J. L. BROWN.

Slide-Valves.

No. 138,376. Patented April 29, 1873.

Fig. 2.

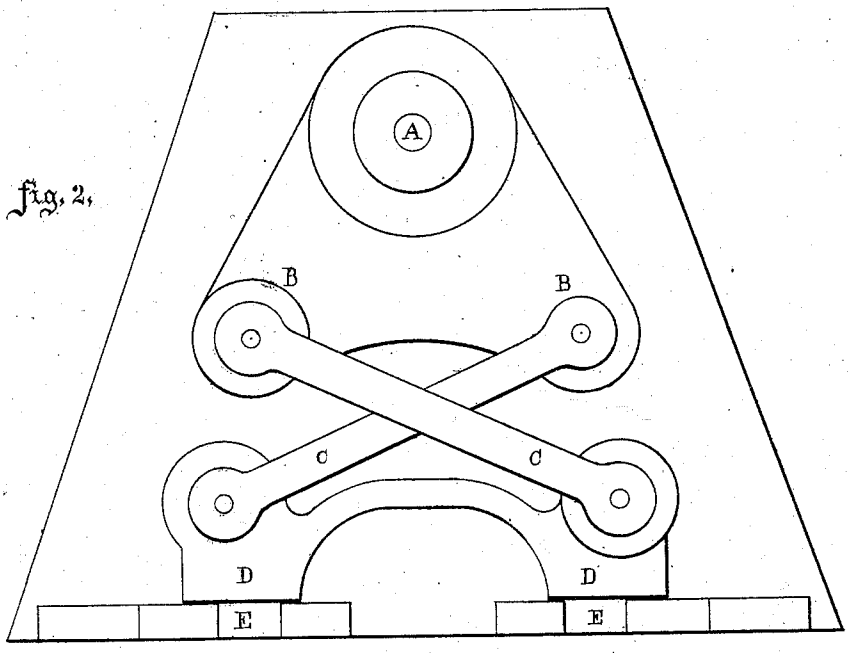
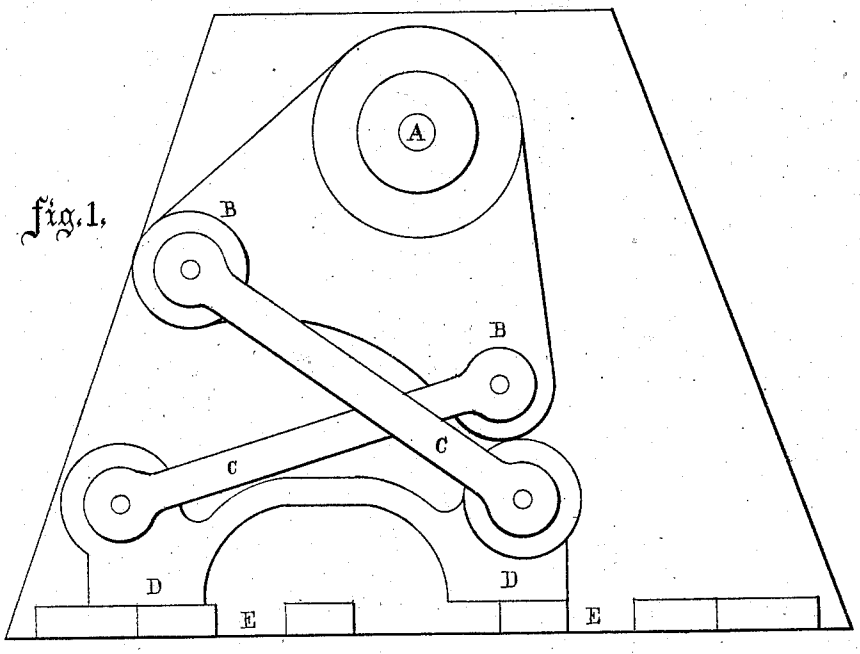


Fig. 1.



Attest

Wm. R. Singleton

D. D. Phelan

Inventor

James L. Brown

Per John H. Frazer

Attorney

UNITED STATES PATENT OFFICE.

JAMES L. BROWN, OF BROOKVILLE, PENNSYLVANIA.

IMPROVEMENT IN SLIDE-VALVES.

Specification forming part of Letters Patent No. **138,376**, dated April 29, 1873; application filed February 11, 1873.

To all whom it may concern:

Be it known that I, JAMES L. BROWN, of Brookville, county of Jefferson, State of Pennsylvania, have invented certain Improvements in Slide-Valves for Steam and other purposes, of which the following is a specification:

My invention relates to slide-valves; and consists, first, in a rock-shaft with laterally-projecting arms, to which are attached links crossing each other in such a way as to be attached to opposite sides of the slide-valve; and, secondly, to the general arrangement of the parts, as hereinafter described and claimed, to enable others skilled in the art to which it appertains to construct and use the same, referring to the accompanying drawing and letters of reference marked thereon, which constitute and form part of the same.

Figure I is a front view of my invention. Fig. II is a front view with ports closed.

A is the rock-shaft, which passes horizontally through the upper part of the steam-chest, to one end of which is keyed the arms B B, projecting laterally and downwardly, the ends being prepared to receive the cross-links C C. The upper end of one link is attached to one arm, and passes thence obliquely downward, and is attached to the opposite side of the valve D, the other link being attached to the opposite arm and crossing the first link, forming the letter X, and is also attached to the valve D. The valve D is of usual form of construction, with valves and valve-seats.

Operation.

The driving-power is attached to the opposite end of the rock-shaft A, and, as the shaft is rotated, one link pushes and the other one pulls, and vice versa in the return motion.

In Fig. I the parts heretofore described show their position in the steam-chest with the ports closed. In Fig. II the dotted lines show the position of these parts with the ports open.

Having thus fully described my invention, I claim—

The combination of the rock-shaft A, and the arms B B, and the links C C, and the valve D, and the ports E E, substantially as and for the purposes described.

In testimony whereof I have hereunto subscribed my name.

JAMES L. BROWN.

Witnesses:
H. GARRETT,
JOHN W. FRAZEE.