

(No Model.)

C. F. SMITH.
RIGHT AND LEFT HAND STOP AND WASTE COCK.

No. 594,162.

Patented Nov. 23, 1897.

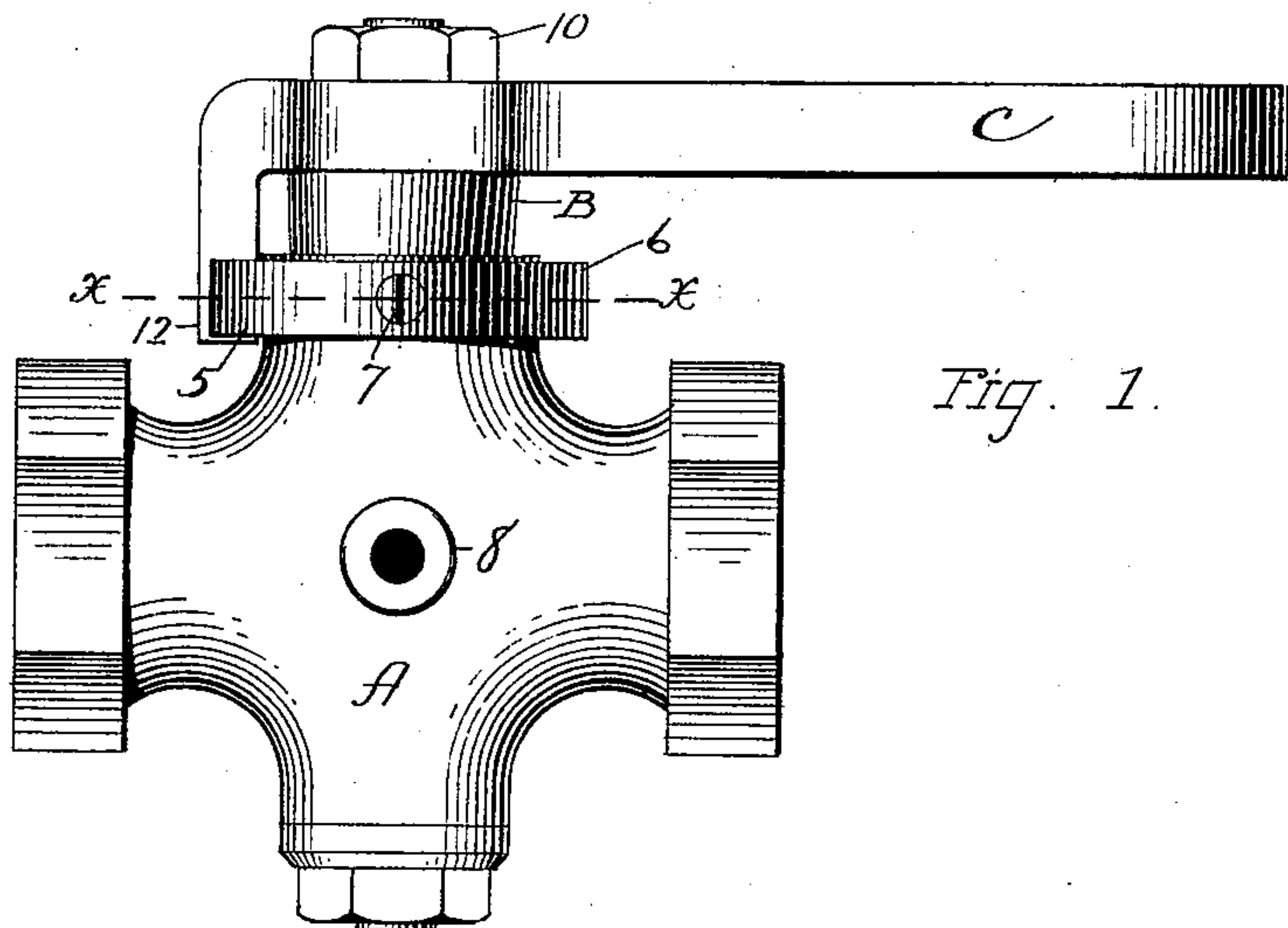


Fig. 1.

Fig. 2.

