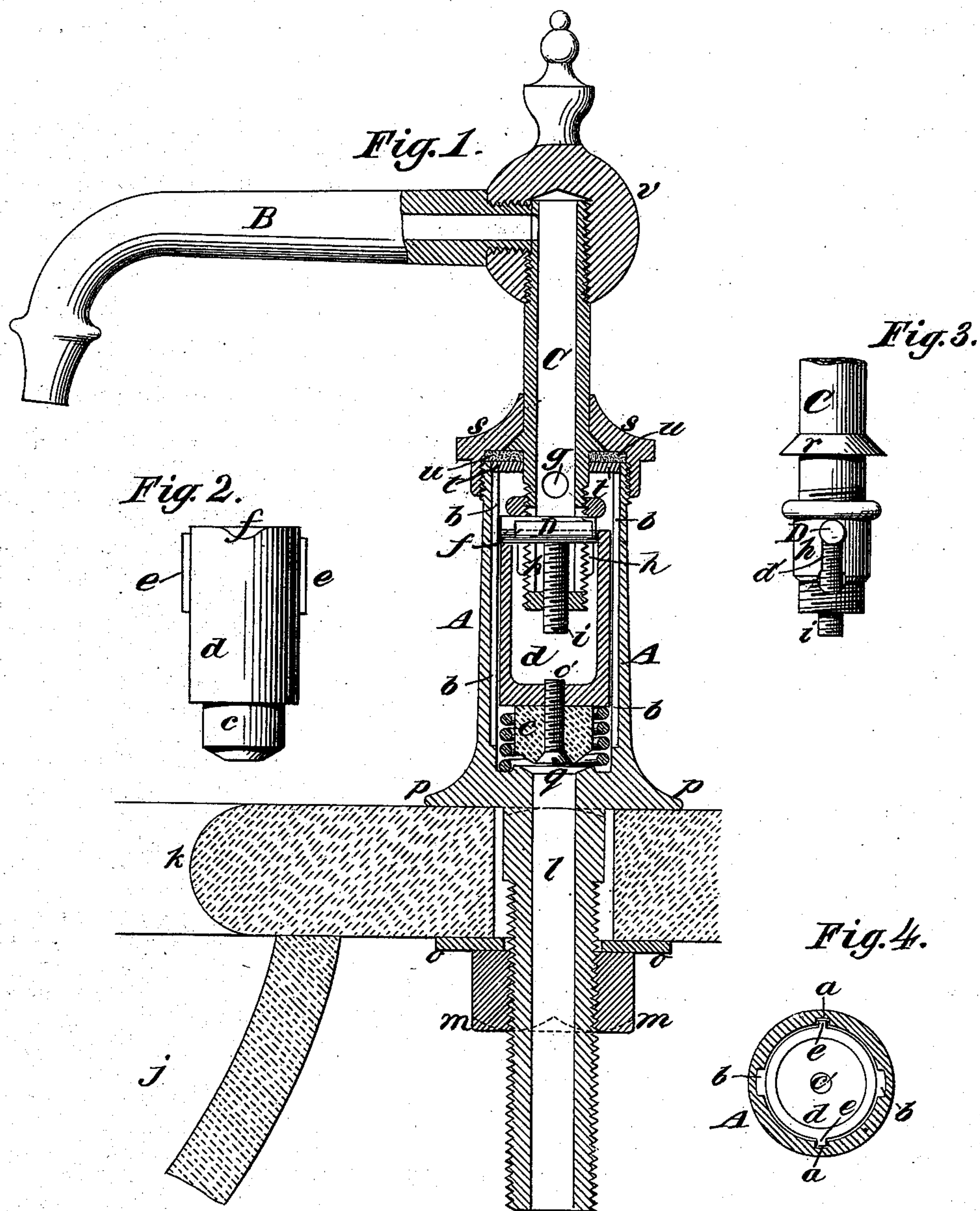


(No Model.)

B. JOHNSON.  
BASIN FAUCET.

No. 401,952.

Patented Apr. 23, 1889.



Witnesses:  
Joseph W. Roe,  
O. Sundgren

Inventor:  
Bernard Johnson  
by attorneys  
Pronnt & Ball



# UNITED STATES PATENT OFFICE.

BERNARD JOHNSON, OF NEW YORK, N. Y.

## BASIN-FAUCET.

SPECIFICATION forming part of Letters Patent No. 401,952, dated April 23, 1889.

Application filed June 28, 1888. Serial No. 278,411. (No model.)

*To all whom it may concern:*

Be it known that I, BERNARD JOHNSON, of the city and county of New York, in the State of New York, have invented a new and useful Improved Basin-Faucet, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to that class of faucets known as "swing basin-faucets," in quite general use, particularly for supplying water to wash-basins.

I will now proceed to describe the invention and point out its novel features in claims.

In the drawings, Figure 1 represents a vertical longitudinal sectional view of a swing basin-faucet embodying my improvement. Fig. 2 represents a side view of the plunger-valve. Fig. 3 is a front view of a portion of the discharge-tube spindle, adjusting-nut, and clamp-screw; and Fig. 4, a horizontal sectional view of the valve plunger and casing.

Like letters of reference indicate corresponding parts in all the figures.

A indicates a cylindrical valve-casing, contained in which is a plunger-valve, *d c*. The upper edge or rim of the plunger *d* of said valve has a notch, *f*, on one side only of its rim.

B indicates the discharge-tube, through which water may be delivered into a wash-basin, *j*, situated beneath the slab *k*, to which the faucet is attached.

