

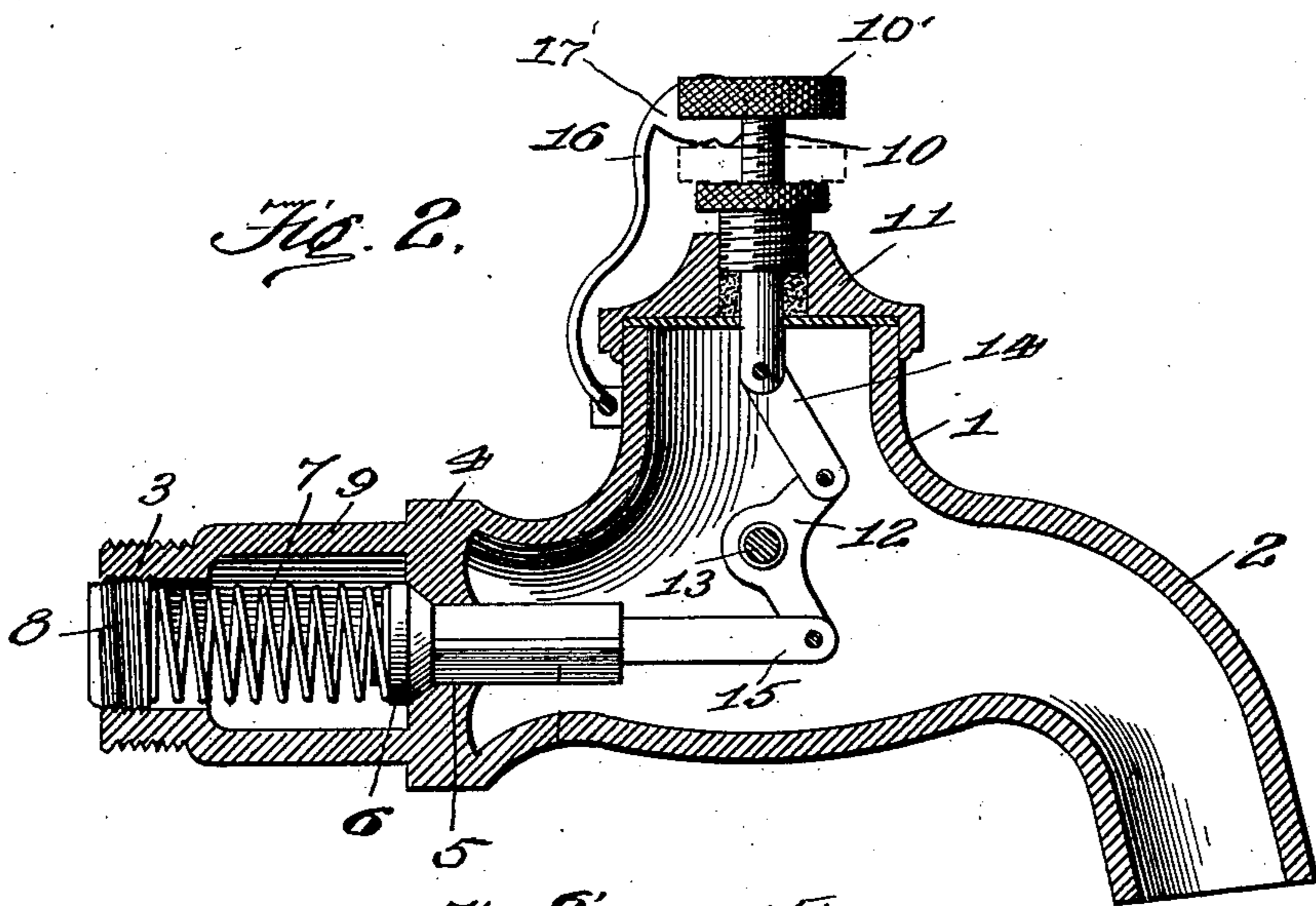
