

(No Model.)

A. S. MILLER.  
LOCOMOTIVE ASH PAN.

No. 354,165.

Patented Dec. 14, 1886.

FIG. 1

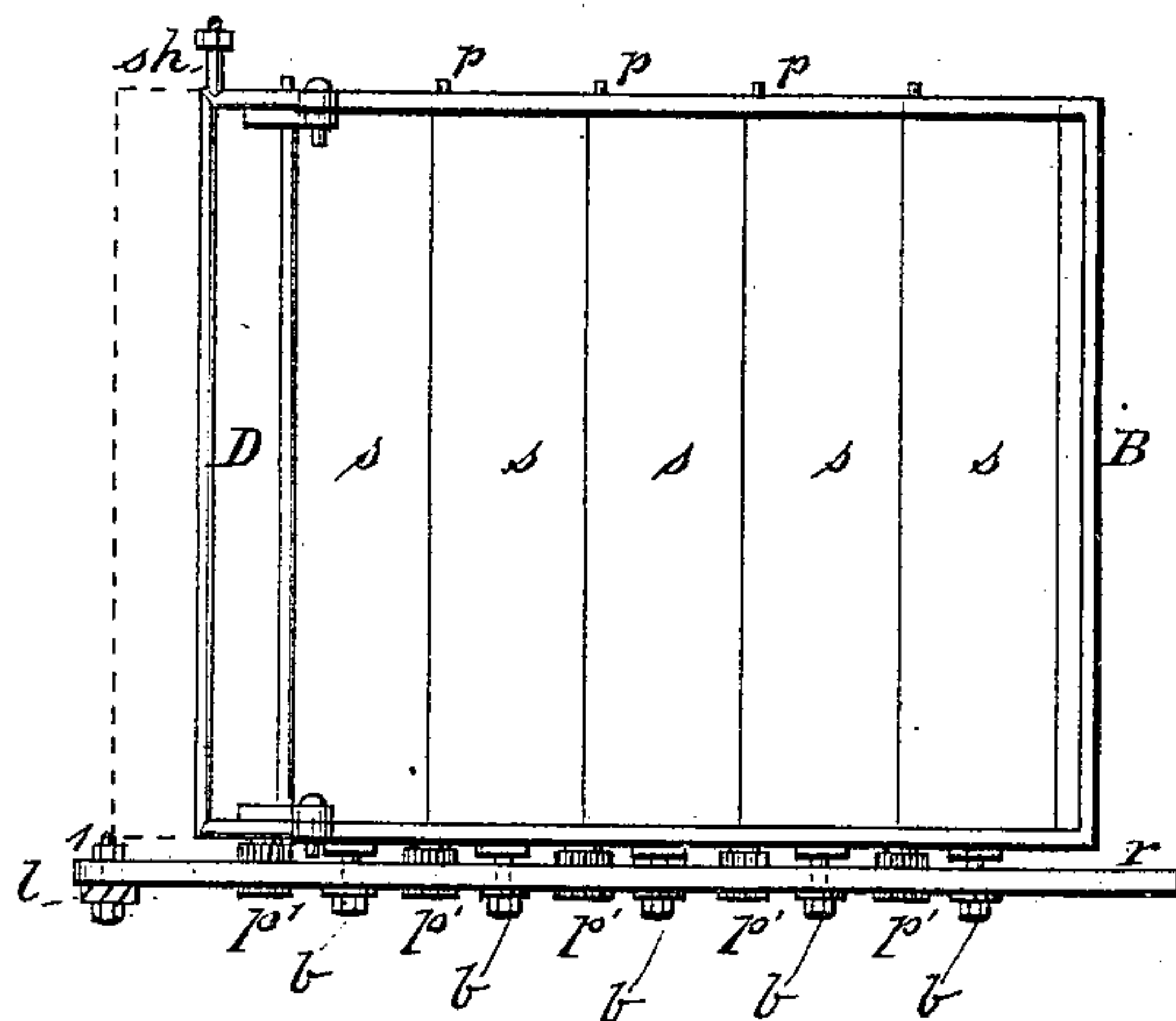


FIG. 2

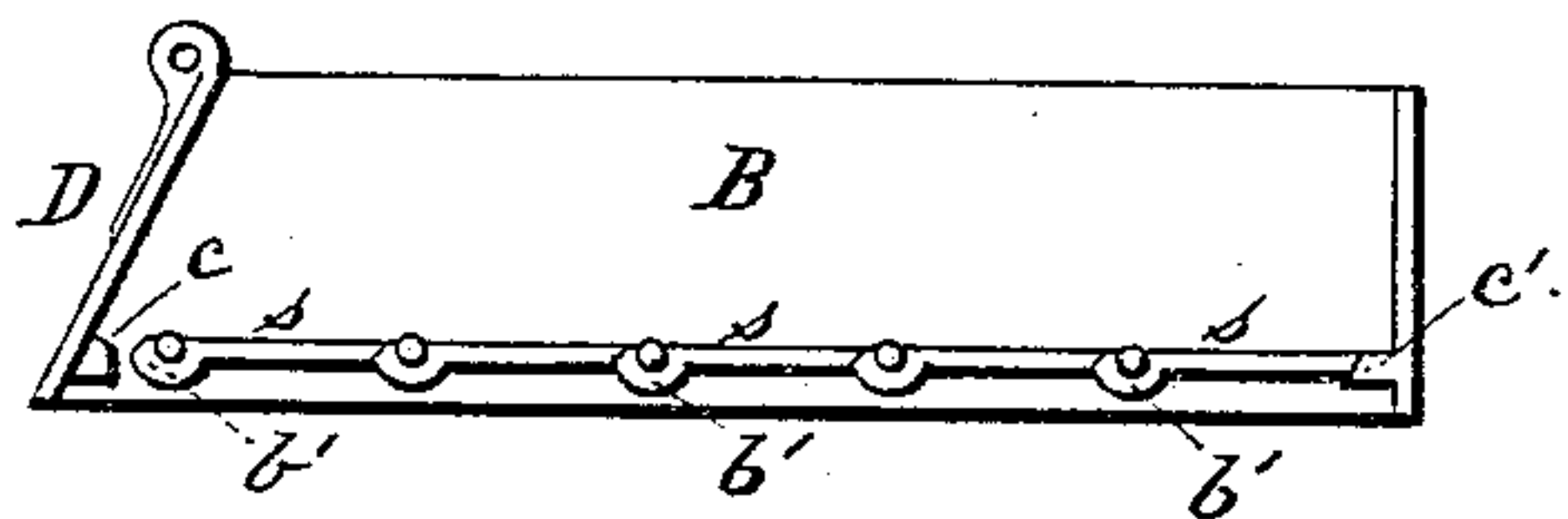


