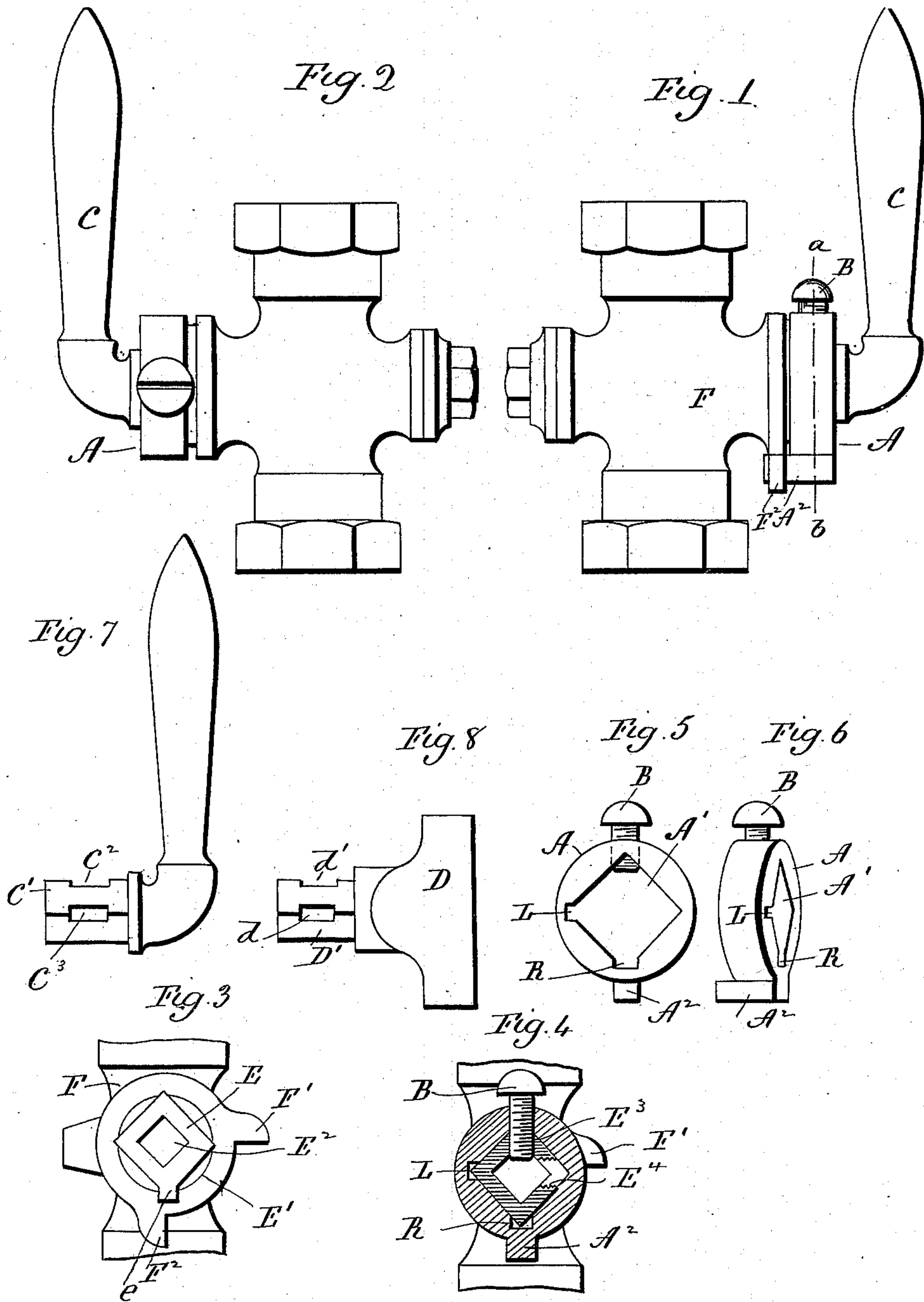


(No Model.)

J. TOTHAM.
REVERSIBLE STOP AND WASTE COCK.

No. 568,181

Patented Sept. 22, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES TOTHAM, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE PECK BROS. & COMPANY, OF SAME PLACE.

REVERSIBLE STOP AND WASTE COCK.

SPECIFICATION forming part of Letters Patent No. 568,181, dated September 22, 1896.

Application filed December 23, 1895. Serial No. 573,049. (No model.)

