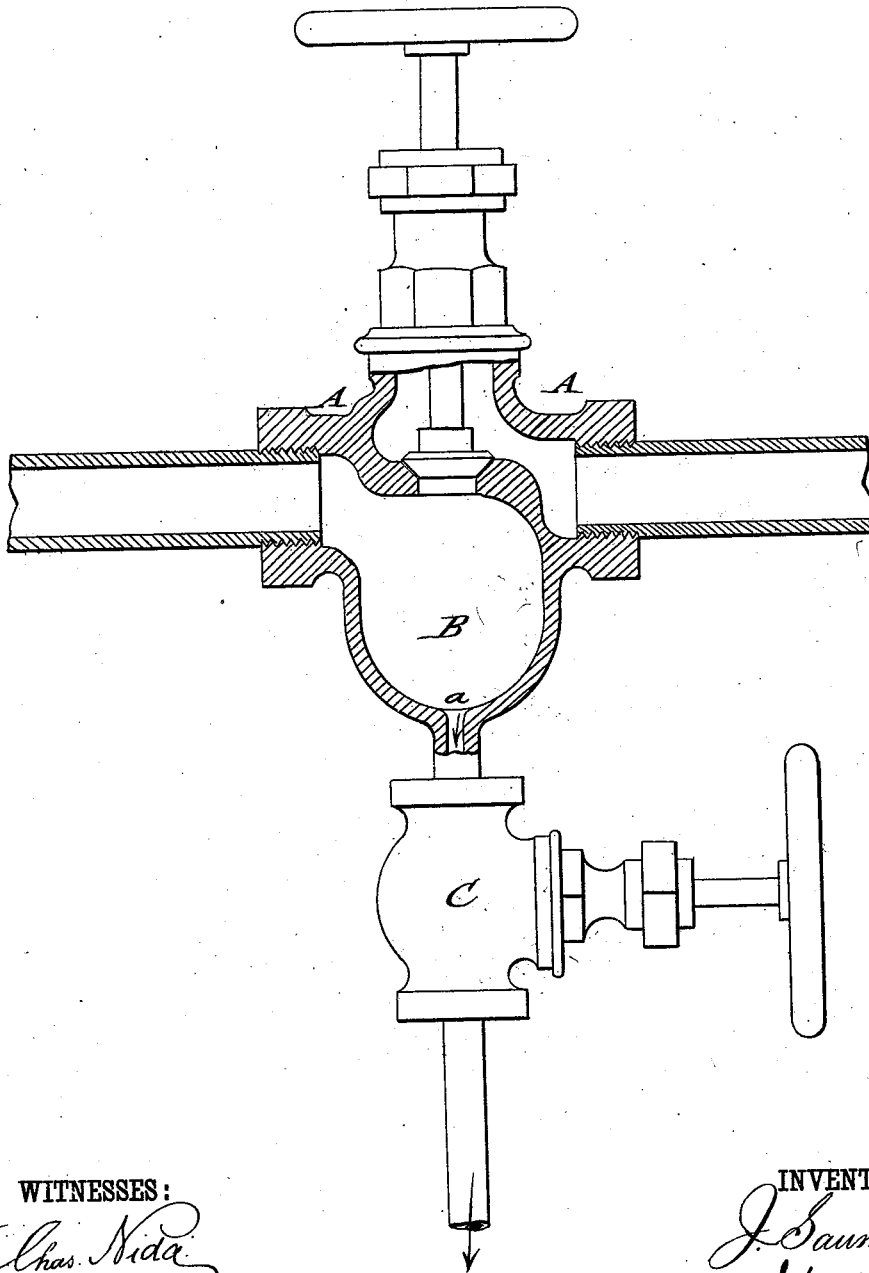


J. SAUNDERS.
Steam-Valve.

No. 203,947.

Patented May 21, 1878.



WITNESSES:

Chas. Nida
C. Sedgwick

INVENTOR:

J. Saunders
BY *Munn & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOSEPH SAUNDERS, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN STEAM-VALVES.

Specification forming part of Letters Patent No. **203,947**, dated May 21, 1878; application filed April 6, 1878.

To all whom it may concern:

Be it known that I, JOSEPH SAUNDERS, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Steam-Valve, of which the following is a specification:

The accompanying drawing represents a vertical central section of my improved steam-valve for supplying dry steam.

The object of this invention is to furnish, for steam-pipes of all kinds, an improved valve, by which the water of condensation may be collected and discharged, and thereby steam of greater dryness furnished than customary with the common steam-valve; and the invention consists of a steam-valve having an enlarged portion or pocket below the valve-seat, a discharge-opening in the pocket, and a discharge valve or cock below the pocket for letting out the water of condensation collected in the pocket of the main valve.

Referring to the drawing, A represents a steam-valve of the usual construction. The casing of the valve is cast at the bottom, below the valve-seat, with an enlarged portion or pocket, B, which pocket is connected, by an exit-aperture, *a*, with a valve or cock, C, below the pocket. The steam, in passing through the valve, fills the enlarged portion

or pocket, and deposits in the same any water of condensation that is carried along with the same. The increased depth of the pocket prevents the customary siphoning that takes place in the valves commonly employed in steam-pipes. The valve C below the pocket is kept open slightly, just enough to discharge the water of condensation at the moment it collects in the pocket, so as to prevent its being carried along with the steam. In this manner, by the use of the enlarged portion or pocket of the valve that collects the water carried along by the steam, the steam may be furnished in drier condition to the engine or other point of use, and thus by simple means the effective draining off of the water of condensation from the steam-pipes obtained.

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

The combination, with a steam-valve, of the pocket B, arranged under the valve-seat, and provided with a cock, C, below the aperture *a*, said cock being kept slightly open, as and for the purpose specified.

JOSEPH SAUNDERS.

Witnesses:

FRANCIS J. OAKES,
PAUL GOEPEL.