

H. H. MEYER.

Improvement in Slide-Valves.

No. 132,480.

Patented Oct. 22, 1872.

Fig. 1.

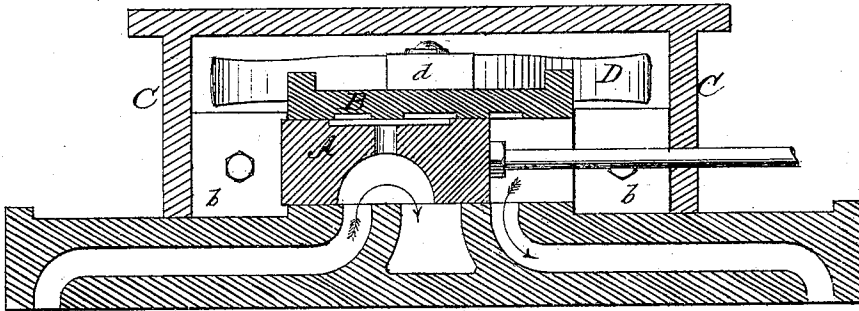


Fig. 2. y

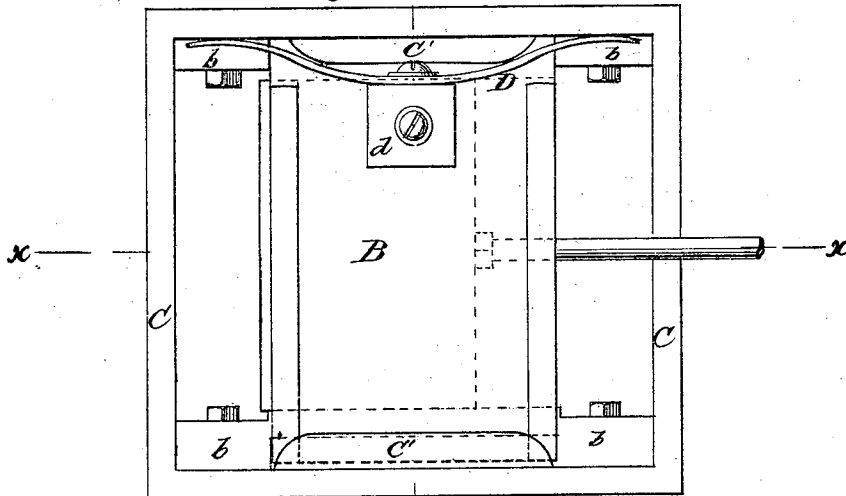
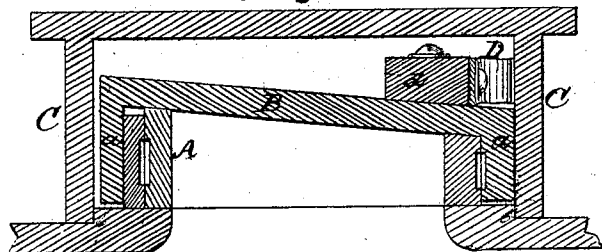


Fig. 3. y



Witnesses.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN SLIDE-VALVES.

Specification forming part of Letters Patent No. 132,480, dated October 22, 1872.

To all whom it may concern:

Be it known that I, HERMAN H. MEYER, of Denver, in the county of Arapahoe, in the Territory of Colorado, have invented a new and useful Improvement in Slide-Valve; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is a vertical section in the plane of the line *xx* of Fig. 2; Fig. 2 is a plan view, the top of the steam-chest being removed; and Fig. 3 is a vertical section in the plane of the line *yy* of Fig. 2.

Similar letters indicate corresponding parts.

This invention relates to slide-valves; and consists in the combination, with a slide-valve, of a cover, which holds the valve down to its seat, and which is so constructed and arranged as to compensate for wear of the valve, the cover closing against the back of the valve so as to prevent it from wearing leaky.

The letter A designates a slide-valve; and B, a cover placed over its back within the valve-chest C. Both the valve and the cover are made wedge-shaped in cross-section, (see Fig. 3,) and the ends *aa* of the cover overlap the sides of the valve, as shown in Fig. 3; but space is left between its ends *aa*, and the walls of the steam-chest to allow it to advance to compensate for the wear of the valve. The ends *aa* of the cover are guided and prevented from moving lengthwise of the valve by guide-pieces *b b b b* in the corners of the steam-chest, but they do not prevent motion of the cover crosswise of the valve. The ends of the cover extend under ears *C' C'*, which are secured to the side of the steam-chest, and

which serve to keep the cover in place and prevent it from rising off its place over the valve. The face of the cover, which comes next to the back of the valve, is inclined so as to correspond to the wedge-shaped or inclined back of the valve, and at its thicker end I apply a spring, D, which is, in this example, flat, and is so arranged that its ends bear against one side of the steam-chest while its center bears against a shoulder, *d*, on the cover. This arrangement causes the cover to advance over the valve and compensate for wear, and thereby prevent leakage.

One advantage of my invention is found in locomotives, which, when running on a down grade, have their steam shut off, and while in this condition their valves keep on moving and wear on their seats, so that at length the wear forms a space between the back of the valve and the cover, and in such cases the cover would be of no benefit. In order to obviate this difficulty, I have provided a spring to bear upon the cover and feed it along across the back of the valve, as described, the cover being made in length less than the width of steam-chest inside, so as to allow it to be moved along by the spring as the wear of the face of the valve proceeds.

What I claim as new, and desire to secure by Letters Patent, is—

A cover, B, arranged over the back of a slide-valve, as described, in combination with a spring to move the cover on the back of the valve and compensate for the wear of the valve, substantially as described.

HERMAN H. MEYER.

Witnesses:

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