

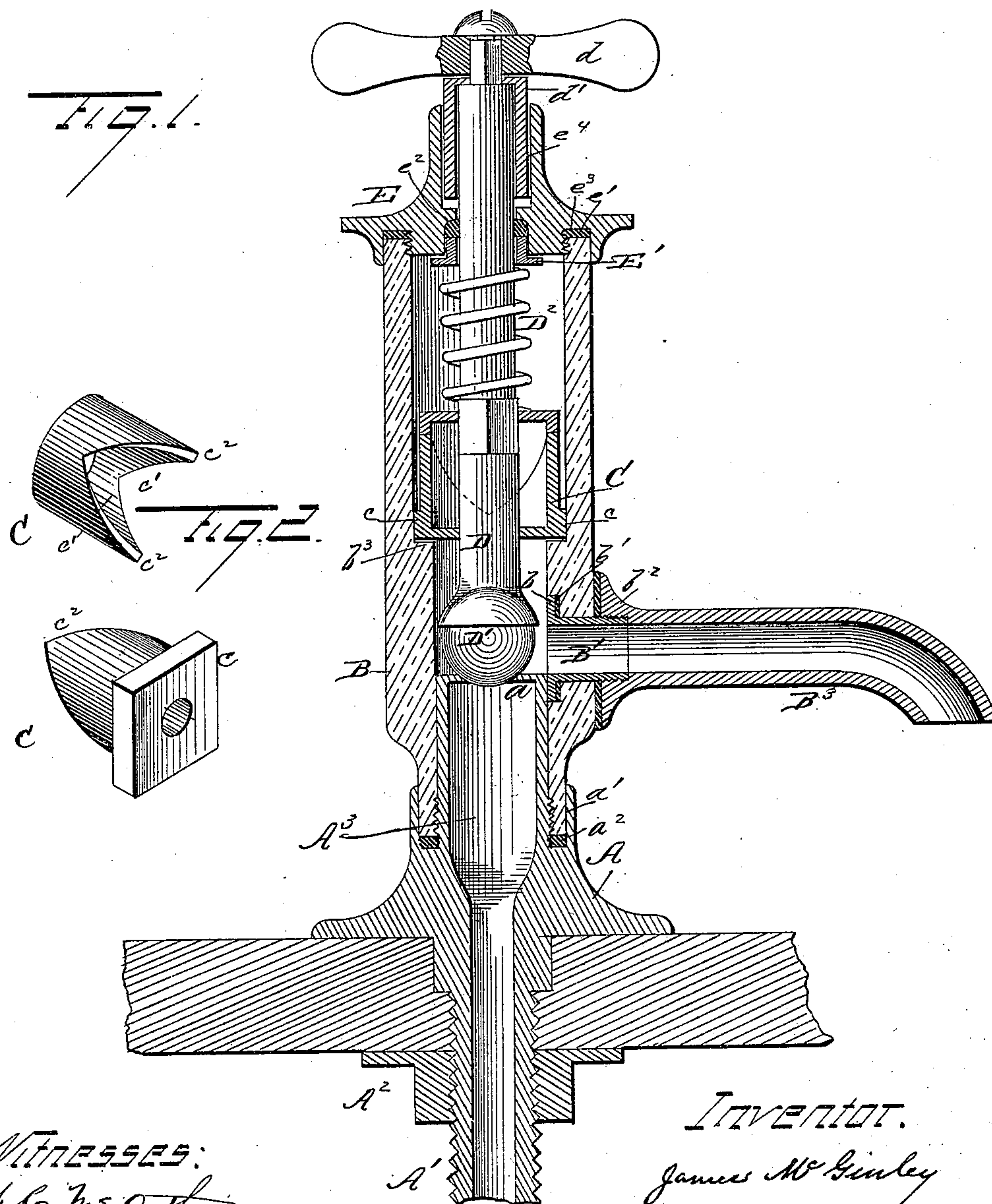
(No Model.,

J. MCGINLEY.

FAUCET.

No. 297,426.

Patented Apr. 22, 1884.



WITNESSES:  
H. C. McArthur,  
Frank Johnson

Inventor.  
James McGinley

H. Harrison  
Attorney.



# UNITED STATES PATENT OFFICE.

JAMES MCGINLEY, OF CHICAGO, ILLINOIS.

## FAUCET.

SPECIFICATION forming part of Letters Patent No. 297,426, dated April 22, 1884.

