

(No Model.)

J. KELLY.
WASH BASIN.

No. 479,429.

Patented July 26, 1892.

Fig. 1.

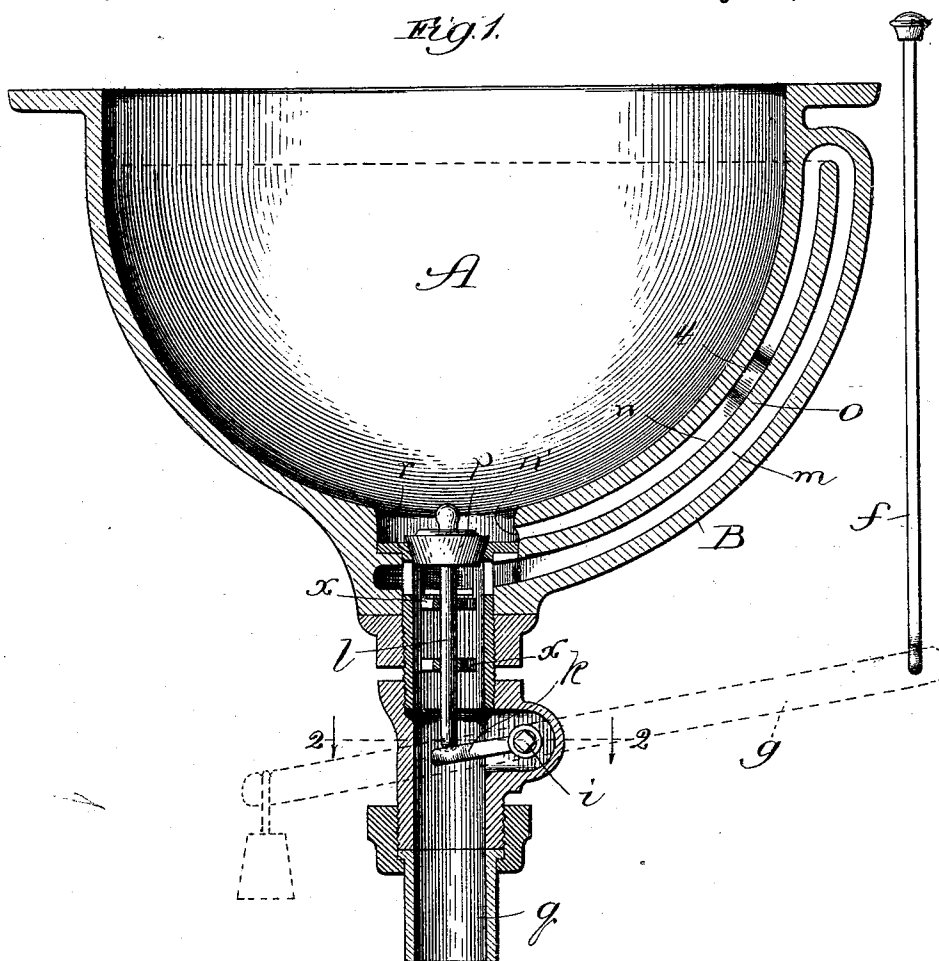
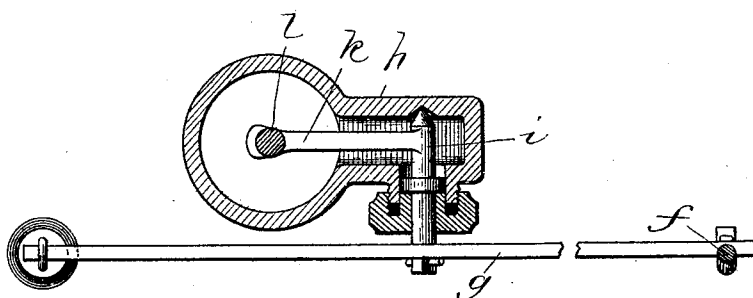


Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES KELLY, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO JOHN KELLY, OF SAME PLACE.

WASH-BASIN.

SPECIFICATION forming part of Letters Patent No. 479,429, dated July 26, 1892.

Application filed December 21, 1891. Serial No. 415,729. (No model.)

To all whom it may concern:

Be it known that I, JAMES KELLY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Wash-Basins, of which the following is a specification.

The object of my invention is to provide for dispensing with the unsightly strainer commonly used for the overflow in stationary wash-bowls and which is liable to become clogged, and thus have its function impaired, and to provide in lieu thereof a construction of overflow whereby it shall be entirely concealed from view and which shall besides afford a seal against the ingress through the water-pipe of sewer-gas and the like, and also a siphonic discharge for the contents of the bowl or basin.

