

J.C. King,

Rotary Valve.

No. 107,505.

Patented Sep. 20. 1870

Fig. I.

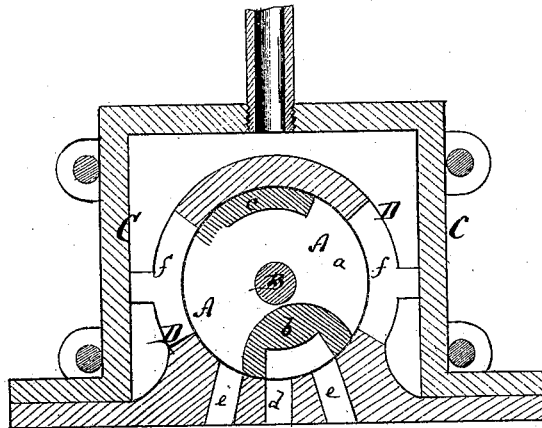
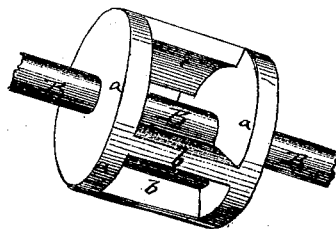


Fig. II.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN C. KING, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, GEORGE M. WOODWARD, AND GEORGE A. BLOOD, OF SAME PLACE.

IMPROVEMENT IN BALANCED ROCK-VALVES.

Specification forming part of Letters Patent No. **107,505**, dated September 20, 1870.

To all whom it may concern:

Be it known that I, JOHN C. KING, of the city of New York, in the county and State of New York, have invented a new and Improved Balanced Rock-Valve; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 represents a vertical transverse section of my improved balanced rock-valve. Fig. 2 is a perspective view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new rock-valve for pumps, steam-chests, &c., and has for its object to so construct the same that it will be fully balanced.

The valve A, which is made cylindrical or slightly conical, consists of two heads, *a a*, which are connected by two longitudinal pieces, *b* and *c*. The piece *b* forms the bridge for connect-

ing the exhaust-port *d* alternately with the ports *e e*. The piece *c* is a bracing-strip above the bridge. The valve is hung upon a shaft, B, within the steam-chest C, into an open cylindrical shell, D, formed therein, the said shell having two openings, *f f*, in the sides, through which steam is admitted to the valve. The steam, it will be seen, is in contact with the upper surface of the bridge *b* and with the lower side of the connecting-plate *c*, and serves, therefore, to balance the valve and to keep it properly suspended. The valve will consequently operate without friction.

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

The balanced rock-valve consisting of the heads *a a*, bridge *b*, and plate *c*, substantially as herein shown and described.

JOHN C. KING.

Witnesses:

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