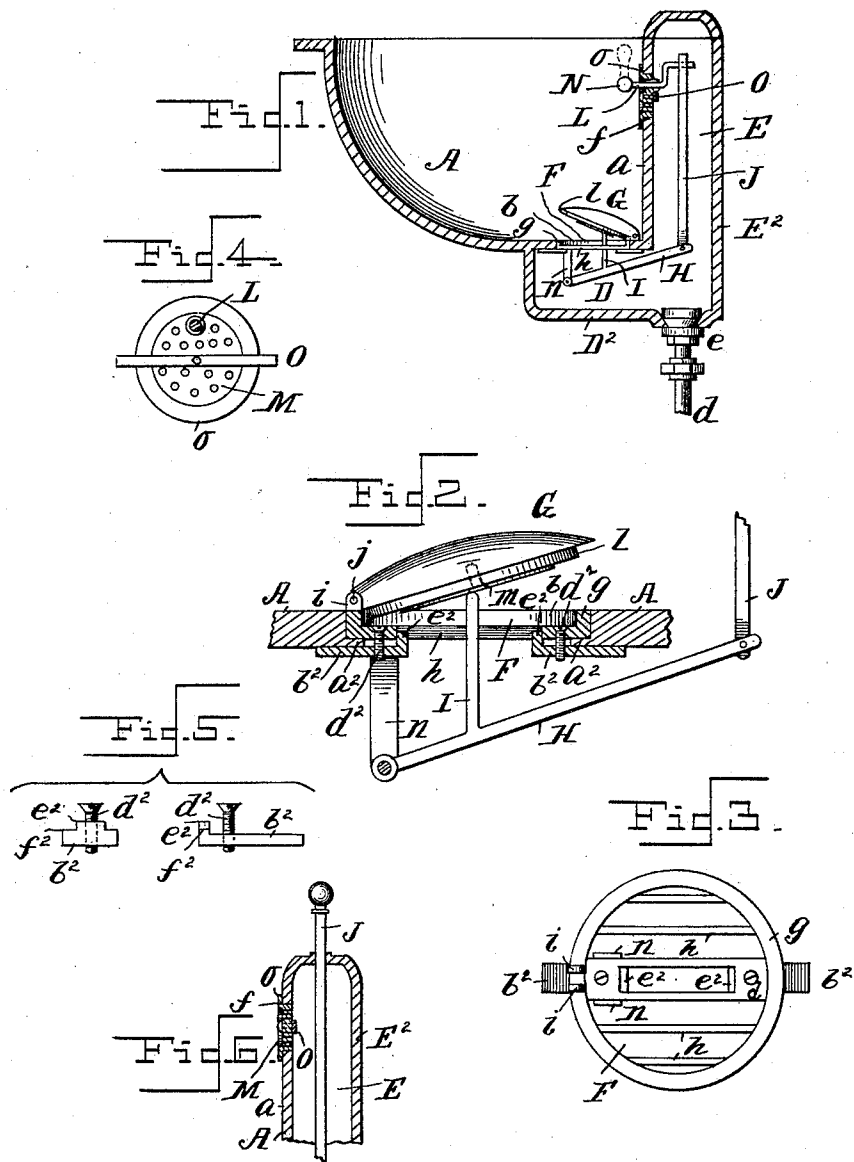


(No Model.)

H. H. CRAIGIE.  
BASIN STRAINER AND STOPPER.

No. 469,513.

Patented Feb. 23, 1892.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## BASIN STRAINER AND STOPPER.

SPECIFICATION forming part of Letters Patent No. 469,513, dated February 23, 1892.

Application filed May 16, 1891. Serial No. 392,950. (No model.)

*To all whom it may concern:*

Be it known that I, HUGH H. CRAIGIE, a citizen of the United States, and a resident of Stamford, Fairfield county, Connecticut, have  
5 invented certain new and useful Improvements in Basin Strainers and Stoppers, of which the following is a specification.

