(No Model.)

J. FAULKNER.

SUPPLY CHECK AND WASTE PIPE VALVE.

No. 384,833. Patented June 19, 1888.

Fig. I.

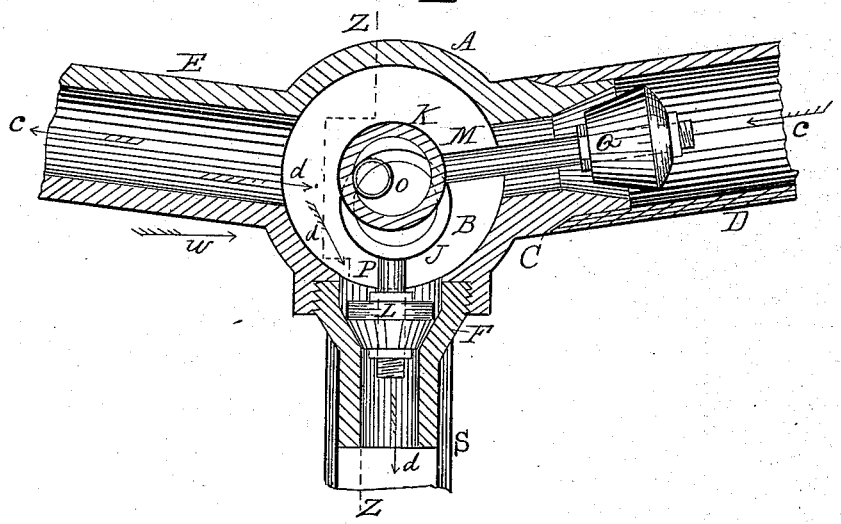


Fig. II.

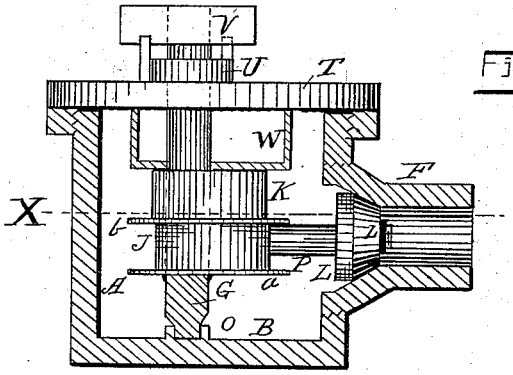
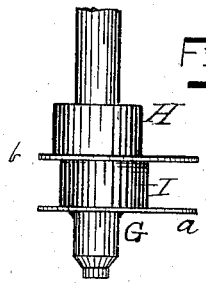


Fig. III.



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UNITED STATES PATENT OFFICE.

JOHN FAULKNER, OF AUSTIN, ILLINOIS.

SUPPLY-CHECK AND WASTE-PIPE VALVE.

SPECIFICATION forming part of Letters Patent No. 384,833, dated June 19, 1888.

Application filed November 29, 1887. Serial No. 256,374. (No model.)

To all whom it may concern:

Be it known that I, JOHN FAULKNER, a citizen of the United States, and a resident of Austin, in the county of Cook and State of Illinois, have invented new and useful Improvements in Supply-Check and Waste-Pipe Valves, of which the following is a specification, reference being had to the accompanying drawings, illustrating the invention, in which—

Figure I is a horizontal section taken centrally through the case, the valves being shown in plan. The height of the line of section is indicated by the dotted line X, Fig. II. Fig. II is a vertical transverse sectional elevation of the device complete, taken on line Z, Fig. I, looking in the direction indicated by dart *w;* Fig. III, a broken elevation of the valve-post and cams removed from the case.

This invention relates to improved means for taking water from service-pipes to supply-pipes and turning off waste water, as hereinafter fully shown and described.

A represents a short cylindrical case, which is provided with a fixed bottom, B.

C represents the short pipe which connects with the service-pipe, a broken section of which is shown at D, and E is a short portion of the supply-pipe.

F is the waste-pipe.

In the bottom B there is a step, O, for the support of the lower end of the valve-post G. This post has attached thereto, by a solid casting or otherwise, an upper cam, H, and a lower cam, I. The lower cam operates inside of the lower strap, J, and the upper cam operates inside of the upper strap, K. The strap J is by means of a stem, P, attached to a valve, L, which shuts the waste-pipe F. The upper strap is attached by means of a stem, M, to a valve, Q, which shuts the service-pipe C. The valves Q L are preferably made of rubber of about the solidity of that used for pump-valves, and they are held to the stems by nuts and screws. The straps K J may be cast solid to the stems and bored out to provide suitable surfaces for the cams H I. The cams are cast solid to the valve-post G, and they may be fitted to the straps with a file. The short waste-pipe F is made separate and tapped into the cylinder A by a screw, and the inner end of the pipe is provided with a seat for the valve L, and the outer end of the service-pipe C is provided with a seat for the valve Q. The supply-pipe E is to be attached to a lead pipe in the usual manner, as is also the pipe C to the service-pipe D. The pipe F may discharge water into the ground, or it may connect with a pipe, S, running to a sewer.

T represents the cap-plate, it being shown part in elevation and part in section at Fig. 2, and it is screwed fast to the cylinder A. A hole is formed through it for post G to turn in, and on its top part it is provided with an ordinary stuffing-box, U, to prevent the escape of water. Between the cap T and strap K is placed a cup-plate, W, and between the straps J K, and below the strap J, are metal plates *a b*, to hold the parts in suitable positions for use. The T-bar V is removably secured to the post, and by means of it the post may be turned by a rod extending up to a compartment. The device is represented as when water is to flow through the service-pipe D C and supply-pipe E, (the waste-pipe F being closed by valve L,) as indicated by darts *c c*. To shut the supply-pipe and open the valve L, turn the T-bar V one-half around to the right. This will permit the water to come down the supply-pipe E and pass out of waste-pipe F, as shown by darts *d*, Fig. I.

The device is an improvement on the three-way cock in that sand does not grind out the valves, and in that there is greater certainty in closing the check-valve to prevent a waste of water. When check and waste cocks or valves are set, they are below the frost, and it is essential that they be as nearly perfect as possible, because they are difficult to reach for repairs.

By the construction shown the necessity for a weighted lever to hold the valves closed and the underground box-room for such lever are obviated, and the operating-rod from a compartment is placed vertically over the valve-post G, and all the pipes connect substantially in a horizontal plane with the case A, of which the post G is a focus. There is much more surface of contact between the cams and straps than where cranks and connecting-rods are employed to operate the valves, and as a result there is friction enough to hold the valves in any position required, and the objectionable pounding of the weight is obviated. A further advantage is, all the parts are held in place

by the top of the case-shaft G, plates *a b* W, and the cap to the case, and when said cap is removed the working parts can be removed without loosening screws or pins, which, when employed with cranks and rods, get out of order by wear or use.

I claim as new and desire to secure by Letters Patent—

The vertical post G, provided with the cams H I, in combination with the case A B T and horizontal pipes C E F, the annular straps J K, surrounding the cams and valves L Q, connected by rigid stems M P, the cup-plate W, and separating-plates *a b*, as and for the purpose specified.

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Witnesses:
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