W. E. PILCHER.

ORGAN VALVE.

APPLICATION FILED MAR. 10, 1913.

1,067,545. Patented July 15, 1913.

Fig. I.

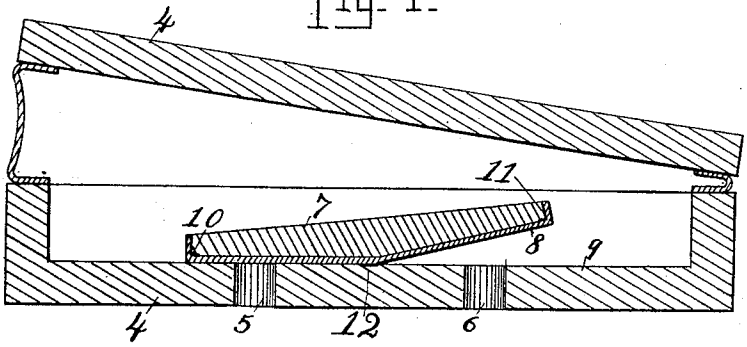
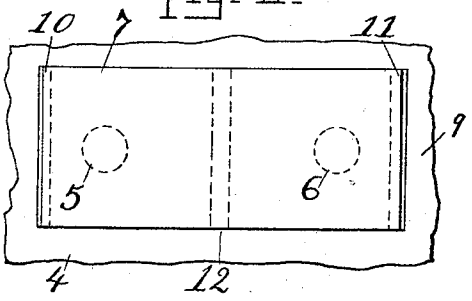


Fig. II.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM E. PILCHER, OF LOUISVILLE, KENTUCKY.

ORGAN-VALVE.

1,067,545. Specification of Letters Patent. Patented July 15, 1913.

Application filed March 10, 1913. Serial No. 753,345.

To all whom it may concern:

Be it known that I, WILLIAM E. PILCHER, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Organ-Valves, of which the following is a specification.

This invention relates in general to valves for wind instruments such as church organs, and more particularly to what may be termed a double valve or valve for alternately closing two separate ports. Its object is to render such a valve more quickly responsive to pneumatic action in perfectly closing either of the said ports.

To this end my invention consists in the construction and combination of parts forming an organ valve, hereinafter more fully described and particularly stated in the claims, reference being had to the accompanying drawing in which;

Figure I represents a pneumatic motor in vertical section showing a valve according to my invention. Fig. II is a plan view of the valve.

Numeral 4 represents a pneumatic motor or other air chamber for organs, having two ports, 5, 6, each for both entry and exit. A valve, 7, faced as usual with a packing of sheet material such as soft sheepskin, 8, is secured upon the bottom, 9, of the motor to cover, alternately, the ports 5 and 6. The packing, 8, is glued or otherwise firmly secured to the valve at the ends, 10 and 11, and to the bottom of the motor at 12, centrally between the ports. This central attachment forms the hinge on which the valve rocks, and the packing is not attached to the valve in the immediate region of this hinge.

The under side of the valve is formed as two planes meeting at an obtuse angle at the hinge line, 12, in order that the valve may rest true upon the seat around each port in turn; and the packing, when stretched from end to end over this central, downward angle, perfectly closes each port in turn. This arrangement of valve, packing and valve seats secures perfect flexibility at the hinge and renders it more reliable and more durable than the packing would be if stiffened by rigid attachment to the valve at or near the hinge.

I claim—

1. In an organ valve, an air chamber having two ports in its side; a valve having two faces adapted to alternately rest upon the seats around the said ports, and a packing of sheet material secured to the valve at its ends and secured to the side of the chamber between the ports as a hinge for the valve, but not secured to the valve near the hinge.

2. In an organ valve, an air chamber having two ports in its side; a valve shaped to alternately engage the ports, and a packing of sheet material secured to the side of the chamber midway between the ports as a hinge to the valve, and secured to the valve beyond the ports but not in the region of the said hinge.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM E. PILCHER.

Witnesses:
A. C. REUTER,
H. E. EYL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."