

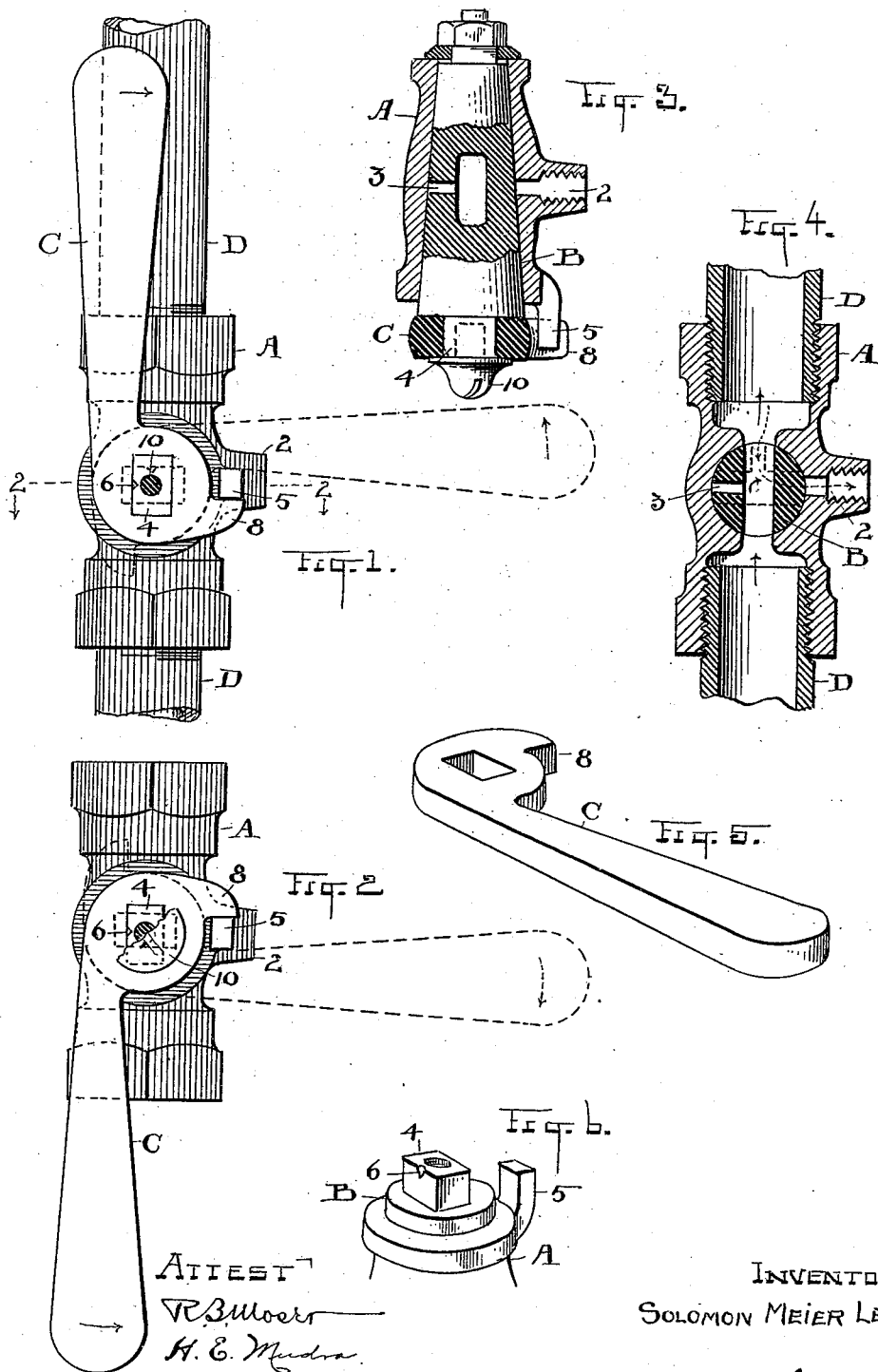
No. 646,440.

Patented Apr. 3, 1900.

S. M. LEVY.  
STOP AND WASTE COCK.

(Application filed Sept. 27, 1899.)

(No Model.)



ATTEST

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# UNITED STATES PATENT OFFICE.

SOLOMON MEIER LEVY, OF CLEVELAND, OHIO, ASSIGNOR TO THE CENTRAL BRASS MANUFACTURING COMPANY, OF SAME PLACE.

## STOP AND WASTE COCK.

SPECIFICATION forming part of Letters Patent No. 646,440, dated April 3, 1900.

Application filed September 27, 1899. Serial No. 731,802. (No model.)

