(No Model.)

W. S. MAYO.

WATER CLOSET.

No. 418,580. Patented Dec. 31, 1889.

Fig. 1.

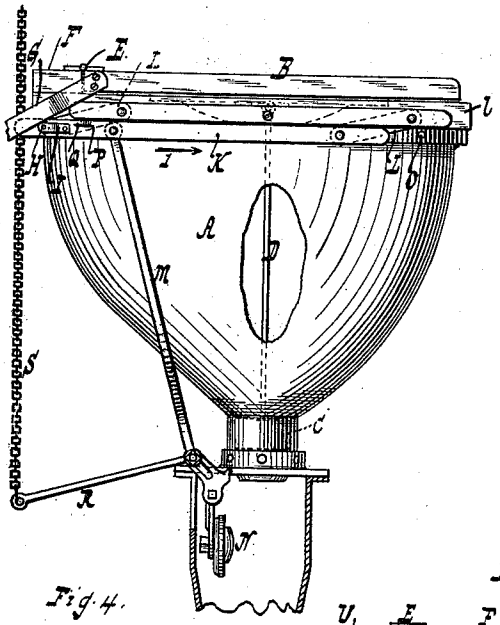


Fig. 2.

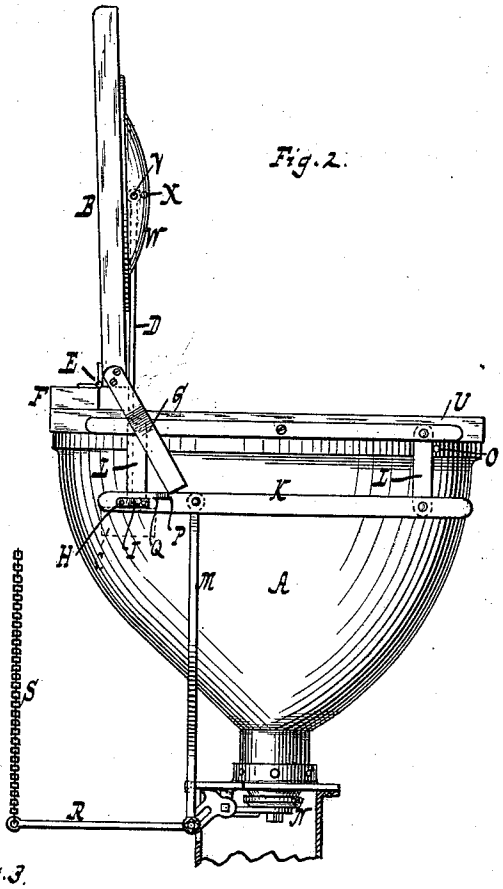


Fig. 3.

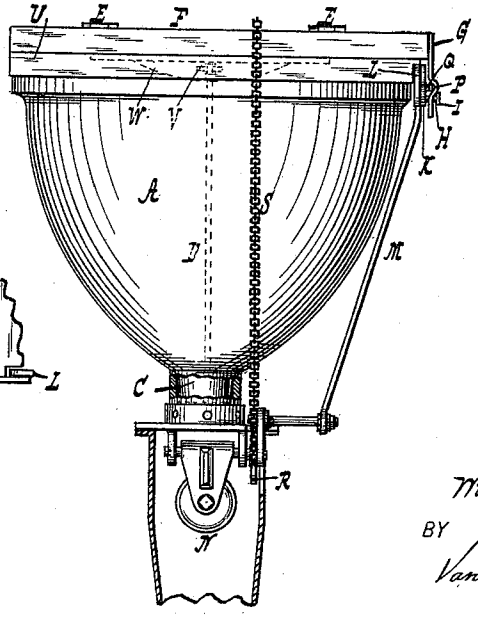


Fig. 4.

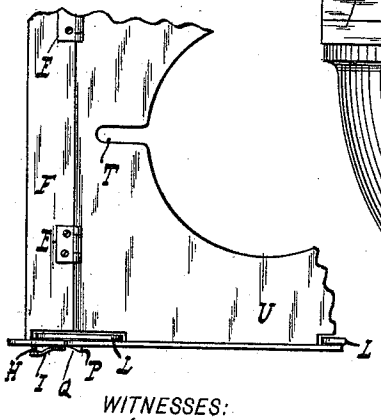
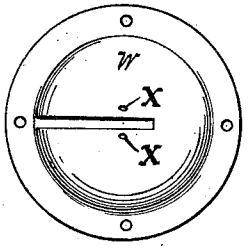


Fig. 5.



