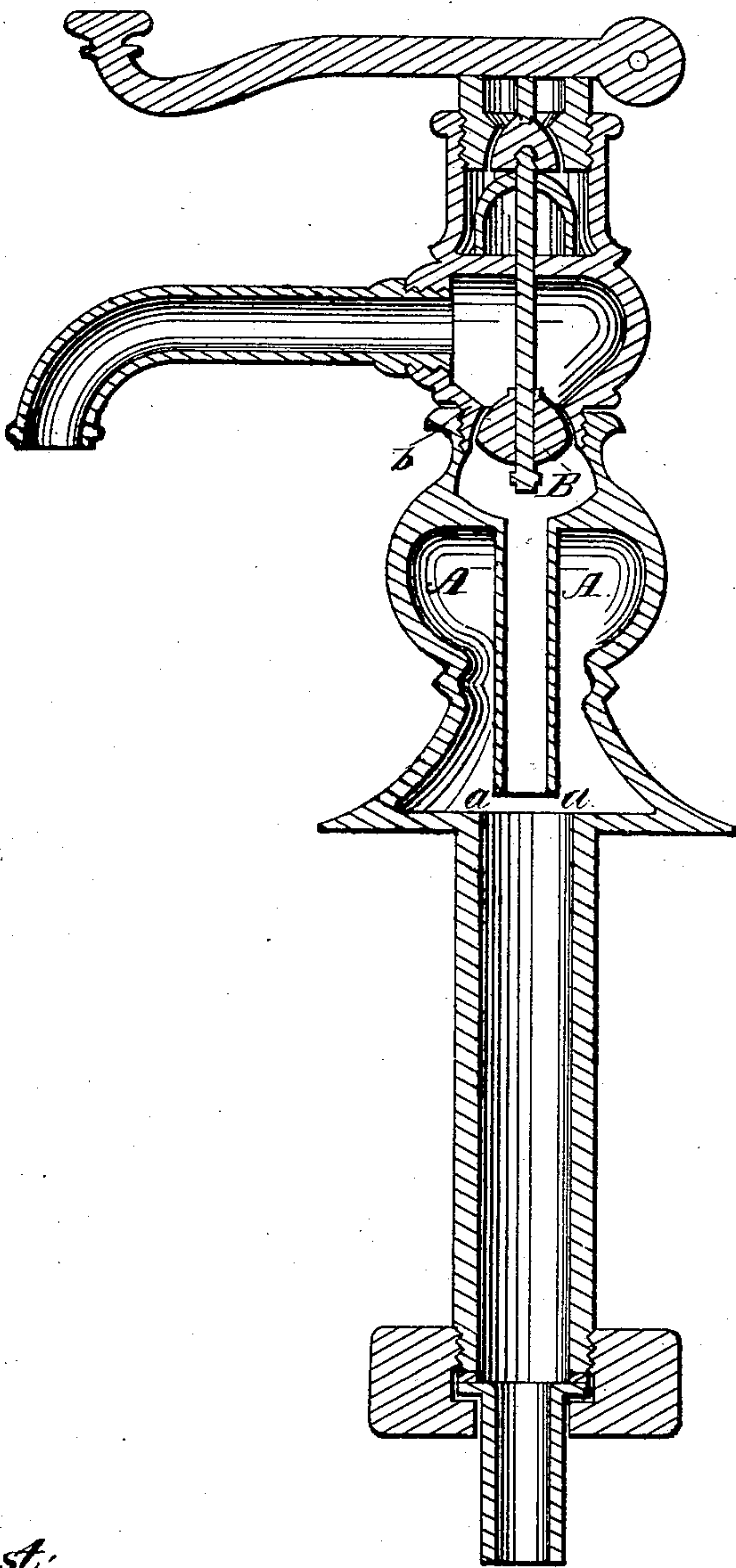


A. D. DAVIS.
Water-Cocks.

No. 156,987.

Patented Nov. 17, 1874.



Attest:

Wm. B. Wifley

Inventor:

A. D. Davis.

UNITED STATES PATENT OFFICE

ALBERT D. DAVIS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN WATER-COCKS.

Specification forming part of Letters Patent No. **156,987**, dated November 17, 1874; application filed March 14, 1874.

To all whom it may concern:

Be it known that I, ALBERT D. DAVIS, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Water-Cocks; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, and being a part of this specification, which shows a vertical section of the water-cock.

The nature of this invention relates to an improvement in that class of cocks whose valves are held closed by the pressure of the water in the service-pipe.

The invention consists of a novel construction of the same by forming an air-chamber in the body of the cock below the valve, in such a position as to cushion the water-column, and avoid all pounding of the valve on the valve-seat when the valve is closed by the pressure of the water.

In the drawing, A represents the air-chamber, whose mouth or opening is at *a*. B is the rubber ball-valve, closing against the valve-seat *b*. The mouth *a* dips into the chamber A, so as to form an inverted vessel, from which the air cannot escape when the mouth *a* is occupied and closed by the water from the service-pipe; and when the flow of water through the cock is arrested by the closing of the valve B, the elasticity of the air con-

fined in said chamber will cushion the water-column, and prevent the effect known as water-hammer.

Heretofore manufacturers have been unable to make a durable water-cock whose valve closes with the pressure, for the reason that the water, when turned on full force and suddenly checked, produces a heavy thump, varying according to the pressure of water. This thumping not only injures the cock itself, by speedily wearing out the valve, but also the plumbing throughout the building is more or less shattered by the continual pounding produced by the water-pressure.

By the simple and inexpensive use of an air-chamber attached to the shell of the water-cock below the valve, to form a cushion for the water to ram against, this objection is entirely avoided.

Having fully described the essential points of this invention, what I claim is—

A water-cock constructed with an air-chamber, A, situated below the valve-seat, and within the shell thereof, substantially as set forth, in combination with a seat, *b*, and valve B, arranged as set forth, to open against the water-pressure.

A. D. DAVIS.

Witnesses:

J. BEEVER,
P. B. WIGHT.