E. S. RICH.
Basin-Faucet.

No. 218,135. Patented Aug. 5, 1879.

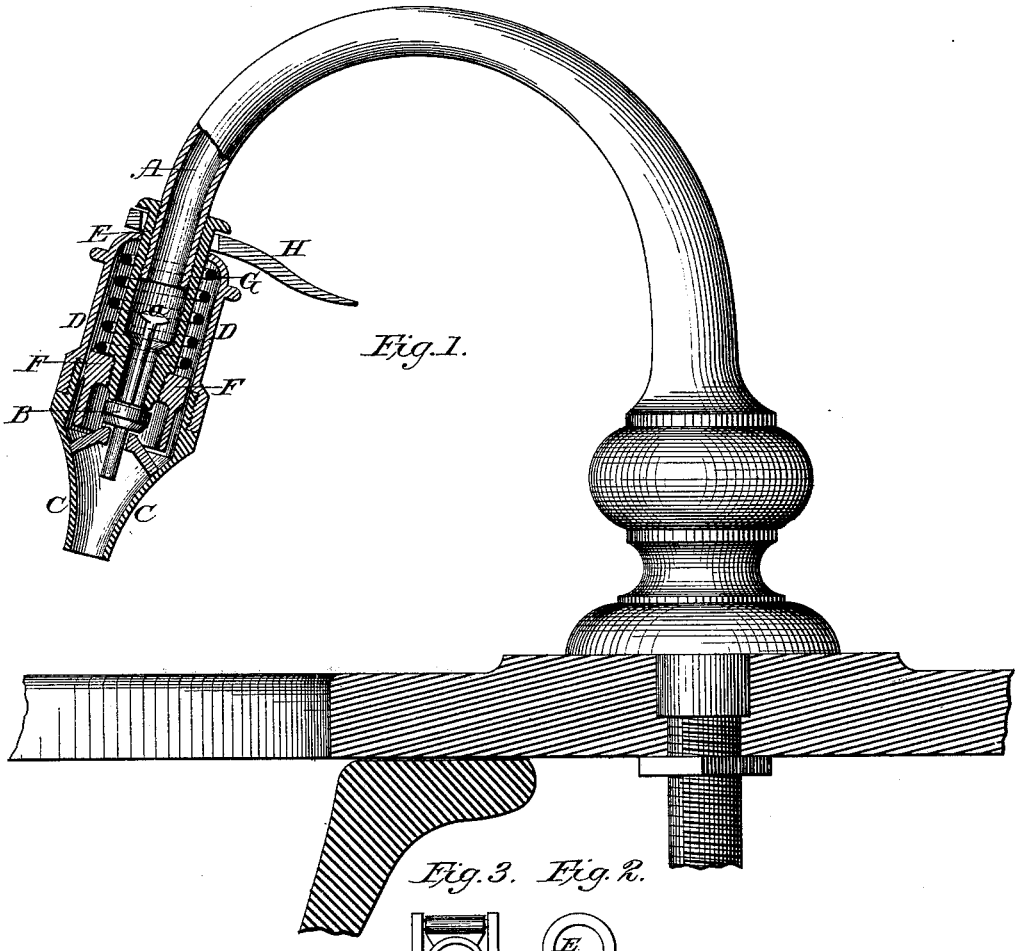

Fig. 1.

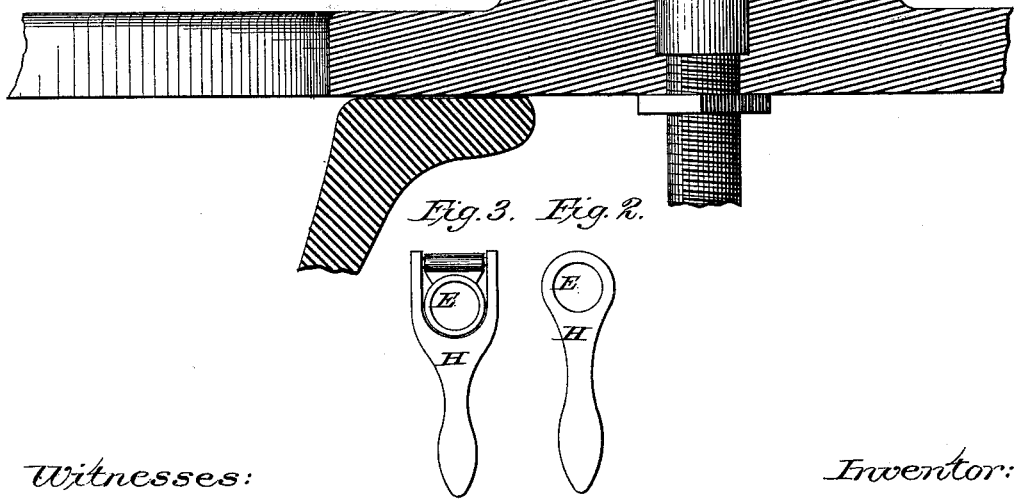

Fig. 3. Fig. 2.

