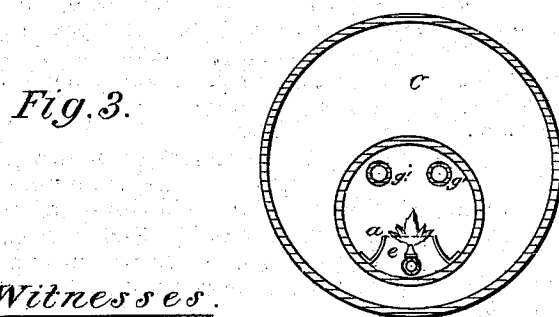
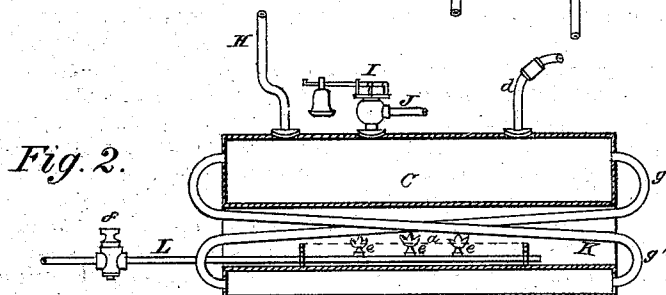
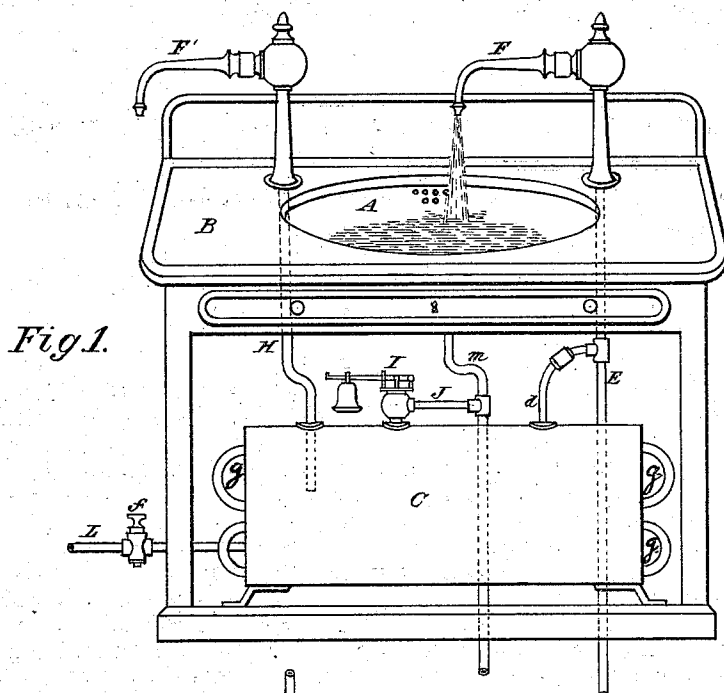


W. HERLEHY & R. JOHNSON.  
Heaters for Wash-Stands.

No. 154,392.

Patented Aug. 25, 1874.



Witnesses.

*Jonathan Ord*  
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Inventors.

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# UNITED STATES PATENT OFFICE.

WILLIAM HERLEHY AND RICHARD JOHNSON, OF PITTSBURG, PA.

## IMPROVEMENT IN HEATERS FOR WASH-STANDS.

Specification forming part of Letters Patent No. **154,392**, dated August 25, 1874; application filed May 11, 1874.

*To all whom it may concern:*

Be it known that we, WILLIAM HERLEHY and RICHARD JOHNSON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful means of warming and keeping warm a supply of water, such as may be required in public and private buildings, bed-rooms, &c., of which the following is a specification:

Our invention will be readily understood from the following description, taken in connection with the accompanying drawing, wherein—

Figure 1 represents a perspective view of a wash-stand, having its front doors removed to exhibit the application of our invention. Fig. 2 represents a longitudinal section of the boiler or water-heating apparatus, and a portion of its attachments; Fig. 3, a transverse section of the same.

The object of our invention is to furnish such wash-stands as are usually connected to a street-main with a means of warming the in-going water on its way to the basin, and which is accomplished by a burning jet of gas acting on a small boiler or tank arranged within the body of the wash-stand, the several parts being so connected and made to operate with respect to each other as that hot or cold water, or a mixture of the same, may be drawn into the basin at pleasure.

To this end we place underneath the basin A, and within the body of the stand B, a small cylindrical or other shaped tank, C, so united with the water-main, by means of a branch, *d*, of the supply-pipe E, as that the necessary quantity of water may at all times be had. The upper end of the supply-pipe E is furnished with the usual swinging faucet F, so arranged as that its nozzle, when brought over the basin, will discharge cold water therein in the manner of

those in ordinary use. At the opposite side of the basin is arranged a similar faucet, F', so connected to a pipe, H, extending down into the tank C, as that hot water will flow through it when its faucet is swung over the basin.

To generate heat, and thereby warm the water in the tank, we have constructed it with a large horizontal flue, K, in which is arranged a gas-pipe, L, furnished with burners *eee*, over which is placed a fine wire-gauze, *a*, which creates a smokeless flame, which, although small, will be found sufficient to heat and keep hot the water, the pressure of gas being regulated, &c., by means of an ordinary key, *f*.

To provide against any explosion possible on the undue accumulation of steam, we have attached to the tank a safety-valve, I, so contrived as to allow such steam to escape through a connecting branch, J, into the waste-pipe *m*, just below its bend or trap.

For the purpose of keeping up a lively and continuous circulation of the water in the tank, we have connected its opposite ends by means of S-shaped pipes *g g'*, that extend into and through the flue K above the gas-flame, which arrangement is found to answer the object required.

We claim—

A new and improved heater for wash-stands, consisting of the steam-tight boiler C, having a longitudinal open-ended flue, K, in combination with the S-shaped circulating-tubes *g g'*, inlet-pipe E, and outlet-pipe H, as and for the purposes set forth.

WILLIAM HERLEHY.  
RICHARD JOHNSON.

Witnesses:

JOSIAH W. ELLS,  
W. L. BADGER.