J. CAVANAGH.

Automatic Shut-Off Attachment for Water-Closets.

No. 165,209. Patented July 6, 1875.

Fig: 1.

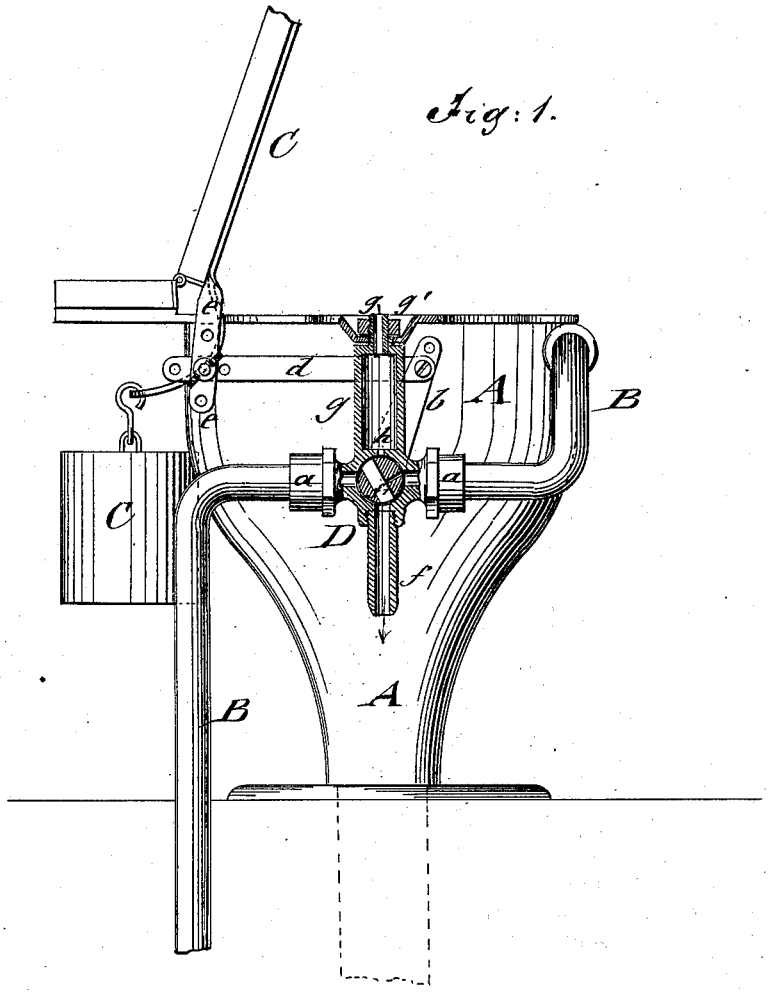
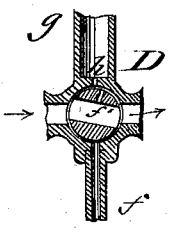


Fig: 2.



WITNESSES:

Chas. Nidd

A. F. Terry

INVENTOR:

J. Cavanagh

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES CAVANAGH, OF NEW YORK, N. Y.

IMPROVEMENT IN AUTOMATIC SHUT-OFF ATTACHMENTS FOR WATER-CLOSETS.

Specification forming part of Letters Patent No. **165,209**, dated July 6, 1875; application filed June 12, 1875.

To all whom it may concern:

Be it known that I, JAMES CAVANAGH, of the city, county, and State of New York, have invented a new and Improved Automatic Shut-Off Attachment for Water-Closets, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation, partly in section, of a water-closet with my improved automatic shut-off attachment; and Fig. 2, a detail central section of the water-supply cock.

Similar letters of reference indicate corresponding parts.

My invention relates to an automatic shut-off attachment for water-closets, by which the supply of water is instantly interrupted as soon as the hinged cover of the same is released, the supply of water regulated as desired, and by the ready access and easy lubrication of the parts few repairs rendered necessary.

The invention consists of the connection of the stop cock of the supply-pipe by a crank lever and adjustable rod with the hinged and weighted cover of the bowl, so that the opening of the same produces the closing of the supply-cock, which is provided with a waste-pipe and a lubricating-pipe attached by fastening-nut to the flange of the bowl.

In the drawing, A represents the bowl of a water-closet; B, the water-supply pipe, and C the hinged and suitably-weighted cover. A stop-cock, D, is attached by fastening-nuts *a* to the supply pipe, and governed by a crank-lever, *b*, applied rigidly thereto. The crank-lever *b* is connected by a rod, *d*, to an arm, *e*, of cover C, the lever, rod, and arm being so perforated and connected by clamp-screws that a greater or less degree of leverage is imparted to the crank *b* of stop-cock D, and thereby a larger or smaller quantity of water supplied to the bowl. The advantage of this regulating feature consists in the possibility of adjusting the supply of water to the closets of all the stories, so that the closets in the upper stories are also uniformly supplied, and not, as is commonly the case, left without water when the lower closets are in use. When the cover is pressed down on the bowl the stop-cock is opened and the water supplied to the bowl. As soon as the cover is released the weight of the same carries it up and shuts the stop-cock, interrupting instantly the flow of water. The water remaining in the forward end of the supply-pipe is allowed to pass off to the exit-pipe of the bowl by means of a waste-pipe, *f*, communicating by a perforation, *f'*, of the stop-cock with the closed section of the supply-pipe C. The stop-cock D is cast or otherwise provided with an upwardly extending tube, *g*, that is attached at its narrower and threaded upper end by a nut, *g'*, to a recessed or indented part of the bowl-flange, supporting thus the stop-cock, independently of the supply-pipe, and allowing, by unscrewing nuts *a a* and *g'*, the detaching of the stop-cock mechanism for repairs. The tube *g* serves also as a chamber for the lubricant, which is admitted through a small bottom perforation, *h*, to the stop-cock, securing thereby the regular working of the shut-off attachment for a considerable length of time without re-oiling and repairing. The shut-off attachment may also be used with the common pull-lever in place of the swinging cover, and applied to any water-closet.

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

1. An automatic shut-off attachment for water-closets, consisting of a water-supply pipe, with regulating stop-cock, connected by adjustable lever mechanism with the hinged and weighted cover that operates thereby the stop-cock, substantially in the manner and for the purpose set forth.

2. The combination of the stop-cock by a supporting-tube and fastening-nut with the flange of the bowl, to be readily detached for repairs, substantially as specified.

3. The supporting-tube of the stop-cock, forming a lubricating-chamber, and having bottom aperture to supply oil to stop-cock, substantially in the manner set forth.

JAMES CAVANAGH.

Witnesses:

PAUL GOEPEL,

T. B. MOSHER.