C is the discharge-tube spindle, which has an opening, *g*, connecting its interior with the interior of the casing A.

D indicates a spindle-pin projecting from one side only of the spindle. The projecting pin D, when the spindle C is revolved, rides around the rim or upper edge of the plunger *d*, for holding the valve *c* closed or down on its seat *q* against the upward pressure of the water in the inlet tube or pipe *l*. When the projecting pin D arrives at the notch *f*, the said upward pressure of the water forces the valve and its plunger upward until the projecting lower part of pin D rests in the bottom of notch *f*. The spindle continuing to revolve, the plunger-valve *d c* will be closed by being forced downward by the pressure of the revolving pin D against the sloping sides of notch *f*, and will remain closed until the

pin again enters the notch. The notch *f*, extending but a relatively short distance laterally, occupies a proportionally small part of the upper rim or face of the plunger *d*, and the valve is therefore open only when the discharge-pipe is in one position, or near that position, and consequently no water can escape through the discharge-pipe at any other time—as, for example, before or after it is over the basin *j*.

In order that the distance between the projecting spindle-pin and the end of the spindle may be adjusted to the distance required between the working-face of the projecting pin and the valve-seat, I employ a removable pin, D, passing diametrically through a slot, *d'*, in the spindle at a distance above its lower end, form a thread on the spindle, and place an adjusting-nut, *h*, thereon, which nut *h* in the examples given is slotted on both sides to embrace the pin, and extends down on each side thereof to engage the thread of the spindle on each side of and below the said pin, and into the lower end of the spindle I place a clamp-screw, *i*, which, by pressing the pin upward against the nut *h*, secures the said pin D in position at whatever height the adjusting-nut *h* may be placed. When the plunger-valve *d c* is open, the water passes upward between it and the casing and enters the discharge-pipe spindle through the hole *g*. To facilitate the upward passage of the water, I enlarge the space by providing water ways or grooves *b*, extending longitudinally therein. In this example the water ways or grooves *b* are formed in the inner face of the casing and extend above and below the plunger.

To prevent the plunger *d* from turning on its axis, and thereby changing the point or position of the discharge-pipe when the valve is open, I provide the plunger with projecting feathers or wings *e*, and provide corresponding vertical guide-grooves, *a*, in the inner surface of the casing to receive, retain, and guide the said wings *e*.

In order that the plunger *d* and valve *c* may be separably removable, I form them in separate pieces and unite them by a screw, *c'*, as shown in Fig. 1.

In order that the valve *c* may be noiseless and not require grinding, and may not be



caused to leak by the cutting effect of sand or grit, I make it of elastic or plastic material, as of gum or rubber.

Upon the spindle C, near the top of casing A, is formed a flange or collar, *r*. Over collar *r* is placed a screw-cap, *s*, which screws onto the upper end of the casing in the usual manner. The upper inner rim of the casing is recessed to receive a metallic washer, *t*, so that the upper face of washer *t* is flush with the top of the casing. Between washer *t* and the cap *s* and collar *r* is placed an elastic or plastic packing-ring, *u*. When the cap is screwed down, the packing-ring *u* makes a water-tight joint between the adjacent parts, and permits the spindle C to be turned to the right or left all the way around.

As the discharge-tube attached to the spindle may be turned in either direction, my improved faucet may be used where rights and lefts have been necessary heretofore.

To join the discharge-tube B to the spindle C strongly and removably, I first drill and tap the holes in the joining-globe *v*, then screw in the spindle as tightly as possible, then drill a hole through one side of the spindle near the end to communicate with the interior of the discharge-pipe, and then screw in the discharge-pipe tightly against the spindle, as represented in Fig. 1. The discharge-tube B is thereby caused to operate as a stop for preventing rotation of the spindle C.

*l* indicates the threaded inlet-pipe, extending from the bottom of the valve-casing A directly downward through a hole in the slab *k*. *m* is a nut, and *o* a washer in the inlet-pipe. The nut *m*, being screwed up, clamps the slab firmly between washer *o* and flange *p* of the casing. The valve-seat *q* is located in the center of the bottom of the casing at the upper extremity of the inlet-pipe. A sup-

ply-pipe may be attached by a coupling to the threaded lower end of the inlet-pipe.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a swing basin-faucet, the combination, with the discharge-tube spindle and the plunger-valve, of the removable transverse projecting spindle-pin for closing the valve, an adjusting-nut and thread on said spindle for regulating the distance of said pin from the end of the spindle, and a clamp-screw for securing the pin when adjusted, substantially as described.

2. In a swing basin-faucet, the combination, with the cylindrical valve-casing A, having guide-grooves *a* and water-ways *b*, the elastic valve *c*, and the plunger *d*, to which it is attached, the latter having wings *e* to enter the said guide-grooves *a*, and having a notch, *f*, in one side only of its rim, of the discharge-tube B and the spindle C thereof, the latter having an opening, *g*, connecting its interior with the interior of said casing, the removable projecting spindle-pin D to ride around the rim of the plunger and enter the notch *f* thereof, the adjusting-nut *h*, for regulating the distance of said pin D from the end of the spindle, and clamp-screw *i*, for securing the pin when adjusted, substantially as described.

3. In a faucet, the combination, with a hollow spindle, of a discharge-tube and a joining-globe, with which said spindle and discharge-tube are connected by means of screw-threads, the discharge-tube when in place acting as a stop to prevent the rotation of the spindle within the joining-globe, substantially as specified.

BERNARD JOHNSON.

Witnesses:

DANIEL MOYNAHAN,  
MINERT LINDEMAN.