L. BRANDEIS.

Valve.

No. 216,720. Patented June 24, 1879.

Fig. 1

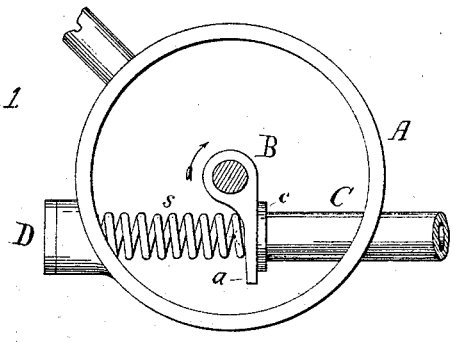
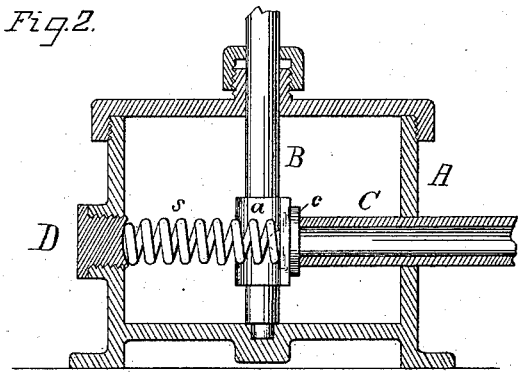


Fig. 2.



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UNITED STATES PATENT OFFICE.

LUDWIG BRANDEIS, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN VALVES.

Specification forming part of Letters Patent No. **216,720**, dated June 24, 1879; application filed May 1, 1879.

To all whom it may concern:

Be it known that I, LUDWIG BRANDEIS, of Brooklyn, Kings county, New York, have invented an Improved Valve, of which the following is a specification.

The object of my invention is a valve adapted specially for water-closets, and constructed, as fully described hereinafter, so as to permit an unobstructed flow of water, close automatically when pressure is removed, secure an absolute contact of the valve with its seat however foul the water may be, and capable of being readily repaired should it get out of order, and easily cleaned.

In the drawings forming part of this specification, Figure 1 is a sectional plan of my improved valve; Fig. 2, a sectional elevation.

A represents the casing, of any suitable form, provided with a cap and stuffing-box, through which extends a spindle, B, which may be rotated by means of a suitable handle. The spindle B carries an arm or gate, *a*, having an elastic pad, *c*, of leather or other suitable material upon one face, and so arranged that said pad may be brought squarely against the end of an outlet-tube, C, extending from the outside and projecting some distance into the casing.

Against the rear face of the gate *a* bears a strong spring, *s*, which has its bearing at the other end against a screw-plug, D, adapted to a threaded socket in the casing.

By turning the spindle B in the direction of its arrow, Fig. 1, the valve is wholly removed from its seat on the end of the outlet-pipe C, leaving the latter unobstructed, and the water passing in through the pipe can flow freely from the casing.

On removing the pressure applied to the spindle B, the spring *s* forces the valve or gate firmly against its seat and effectually prevents further flow.

In ordinary valves the outlet-passage leads directly from the side of the chamber, and any moss or other matter carried by the water is apt to lodge upon the valve-seat, so that the gate cannot fit tightly, leaving room for the passage of the water, which is thus wasted.

In the above-described valve the outlet-tube C projects at an angle to the case into the chamber beyond the inner side of the case, so that any matter carried by the water, however foul, accumulates in the chamber instead of lodging upon the seat.

As the gate is at an angle to the spindle B, a slight movement of said spindle will throw the gate wide open, and by turning the screw-plug D any desired pressure may be brought upon the spring and upon the valve.

I claim—

The combination of the casing A, spindle B, carrying the gate *a*, spring *s*, and outlet-tube C, extending into the case and affording a seat for the gate, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LUDWIG BRANDEIS.

Witnesses:
GEO. H. MORRIS,
LEOPOLD BRANDEIS.