FIG. 3

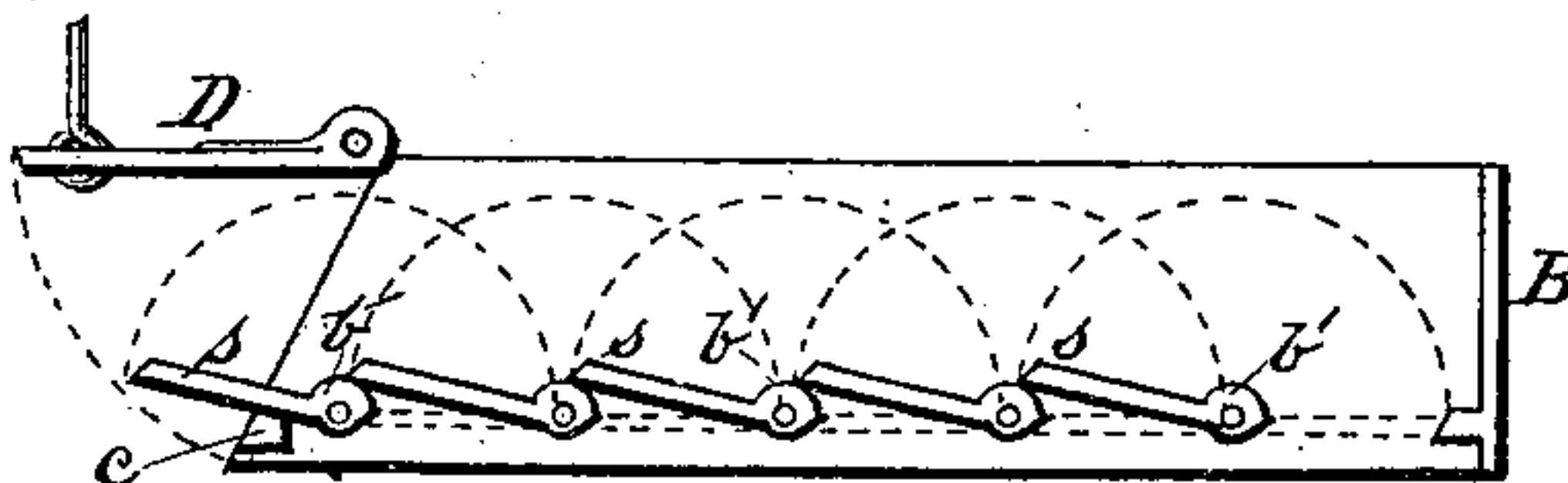


FIG. 4