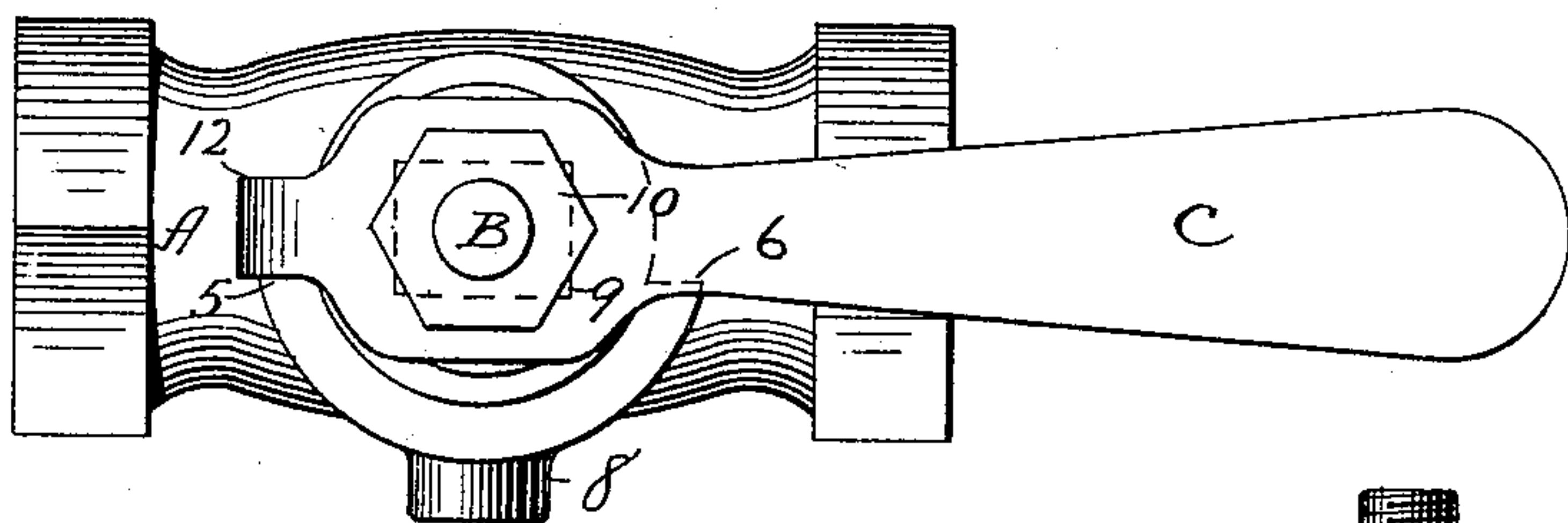
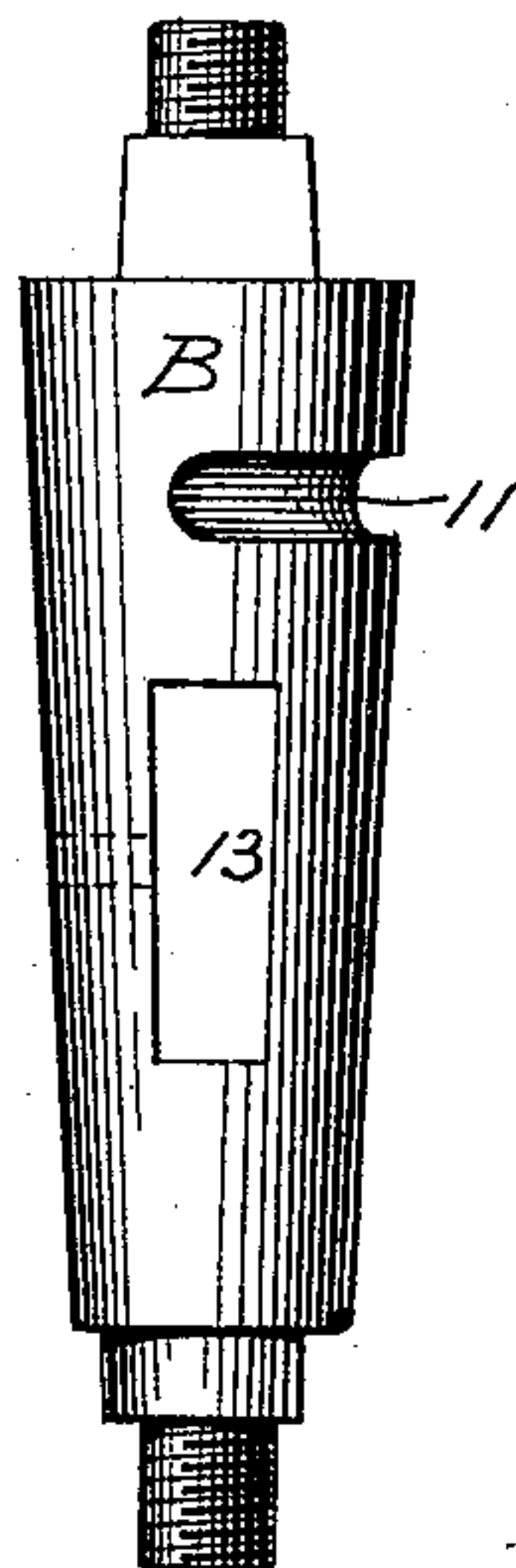
