

J. STREILY.
Slide-Valve.

No. 209,305.

Patented Oct. 22, 1878.

Fig. 1.

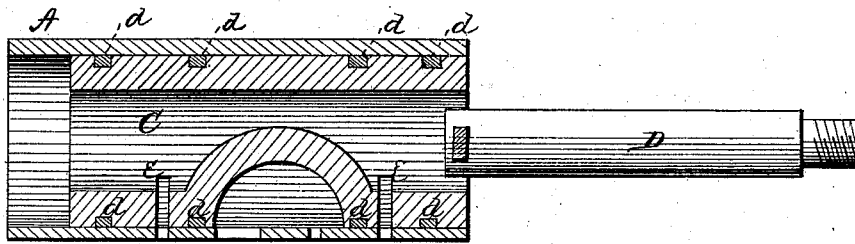


Fig. 2.

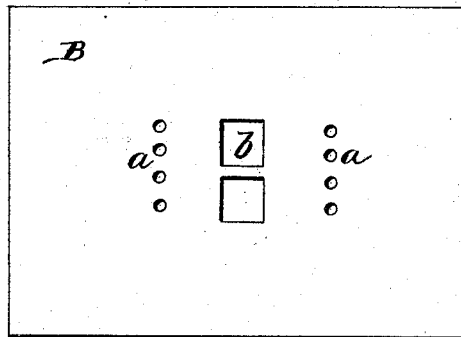


Fig. 4.

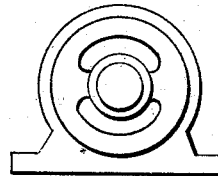
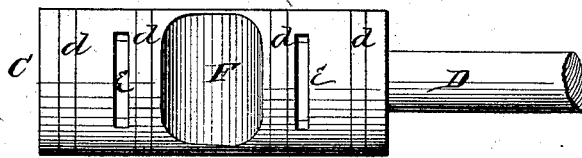


Fig. 3.



WITNESSES
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UNITED STATES PATENT OFFICE.

JOSEPH STREILY, OF VINCENNES, INDIANA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO JOHN T. YOUNG, OF SAME PLACE.

IMPROVEMENT IN SLIDE-VALVES.

Specification forming part of Letters Patent No. 209,305, dated October 22, 1878; application filed
June 26, 1878.

To all whom it may concern:

Be it known that I, JOSEPH STREILY, of Vincennes, in the county of Knox and in the State of Indiana, have invented certain new and useful Improvements in Balanced Cylinder Slide-Valves; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of balanced slide-valve and valve-chest, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a longitudinal section of the valve and chest. Fig. 2 is a bottom view of the chest. Fig. 3 is a bottom view of the valve. Fig. 4 is an end view of the valve and chest.

A represents a cylindrical valve-chest of suitable dimensions, provided with a flange, B, at the bottom for fastening the chest to the steam-cylinder.

a a are the steam-ports, and *b* the exhaust-port. These ports are formed with bridges across, as shown in Fig. 2, to prevent the packing-rings on the piston from passing into the same.

C represents the piston or valve, made in

cylindrical form and fitting the interior of the chest A. This valve is open at both ends, and provided at one end with a suitable cross-bar, or its equivalent, for securing the valve-rod D.

Around the outside of the valve C is made a series of grooves, in which are placed packing-rings *d*, to form steam-tight joints.

The valve C is in the center, in its under side, provided with an arch, F, which forms the exhaust-port of the valve, and on each side of this port is a steam-inlet port, *e*. This cylindrical valve operates the same as an ordinary slide-valve; but it is perfectly balanced, as the steam-pressure is altogether on the inside, and hence acts equally in all directions, and will not force the valve hard down on its seat.

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

The cylindrical valve C, open at both ends and provided with exterior packing-rings *d*, arch F, and ports *e*, in combination with the chest A, having ports *a a* and *b*, provided with bridges across the same, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of May, 1878.

JOSEPH STREILY.

Witnesses:

SAM. W. WILLIAMS,
JOHN T. YOUNG.