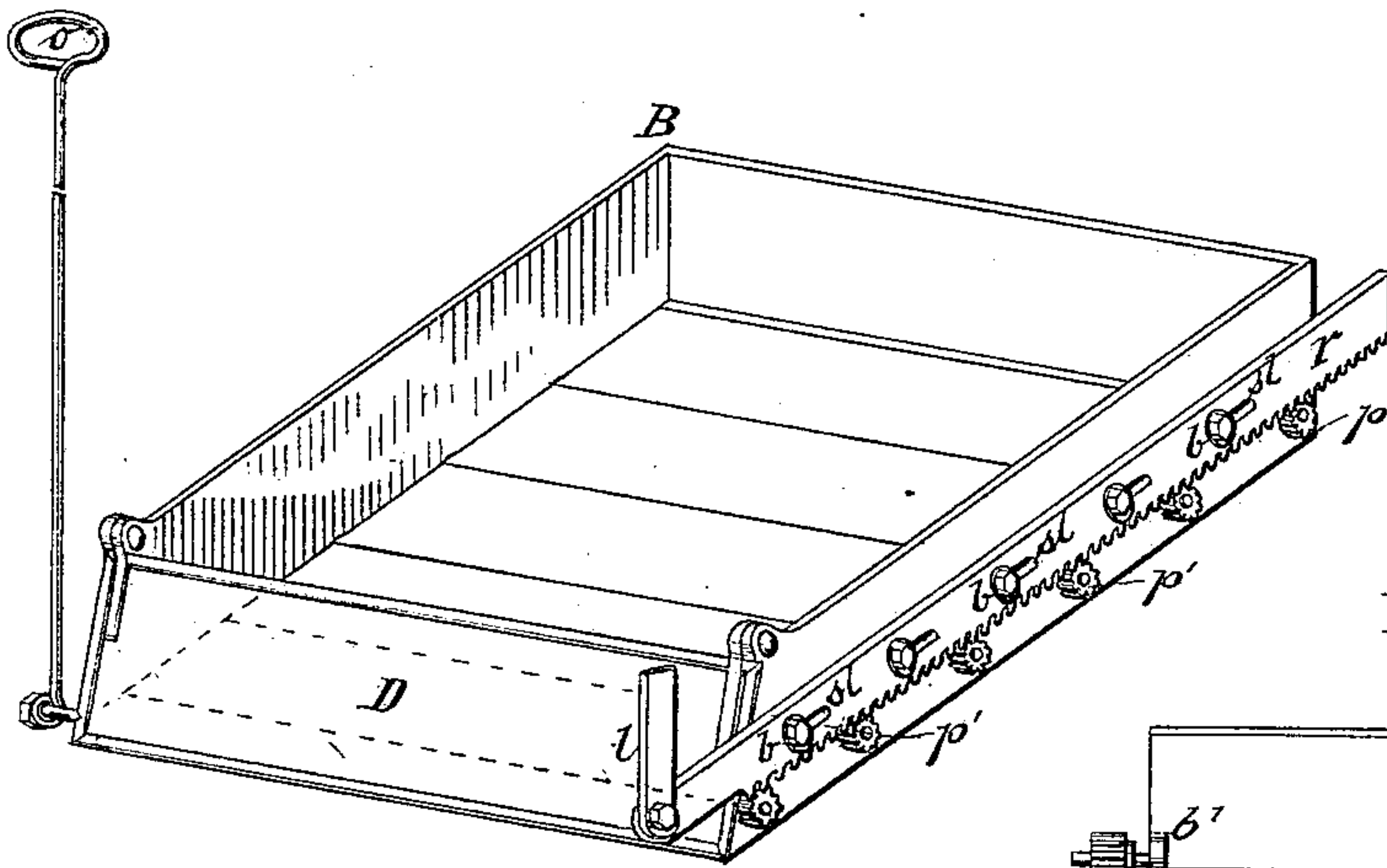
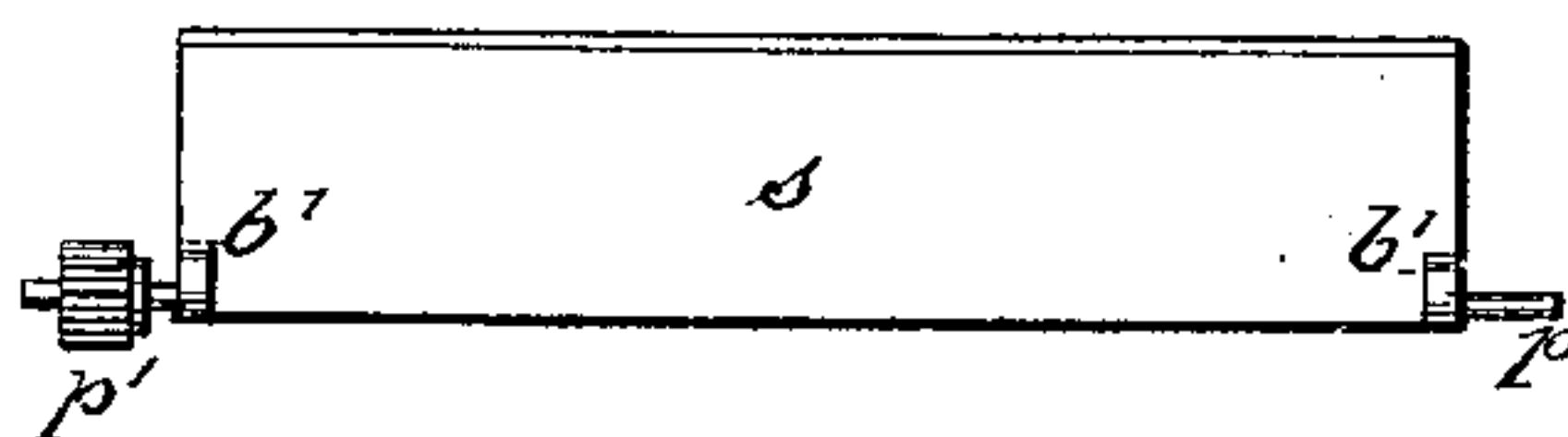


FIG. 5



WITNESSES.