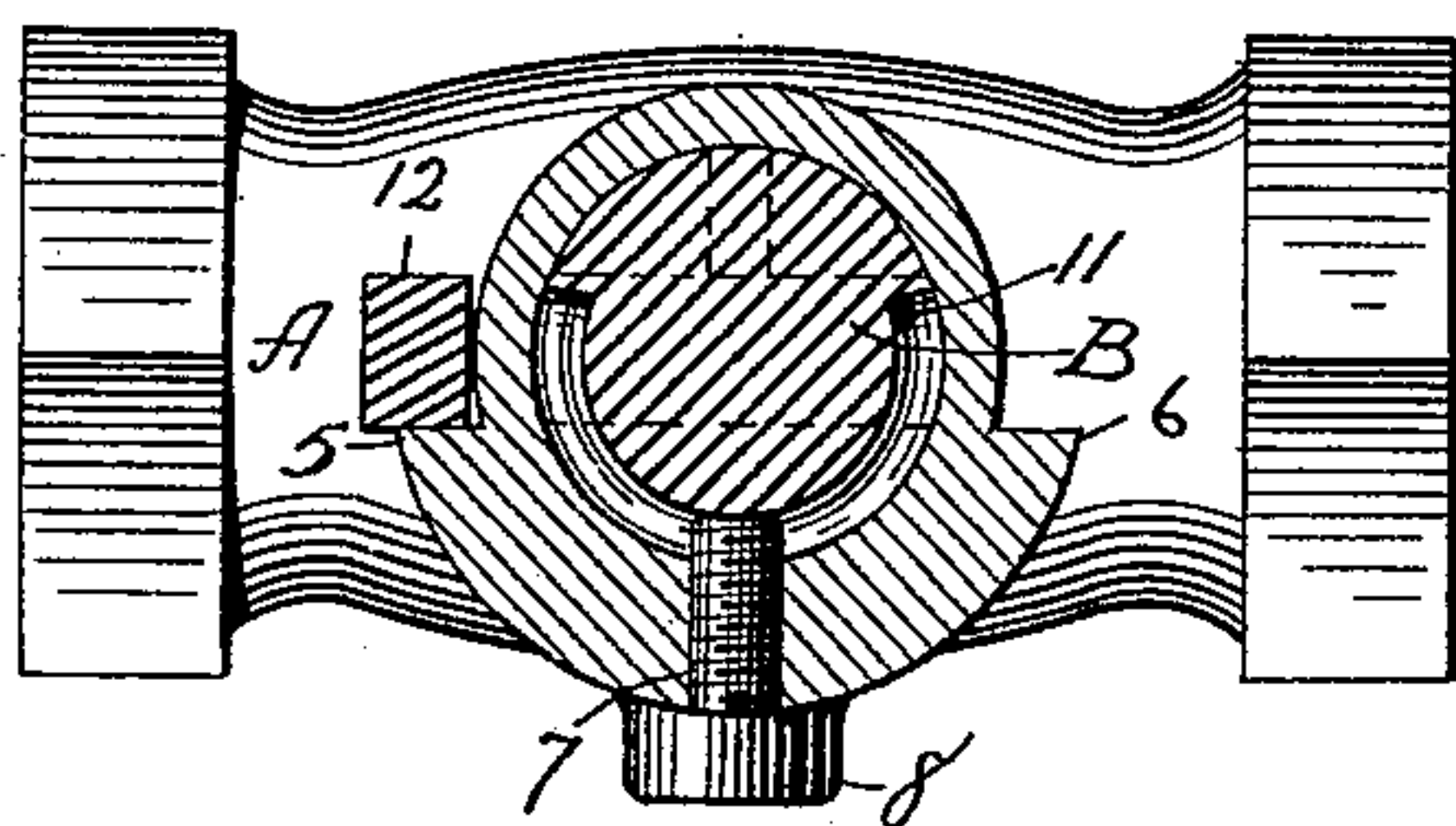