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WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 418,580, dated December 31, 1889.

Application filed June 27, 1889. Serial No. 315,752. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. MAYO, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Water-Closets, of which the following is a specification.

This invention relates to an improvement in water-closets; and it consists in the details of construction set forth in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a side view of a water-closet closed and partly broken away. Fig. 2 is a similar view to Fig. 1, the closet being open. Fig. 3 is a rear elevation of Fig. 1. Fig. 4 is a detail plan view of a seat. Fig. 5 is a detail view of a pivot-carrier.

Similar letters indicate corresponding parts.

In the drawings, the letter A indicates a bowl or basin having a cover B. The plug-stopper or plunger C is attached by a link or rod D to the cover B. The cover is jointed at E to a suitable support, such as the frame-work F of the closet. When the cover B is opened, the plug C is drawn out of the outlet of basin B and the arm G, which is fixed to the cover, strikes against the lug or stud H, mounted on the spring I, secured to the swinging arm K. The arm K swings on the oscillating links L, and said arm K is connected by a link M with the valve N. The opening of the cover B swings or moves the arms G K in the direction of arrow 1, Fig. 1, to the position shown in Fig. 2, thus raising the valve N against its own weight to close the outflow of bowl A. A stop O prevents excessive motion in the direction of arrow 1, and when the parts are in the position shown in Fig. 2 the links L M are on the dead-center or slightly beyond the dead-center in the direction of arrow 1, and kept stationary by stop O, so that the valve N is held closed.

A stud or shoulder P is secured to a spring or spring-arm Q on the arm K, so that when the cover B is being opened the arm G rides over or past the stud P. When the cover B is being closed, the arm G strikes against the stud P and pushes the arm K in the direction opposed to arrow 1 until the links L M are past the dead-center, when the valve N drops open by its own weight, and the arm K is restored to the position shown in Fig. 2. The arm G, following after the arm K, rides over the spring I and stud H until said arm and the cover B have resumed their starting positions, Fig. 1.

The link M in its movements imparts motion to the arm R, to which is connected the chain S, leading to the water-tank, (not shown,) and which, with its valve arrangement may be of any suitable well-known construction. When the valve N is closed, the actuation of the chain S causes a wash or flow, so that a supply of water rests on the valve N. When the valve N is opened, this supply of water flows off, and as the plug C closes the basin another wash takes place, so that a supply of water then rests on the plug C.

When the cover B is opened, Fig. 2, the plug C is drawn to its opening position by the rod D, and is swung back and concealed in a recess in the bowl, so as to be out of the way, a slit T in the seat U, Fig. 4, allowing the link D to swing well back. The pivot V for the link D can be supported in a pivot-carrier consisting of a shell or case W, of sheet metal having a suitable ornamental form, and provided with eyes X for the pivot V. A series of eyes placed at different distances from the cover, can be provided so that the link D can be adjusted nearer to or farther from the cover B, as may be required, to cause the plug C to tightly close the basin.

It will be noticed that the cover controls the operation of the mechanism, since the opening of the cover closes the valve N and causes a wash of water, so that water rests on the valve N, and when the cover is closed the valve N opens, allowing the water and contents of the bowl to flow off, after which the plug C hermetically closes the bowl, and a second wash supplies an amount of water, which rests on the plug C, and serves as an additional seal or closure to assist the plug in preventing foul gas from passing into the bowl from its outlet. The bowl is thus thoroughly cleansed and sealed by the operation of opening and closing the cover.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the basin having

a valve N, of a cover provided with a plug for the basin, said cover being connected to the valve, substantially as described.

2. The combination, with the basin having a valve N, and a cover provided with a plug for the basin, of an oscillating arm K, a link M, connected to said arm and to the valve, and an actuating-arm G, secured to the cover and made to engage the arm K, substantially as described.

3. The combination, with a bowl, a seat having a rear slot, and a cover over the seat, of a bowl stopper or plunger and a swinging link or rod connected to the stopper or plunger and to the cover, said link or rod lifting the stopper or plug and entering the rear slot of the seat when the cover is elevated, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WM. S. MAYO.

Witnesses:
WILLIAM C. HAUFF,
E. F. KASTENHUBER.