Witnesses:
George Batum
Albert Schmeck.

Inventor:
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UNITED STATES PATENT OFFICE.

EDWIN S. RICH, OF NEW YORK, N. Y.

IMPROVEMENT IN BASIN-FAUCETS.

Specification forming part of Letters Patent No. **218,135**, dated August 5, 1879; application filed November 18, 1878.

To all whom it may concern:

Be it known that I, EDWIN S. RICH, of the city, county, and State of New York, have invented a new and useful Improvement in Basin-Faucets, of which the following is a specification.

The object of my invention is to so improve the basin-faucets for which Letters Patent have been granted to me under dates of July 4 and September 26, 1876, and numbered 179,608 and 182,603, as to make them self-closing.

The accompanying drawing represents a vertical central section of my improved self-closing basin-faucet.

In the drawing, A represents the tube or pillar, which stands stationary with the nozzle, just projecting over the slab into the basin; and B, the closing-valve, with a metallic seat at the discharge end of the same. The valve B is seated in the nozzle C, and secured by the sleeve D to the center-piece E of tube A, lower collar, F, and spiral spring G. The lever-handle H encircles the center-piece E below the upper collar or rim and above the sleeve D. The center-piece E is arranged with an additional stem-valve, *a*.

It will be perceived that the closing-valve B is placed at the lowest point of the tube A; consequently it is impossible for it to leak or drip but from that point, and the drip is conveyed directly into the basin, instead of running down the pipe, or between slab and basin, and thereby prevented from injuring the floor and spoiling the ceilings below.

The nozzle C is screwed into the sleeve D, and the valve B supported on a perforated bridge across the same, and the stem of the valve passing through the bridge.

The sleeve D is drawn in closely at the upper end around the center-piece E, and held up into its place by the spiral spring G.

The center-piece E is screwed onto the tube or pillar, and arranged on the inside with the stem-valve *a*, the stem being made long enough to rest on the closing-valve during the use of the same, so as to admit of a free discharge of water. A collar or rim is cast on the top part for the lever-handle H to work against. On the lower end inside and outside valve-seats are made to fit the valves *a* and B.

The lower collar, F, is made to screw on the lower end of the center-piece E and extended down and around the closing-valve B, to prevent the rising of the water to the parts above, and thereby doing away with all packing. The top of the collar F is enlarged, so as to fit the sleeve D and support the spiral spring G, which keeps the closing-valve B tight up against the pressure to its seat.

The spiral spring G is made of brass spring-wire, or other suitable material, of the requisite strength to keep the water-way closed against the pressure.

The lever-handle H is made to encircle the center-piece E, Fig. 2, below the top collar and above the sleeve D, so that when pressed down it acts as a lever between the top rim of the center-piece E and the sleeve D and opens the water-way of the faucet.

I shall now explain the working of my self-closing nozzle-faucet. Press down on the lever-handle H to draw water; let go, and it closes.

To repair the same, to put in a new spring or metallic valve-seat, when required, press down on the handle H, screw off the nozzle C, and as soon as screwed off down comes the upper valve to its seat by the pressure of water and closes the water-way. Let go the handle and screw off the lower collar, F, and the old spring will fall out; put in a new one, screw on the collar F up to its shoulder, drop in a new valve-seat, press down on the handle H, screw on the nozzle, and up goes the upper valve, and the water is on again, and the faucet is in perfect order and ready for use; and this can be done in a few minutes, and without necessitating the shutting off of the water during the time the valve is being repaired.

These self-closing nozzle-faucets have no tight packing for the spring to shove the valve through, and are consequently more sensitive and more easily worked, which adds to the durability of the spring, and consequently the spring will last longer.

If the spring happens to break, the entire sleeve slides down and disengages the upper valve, *a*, which falls to its seat and shuts off the water, and then the faucet can be repaired at leisure, thereby making it a double safety self-closing faucet.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

1. As an improvement in basin-faucets, the lower collar, F, made to screw on and off of the center-piece E, so as to put on the lever-handle H, sleeve D, and spiral spring G, as and for the purpose specified.

2. The combination of the lever-handle H with the center-piece E, spiral spring G, lower collar, F, nozzle C, and valve B, the lever-handle made with a collar to encircle the center-piece E just below its top collar and above the sleeve D, so that when pressed down it acts as a lever in shoving down the sleeve D, nozzle C, and valve B, and opens the waterway of the faucet, substantially as and for the purpose specified.

EDWIN S. RICH.

Witnesses:
GEORGE BATUM,
O. W. COOK.