

UNITED STATES PATENT OFFICE.

ERASTUS STEBBINS, OF CHICOPEE, MASSACHUSETTS.

BASIN-FAUCET.

Specification of Letters Patent No. 17,342, dated May 19, 1857.

To all whom it may concern:

Be it known that I, ERASTUS STEBBINS, of Chicopee, in the county of Hampden and State of Massachusetts, have invented an
5 Improved Basin Cock or Faucet; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—
10 Figure 1, exhibits a side elevation of the same, Fig. 2, a vertical and longitudinal section of the same, Fig. 3, an internal view of its spindle and valve with the mechanism for operating the latter, Fig. 4, a side view
15 of the valve, Fig. 5, a side view of the spindle, Fig. 6, a top view of the valve, Fig. 7, a bottom view of the spindle cams and bearing surfaces, Fig. 8, a horizontal section of the valve, such being taken just above its elevat-
20 ing cams, Fig. 9, a horizontal section of the faucet, such being taken through the feather connection, to be hereinafter described, Fig. 10, another horizontal section taken through the valve chamber.
25 My invention has reference to a faucet, provided with a bib or tube applied to the case of the faucet so as to turn therein and serving not only to discharge water or a liquid from the faucet but to open and close or
30 aid in opening and closing the valve of the faucet. In the drawings, this movable bib or eduction tube is represented at A, as projecting from and fastened to a tubular spindle B, in such manner that said spindle may
35 rotate on its axis with the eduction tube or bib, while the latter is being moved around through the arc of a circle. To the lower end of the spindle, the valve C, is applied as will be hereinafter described. This spindle
40 and valve are arranged within a case D, at the lower end of which or at the bottom of a valve chamber E (formed therein) is the valve seat F, the latter connecting in the usual manner with an induction pipe G, pro-
45 vided with means, (viz., a screw, *a*, and a polygonal head *b*) by which it and the faucet may be fastened to a basin stand.

The valve chamber and valve are constructed, polygonal in cross section, in order
50 that the valve may be prevented from turning around, while being raised or lowered. A cap H, screws on the valve case, and against a leather washer *c*, the said cap being provided with a secondary screw cap or
55 nut I, which is screwed upon it as shown at

d, d, in Fig. 2 and against the upper end of a tubular bearer K, which surrounds the spindle B, and rests on a conical shoulder *e, e*, formed thereon. This tubular bearer is connected to the cap, H, by a feather connection, *f*, which consists of a projection and a recess, the former being extended from the tubular bearer, while the latter is formed within the cap, the two being so made as to enable the tubular bearer to be moved vertically and be stationary in other respects within the cap. A side view of this tubular bearer K, exhibiting the projection is given in Fig. 2. By screwing down the secondary cap I, the valve may be adjusted so as to
60 press with more or less force upon its seat as circumstances may require. I employ the tubular bearer K, for the purpose of preventing the screw, I, from being turned around or loosened during the rotary movement of the spindle. I could construct the
65 spindle with a shoulder for the screw, I, to operate directly against but in such case, it will readily be seen that the rotary motions of the spindle would tend either to unscrew
70 or screw up the adjusting screw I. By employing the tubular bearer to rest on the shoulder of the spindle and cap H as described the screw, I, becomes so insulated
75 from the shoulder of the spindle as to be prevented from being turned or loosened during the rotary movements of the spindle.

The valve is so connected to the spindle as to enable the latter to be rotated, the said valve being provided with a passage *g*,
80 leading laterally through it and so that a liquid when in the valve chamber may pass through the said valve and its spindle and from thence be discharged into and through the bib or eduction pipe.
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The mechanism for operating the valve is applied both to it and the spindle, and consists, first, of cams or projectins *h, i* applied respectively to the spindle and valve, such cams (or their equivalents) being so
90 applied to such parts, that during the rotary movements of the spindle, one shall be carried against the other or be made to so operate as to raise the valve from off its
95 seat. Besides these cams or elevating contrivances arranged as shown in the drawings—I combine with the spindle and valve, cams for closing the valve and for main-
100 taining it closed during such movements of the bib as may be made after the valve has
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been closed and prior to a subsequent elevation of it. These last cams are shown at *h*, *l*, the bearing surfaces being exhibited at *m*, *n*, the same being arranged with reference to the spindle and the valve as shown in the drawings. The said drawings represent two sets of the lifter cams, two sets of depressing cams, and two sets of bearing surfaces, the peculiar arrangement and combination of which constitute an improvement in operating the valve of the faucet of the above kind, as by means of it, the valve does not turn upon its seat so as to be liable to be worn by such a movement but is raised and controlled in such manner as may be desirable in order that when the bib is brought over the center of the basin, fluid may be discharged through said bib and its discharge arrested during any lateral movement.

The manner in which I construct my faucet, insures to it great durability and free-

dom from leakage, matters of great importance in basin faucets of this kind.

What I claim as my invention is—

1. Combining and arranging the tubular bearer *K*, with the spindle, the valve case and adjusting screw substantially in manner and for the purpose as herein before specified.

2. I also claim the combination and arrangement of the elevating and depressing cams (or their equivalents) *h*, *i*, *k*, *l*, and the plane or bearing surfaces, *m*, *n*, the same being applied to the spindle and valve and made to operate together essentially in manner as hereinbefore explained.

In testimony whereof, I have hereunto set my signature.

ERASTUS STEBBINS.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.