J. Wilson,

Check Valve,

No 79,527, Patented June 30, 1868.

Fig. 1.a

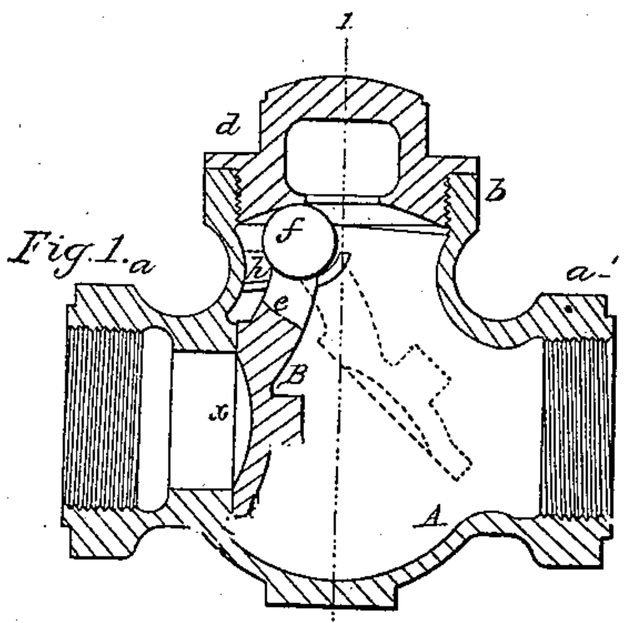


Fig. 2.

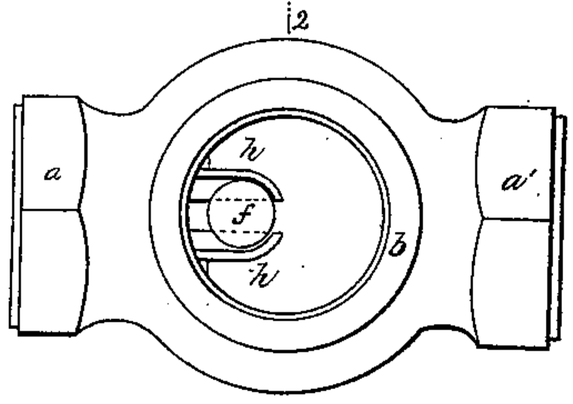
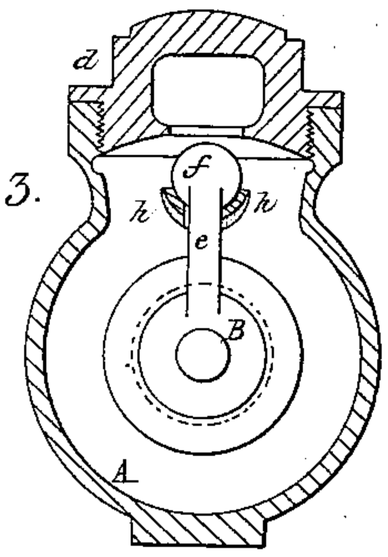


Fig. 3.



Witnesses.
Wm A Steel
John Parker

Inventor.
Jas Wilson
By his Atty
H. Howson

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JAMES WILSON, OF CHESTER, ASSIGNOR TO A. H. SIMON, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 79,527, *dated June* 30, 1868.

IMPROVEMENT IN CHECK-VALVES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES WILSON, of Chester, county of Delaware, State of Pennsylvania, have invented an Improved Check-Valve; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a valve hung to projections n a casing, confined thereto by a cap, and arranged for introduction to and withdrawal from the said casing, all substantially as described hereafter, so that the valve may be self-adjusting to its seat in every direction, and so that both valve and casing may be more readily and economically constructed than ordinary check-valves.

In order to enable others skilled in the art to make and apply my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a vertical section of my improved check-valve,

Figure 2 a plan view with the screw-cap removed, and

Figure 3 a transverse section on the line 1 2, fig. 1.

Similar letters refer to similar parts throughout the several views.

The body of the casing A is in the present instance of a spherical form, and has two branches *a a'*, for receiving the ends of pipes, and a third branch, *b*, for receiving the screw-cap *d*.

A seat is formed within the casing at *x* for the valve B, which consists of a metal disk suitably faced at the side which has to come in contact with the seat *x*. This valve has a projecting arm, *e*, terminating in a sphere, *f*, which rests in a socket formed by two projections *h h* cast in and forming a part of the casing A, the arm *e* fitting so freely between these projections that the valve can have play sufficient to be self-adjusting to the seat laterally, while its self-adjustment in every other direction is insured by the sphere.

The spherical termination *f* of the arm *e* of the valve is maintained in its place on the projections *h* by the under side of the screw-cap *d*, which, however, does not bind so hard on the sphere as to interfere with the free movement of the valve.

If it becomes necessary to withdraw the valve B from the casing, the screw-cap is removed, and the valve made to assume the position shown by dotted lines fig. 1, after which it can be readily withdrawn through the hollow branch *b*. In the same manner it can be as readily reintroduced into the casing, and hung to the projections *h h*.

The facing of both seat and valve can be readily accomplished by ordinary well-known tools. Hinges, common to this class of valves, are dispensed with, and the valve is self-adjusting in every direction to its seat; hence it is more economical than those in which the careful fitting of parts demands tedious manipulation.

I claim as my invention, and desire to secure by Letters Patent—

The valve B, hung to projections *h* in the casing, confined thereto by the screw-cap *d*, and arranged for introduction into and withdrawal from the said casing, all substantially as and for the purpose herein set forth.

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

JAMES WILSON.

Witnesses:

WM. A. STEEL,

C. B. PRICE.