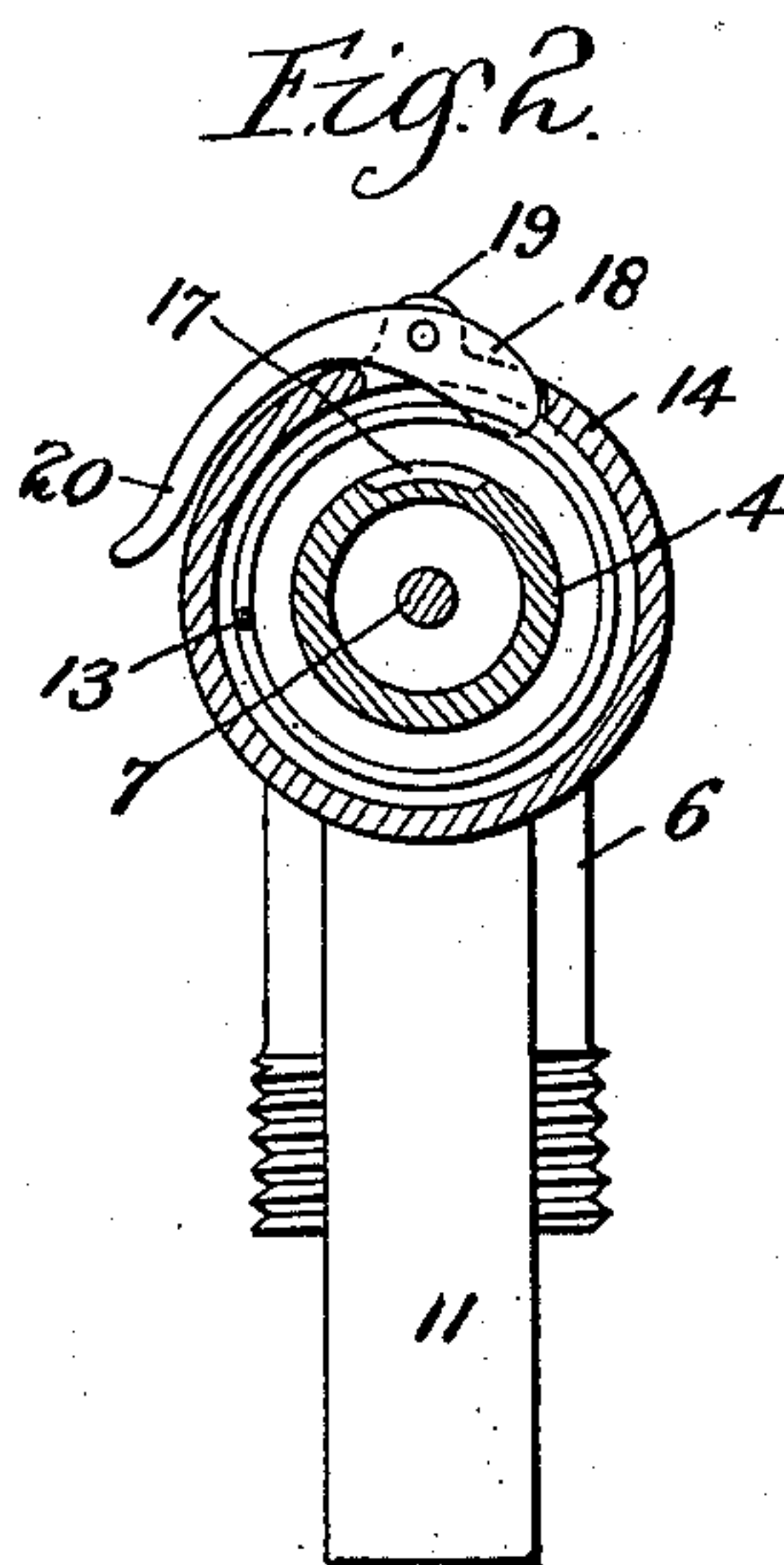
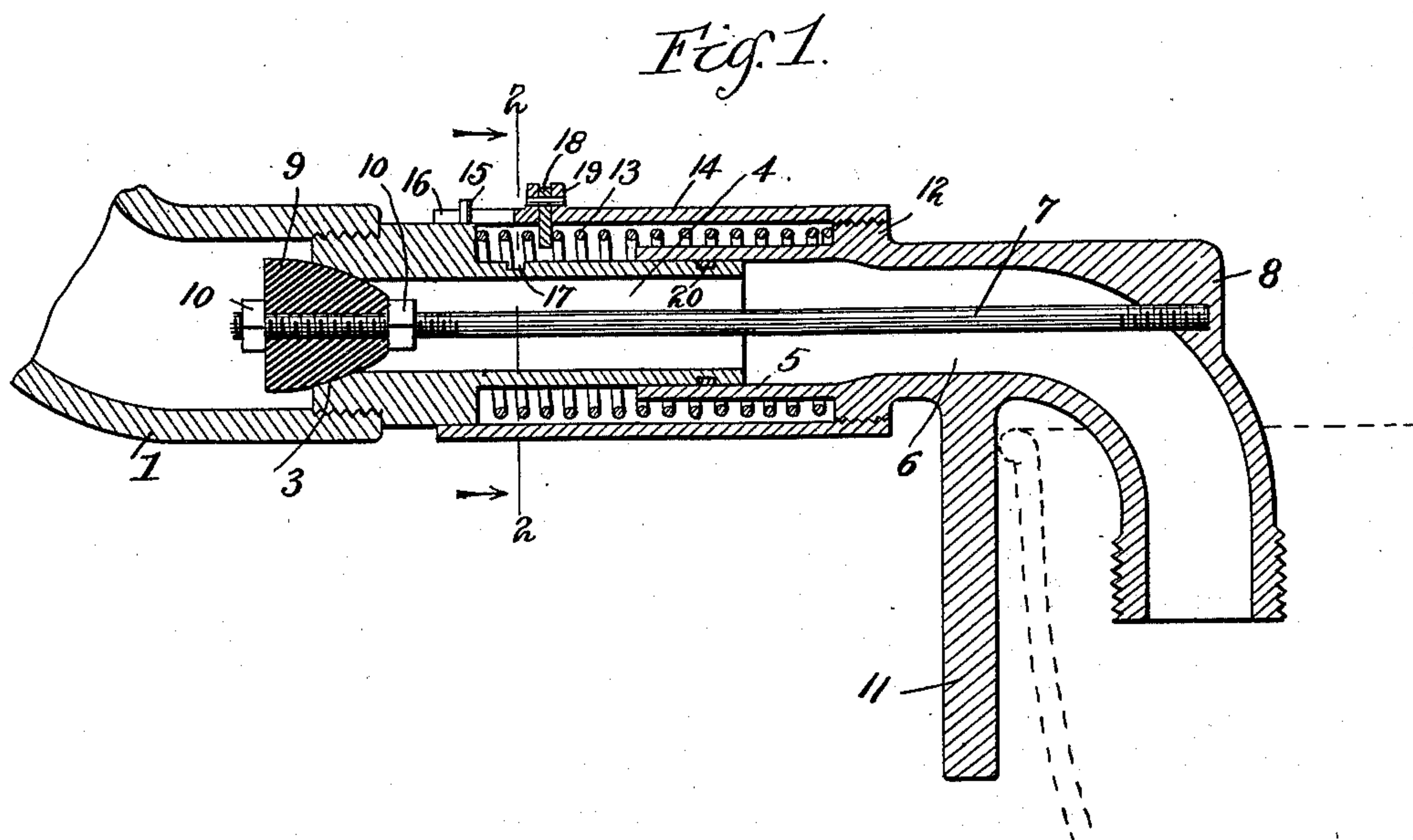


