

(No Model.)

F. J. CARNEY.

STEAM VALVE.

No. 261,671.

Patented July 25, 1882.

Fig: 1.

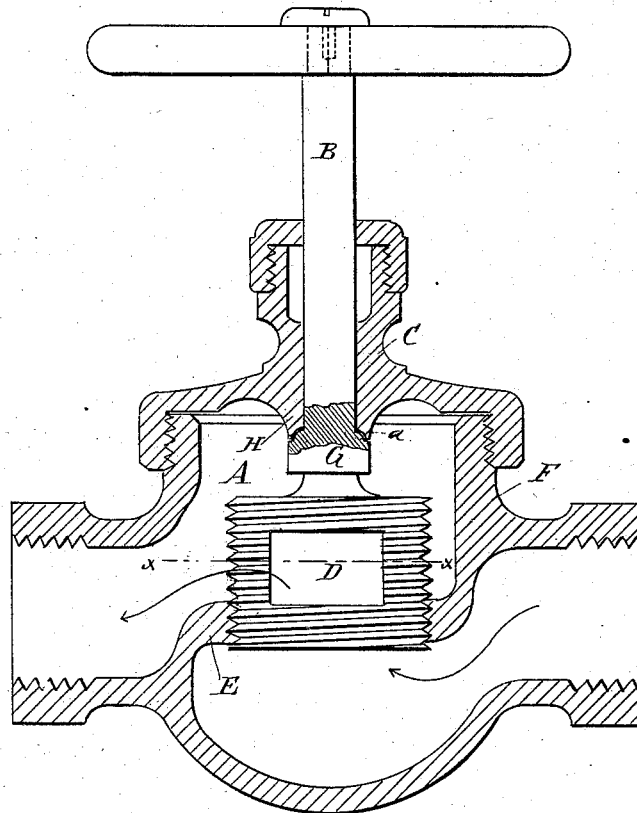
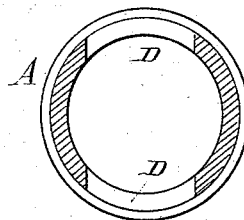


Fig: 2.



WITNESSES:

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FRANCIS J. CARNEY, OF BROOKLYN, NEW YORK.

STEAM-VALVE.

SPECIFICATION forming part of Letters Patent No. 261,671, dated July 25, 1882.

Application filed May 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS J. CARNEY, of the city 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 full, clear, and exact description.

My invention relates to improvements in steam-valves; and it consists in the peculiar construction and arrangement of parts, as hereinafter more fully set forth.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of my improved steam-valve; and Fig. 2 is a sectional plan view of the cup-shaped valve-plunger on the line *xx*, Fig. 1.

A cylindrical cup-shaped valve-plug, A, open at its lower end and closed at the upper end, is secured to the lower end of a spindle, B, loosely mounted in the sleeve of the cap C of the valve-casing F.

The valve-plug A is externally threaded, and is provided with two or more side openings, D.

The port in the horizontal partition E of the valve box or casing F is screw-threaded internally, and is of such size that the externally-threaded plug A can be screwed into it.

The spindle B is provided with a collar, G, directly above the valve-plug, and the cup C of the valve-casing is provided with a central annular projection, H, through which the spindle B passes, which collar G and projection H prevent the valve-plug from being entirely screwed out of the port in the horizontal position.

The upper edge of the collar G is made in the shape of a half-bead, *a*, and the lower end of the projection H is provided with an annular half-bead recess, into which the half-bead projection *a* fits, thus forming an absolutely tight joint and preventing steam from escaping through the sleeve of the cap C when the valve is opened, and permitting packing of the valve-spindle when the steam is turned on.

When the hollow valve-plug A is raised, as shown in Fig. 1, the steam can pass as indi-

cated by the arrow, and if the valve-plug is screwed into the port to such an extent that the openings D will be below the partition E the valve will be closed and no steam can pass.

In the ordinary valve the plug is raised from its seat to form an aperture to let the steam pass, and when this plug is raised chips of metal or other impurities are deposited on the seat, and when the plug is screwed down on the seat these chips or other matter destroy the ground surfaces of the plug and the seat. This defect is avoided in my improved valve, as the plug is never entirely removed from the port, and thus no foreign matter can enter between the sides of the plug and the port.

This valve can be used for steam, gas, or liquids.

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

1. In a steam-valve, the combination, with the valve-box F and cap C, of the spindle B, the externally-threaded hollow valve-plug A, provided with side openings, D, and of the partition E, provided with a threaded port, substantially as herein shown and described, and for the purpose set forth.

2. In a steam-valve, the combination, with the valve-box F and the cap C, provided with a central downward projection, H, of the spindle B, provided with a collar, G, the threaded hollow plug A, provided with side openings, D, and the horizontal partition E, provided with a threaded port, substantially as herein shown and described, and for the purpose set forth.

3. In a steam-valve, the combination, with the valve-box F and the cap C, provided with a central downward projection, H, having a half-bead recess on its lower edge, of the spindle B, provided with a collar, G, having a half-bead, *a*, on its upper edge, and of the valve-plug D, substantially as herein shown and described, and for the purpose set forth.

FRANCIS J. CARNEY.

Witnesses:

OSCAR F. GUNZ,
C. SEDGWICK.