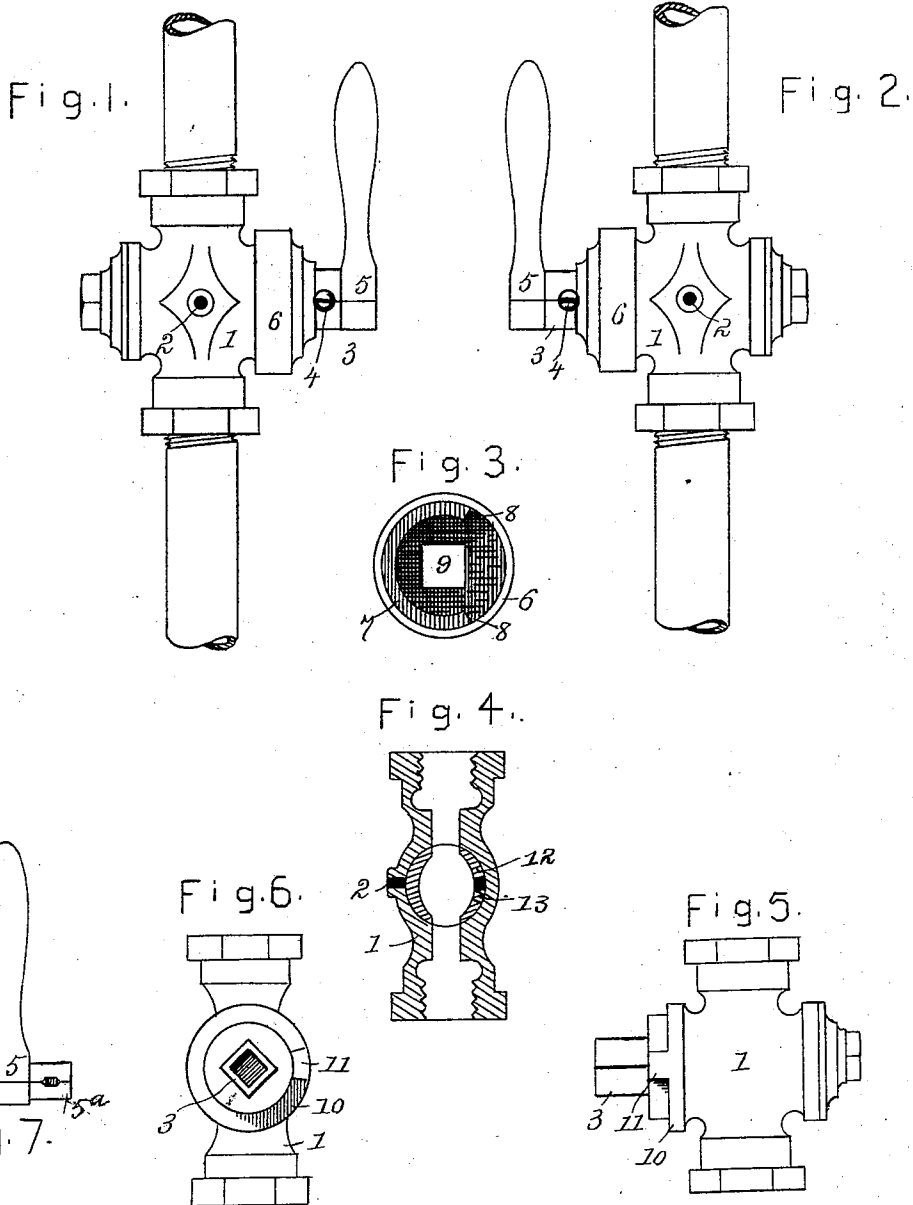


(No Model.)

H. MUELLER.
STOP AND WASTE COCK.

No. 513,272.

Patented Jan. 23, 1894.



ATTEST

Helen Graham

William Graham.

INVENTOR
HENRY MUELLER

by his attorney
L. P. Graham

UNITED STATES PATENT OFFICE.

HENRY MUELLER, OF DECATUR, ILLINOIS.

STOP AND WASTE COCK.

SPECIFICATION forming part of Letters Patent No. 513,272, dated January 23, 1894.

Application filed August 1, 1892. Serial No. 441,787. (No model.)

To all whom it may concern:

Be it known that I, HENRY MUELLER, of Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Stop and Waste Cocks, of which the following is a specification.

This invention relates to interchangeable right and left stop and waste cocks, and it is intended to protect the adjustable stops of such cocks, and to make the connection of the same much more secure.

In the drawings forming part of this specification Figure 1 is a front elevation of the cock in one position, and Fig. 2 is a similar representation of the same in the opposite position. Fig. 3 is an interior view of the cap which carries the adjustable stops and also protects the same. Fig. 4 is a central section through the cock and crosswise of the plug. Fig. 5 is a rear view of the cock with the handle and the cap removed. Fig. 6 is an end view of the cock minus the stop cap and the handle, and Fig. 7 is a side view of the handle.

The shell or body 1 has the customary waste hole 2, and it also has the flange 10 provided with the permanent rectangular stop projection 11. The plug 12 has a waste hole as 13, and its outer end is square in cross section and provided with a square recess for handle 5. The cap 6 is recessed to fit over the circular flange 10 of the shell, it has the rib 7 cut away at 8 to receive the permanent stop 11 and form adjustable bearings therefor, and it has the square hole 9 adapted to fit over the square end 3 of the plug. The handle 5 has the square portion 5^a which fits in the square socket of the end of the plug, and it is held in such socket by screw 4.

In operation, the cap is slipped onto the square end of the plug in such position that the stops may swing in the right direction to permit the plug to open when the handle is lowered. The handle is inserted into the socket as shown and is secured therein by the set screw. Then when the handle is turned the valve will open, the waste hole 13 of the plug will receive the back water, and such water will waste through the plug opening and hole 2 of the shell. When the plug is completely open an end 8 of rib 7 will strike against stop 11 and arrest the motion of the handle and

the valve. In reversing the cock to use on the left hand, it is turned end for end, the cap is removed and replaced in position to permit a reverse turn of the plug, and the handle is placed in proper position and secured.

The operation and the general result above described is substantially the same as in other interchangeable stop and waste cocks, but there is in my device a specific peculiarity which I will now explain. In other cocks of like character the adjustable stop bearings are held in position by a screw and in consequence thereof such connections are somewhat insecure. Moreover, the stops are exposed to the accumulation of dirt, and, on account of the customary location of such cocks, such exposure is liable to interfere with the correct action of the stops. In my device the stops are inclosed by the stop cap itself, and the square hole of the cap fits over the square end of the plug and forms a practically rigid connection. The adjustment of the stops is to an extent of ninety degrees so that the square bearings of the cap and plug are peculiarly fitted to the purpose. It is obvious, however, that octagon bearings, for instance, would enable the same result to be effected in nearly as desirable manner, so that in using the word square throughout the specification and claim, it is intended to be typical of prismatic as opposed to circular.

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

An interchangeable stop and waste cock consisting of a shell having a waste hole, and a rectangular stop projection 11 formed on its side, a plug having a waste hole and a projecting end square in cross section, a cap having a square hole in its end adapted to engage the square end of the plug, stop bearings in the cap adapted to entirely inclose and strike the stop projection of the shell, and a handle on the plug outside the cap, substantially as set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

HENRY MUELLER.

Attest:

ROBERT MUELLER,
W. H. ELWOOD.