(No Model.)

R. SMITH.  
FAUCET.

No. 596,634.

Patented Jan. 4, 1898.



Witnesses.  
Wm. M. Rheem  
Wm. J. Humm

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Attys.



# UNITED STATES PATENT OFFICE.

RICHARD SMITH, OF CHICAGO, ILLINOIS.

## FAUCET.

SPECIFICATION forming part of Letters Patent No. 596,634, dated January 4, 1898.

Application filed June 16, 1897. Serial No. 640,993. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD SMITH, 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 full, clear, and exact specification.

My invention relates to faucets, and the improvements have more especial reference to means whereby the same may be turned on or the water caused to flow by pressure applied to the faucet proper for convenience in filling vessels without the necessity of utilizing one hand for operating the faucet.

The object of my invention is to provide improved and simple means whereby the faucet may be opened or turned on and the liquid directed therethrough into the pan or vessel by the pressure of the pan or vessel itself against the faucet.

Another object of my invention is to provide improved means whereby the faucet may be held open for any desired length of time after the pressure thereagainst is released.

With these ends in view my invention consists in certain features of novelty in the construction, combination, and arrangement of parts by which the said objects and certain other objects hereinafter appearing are attained, all as fully described with reference to the accompanying drawings, and more particularly pointed out in the claim.

In the said drawings, Figure 1 is a longitudinal sectional view of a faucet constructed according to my invention; and Fig. 2 is a transverse sectional view taken on the line 2 2, Fig. 1.

