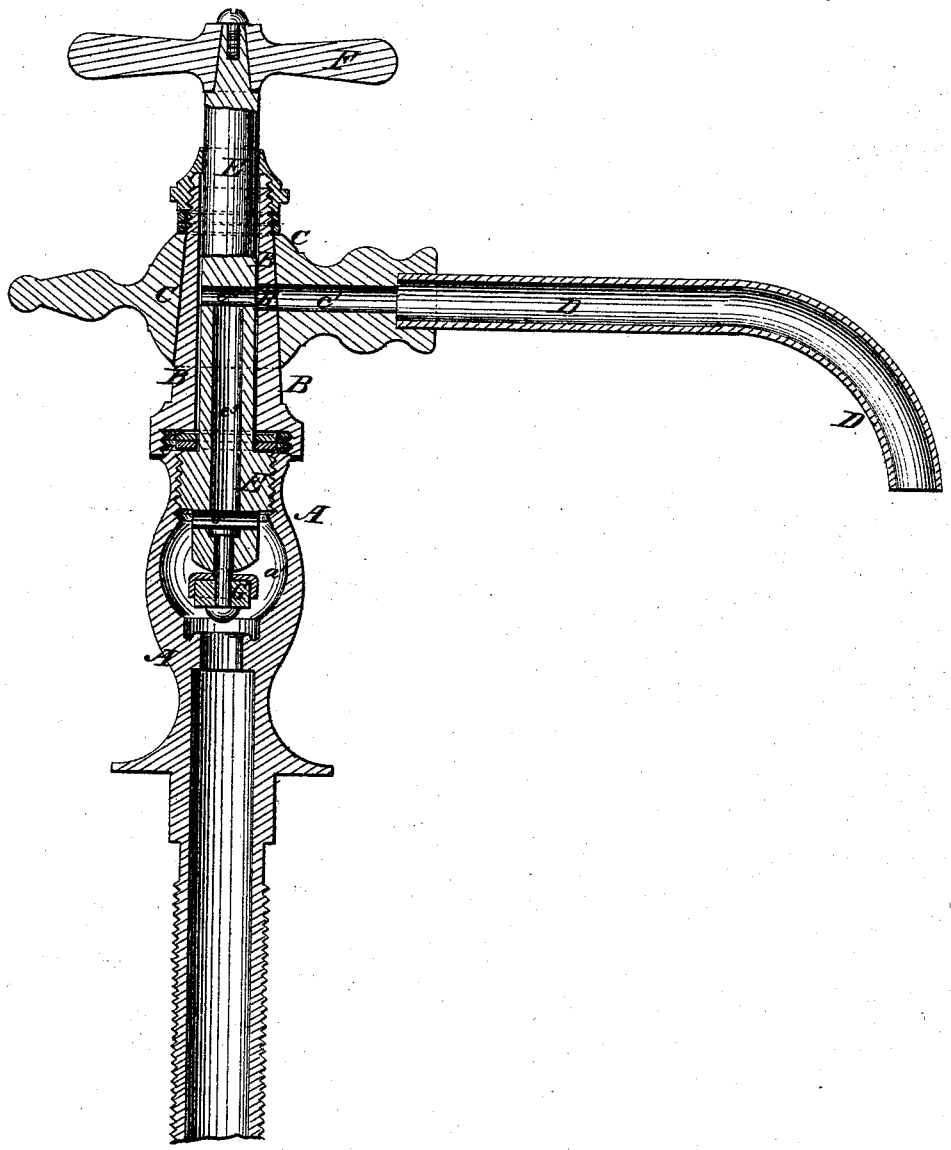
W. L. BROWNELL.

COMBINED COMPRESSION AND SWING-COCK.

No. 169,952. Patented Nov. 16, 1875.



WITNESSES:

Francis McArdle

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INVENTOR:

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UNITED STATES PATENT OFFICE.

WILLIS L. BROWNELL, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN COMBINED COMPRESSION AND SWING COCKS.

Specification forming part of Letters Patent No. **169,952**, dated November 16, 1875; application filed October 29, 1875.

To all whom it may concern:

Be it known that I, WILLIS LORD BROWNELL, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Combined Compression and Spring Cock, of which the following is a specification:

The figure is a vertical section of my improved cock.

The object of this invention is to improve the construction of the ordinary swing-cocks by providing them with a screw or compression valve, to permit the shutting off of the water independently of the swing-faucet, to prevent the said cocks from leaking.

The invention consists in the combination of the compression-valve and the swinging faucet, as hereinafter fully described.

The body of the cock is made in two parts, A B, screwed together. The upper part B is made tapering, to receive the ball C, and with a hole, b', in its side for the escape of the liquid. The ball C is made with a tapering hole, to fit upon the taper of the part B, and with a hole, c', in its side for the escape of the liquid when the said hole c' is brought opposite the hole b'. D is the nozzle, which is connected with the hole c' of the ball C. In the part A of the body A B is formed a valve-chamber, a', and in the inner surface of the said part, above the said valve-chamber a', is formed a screw-thread, to receive the screw-thread formed upon the outer surface of the plug E, which passes up through the cavity of the part B and has a handle, F, attached to its projecting upper end. The plug E has a valve, G, swiveled to its lower end, which is forced down to its seat by turning the plug E downward, and is raised from its seat by turning the plug E upward. In the lower part of the plug E, that projects into the valve-chamber a', is formed a cross-hole, e', and in its upper part, and corresponding in position with the position of the holes b' c', is formed a cross-hole, e^2. Through the center of the plug E, between the holes e^1 e^2, and connecting said holes, is formed a longitudinal hole, e^3. The holes e^1 e^3 e^2 thus form a passage for the liquid from the valve-chamber a' to the discharge-holes b' c'.

By this construction the nozzle D may be allowed to remain stationary, and the liquid may be turned on and off by operating the screw-plug E; or the screw-plug E may be turned up, and the liquid turned on and off, by turning the ball C.

When the valve G is in its seat the liquid is shut off from the upper part of the cock, so that there can be no leakage.

The body A B may be made in one piece, if desired. This will render the perforations in the stem unnecessary, and will enable the cock to be made shorter, more compact, and cheaper.

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

The combination of the compression-valve and the swinging faucet, substantially as herein shown and described.

WILLIS L. BROWNELL.

Witnesses:

JAMES T. GRAHAM,

T. B. MOSHER.