*To all whom it may concern:*

Be it known that I, SOLOMON MEIER LEVY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Stop and Waste Cocks; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to what are known as "interchangeable or right and left stop and waste cocks," and the object of the invention is to provide a simple and reliable construction of waste-cock which is equally well adapted to right and left positions in service and in which the mere inversion of the handle is the only change necessary to bring the plug to proper wasting position, if not found so in the other position, all substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan elevation of a setting in which the cock is set—say in a right position; and Fig. 2 is a like elevation in which the cock is in a left position, or inverse to that shown in Fig. 1, the retaining-screw head being wholly broken away in Fig. 1, and partly in Fig. 2. Fig. 3 is a cross-section on line 2 2, Fig. 1, which discloses a plan of the plug, partly sectioned, to show the waste and regular channels for the water in both plug and barrel or casing. Fig. 4 is a vertical central sectional elevation of the parts seen in Fig. 1 in the plane of the handle and bisecting the plug on the line of its waste-outlet, as hereinafter fully described. Fig. 5 is a perspective view of the handle alone. Fig. 6 is a perspective elevation of the portion of the barrel and plug with which the handle is more especially associated.

A represents the body or shell of the cock, having the usual waste-hole 2, and B is the plug, having also the usual waste-hole 3.

C is the handle, which fits in this instance upon the rectangular shank or extremity 4 of the plug, but it might be secured thereto or therein in any equivalent way, the construction and purpose of the invention only demanding that it be conveniently detach-

able and invertible as to position, thereby adapting it to right and left hand work as required.

The body or shell A is provided with a single stud or small post or projection 5, placed in this instance directly opposite the waste-outlet 2 on what may be termed the "side" of the body and bringing the stud in a measure between the square shank 4 and the waste-outlet 2. However, the stud might be on the opposite side from the waste-outlet, if preferred.

Another preferred feature of construction is the shape of the shank 4, which has the form of a parallelogram or rectangle rather than a square, although a square could be used, if desired. The special advantage of the present shape is that it harmonizes with my further idea of always making the change of handle if it be found to be out of position when it is parallel with the body and the pipe D, and so the long sides of the shank are made to run with the line of the handle. It follows inevitably in that case, if by mishap the plug be placed wrong in the body when it is set up, that the inversion of the handle from the full-line position in Fig. 1 to the full-line position in Fig. 2 will right the plug and bring its exhaust in the right relation for service. The same is true if the handle were down instead of up originally or the pipe were horizontal instead of vertical. Then to exhaust it is only necessary in either case to give the handle a quarter-turn to right angles, as shown in dotted lines. For further convenience in locating the side upon which the exhaust-hole is in the plug I may place a suitable mark, like a small notch 6, on the side of the shank 4, and this will enable the plumber when he comes to place the cock to know definitely whether the parts are in the right relation or not.

The handle C is limited in its operations to a quarter-turn, as described, by the lug 5, which forms the stop in both directions of rotation, engaging the base of the handle itself in one position and the lug 8 thereon in the other. The handle is confined by the screw 10, and the parts are supposed to be assembled and placed in operative relation when sent out into the market. This anticipates the possible difficulty of getting the plug in

the right relation to the body for waste purposes, and if by mistake it were to be wrong nothing need be done but to remove and invert the handle to either position Fig. 1 or Fig. 2, and that will certainly bring the waste right.

It will be noticed that the lug 8 on the handle is placed at right angles to the handle and that there is a quarter-turn space between them.

What I claim is—

1. In stop and waste cocks, the body having a single stop-lug, the plug therein, and a reversible handle fixed on the plug and constructed to engage said lug at two points spaced apart equal to a quarter-turn of the plug, substantially as set forth.

2. The body of the cock having a stop projection, a plug in said body and an invertible handle on said plug having a lug on its head a quarter-turn from the handle, the said stop projection being between the handle and the lug thereon, substantially as described.

3. The body of the cock and the plug therein having an engaging portion for the handle, in combination with an invertible handle detachably secured to the plug, the said body having a single lug in the path of the handle to limit its rotation, and the handle having two stops on its head a quarter-turn of the plug apart to engage said lug, substantially as described.

4. The body of the cock having a waste-outlet and a stop-lug in line therewith, the plug in the body having an exposed shank, and a reversible handle fitted to said shank and constructed with projections to engage said lug in either position of the handle and limit the rotation of the plug to a quarter-turn, substantially as set forth.

Witness my hand to the foregoing specification this 25th day of September, 1899.

SOLOMON MEIER LEVY.

Witnesses:

H. T. FISHER,  
R. B. MOSER.