

(No Model.)

J. G. SCHUMACHER.

STEAM ENGINE SLIDE.

No. 334,811.

Patented Jan. 26, 1886.

Fig. 1.

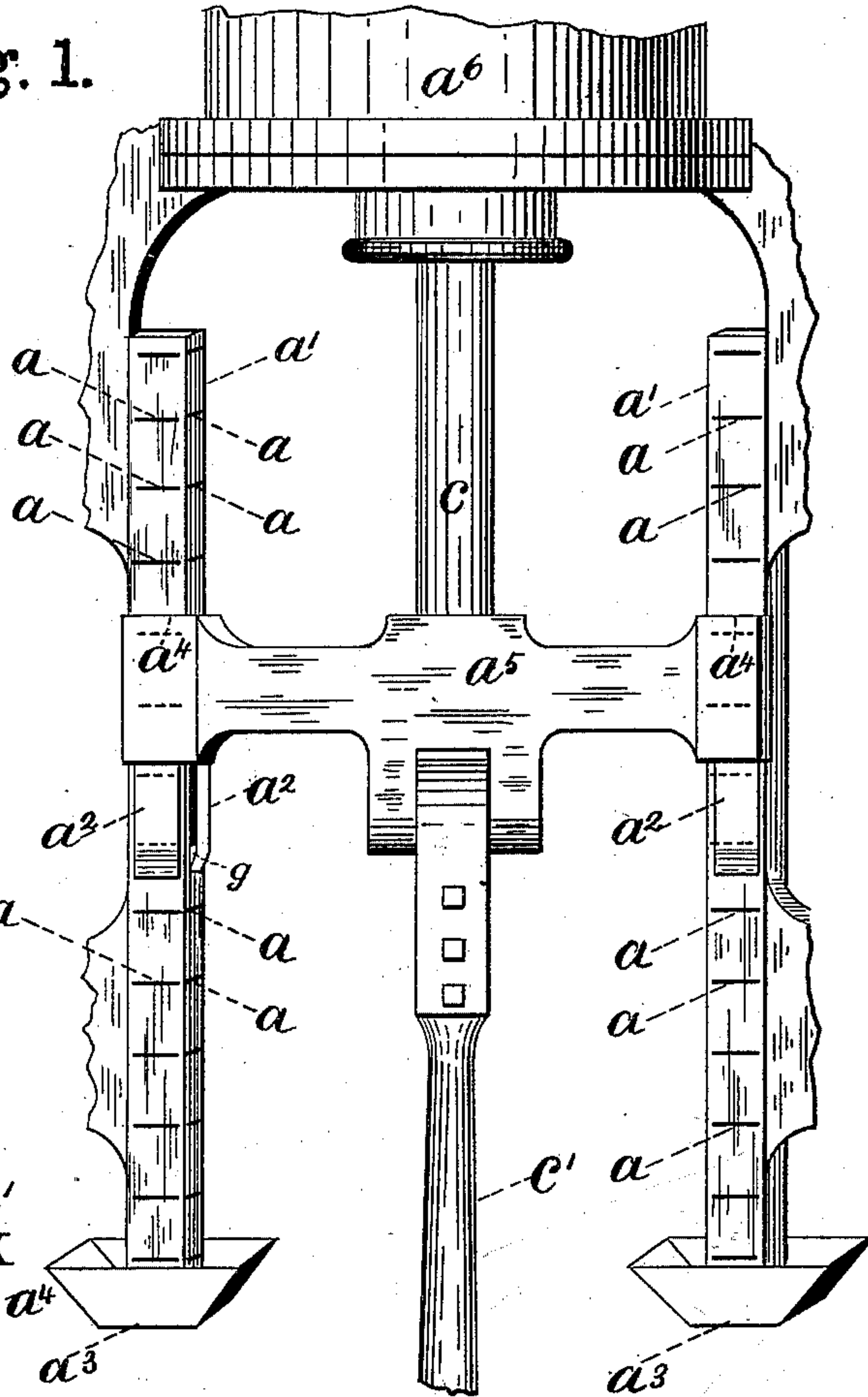


Fig. 2.