To all whom it may concern:

Be it known that I, JAMES TOTHAM, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Reversible Stop and Waste Cocks; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in side elevation of a reversible stop and waste cock constructed in accordance with my invention and assembled for use as a right-hand cock. Fig. 2 shows the same cock assembled for use as a left-hand cock; Fig. 3, a broken view of the cock in elevation, with the handle and stop-collar removed; Fig. 4, a sectional view of the cock on the line *a b* of Fig. 1; Fig. 5, a detached view of the stop-collar in front elevation; Fig. 6, a perspective view of the same part; Fig. 7, a detached view of the lever-handle of the cock; Fig. 8, a similar view of such a T-handle as may be employed in lieu of a lever-handle.

My invention relates to an improvement in stop and waste cocks, the object being to produce at a low cost for manufacture a simple, durable, convenient, and effective cock, constructed with particular reference to reversing it for use as a right-hand cock or as a left-hand cock, as desired, whereby the expense of making and carrying special right and left hand cocks is avoided.

With these ends in view my invention consists in a reversible stop and waste cock having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claim.

In carrying out my invention I employ a shiftable stop-collar A, having a square central opening A', two adjacent points of which merge into transverse offsetting grooves L and R, located at a right angle to each other. The said letter L may be taken to stand for the word "left" and the said letter R may be taken to stand for the word "right." In constructing the device the letters L and R will by preference be stamped into the col-

lar at points closely adjacent to the said grooves. The said collar is provided with a set-screw B, located in its plane and entering its squared central opening A' at the corner thereof opposite the groove R aforesaid. The said screw is designed to couple the handle C of the cock with the rectangular stem E of the valve E', which, as well as the valve-body F, may be of any ordinary construction and adapted to operate on the well-known stop-and-waste principle. The said stem E is, as aforesaid, rectangular in cross-section and constructed with a rectangular opening E², adapted to receive the solid rectangular shank C' of the lever-handle C, the said shank C' having retaining-notches C² and C³ for the reception of the inner end of the screw B, which, before it enters either of the said notches C² and C³, enters either one or the other of two threaded openings E³ E⁴, formed at right angles to each other in corners of the valve-stem E, as shown in Fig. 4, the threaded opening and notch entered by the screw depending on the way the stop-collar A and handle C are applied to the valve-stem E. The said valve-stem E is also constructed with a rib *e*, projecting from one of its four corners and adapted to enter either one of the two grooves L and R of the stop-collar A. The said stop-collar is furnished with an inwardly-projecting stop-finger A², designed to engage with stop-arms or projections F' and F², located in the same horizontal plane with each other and formed integral with the valve-body F, as shown, or, if preferred, formed independent thereof and applied thereto. It will be understood, of course, that these stop-arms F' and F² are arranged to permit a quarter-turn of the valve and so as to stop the rotation thereof when the same is in its full open and full closed positions. The cock becomes a right-hand cock or a left-hand cock according to the position in which the stop-collar A and handle are applied to the hollow valve-stem. If the stop-collar is applied to the valve-stem so as to have its groove R coincide with the rib *e* of the stem, the cock becomes adapted for use as a right-hand cock, as seen in Fig. 1, while if the collar is applied so as to bring its groove or offset L in coincidence with the

rib *e* of the valve-stem the cock becomes a left-hand cock, as seen in Fig. 2.

Instead of using a lever-handle C, I may employ a T-handle D, having a solid rectangular shank D', constructed with two retaining-notches *d* and *d'*.

It is apparent that in carrying out my invention some changes from the construction herein shown and described may be made. I would therefore have it understood that I do not limit myself to the form set forth, but hold myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

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

In a reversible stop and waste cock, the combination with a body having two stop-arms, of a valve located in the said body and constructed with a rectangular stem having a hollow rectangular opening, and provided

with an outwardly-projecting longitudinal rib located upon the apex of one of its corners; a stop-collar having a rectangular opening adapting it to fit over the said stem, and formed with two grooves leading out of two of its adjacent corners, one or the other of the said grooves receiving the said rib according to the position of the collar upon the stem; a handle having a rectangular shank adapted to enter the rectangular opening of the said stem; and a screw mounted in the collar and extending laterally through the same and through the valve-stem and impinging upon the shank of the handle for holding the same, as well as the collar in place.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAMES TOTHAM.

Witnesses:

CHARLES F. CURTISS,
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