My improvement is illustrated in the accompanying drawings, in which—

Figure 1 is a view in sectional elevation of a wash-basin constructed in accordance with my invention, and Fig. 2 is a section taken on the line 2 2 of Fig. 1 and viewed in the direction of the arrows.

A is the bowl or basin, formed, by preference, of earthenware, because it is my particular desire to dispense with the common form of strainer-overflow on the more richly-decorated specimens of earthenware basins, which are especially marred in appearance by such overflow. However, my improvement is applicable to stationary wash-basins generally, whatever the material of which they are formed.

In the base of the basin A is an opening *r*, affording a seat for the plug *p*, and from which the basin is connected in the usual or any suitable manner with the waste-pipe *g*. In one side of the basin I provide a chamber B, divided by a diaphragm *o* into two channels *m* and *n*, which intercommunicate at the outer end of the diaphragm, the channel *n* opening into the basin near and above the plug *p* and the channel *m* opening into the waste-pipe below the plug. Thus, as will be seen, the water-line in the basin necessarily coincides with the upper extremity of the partition *o* and overflowing the bowl is prevented, since water admitted thereto in excess of

filling it to the water-line passes over the diaphragm into the channel *m*, and thence discharges into the waste-pipe, and such discharge would obviously start the siphon and empty the basin without removing the plug.

To empty the basin, it is only necessary to lift the plug *p* momentarily, when, before releasing it to resume its seat, enough of the contents of the basin will run down the waste-pipe to create a partial vacuum in the channel *m* sufficient to siphon the remainder of the contents of the basin through the channels *n* and *m* into the waste-pipe. Of course the siphon will be broken when the water in the basin is lowered below the mouth *n'* of the channel or siphon arm *n*; but so much of the water as is in the said channel when the siphon is broken will then flow back into the basin in sufficient quantity to cover the mouth *n'*, and thus form a water seal. The channel *n* (which, like the channel *m*, need be only between two and three inches wide) is expanded laterally at some point between its extremities, forming the swell *t*, Fig. 1, to increase its capacity, and thus enable it to contain the larger quantity of water to flow back into the basin and form the seal.

A particular advantage incidental to my improvement is that the siphonic discharge of the contents of the bowl thoroughly scours the channels *n* and *m*, and maintains them clean.

To avoid the necessity of inserting the hand into the water contained in the basin for raising the plug *p*, suitable means should be provided as a medium for raising it from the bowl, and a chain or any other means that are suitable may be used without departure from my invention. I prefer, however, to provide the device for the purpose illustrated. It comprises the stem *l*, depending from the plug through suitable guides *x* and engaging at its lower end the free end of an arm *k*, extending from a rock-shaft *i*, journaled in a stuffing-box *h* on the water-pipe connection, and having connected with its protruding end a lever *g*, weighted at one side of the shaft *i* and connected from the opposite side thereof with a push-rod *f*, extending above the top of the wash-basin. Instead of the weight, a spring may be provided on the push-rod.

By pressing downward on the knob of the push-rod *f* obviously the lever *g* turns the rock-shaft *i* to raise the arm *h*, and consequently the plug, while on releasing the pressure on the rod the weight on the lever *g* (or spring) returns it to its normal position and permits the plug to resume its seat.

I do not wish to be understood as limiting my improvement to the exact construction of the combined overflow and discharge siphon shown and described, as the construction may be variously modified without impairing the operation.

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

1. In combination with a wash-basin, a plug *p*, seated over its discharge-opening *r*, a chamber *B*, formed in the wall of the basin, divided into channels *n* and *m* by a diaphragm *o*, extending upward and defining the water-line in the basin, the said channels *n* and *m* lead-

ing, respectively, into the basin above the plug at the upper end of the discharge-opening and into the discharge-pipe below the plug, and the channel *n* being provided with a swell *t*, substantially as described.

2. In a wash-basin, the combination, with the discharge-outlet *r* and its plug *p*, of a combined overflow and discharge siphon leading from the inner base of the basin in the wall thereof upward and defining the water-line therein and thence down to the discharge from the basin below the plug, a swell in the outgoing channel of the siphon for augmenting the backflow of water for the seal, and means for raising the plug from its seat from without the basin, substantially as described.

JAMES KELLY.

In presence of—
A. P. COBB,
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