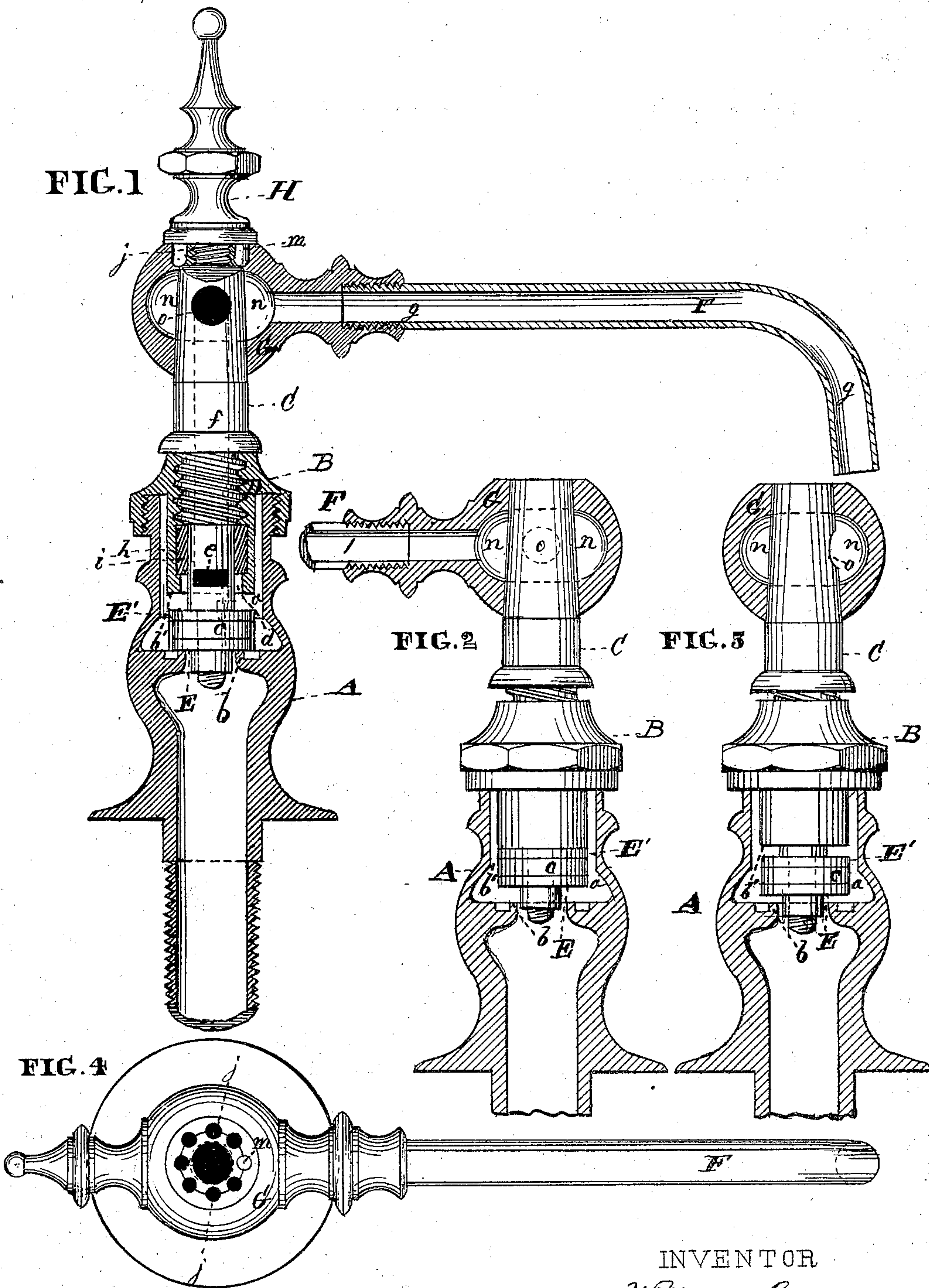


Compression Basin-Faucets.

No. 135,541.

Patented Feb. 4, 1873.



WITNESSES

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WILLIAM GORDON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO ANDREW McCAMBRIDGE AND THOMAS KENNEDY, OF SAME PLACE.

IMPROVEMENT IN COMPRESSION BASIN-FAUCETS.

Specification forming part of Letters Patent No. 135,541, dated February 4, 1873.