Fig. 3.

Fig. 4.



Witnesses

W. D. Stipek
P. J. Egan

Inventor

Charles F. Smith
By James Shepard
Atty.

UNITED STATES PATENT OFFICE.

CHARLES F. SMITH, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
LANDERS, FRARY & CLARK, OF SAME PLACE.

RIGHT AND LEFT HAND STOP AND WASTE COCK.

SPECIFICATION forming part of Letters Patent No. 594,162, dated November 23, 1897.

Application filed July 9, 1897. Serial No. 643,997. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. SMITH, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Right and Left Hand Stop and Waste Cocks, of which the following is a specification.

My invention relates to improvements in right and left hand stop and waste cocks; and the objects of my improvement are simplicity and economy in construction and efficiency in operation.

In the accompanying drawings, Figure 1 is a front elevation of my right and left hand stop and waste cock. Fig. 2 is a plan view thereof. Fig. 3 is a horizontal section on the line *xx* of Fig. 1, and Fig. 4 is a detached elevation of the plug.

A designates the body of the cock, which in its general features is of an ordinary form and within the cross-bore of which the rotary plug B is fitted, the general form of said plug and the passages through it being of the ordinary form. The main and waste passages through the plug are indicated by broken lines in Fig. 3. The body of said cock is provided at its handle end with a pair of fixed external stops 5 6 and also with a screw 7, the end of which extends into the bore of said body and forms an internal stop or pair of stops. The respective ends of the body are designed to be connected with the water-pipes in the ordinary manner, and the middle portion of said body has the ordinary waste-nozzle 8 on its front side.

The plug B is provided with an oblong angular neck or shank 9, Fig. 2, to receive the handle C, the opening in the head of which is of a corresponding form, whereby the position of the handle on the shank is changed by half-revolutions. The handle is held in place by the nut 10. The plug is also provided with a reduced portion or groove 11, into which the end of the screw 7 enters, as shown in Fig. 3. This groove extends around the plug for a little over half of its circumference, the ends of said groove forming stop-shoulders coacting with the screw 7, as hereinafter described. The handle is provided with a stop 12.

The cock is represented as arranged for a right-hand cock—that is to say, the handle stands on the right-hand side and swings within the right-hand front quadrant of a circle around the plug. When the handle stands lengthwise with the pipes connected with the body of the cock, as shown, the main passage 13, Fig. 4, through the plug stands in alignment with the pipes and the cock is open. In bringing the handle to this position the stop 12 engages the external stop 5 on the body and thus limits it from moving rearwardly beyond the position shown. By pulling the handle to the front the stop 12 is carried away from the external stop 5, and the right-hand end (in the position shown in Fig. 3) of the groove comes against one side of the internal body-stop or screw 7 at the end of a quarter-turn of the plug and stops the handle and plug with the main passage 13 closed and the waste-passage leading therefrom on the right-hand side of the cock, the stop 12 being about midway between the stops 5 and 6, and the position now being determined by the internal body-stop instead of an external stop, as before. By removing the handle from its shank and changing its position thereon one-half of a revolution the cock will be changed to a left-handed cock. When thus changed, the handle will swing in the left-hand front quadrant and be stopped in its parallel position with the pipes by the handle-stop 12 and external body-stop 6 and in its position at right angles thereto by the left-hand end of the groove in the plug and the internal body-stop.

By my improvements the construction is simple and inexpensive, while the cock is conveniently changed for either hand by merely changing the position of the handle on the plug. The internal body-stop and coacting part of the plug are wholly inclosed and protected where they are completely isolated from the external body and handle stops. By making the internal body-stop in the form of a screw it can be withdrawn for the insertion of the plug and then screwed in to properly project into the reduced portion of the plug.

I claim as my invention—

1. A stop and waste cock having a body

provided with a pair of external stops, a plug fitted to said body, a handle fitted to said plug and having a handle-stop for engaging the said external body-stops, and an internal stop coacting with a portion of the said plug substantially as described.

2. The combination of a cock-body having a pair of opposing external stops, a handle having a stop for coacting therewith, a plug having a reduced portion with stop-shoulders and an internal stop projecting from the inner wall of said body into the reduced portion of said plug substantially as described.

3. The combination in a stop and waste cock of a cock-body having a pair of stops, a handle having a stop for engagement therewith, a plug having a reduced portion with stop-shoulders and a screw secured in said body with its end projecting into the reduced portion of said plug substantially as described.

CHARLES F. SMITH.

Witnesses:

JAMES SHEPARD,
A. W. STIPEK.