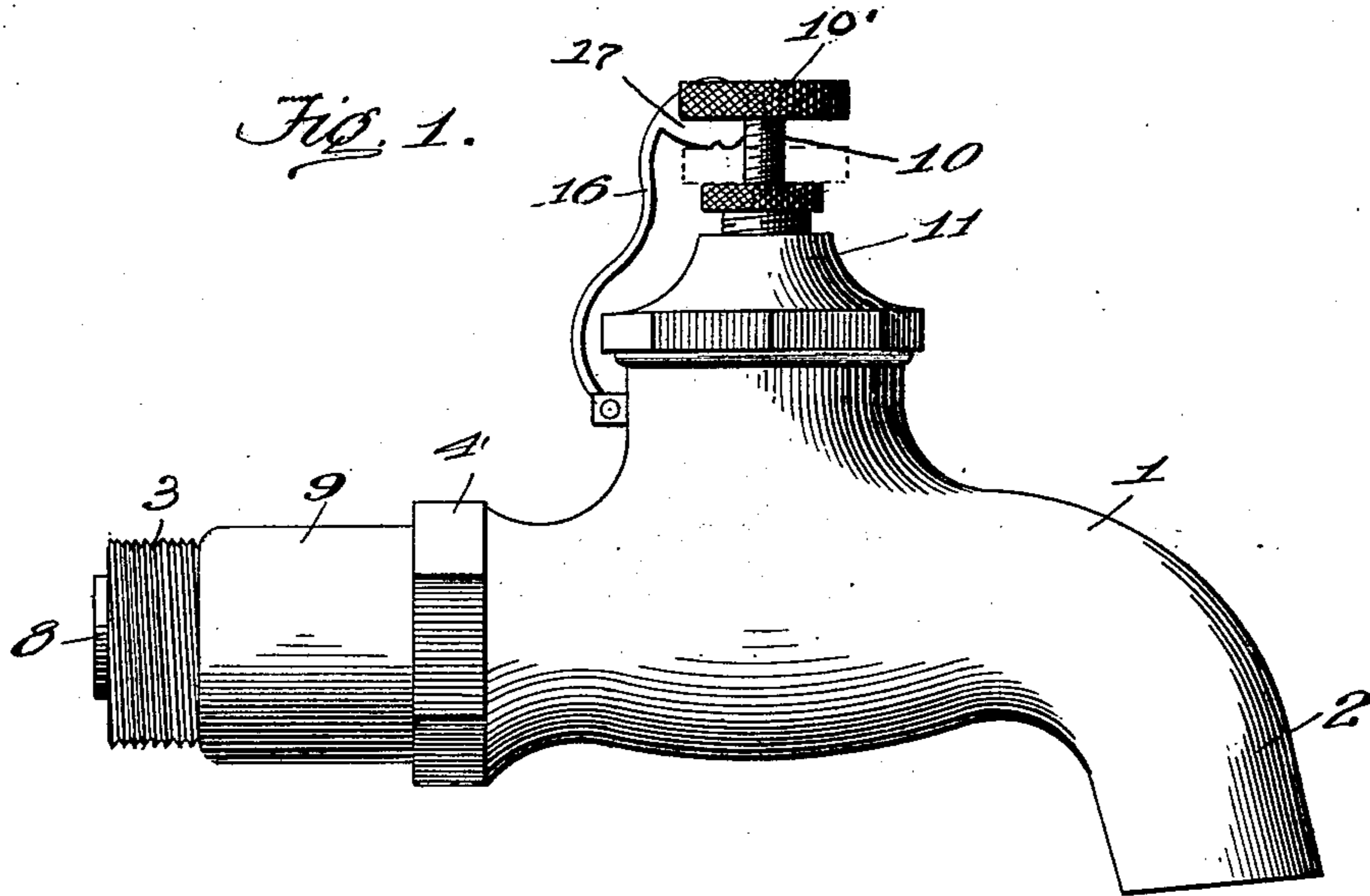
No. 711,846.