1 represents the service-pipe or other source of supply to which the faucet is connected

2 is a screw-plug threaded within the mouth of the pipe 1 and having at its inner end a valve-seat 3 and at its outer end a reduced neck or pipe 4. Over the pipe or neck 4 is telescoped a neck 5, which is formed on or secured to the horizontal portion of the nozzle 6. The nozzle 6 turns downwardly in the ordinary way, and projected through its horizontal portion and also through the neck 4 is a valve-stem 7, whose outer end is screw-threaded in the boss 8 of the nozzle, while its inner end carries a conical valve 9, seating against the seat 3, such valve being prefer-

ably held adjustably on the valve-stem by a pair of nuts 10, threaded on the stem. By this means it will be seen that the pressure of the water against the inner face of the valve 9 will hold the valve against its seat 3 under normal conditions and prevent the water from escaping through the neck 4 and thence through the nozzle 6; but as soon as the nozzle 6 is forced inwardly, so that its neck 5 is caused to slide rearwardly on the neck 4, the valve 9 will be unseated by the pressure communicated thereto through the rod or stem 7 and the water or liquid will flow through the neck 4 and nozzle 6 to the pan or vessel located thereunder; and in order that the pan or vessel may itself be utilized as a means for causing the water to flow through the nozzle and to discharge with regularity and without splashing thereinto I provide the lower side of the nozzle 6 with a depending operating-finger 11, located at a slight distance in the rear of the mouth of the nozzle, so that the pan or vessel (shown in dotted lines) may be introduced between the nozzle and the finger 11 and forced rearwardly against the finger for unseating the valve 9, the finger 11 being carried considerably below the mouth of the nozzle for the sake of greater convenience in causing the edge of the pan or vessel to engage therewith. By this means it will be seen that when the pan is in the position for opening the faucet the water will inevitably flow thereinto without splashing against any of the mechanism.

In some instances head of the water may be insufficient to cause the valve to promptly reseat. With the construction shown the edge of the pan may itself be utilized for pulling the nozzle outward by engaging with the depending end thereof in removing the pan. As a further safeguard a spring may be employed for forcing the nozzle outward. To this end I provide the nozzle with a shoulder or flange 12, against which bears one end of a spiral spring 13, whose other end abuts against the plug 2. This spring may be inclosed by a housing or sleeve 14, screwed upon the flange 12 and sliding freely over the plug 2, the plug 2 being provided with a pin or lug 15, projecting through a slot 16 in the sleeve 14, for preventing the independent rotation of the nozzle.



In order that the faucet may be maintained in its open condition as long as desired, should it become necessary to permit the water to flow for any considerable length of time, I provide the faucet with a lock, preferably consisting of a notch 17, formed in the neck 4, and a latch 18, pivoted to and projecting through the sleeve 14. The latch 18 is arranged between a pair of ears 19, formed on the sleeve 14, and to which ears it is pivoted, and it is provided with an exterior operating-handle 20, whereby the lower or inner end of the latch may be thrown into engagement with the notch 17 when it is desired to hold the nozzle to the limit of its inward movement.

The exterior of the sleeve 14 may, if desired, be provided with any suitable packing 20 to prevent leakage between the neck 4 and the neck 5 when the exterior of the faucet is subjected to pressure at such times—for instance, as when a hose is connected to the discharge end of the nozzle. At other times the passage through the faucet is sufficiently free to prevent leakage between the faces of the necks 4 5; but in order to adapt the device for universal use the packing 20 may be employed.

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

A faucet having in combination a tube 4 having one end screw-threaded and provided

with a valve-seat facing outwardly and the other end reduced in diameter; the neck 5 fitting snugly over said reduced end and being provided with the enlarged screw-threaded shoulder 12 and the downwardly-turned nozzle 6; the sleeve 14 of larger diameter than said neck 5, fitting over said neck and threaded upon said shoulder 12 and also extending over the larger portion of said tube 4; a pin-and-slot connection between said tube 4 and sleeve 14; a coil-spring surrounding said sleeve 5 and abutting against said shoulder 12 and also surrounding the reduced portion of the tube 4 and abutting against the larger portion of the tube 4, said tube 4 being provided with the socket or notch 17, the catch 18 pivoted transversely to and projecting through said sleeve 14 and having its inner end projecting between the convolutions of said spring and in readiness to engage in said notch 17; the stem 7 secured to the bend of the said nozzle and projecting longitudinally through said neck 5 and tube 4, and the valve 9 adjustably secured to the end of said stem and adapted to come against said valve-seat; and the operating projection 11 secured to said nozzle at a point to the rear of its discharge end and extending downwardly below said end, substantially as set forth.

RICHARD SMITH.

Witnesses:

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