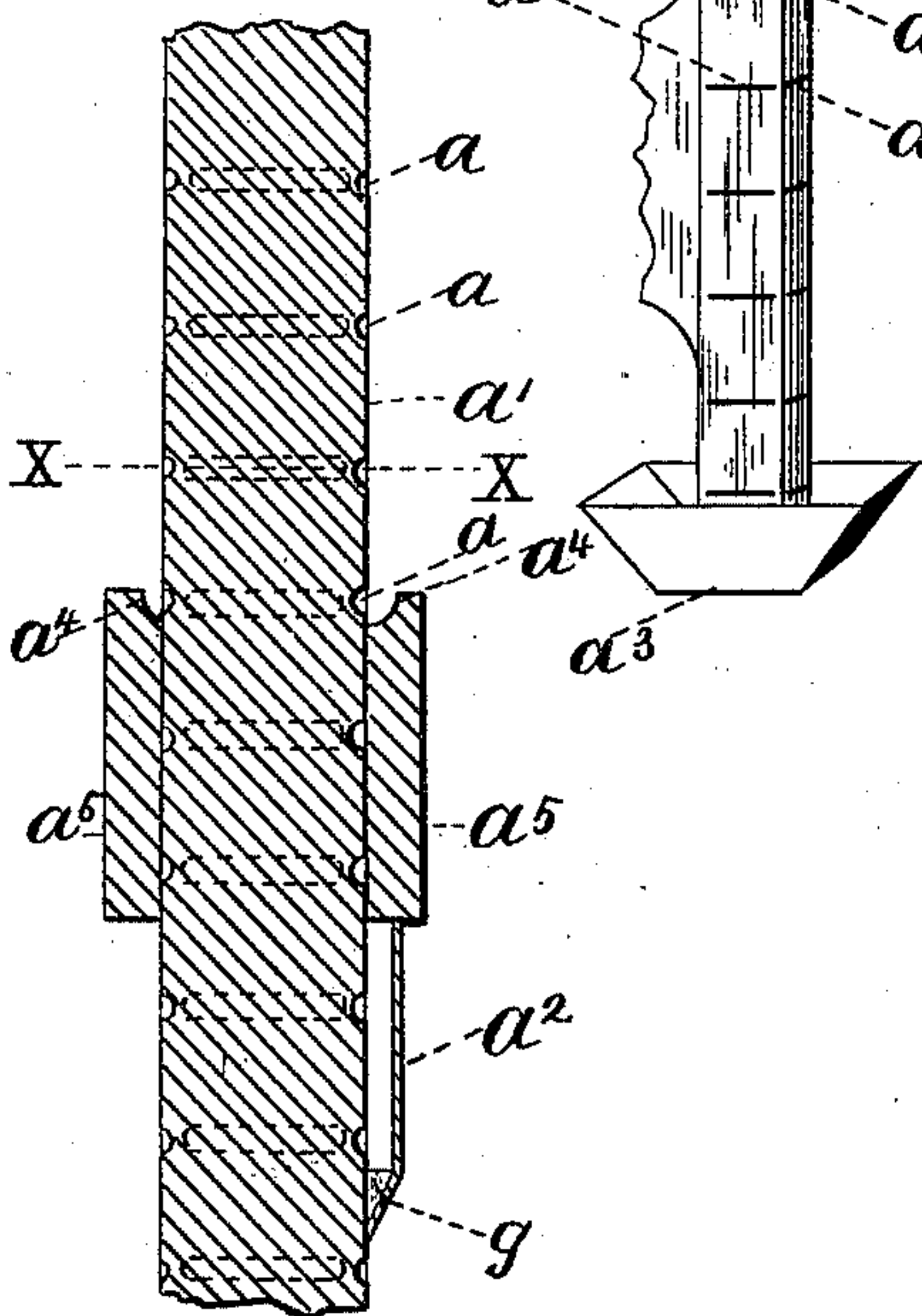
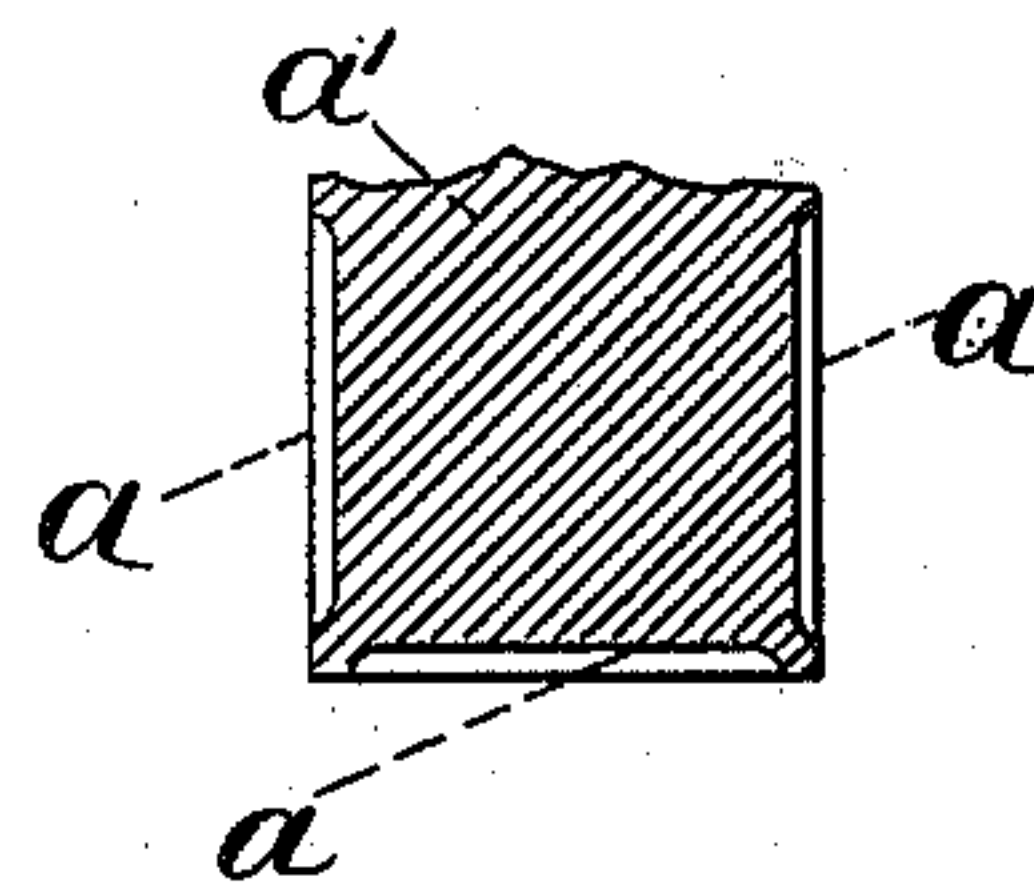


