W. L. MILLER.
Pump-Valve.

No. 205,566. Patented July 2, 1878.

Fig: 1.

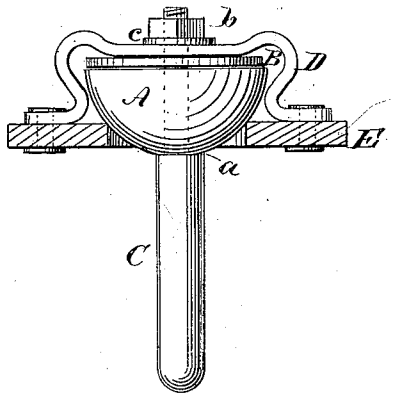
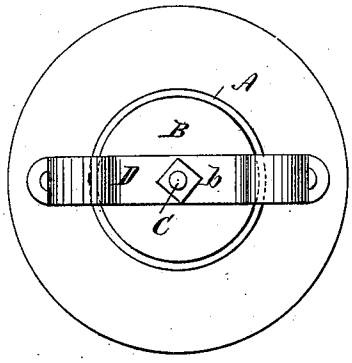


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM L. MILLER, OF SANTA ROSA, CALIFORNIA.

IMPROVEMENT IN PUMP-VALVES.

Specification forming part of Letters Patent No. **205,566**, dated July 2, 1878; application filed April 30, 1878.

To all whom it may concern:

Be it known that I, WILLIAM LEWIS MILLER, of Santa Rosa, in the county of Sonoma and State of California, have invented a new and Improved Pump-Valve, of which the following is a specification:

Figure 1 is a side elevation of my improved valve. Fig. 2 is a plan view.

Similar letters of reference indicate corresponding parts.

My invention consists in an elastic hemispherical valve, of rubber or other material, having a metallic valve-stem and rigid backing.

It also consists in a check-strap for limiting the lift of the valve, which is attached to the top of the valve and to the leather packing of the pump.

In the drawing, A is a hemispherical valve, which may be made of any elastic material. In the present case it is made of soft vulcanized rubber. The valve is backed by a metallic disk, B, which is of about the same diameter as the valve, and has a central aperture for receiving the end of the valve-stem C, which also passes through the valve. A shoulder, *a*, is formed on the valve-stem C, which bears against the under surface of the valve, and a nut, *b*, and washer *c* are placed at the end of the valve-stem, between which and the disk B a flexible strap, D, is placed. The ends of the strap are secured by rivets to the leather pump-packing E, and it is of sufficient length to admit of the usual lift of the valve.

This valve is designed for pumps having a round suction-pipe. The valve is to be seated on the leather packing at the bottom of the pump-cylinder. It may also be used in the piston of the pump without the leather seating.

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

1. The elastic hemispherical valve A, having the metallic backing-disk B and shouldered stem C, as herein shown and described.

2. The flexible strap D, in combination with the valve A, as herein shown and described.

WILLIAM LEWIS MILLER.

Witnesses:

CHARLES ROBERT MILLER,

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