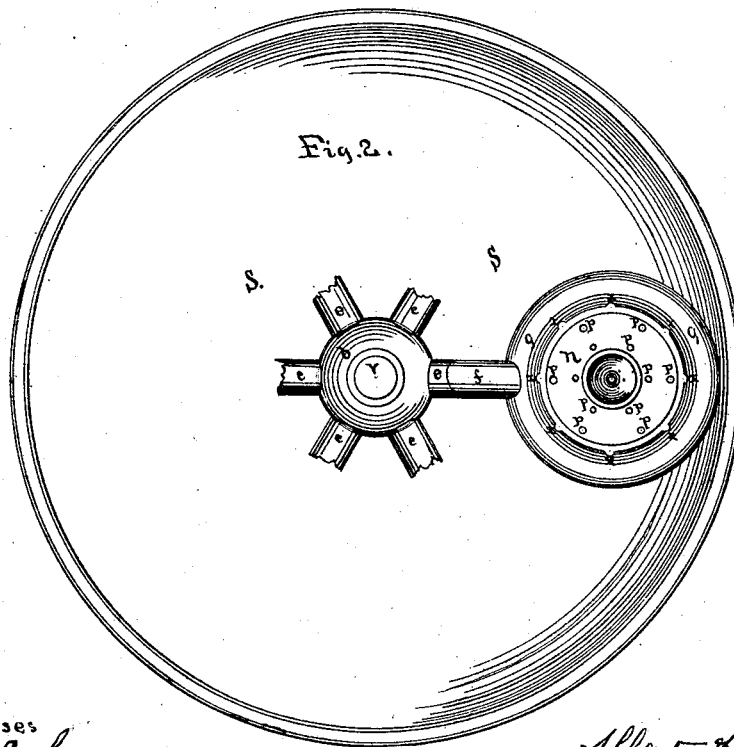
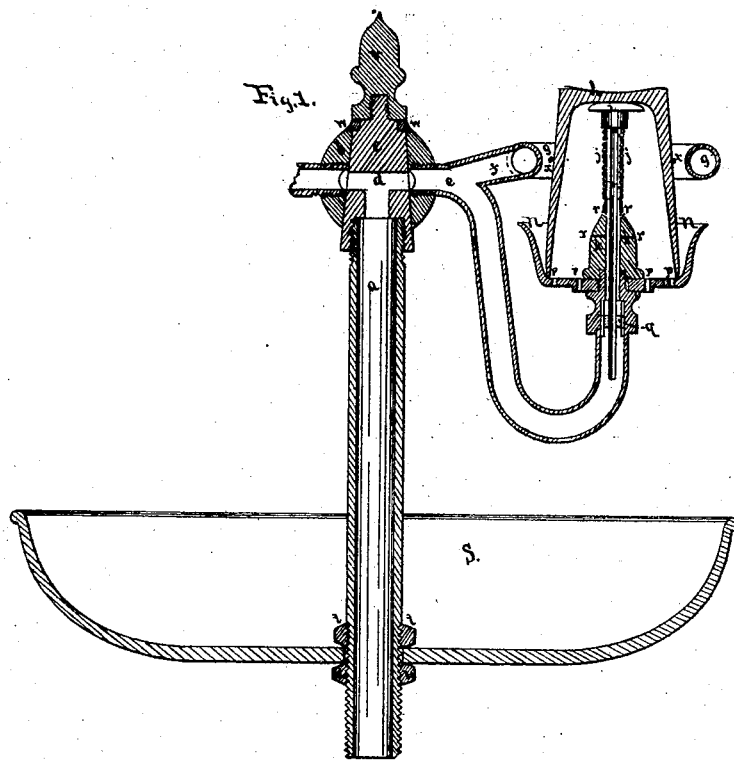


A. HALLOWELL.  
TUMBLER WASHER.

No. 110,231.

Patented Dec. 20, 1870.



Witnesses  
*John E. Crane*  
*A. A. Hart*

Inventor  
*Albert Hallowell*

# United States Patent Office.

ALBERT HALLOWELL, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO GUSTAVUS D. DOWS, CALVIN DOWS, AND GEORGE S. CUSHING.

Letters Patent No. 110,231, dated December 20, 1870.

## IMPROVEMENT IN TUMBLER-WASHERS.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom it may concern :

Be it known that I, ALBERT HALLOWELL, of Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Tumbler-Washers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 represents a vertical section through the center of one branch of the apparatus.

Figure 2 is a plan or top view of the same.

In this invention a jet is closed at its top by a valve seating upward.

In practice this valve closes by the force of the water.

The valve-rod projects upward from the top of the jet.

A spiral spring surrounds the valve-rod, to hold the latter and the valve upward when there is no water or pressure of water in the pipe.

When an inverted tumbler is placed over the jet, its weight is intended to press the rod downward and open the valve, and a shower or spray of water is thrown upward into the tumbler until it is removed.

In the drawing—

*a* denotes a vertical conduit or tube, which is closed at the top, and there provided with a series of branch tubes, *e e e e*, leading from it, and curved as shown in the drawing.

Each of these branch tubes terminates in a perforated acorn-shaped cap, *k*, and inside of each tube *e*, a little below this cap, is a valve, *q*, seating upward, and when seated closing all the perforations of the cap water-tight.

The valve-rod *m* projects upward through the center of the cap, terminating in a knob, *i*.

A spiral spring, *j*, surrounds the valve-rod between the knob and the cap *k*, to hold the valve up to its seat when there is no water or water-pressure in the pipe.

The weight of the valve is to be so adjusted to the upward pressure of the water beneath it that when

undisturbed it will remain constantly closed by the force of the water without the aid of the spring *j*, which is only used to hold the valve against its seat in the absence of water, as before described.

Each inverted tumbler is placed on a suitable stand, or in a cup, *n*, over the top or cap *k* of the branch-pipe, which projects so far above the tumbler-seating surface of the stand or cup, that when the inverted tumbler is placed over the cap *k*, the weight of the tumbler will press upon the knob *i*, depress the valve-rod, and open the valve, causing the water to be thrown upward and outward in spray against the bottom and sides of the tumbler.

Leading from each branch-tube *e* there is an auxiliary branch-tube, *f*, which opens out of the tube *e*, and into and supports a tubular jet-ring, *g*, arranged over the cup.

The tubular jet-ring, branch-pipes, and cups are substantially like those shown in my patent dated February 13, 1866, reissued to G. D. Dows and C. Dows and G. S. Cushing, dated March 8, 1870, the principal peculiarity of this invention being the valve operating in connection with the water-delivery pipe and its perforated top or cap to arrest the flow of water when the tumbler is removed.

The instrument or apparatus is designed to be used in connection with soda-water stands, or other places where many tumblers are constantly in use and require frequent washing or rinsing.

I claim as my invention as follows:

In connection with the water-delivering pipe, provided with a perforated cap or top, substantially as described, the upward-seating valve *q*, having a projecting rod, *m*, when arranged and operating in the manner and for the purpose specified.

ALBERT HALLOWELL.

Witnesses:

JOHN E. CRANE,  
A. A. HART.