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOSEPH G. SCHUMACHER, OF BUFFALO, NEW YORK, ASSIGNOR TO HIMSELF
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STEAM-ENGINE SLIDE.

SPECIFICATION forming part of Letters Patent No. 334,811, dated January 26, 1886.

Application filed October 17, 1885. Serial No. 180,150. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH G. SCHUMACHER, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Steam-Engine Slides, of which the following is a specification.

The object of my invention is to produce the means for more effectually lubricating the slides of a steam-engine, and it will be fully and clearly hereinafter described, shown, and claimed, by reference to the accompanying drawings, in which—

Figure 1 is a detached perspective view of a portion of the cylinder, the piston-rod, the cross-head, a portion of the connecting-rod, and the slides, of a steam-engine, showing my invention connected thereto. Fig. 2 is an enlarged vertical longitudinal section through a portion of one of the slides and cross-head and one of the brushes; and Fig. 3 is a cross-section in line X X, Fig. 2, cutting through the grooves in the slide.

Heretofore great difficulty has been found to properly lubricate the slides of large steam-engines having vertical steel slides, and consequently they become heated and are soon so much cut and worn as to be useless. This is especially so in marine engines having steel slides, where water has to be used in large quantities to keep them cool, thereby causing great inconvenience and annoyance, and often resulting in failure to keep the slides in anything like good condition.

The object of my invention is to overcome

these objections by putting a series of transverse grooves, a , in the front and both sides of the slides a' . These grooves are cut nearly across the slides, (see Fig. 3,) so as to leave a series of hollow pockets to receive and hold the oil that the brushes a^2 bring up as they dip into the oil-receptacles a^3 at each revolution of the engine. The upper portion, a^4 , of the cross-head a^5 is preferably made so as to incline, as shown in Fig. 2, so as to hold the oil as it is brought up on the slides. By this construction the oil is retained in the pockets as it is brought up by the brushes a^2 , and has not time to leave them before the brushes make another upward movement and bring up a fresh supply of oil, thereby keeping them well lubricated and dispensing with the use of water entirely to keep them cool.

The cylinder a^6 and its stuffing-box, the piston-rod c , and connecting-rod c' are all old and well known, and require no further description here—

I claim as my invention—

1. A steam-engine slide, a' , provided with a series of grooves or pockets, a , substantially as and for the purposes described.

2. The slides of a steam-engine provided with a series of transverse grooves or pockets, a , in combination with the cross-head having the inclined portion a^4 and brushes a^2 , for the purposes described.

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Witnesses:

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