T. B. HENSEY.

STOP AND WASTE COCK.

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960,323. Patented June 7, 1910.

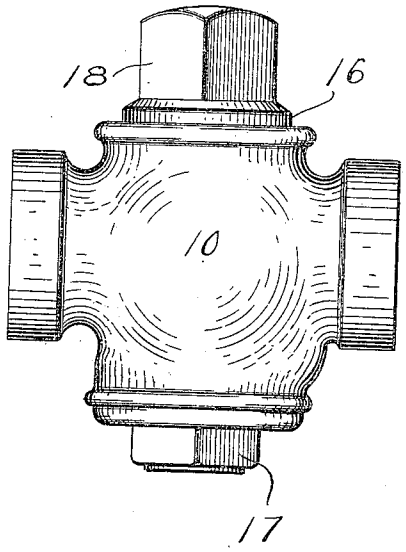
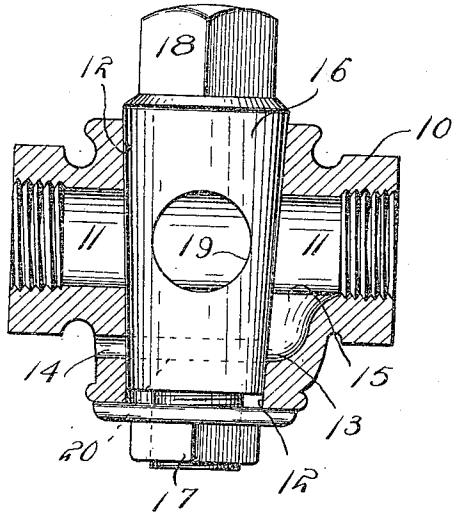



Fig. 1.

Fig. 2.




Witnesses

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# UNITED STATES PATENT OFFICE.

THOMAS B. HENSEY, OF ADRIAN, MICHIGAN.

## STOP AND WASTE COCK.

960,323. Specification of Letters Patent. Patented June 7, 1910.

Application filed February 13, 1909. Serial No. 477,500.

*To all whom it may concern:*

Be it known that I, THOMAS B. HENSEY, a citizen of the United States, residing at Adrian, in the county of Lenawee, State of Michigan, have invented certain new and useful Improvements in Stop and Waste Cocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to combined stop and waste cocks, and has for one of its objects to simplify and improve the construction and increase the efficiency and utility of devices of this character.

Another object of the invention is to provide a simply constructed device of this character which may be operated in either direction, so that no matter in which way the plug may be turned the waste duct will be arranged in operative position.

With these and other objects in view the invention consists generally in a casing having a water passage extending therethrough, and with a waste passage extending in longitudinal alinement with the water passage and spaced therefrom, and with valve seats communicating through the water passage and the waste passage, with the waste passage communicating with the water passage at one side of the seats, and a plug engaging the seats and provided with transverse passages at right angles to each other, one passage adapted to register with the water passage when the plug is arranged in one position, and the other passage of the plug adapted to register with the waste passage when the plug is arranged in another position.

The invention further consists in certain novel features of construction as hereafter shown and described and then specifically pointed out in the claim, and in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a side elevation of the improved device. Fig. 2 is a longitudinal section of the same.

The improved device comprises a casing 10 of the usual form and provided with a water passage 11 extending therethrough, and with valve seats 12 communicating through the passage. Formed in the casing 10 is a waste passage 13, the waste passage spaced from the water passage 11 and extending in parallel relations thereto. The waste passage opens through the side of the casing at one end as shown at 14 and communicates with the passage 11 at the other end as shown at 15, the latter being located at the discharge end of the casing, while the open terminal 14 is located at the intake end of the casing.

Mounted for rotation in the seats 12 is a plug 16 having the usual binding nut 17 and the wrench head 18. Formed through the plug 16 is the usual main passage 19 adapted to register with the passage 11, when the plug is arranged in one position and to cut off the flow when arranged in another position, in the ordinary manner. Formed through the plug 16 at right angles to the passage 19 is a waste passage 20, the latter adapted to register with the waste passage 13 when the plug 16 is arranged in one position, or with the passage 19 transversely of the casing, as shown in Fig. 2.

The plug 16 may be rotated in either direction to cause the passage 11 to be opened or closed, and by the arrangement of the waste passage 20 at right angles to the water passage 19, the waste passage will be likewise opened no matter in which direction the plug may be turned.

In an ordinary arrangement of combined waste and stop cocks, the waste passage is rendered operative only when the plug is turned in one direction, and as valves of the class to which the improved device herein described appertains are frequently located at inaccessible points, it is a matter of great inconvenience for the operator to know in which direction to turn the plug, to cause the opening of the waste passage. With the improved device, however, the waste passage is rendered operative no matter in which direction the plug may be rotated. This is a matter of great convenience, and materially increases the utility and efficiency of the device without materially increasing the expense of the construction.

The improved device may be applied to valves of various sizes, and to valves employed for various purposes and constructed from various materials.

What is claimed, is:—

A combined stop and waste cock comprising a casing having a transverse valve seat and a main longitudinal water passage extending through the valve seat, said casing having a waste passage communicating with the valve seat at one side and with a waste

passage communicating with the valve seat and the longitudinal water passage at the opposite side, and a plug engaging in said valve seat and having a transverse water passage therethrough and with a waste passage extending through the plug at right angles to the water passage thereof and not connected therewith, whereby the water passage of the plug is cut-off from the water passage of the casing when the waste passage of the plug is disposed in registering position with the oppositely disposed waste passages of the casing.

In testimony whereof, I affix my signature, in presence of two witnesses.

THOMAS B. HENSEY.

Witnesses:
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