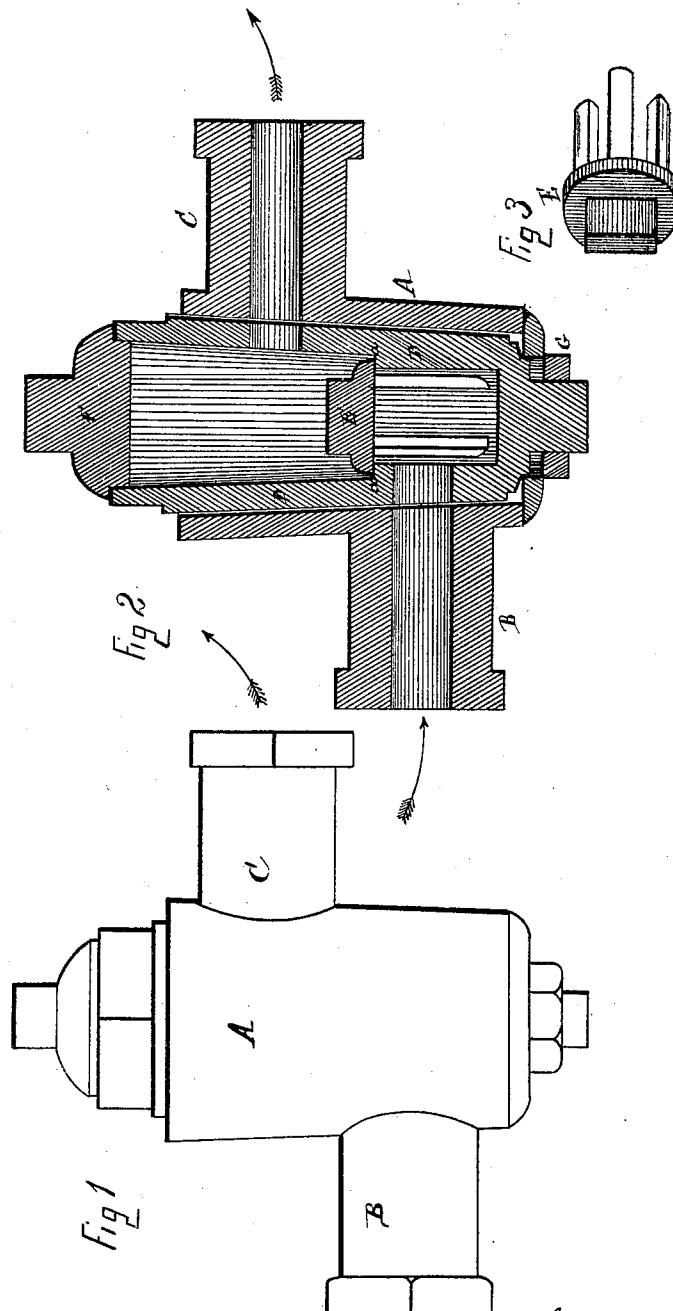


O. E. McMURRAY.

Combined Stop and Check-Valves.

No. 135,352.

Patented Jan. 28, 1873.



Witnesses
F. L. Curand
le. L. Everett

Inventor
Oscar E. McMurray
per Alexander & Mason
Attorneys.

UNITED STATES PATENT OFFICE.

OSCAR E. McMURRAY, OF LANSINGBURG, NEW YORK.

IMPROVEMENT IN COMBINED STOP AND CHECK VALVES.

Specification forming part of Letters Patent No. 135,352, dated January 28, 1873.

To all whom it may concern:

Be it known that I, OSCAR E. McMURRAY, of Lansingburg, in the county of Rensselaer and in the State of New York, have invented certain new and useful Improvements in Check-Valve; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in combining a stop and check valve, substantially in the manner hereinafter described.

In the annexed drawing, A represents the case or shell of a stop-valve, which may be constructed in any of the known and usual ways. D represents the plug, which is fitted snugly in the shell and confined in position by means of a nut, G. This plug D is made hollow, and within it is formed a ledge or valve-seat, as seen at *a a*. E represents a check-valve, which may be made of any usual form, and which is placed within the plug D, resting on the ledge or seat at *a a*. F represents a cap, which closes the upper end of the plug D.

When this valve is in use the water passes directly through the shell A, as the valve E can offer no resistance to its passage to the

boiler. It acts, of course, as a check to prevent the return of water.

When the plug is turned so as to cut off the flow of water to the boiler, the cap F may be removed and the check-valve E very easily reached to repair it, or free it of any obstruction.

By this arrangement of two valves in one case—a check-valve within the plug of a stop-valve—I am enabled to put my valves in much smaller compass, where they will be less liable to damage or breakage, and where, at one operation, I can cut off the flow of water and repair them.

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

The combination, with the case A with inlet and outlet pipes B C, of the plug D with valve-seat *a* and the check-valve E, constructed and arranged to rest on said seat, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of December, 1872.

OSCAR E. McMURRAY.

Witnesses:

EDM. F. BROWN,
J. M. MASON.