My invention relates to stationary wash-basins, and more particularly to means for  
10 regulating the outflow of water therefrom; and it has for its object to operate the stopper, which is permanently retained in the basin, in a simple and effective manner.

Another object is to detachably secure the  
15 strainer in the basin.

Another object is to provide the basin with outflow and overflow passages that are formed integrally with the basin and within which the parts for operating the stopper are contained.  
20

The invention consists in the novel details of improvement and the combinations of parts that will be more fully hereinafter set forth, and then pointed out in the claims.

Reference is to be had to the accompanying  
25 drawings, forming part hereof, wherein—

Figure 1 is a vertical central cross-section through a wash-basin embodying my invention. Fig. 2 is an enlarged detail cross-section of the bottom of the basin, showing the strainer, stopper, and other connections. Fig. 3 is a plan view of the strainer. Fig. 4 is a face view of the overflow-strainer, showing a section of the crank-shaft for operating the stopper. Fig. 5 shows details of the clamps that hold the strainer in the basin, and Fig. 6 is a sectional view showing a modified form of means for operating the stopper-actuating mechanism.  
30

In the accompanying drawings, the letter A indicates the wash-basin, which may be of suitable construction, in this instance being shown with a straight vertical rear wall *a*. In the bottom of the basin is the outlet-opening *b*, which leads to a horizontal passage or chamber B beneath the basin, which passage leads to the waste-pipe *d* through the open waste-ferrule *e*.  
35

E is an overflow tube or passage extending  
40 along the outer side of the wall *a* of the basin and communicating at its lower end with the passage D, as in Fig. 1. The passage D and

tube E are preferably formed by casting their outer walls D<sup>2</sup> and E<sup>2</sup> integrally with the basin A, part of the basin forming the inner  
55 walls of the passage D and tube E. At the upper part of the basin A is an opening *f*, leading to the tube E, so that the overflow from the basin will enter the tube E and thus find its way out through the pipe *d*.  
60

F is a strainer placed in the opening *b* in the basin, which strainer may be of suitable construction. In the example shown the strainer consists of a ring *g*, having a number of cross-bars *h*. The strainer F is to be  
65 detachably connected with the basin, and for this purpose it preferably rests on an annular projection or ring *a*<sup>2</sup> within the aperture *b*. (See Fig. 2.) *b*<sup>2</sup> are clamps or bars that rest at one part against the under side of the basin A, and also against the strainer F,  
70 screws *d*<sup>2</sup> being passed through the strainer and into said clamps *b*<sup>2</sup>, as in Fig. 2, whereby the strainer is clamped to the basin. To prevent lateral movement of said clamps they  
75 are made with projections *e*<sup>2</sup>, that pass between two bars *h*, ledges *f*<sup>2</sup> on said clamps coming against the under side of the bars *h* to compensate for the thickness of the ring *a*<sup>2</sup>.

G is the stopper, adapted to fit over or within  
80 the strainer F, and it is preferably suitably pivoted thereto—say by lugs *i* on the strainer, that receive a pivot *j* on the stopper. The stopper G preferably has on its under side a rubber ring *l*, that is held in position by a  
85 disk *m*, screwed to the stopper G. (See Fig. 2.) The ring *l* preferably fits within the ring *g* when the stopper is down.

To lift the stopper G, I provide a lever H, that is located beneath the basin A and within  
90 the passage D, which lever carries a spur or projection I, that passes through the strainer F and rests against the disk *m*, (or the stopper,) so that when the lever H is raised its spur I will lift the stopper G to permit water  
95 to escape from the basin. I preferably pivot the lever H to the strainer F, and for this purpose the latter is provided with lugs *n*, projecting downwardly, to which the lever H is pivoted, as shown. To the lever H is at-  
100 tached a rod or connection J, that passes within the overflow-tube E, by means of which rod the lever H is operated. The rod J is connected to a crank K on a shaft or rod

L, journaled in a strainer M, carried in the overflow-aperture  $f$  of the basin A. On the rod L, within the basin A, is a handle N. (Shown mere fully in dotted lines, Fig. 1.)

