

F. LAUTENBACH & J. C. HAMMEN.
Tumbler-Washers.

No. 154,759.

Patented Sept. 8, 1874.

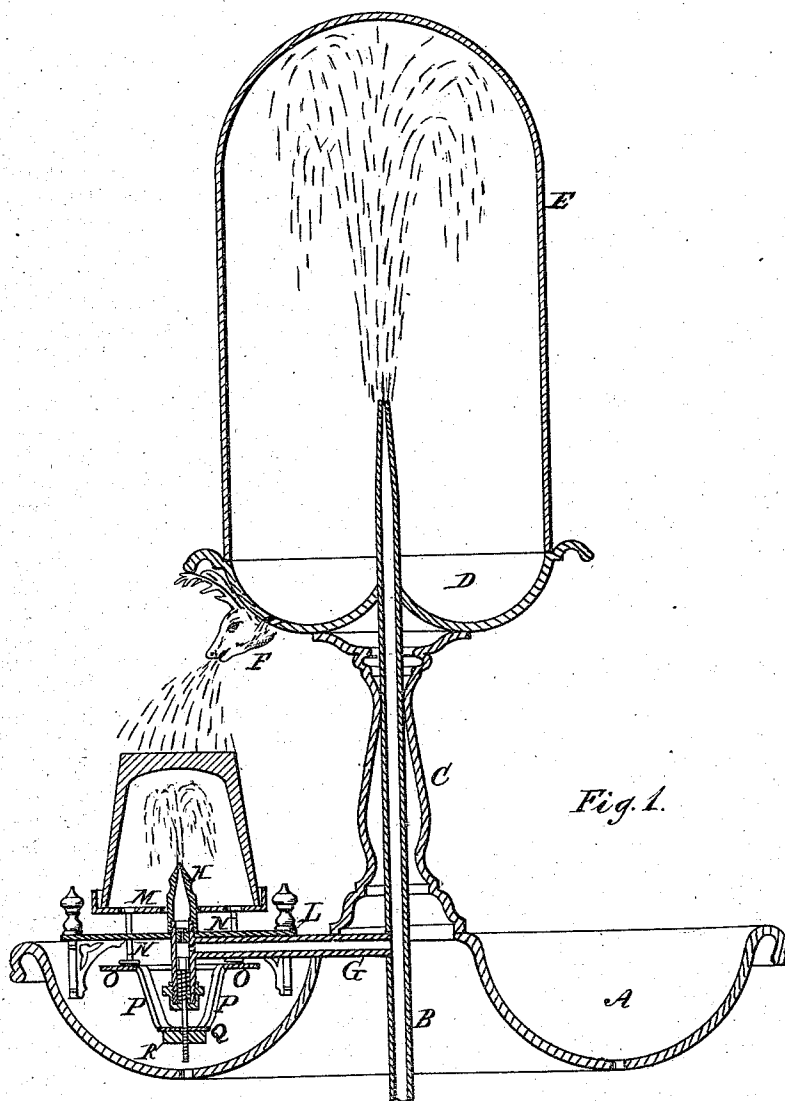


Fig. 1.

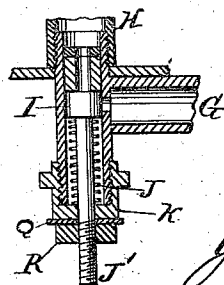


Fig. 2.

Witnesses.

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UNITED STATES PATENT OFFICE.

FERDINAND LAUTENBACH AND JOHN C. HAMMEN, OF BALTIMORE, MD.

IMPROVEMENT IN TUMBLER-WASHERS.

Specification forming part of Letters Patent No. 154,759, dated September 8, 1874; application filed April 21, 1874.

To all whom it may concern:

Be it known that we, FERDINAND LAUTENBACH and JOHN C. HAMMEN, both of the city of Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Tumbler-Washers, of which the following is a specification:

Our invention relates to a tumbler-washer of that well-known class in which the tumbler is placed bottom up upon a stand, through which projects a jet-pipe, the water from which is caused to issue and impinge against and wash the inside of the tumbler simply by placing the tumbler upon the stand, its weight opening a valve and allowing the passage of the water from a supply-pipe to the jet-pipe, the valve being automatically closed and the jet stopped when the tumbler is removed.

The subject-matter claimed will hereinafter be set forth.

In the accompanying drawings, Figure 1 represents a vertical central section through our improved tumbler-washer with the jet-pipe valve open; and Fig. 2, a similar section through a portion of one of the jet-pipes and its branch pipe, showing the valve closed.

We have shown in the drawings only one set of jets, one tumbler-stand, and one branch pipe; but these parts are, of course, to be duplicated.

The base A is formed with an annular depression to constitute a basin, into which the waste-water flows, and from which it is conducted by a suitable waste-pipe. A main supply-pipe, B, passes centrally through the basin. A series of branch pipes, G, project laterally from the supply-pipe B, to which they are firmly united. At the outer end of each branch pipe is a jet-pipe, H. The opening from the jet-pipe into the branch pipe is ordinarily closed by means of a valve, I, held in line with the opening by means of a coiled spring, J, incased in the lower part of the jet-pipe, and encircling the valve-stem J', and bearing at one end against the valve, and at the other against a cap, K, screwed onto the lower end of the jet-pipe, so that it can be removed when desired. A rest or support, L, for a tumbler-stand, M, is secured upon or over each branch pipe. The jet-pipe H projects centrally through the rest and stand. The stand is connected with its support by means of rods N, secured to the under side of

the stand, and passing through holes in the support, so that the stand may have a limited vertical movement on its support. The lower ends of the rods N rest on a cage, composed of a loose ring or collar, O, inclosing the jet-pipe, and connected, by arms P, with another collar, Q, resting on top of a nut, R, screwed to the lower threaded end of the valve-stem J'.

By this construction, when the tumbler is placed bottom up upon the stand M, its weight bears upon the valve-stem, which is held up by the coiled spring J, and compresses the spring, drawing down the valve I, and opening communication between the supply-pipe and the jet-pipe through the branch pipe without altering in any manner the position of the jet-pipe, which always remains in the same fixed position. The jet from the pipe H washes the inside of the tumbler, and the jet from the reservoir, through the head F, washes the outside of the tumbler. When the tumbler is removed from the stand the valve is closed automatically by the spring.

By means of the screw-cap K and nut R the tension of the spring may be regulated, and the spring may readily be removed when desired.

As the valve moves across the opening from the jet-pipe to the branch pipe there is no pressure of the water to be overcome in the closing of the valve, and as the valve-stem spring is entirely inclosed beneath the valve and water-passage, it is thoroughly protected from injury by moisture or other causes.

It is obvious that the rest L for the tumbler-stand may be dispensed with, and the stand be supported by the jet-pipe—for instance, the cage may fit snugly, and slide upon the pipe and valve-stem.

We claim—

In a tumbler-washer, the combination of the jet-pipe, the branch pipe, and a valve arranged within said jet-pipe to move across the branch pipe, as and for the purposes specified.

In testimony whereof we have hereunto subscribed our names.

FERDINAND LAUTENBACH.

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Witnesses:

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