To all whom it may concern:

Be it known that I, WILLIAM GORDON, of the city of Philadelphia and State of Pennsylvania, have invented certain Improvements in Swing-Compression Basin-Faucets, of which the following is a specification:

My invention relates, in the first place, to providing the cap of the water-chamber with a screw-socket and stuffing-box for the connection of the screw-stem. In the second place, it consists in the combination of an upper valve with the lower end of the screw-stem, and making its seat on the lower end of the stuffing-box, for cutting off the flow of water when the nozzle is swung around in the opposite direction to that it assumes when the lower valve is closed, the end of the stuffing-box having an annular chamber around the stem for the passage of water into a cross-opening of the stem and thence through the central passage of the latter. In the third place, it consists in the combination of the ball of the nozzle with the upper end of the screw-stem by means of a tapered joint and the confining the two parts together by means of a cap provided with a central screw which connects with the upper end of the stem. In the fourth place, it consists in providing for regulating the throw of the nozzle to a backward position when either of the valves is brought to its seat, by a series of vertical openings through the tapered joint of the stem and socket of the ball of the nozzle and a pin which connects with one of the openings, the nozzle being adjusted to its right position when the valve is in connection with its seat.

The construction and arrangement of the several parts of the improved faucet are hereinafter fully described.

Figure 1 is a front elevation, partly in section, of the improved faucet, having the nozzle swung back to the right, and the lower valve E being in connection with its seat *b*. Fig. 2 is a like view when the nozzle is swung back to the left and the upper valve E' is closed upon its seat *b'*. Fig. 3 is a like view when the nozzle F is turned in front and the valves both opened for the flow of the water. Fig. 4 is a plan view, with the cap H removed to show the mode of adjusting the nozzle F to the screw-stem C.

Like letters in all the figures indicate the same parts.

A is the barrel of the faucet, having a valve-chamber *a*, and lower valve-seat *b*. B is cap of the valve-chamber, and C the central screw-stem connected therewith by means of the screw-socket D. On the lower end of the stem there is a valve, E, which is closed upon its seat *b* when the nozzle F is thrown back to the right in the position it assumes in Figs. 1 and 4, the arrangement being the same as in ordinary faucets. Resting on the upper side of the washer *c* is an upper valve, E', whose seat *b'* is on the lower end of the screw-socket. The screw-socket is projected into the valve-chamber *a*, as shown in Figs. 1, 2, and 3, so that its end may form a seat for the upper valve E' when the nozzle F is thrown back to the left, as seen in Fig. 2. When the nozzle is thrown in front for the flow of the water, as seen in Fig. 3, both valves are open and the water flows into the annular space *d*, in the lower end of the screw-socket D, and through the cross-opening *e* into the central passage *f* of the valve screw-stem C, and thence out through the passage *g* of the nozzle F. The screw-socket D is provided with a stuffing-box, *h*, and packing-ring *i*, as seen in Fig. 1, for the connection of the smooth part of the screw-stem, whereby the screw is fully protected against the passage of water through it. The ball G of the nozzle F is connected with the tapered part of the screw-stem, and combined therewith by means of the screw-cap H, to provide for its adjustment, so that when either valve is closed the nozzle shall be in its proper backward position. To facilitate the adjustment, and to give a positive set to the nozzle, there is a series of vertical openings, *j*, in the joint K of the stem C and ball G, so that when the nozzle is adjusted it is confined in position laterally by means of the pin *m*, as seen in Figs. 1 and 4. In order to make a connection with the vertical central passage *f* of the screw-stem and the passage *g* of the nozzle, the ball G has an annular space, *n*, with which the side-opening *o* of the stem communicates when the nozzle is in any position.

I claim as my invention—

1. The combination of the cap B, having a

screw-socket, D, with the stem C, substantially in the manner and for the purpose set forth.

2. The combination of the cap B, having a screw-socket, D, and stuffing-box *h*, with the screw-stem C and packing-ring *i*, substantially as described.

3. The upper valve-seat *b'*, on the lower end of the screw-socket D, in combination with the upper valve E', substantially as and for the purpose set forth.

4. The annular chamber *d*, in the lower end of the screw-socket D, in combination with the cross-opening *e* of the valve-stem, substantially as described.

5. The combination of the screw-cap H, the ball G of the nozzle, having an annular space, *n*, and the screw-stem C, having a side-opening, *o*, substantially in the manner and for the purpose above set forth.

6. The combination of the openings *j* and pin *m*, with the upper end of the screw-stem, and the ball G of the nozzle, substantially as described.

WILLIAM GORDON.

Witnesses:

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