Patented Oct. 21, 1902.

N. B. GOSSARD.  
SELF CLOSING FAUCET.

(Application filed Mar. 27, 1902.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

NEWTON B. GOSSARD, OF ALTOONA, PENNSYLVANIA.

## SELF-CLOSING FAUCET.

SPECIFICATION forming part of Letters Patent No. 711,846, dated October 21, 1902.

Application filed March 27, 1902. Serial No. 100,274. (No model.)

*To all whom it may concern:*

Be it known that I, NEWTON B. GOSSARD, a citizen of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Self-Closing Faucets; and I do 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 appertains to make and use the same.

This invention relates to improvements in faucets.

The object of the invention is to provide a faucet which shall be simple of construction, durable and efficient in use, and comparatively inexpensive of production, and one in which the valve is adapted to automatically close and prevent the waste of water and liability of flooding a room or apartment due, in the use of ordinary faucets, to negligence or inattention in leaving the valve open.

A further object of the invention is to provide means whereby the valve may be held from closing to allow a continuous flow.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation of a faucet embodying my invention, and Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a detail view showing a modified form of valve.

Referring more particularly to the drawings, the numeral 1 represents the casing of a faucet which is provided at one end with a discharge-nozzle 2 and has its opposite end 3 threaded for engagement with a water-tank supply-pipe or other source of supply. The casing is also provided with an angular shoulder 4 for the application of a wrench thereto in screwing and unscrewing it. The liquid entering the end 3 flows to the nozzle 2 through a port or passage 5, which is provided with a valve-seat, against which closes a valve 6. This valve 6 is located in the path of the flowing fluid and is normally held closed by a coil-spring 7 bearing thereon and interposed between the same and a bushing 8, inserted in

the end 3. The spring 7 occupies the chamber 9, disposed between the valve-seat and the inlet end 3, and acts in connection with the pressure of the water to hold the valve seated. The stem of the valve 6 projects forwardly into the body of the casing and is adapted to be opened against the pressure of the spring through the medium of a plunger 10, which passes down through the stuffing-box 11 into the body of the casing and is provided at its upper end with a head 10', which is adapted to be depressed to communicate motion through suitable intermediate connections for opening the valve. These connections comprise a bell-crank lever 12, fulcrumed upon the pin 13 on the interior of the casing and connected, by means of links 14 and 15, to the plunger 10 and valve-stem. Upon depressing the plunger the link 14 operates the bell-crank lever and transfers motion to the link 15, which slides the valve 6 rearwardly against the pressure of the spring 7, opening the port or passage 5, so that the water entering the inlet end 3 may pass through the faucet-casing and discharge through the nozzle 2. When the plunger is released, the valve 6 is seated by the pressure of the spring 7 and in turn communicates motion, through the instrumentality of the link 15, to the bell-crank lever 12, which resumes its normal position and acts upon the link 14 to force the plunger 10 upward. By this construction it will be seen that the valve is normally held closed and is opened only upon the depression of the plunger 10, and as soon as said plunger is released automatically closes, thereby cutting off the flow of water.

In order to enable the plunger to be held depressed and the valve maintained in an open position for a period of time without the necessity of the hand of the operator being held against the head of the plunger, a clamp 16 is provided, which is pivoted at its lower end to the casing and provided at its upper end with a cam-head 17 to bear upon the upper surface of the head of the plunger when the latter is depressed to hold the valve open against the tension of the spring 7. This clamp is made of spring metal, so that when forced over upon the head of the plunger it will institute a binding action, and

thereby prevent any liability of the plunger being forced against the tension of the spring 7 and releasing or retracting said clamp.

5 If desired, I may employ a stemless ball-valve 6' of the form shown in Fig. 3, to which the link 15' may be rigidly or otherwise suitably attached.

10 From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of my invention will be readily understood without requiring an extended explanation.

15 Various changes in the form, proportion, and details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

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

In a faucet, the combination with a casing,

a valve controlling the flow of fluid there-  
through, a spring for closing the valve, a ver-  
tically-sliding plunger provided with a plane 25  
surfaced head, and connections between the  
plunger and valve for operating the valve  
against the tension of the spring; of a spring-  
clamp hinged at its lower end to the casing  
and provided at its upper end with a cam- 30  
head adapted when the plunger is forced down  
to bear upon the upper surface of the plane  
head thereof, and to exert a spring tensional  
bind thereon for maintaining the plunger in  
position to hold the valve open, substantially 35  
as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

NEWTON B. GOSSARD.

Witnesses:

J. F. MECK,

GEO. B. BOWERS.