Application filed May 8, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES MCGINLEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Faucets, of which the following is a specification, to wit:

This invention relates to self-closing faucets; and it consists in certain peculiarities of construction and arrangement, whereby its construction is simplified and cheapened, repairs are more easily made, and the valve-stem may be turned in either direction, substantially as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a central vertical section of my invention, and Fig. 2 is a detail perspective view of the two cams.

A represents the base of the faucet, which is formed with the screw-shank A', and provided with the flanged nut A'', as usual in this class of articles. This base is formed with an upward extension, A'', in the top of which is formed the valve-seat a, and around the bottom of which is a recess, a', screw-threaded for the reception of the lower end of the cylinder B, and provided with a packing-ring, a'', as shown.

The main cylinder B is preferably constructed of glass, though metal may be used, and its lower end is screwed into the socket a'. The interior of this cylinder is formed on one side, near the valve-seat, with a recess, in which is seated the flange b of a metal nipple, B', properly packed by a small disk, b', of rubber or other suitable material. This nipple passes through the side of the cylinder, and is screw-threaded on its outer end to receive the nozzle B'', the latter being formed with a flange, b'', adapted to bear against the outside of the cylinder when in position, and is also packed, as represented, making a joint that is always water-tight. Just above the nozzle the interior of the glass cylinder is formed with a shoulder, b'', upon which rests the cam-box C. This cam-box is formed in two parts, the lower one of which has a squared

or angular part, c, which fits into a similar-shaped portion of the cylinder just above the shoulder b'', and prevents this part of the cam-box from turning. The two parts of the box C are each provided with two V-shaped notches, c', which form similar-shaped tongues, c'', as represented in Fig. 2. When placed together, the tongues of each part fit into the notches of the other, and their inclined edges form cam-surfaces, which, when one of them is turned in either direction, force the two parts of the box apart, as will be readily understood, and the purpose of which will be presently seen.

Through the box C runs the valve-stem D, the lower end of which is socketed for the reception of the valve D', which consists of a rubber ball loose in the cylinder, so that when subjected to the influences of the flowing water it will be revolved, and by thus changing its bearing-surface it is prevented from rapid wear. The stem D passes loosely through the lower part of the box C; but at the upper part of said box it is squared, as shown, and secured to said upper portion, so that when the stem is turned the upper half of the cam-box will also be turned, and as this is forced upward by the cam-surfaces the stem will be carried with it, releasing the valve, and allowing a free flow of water through the faucet.

The upper end of the cylinder B is closed by a metal cap, E, secured by a screw-socket, e, and packing-ring e', similar to those already described for securing the cylinder to the base. The under surface of the cap E is socketed in the center, as shown at e'', and this socket is filled with any suitable packing, e'', held in place by a loose sleeve, E', forming a stuffing-box, through which the valve-stem D passes.

Upon the stem, between the box C and the stuffing-box or cap, is arranged a spiral spring, D'', which always holds the valve tightly seated, and returns it and the cam-box to their proper positions when turned.

The upper end of the rod D is fitted with a handle, d, and provided with a cap, d', which extends into a socket, e'', in the upper part of the cap, and serves to hide the stem from view when the valve is raised from its seat, and is arranged to fall with the stem as wear occurs,



and allow the valve to be properly seated at all times.

It will be seen that by using a two-part box with double cams I am enabled to turn the valve-rod in either direction, thus giving greater bearing-surface to the cams and preventing wear; and as the box C is separate from and forms no part of the cylinder B, but sits loosely in its angular seat, held firmly in place by the spring, it may be readily removed and replaced at any time. The glass cylinder B not only presents a neat appearance, but enables the interior to be seen and the working parts of the faucet to be inspected at any time without taking it apart.

If desired, the upper part of the cam-box C may be provided with a pin or projection, which, when the valve-stem is turned in one direction, will engage with the barrel or cylinder B and hold the valve open.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A self-closing faucet consisting of the base A, having valve-seat *a*, cylinder B, provided with nozzle B<sup>3</sup>, and formed with the shoulder *b*<sup>3</sup>, above which it is formed angular in cross-section, and the cap E, having a stuffing-box and a socket, *e*<sup>4</sup>, in combination with the two-part cam-box C, one part of which is formed square or angular and held stationary within the cylinder, and the other is fast upon and moves with the valve-stem, the valve-stem D, and the spring D<sup>2</sup>, adapted to hold the cam-box and valve properly seated and return the latter to place when released, all constructed and arranged to operate substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES MCGINLEY.

Witnesses:

J. E. STEVENSON,  
FRANK JOHNSON.