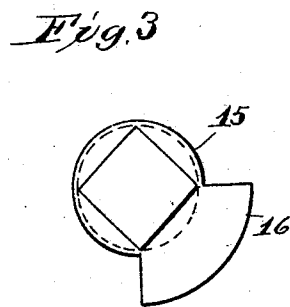
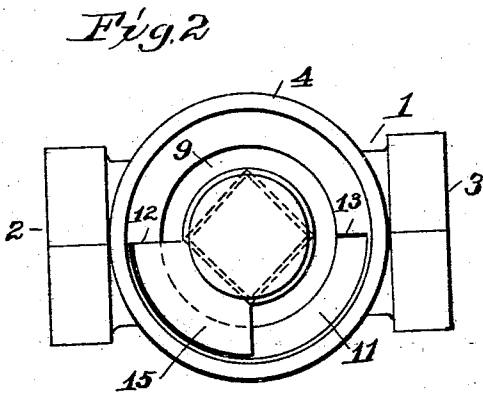
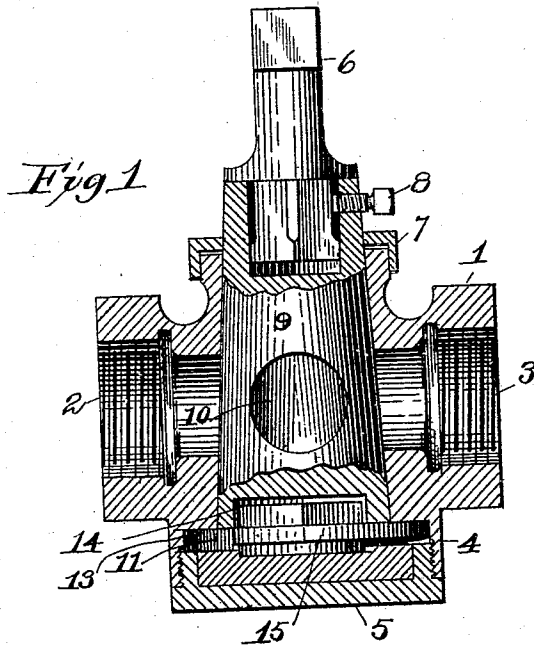


W. G. WESTWATER.  
 STOP COCK.  
 APPLICATION FILED MAY 21, 1908.

908,717.

Patented Jan. 5, 1909.



Witnesses:  
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*H. Randolph.*

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 Attorney.

# UNITED STATES PATENT OFFICE.

WILLIAM G. WESTWATER, OF COLUMBUS, OHIO.

## STOP-COCK.

No. 908,717.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed May 21, 1908. Serial No. 434,038.

*To all whom it may concern:*

Be it known that I, WILLIAM G. WESTWATER, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Stop-Cocks, of which the following is a specification.

My invention relates to improvements in the stop cock used especially at the curb where the piping for a dwelling or other building is connected with the pipe tapping the main water line, and consists in a construction having a wing stop for the valve formed at the lower end thereof, and the valve being so constructed as to receive the wing stop in a manner permitting the said stop to be separated therefrom, and to be held in place by the bottom screw cap. This arrangement removes the stop entirely from any danger of being clogged with earth or other loose material, and renders the manufacture of the valve much more simple and inexpensive, and at the same time providing a construction which is very easily repaired, and at the same time is made of a great strength.

In the drawings which are hereto attached and hereby made a part of this specification, Figure 1 is a section along the axis of the valve and casing showing the parts in place; Fig. 2 is a bottom plan view; Fig. 3 is a view of the stop carried by the valve, detached.

Referring to the drawings in which the same numeral indicates the same part throughout, 1 is the shell or casing for the valve containing the inlet 2 and the outlet 3, internally threaded to receive the pipes through which the water is conducted; 4 is the extension at the lower end of the casing internally threaded and adapted to have applied thereto the bottom cap 5, and when this cap is in place the valve at this end is effectually secured against any earth or debris of any sort which might interfere with the proper operation of the stop construction.

At 6 is shown the turn key for the valve securely positioned by means of the set screw 8; the top cap is shown at 7. When the valve is positioned for operation, it is usually several feet below the surface and a long rod provided at its lower end with a member to engage the key 6 is let down and turned from its upper end, so that the force exerted upon the valve is very great, and the parts in my construction may be very strong

so that they may readily withstand the stress exerted thereon in opening and in closing the valve from the surface.

As seen, the valve 9 is tapered, and has the opening 10 therethrough which is adapted, when the valve is properly positioned, to register with the inlet and outlet openings 2 and 3, and when the valve is turned through a quarter revolution, the communication between the inlet and outlet pipes is effectually stopped. To assure the turning of the valve through the proper angle, and further to make it certain that the valve will not be rotated too far, I provide upon the lower end of the shell 1 the arc-shaped depression 11, which is formed to extend over approximately one-half of the circumference of the lower end of the shell 1, and at the ends of this depression the shoulders 12 and 13 are formed. The valve is recessed preferably at the middle of its lower end as shown at 14, the said recess being preferably formed with a rectangular shape. A detachable member 15 constructed to fit the recess 14 is provided with the arc-shaped wing 16, when the member 15 is positioned in the recess 14, the arc-shaped wing 16 extends into the depression 11, and as the valve is rotated, the said wing will engage a shoulder 12 or 13, depending upon the direction in which the rotation takes place, provided the rotation extends through a sufficient distance. The operator therefore rotates the valve until the wing engages a shoulder, and therefore knows whether the valve has been completely opened or completely closed whichever may be desired. When the member 15 has been thus positioned in the lower end of the valve, the bottom cap member will then be screwed into place, whereby the member 15 will be held in engagement with the depression 14. When it is desired to repair the valve, or for any reason to disassemble the parts, the cap members are removed, and the member 15 is detached, whereupon the valve may be readily removed from the shell 1. The parts may also readily be assembled, when the valve is to be put into operative position.

The advantage in manufacture of a valve constructed in accordance with my improvements is very great, inasmuch as it is much cheaper and easier to form the wing stop separately than it is to form it as a portion of the valve, and its ready detachability renders the assembling and disassembling of the parts easy and rapid.

What I claim is:

1. In a stop cock comprising an inclosing shell and a valve therein, means for rotating said valve at one end thereof, said valve having a socket formed in its opposite end, a member movable with said valve adapted to be positioned in said socket and having an integral radial flange thereon, shoulders on said shell to engage said flange, and a removable cap adapted to maintain said member in said socket.

2. In a stop cock comprising an inclosing shell and a valve therein, said valve having a socket formed in one end thereof, operat-

ing means for said valve at one end thereof and controlling means at the opposite end comprising stops on said shell, a member adapted to be positioned in said socket having an integral radial flange thereon for engagement with said stops, and a removable cap adapted to be applied to said shell to retain said member in said socket.

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

WILLIAM G. WESTWATER.

Witnesses:

GEO. W. RIGHTMIRE,

A. RAGER.