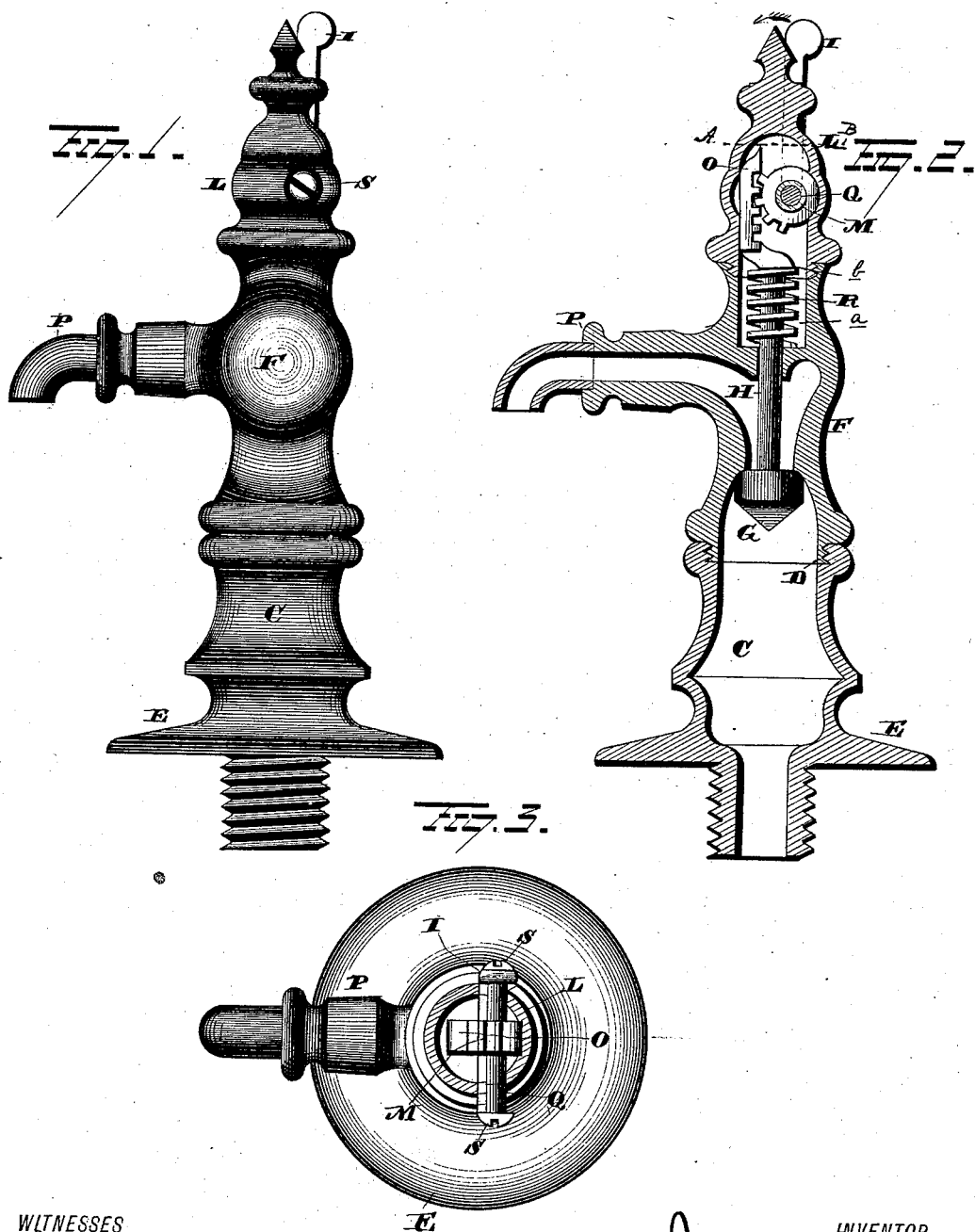


(No Model.)

J. LAWSON.  
AUTOMATIC FAUCET.

No. 305,084.

Patented Sept. 16, 1884.



WITNESSES  
*E. J. Nottingham,*  
*Geo. S. Downing.*

INVENTOR  
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# UNITED STATES PATENT OFFICE.

JAMES LAWSON, OF DENVER, COLORADO, ASSIGNOR OF ONE-HALF TO  
DAVID M. KEITH, W. S. KEELER, AND H. E. VAN SYCKEL, ALL OF  
SAME PLACE.

## AUTOMATIC FAUCET.

SPECIFICATION forming part of Letters Patent No. 305,084, dated September 16, 1884.

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

*To all whom it may concern:*

Be it known that I, JAMES LAWSON, a citizen of the United States, residing at Denver, in the State of Colorado, have invented certain new and useful Improvements in Automatic Faucets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in automatic faucets, the object of the same being to provide a positive-acting device, that will combine simplicity and economy in construction with durability and efficiency in use; and with these ends in view my invention consists in the parts and combinations of parts, as will be more fully described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a view in side elevation of my improved device. Fig. 2 is a view in vertical longitudinal section of the same, and Fig. 3 is a view in transverse section taken on the line A B of Fig. 2.

C represents a section of the faucet provided at its upper end with female screw-threads D, by means of which the section F is secured thereto, and with the flange E, which latter supports the faucet.

To the upper end of the section C is secured the section F, which latter is provided with a discharge-spout and with a tapering valve-seat, against which the valve G, rigidly secured to the valve-stem H, rests.

The section F is provided at its upper end with a chamber, *a*, which latter communicates with the water-passage of the faucet by a small opening, through which the valve-stem passes. This valve-stem extends up into the chamber in the section F, and is bent substantially as shown, and provided with rack-teeth, which latter mesh with the pinion M, rigidly secured to the shaft Q. The shaft Q is journaled in the cap L by the screws, the

said cap being screwed onto the section F, and protecting the parts from dust, and also preventing the escape of any water that might leak up into the chamber *a*.

To one end of the shaft Q is rigidly secured the handle I, by means of which the valve-stem is depressed. The portion O of the valve-stem provided with rack-teeth runs in close contact with the cap L, and is guided in its movements thereby.

R is a spiral spring, one end of which rests on the bottom of the chamber *a*, while the opposite end bears against the shoulder *b*, formed integral with the valve-stem H. This spring constantly exerts an upward pressure on the valve-stem, and, together with the pressure of the water, firmly holds the valve G (which is preferably made of some yielding material) closely on its seat. By moving the handle in the direction of the arrow the valve and valve-stem are depressed and a through passage opened for the water. Immediately on releasing the handle the combined pressure of the spring R and the water moves the valve to its seat and holds it there until the handle is again turned.

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

The combination, with the section F, having a valve-seat, and a chamber, *a*, the latter being situated above the water-passage, and the hollow cap secured to the upper end of the section F, and forming a continuation of said chamber, of the valve-stem provided at its upper end with a rack-bar, a pinion for operating the rack-bar, and the spring encircling the stem, the said rack-bar, pinion, and spring being located within the chamber, all of the above parts combined substantially as set forth.

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

JAMES LAWSON.

Witnesses:

W. G. RENDALL,

GEO. W. FAULKNER.