5 By turning the handle N the crank will lower the lever H, and thereby permit the stopper G to descend to close the outlet  $b$ . By reversing the motion of the handle N the lever H will be lifted, thereby raising the stopper G.

10 The strainer M may be detachably secured in the aperture  $f$  as follows:  $o$  is an annular flange on the strainer M, which rests against the inner side of the basin A, and O is a bar extending across the aperture  $f$  and resting against the basin A, said bar O being screwed to the strainer M. (See Figs. 4 and 6.) This is a very convenient means for detachably securing a metallic strainer to an earthen or porcelain basin.

20 Instead of using the crank K for actuating the lever H, the rod J can be extended up above the tube E, so that by merely pulling the rod J upward the stopper will be lifted.

My improvements are cheap to manufacture, are simple in operation, and not liable to get out of order, and the stopper is always in position in the basin and cannot become misplaced. The handle N is not in the way of a person using the basin, but, on the contrary, is in a convenient position to be operated.

Having now described my invention, what I claim is—

1. A wash-basin having a waste-water aperture at its bottom and a stopper to close the same, combined with a lever for actuating said stopper, an overflow-aperture at the upper part of the basin, a strainer in said aperture, a rotary shaft journaled in said strainer, a handle on said shaft, and connections between said shaft and said lever for operating the latter by the former when the shaft is rotated, substantially as described.

2. The combination of the basin having aperture  $b$ , a strainer in said aperture, a stopper pivoted to said strainer, a lever pivoted to said strainer for operating said stopper, but detached from the latter, a strainer in the overflow-aperture in said basin, a rotary shaft journaled in said strainer, a handle and a crank on said shaft, and a connection between said crank and said lever, substantially as described.

3. The combination of a basin having aperture  $b$  with a strainer in said aperture, a projection  $a^2$ , upon which the strainer rests, clamps  $b^2$ , having projections  $e^2$  at one part to pass between the bars of the strainer and

ledges  $f^2$  to rest against said strainer, the opposite end of the clamp resting against the basin, and screws to hold the clamps against the strainer, substantially as described.

4. A basin having an overflow-outlet  $f$ , combined with a strainer in said outlet, a flange  $o$  on said strainer, and a bar O on the back of said strainer, the wall of the basin being between said flange and said bar, whereby movement of the strainer in any direction is prevented, substantially as described.

5. A wash-basin having an outlet, as  $b$ , a vertical overflow-tube, the wall of the basin forming one wall of the tube, and an open ferrule at bottom of said tube to connect said tube with the waste-pipe, and a horizontal outlet-tube extending from beneath the outlet  $b$  and opening into the overflow-outlet tube between the ferrule and upper part of the overflow-tube, the bottom of basin forming upper wall of the horizontal outlet-tube, whereby the waste-pipe and overflow-tube are on a line, substantially as described.

6. A wash-basin having a vertical overflow-tube, one wall of which is formed by the wall of the basin, and a stopper in the bottom outlet of said basin, and a horizontal outlet-tube extending from beneath the stopper and opening into the overflow-tube and discharging into an open ferrule at bottom of said overflow-tube, the bottom of basin forming upper wall of said horizontal tube, a lever extending horizontally through the outlet-tube into the overflow-tube, with lever-operating connections in said overflow-tube, substantially as described.

7. A wash-basin having a vertical overflow-tube, one wall of which is formed by the basin-wall, combined with a hinged stopper and strainer, a horizontal tube extending from beneath the bottom outlet and discharging into open ferrule at bottom of overflow-tube, the bottom of basin forming one wall of the horizontal tube, a lever having a spur to raise stopper, one end of which lever is connected to the strainer, the lever extending horizontally through outlet-tube into overflow-tube, with operating connection in said overflow-tube, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 12th day of May, 1891.

HUGH H. CRAIGIE.

Witnesses:

CLARENCE L. REID,  
SAMUEL YOUNG.