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Hattie Murray.

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# UNITED STATES PATENT OFFICE.

ALBERT S. MILLER, OF INDIANAPOLIS, INDIANA.

## LOCOMOTIVE ASH-PAN.

SPECIFICATION forming part of Letters Patent No. 354,165, dated December 14, 1886.

Application filed April 5, 1886. Serial No. 197,823. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT S. MILLER, a resident of Indianapolis, Indiana, have made certain new and useful Improvements in Locomotive Ash-Pans, a description of which is set forth in the following specification, reference being made to the accompanying drawings, in the several figures of which like letters represent like parts.

My invention relates to an improvement in locomotive ash-pans; and it consists in so constructing the bottom of the pan that it may be dumped by the fireman from the cab of the locomotive by means of a lever and suitable connecting mechanism, and will be understood from the following description.

In the drawings, Figure 1 is a top view of my device. Fig. 2 is a side view with one of the ends removed, the slats forming the bottom being in their normal position. Fig. 3 is a similar view, the slats being reversed after the ashes have been dumped. Fig. 4 is a perspective view. Fig. 5 is an under side view of one of the slats, showing the projections, stub-axle, and the pinion mounted thereon.

In detail, B is the ash-pan proper, having a door, D, hinged on each side at the upper-front end, and provided with a handle, o, for opening the same. The bottom of the ash-pan is constructed of slats s, which are provided with pivotal axles p on each side, which have bearings in the sides of the pan. Adjacent to these axles on the under side are small projections b', forming stops or rests for the successive slats when they are reversed, the slats resting in such case upon these projections in the manner shown in Fig. 3.

r is a rack-bar, fastened to the side of the pan by bolts b, passing through slots s', the teeth of this rack-bar engaging with small pinions p', which are mounted on the outer end of the pivotal axles p. The rack-bar is actuated by a lever, l, connected to its inner end, as indicated in Fig. 4, and passing up through the cab within convenient reach of the fireman. The slats s are intended to overlap one another, as shown in Fig. 2, and the overlapping edges are beveled away, so that the upper surface of the slats presents a uniformly-flat surface, making it easier for raking. At each end of the pan are projections c and c',

having similar beveled surfaces, providing a rest for the slats at the extreme ends.

The operation of the device is as follows: By throwing over the lever l the rack-bar is moved horizontally, actuating the pinions with which it engages, and causing the slats s to make nearly a half a revolution, as shown in Fig. 3, throwing the upper side downward and causing the end of one slat to strike with more or less of a thump against the projection or slat adjacent, thus dislodging any ashes that, on account of being wet, might otherwise stick to the surface of these slats. A reverse movement of the lever throws the slats back to their normal position.

Instead of the rack-bar mechanism herein shown, squared heads might be formed on the outer ends of the axles, and small crank-rods with openings which fit over these heads could be connected to each other and to the lever l by means of a connecting bar or rod, and the same result will be accomplished; and I do not intend to limit myself to the actuating mechanism shown in the drawings, as it would be easy for a skillful mechanic to vary this mechanism without departing from the principle of my invention.

I am aware that locomotive ash-pans having sectional bottoms and actuated by rods or levers are not new, and do not broadly claim the same as my invention; but I am not aware that any device has been constructed wherein the slats are pivoted in the manner shown, or allowed to make so much of a revolution or to strike against each other, so as to dislodge any wet ashes that would otherwise stick to the bottom.

What I claim, and desire to secure by Letters Patent, is the following:

1. In a locomotive ash-pan, a series of slats forming the bottom pivoted on one side and at each end in the sides of the ash-pan, the edges of adjacent slats beveled, so that when in their normal position the bed of the ash-pan is smooth and free from obstructions, and provided with projections on the under side, so that when reversed one slat will strike against the projections of the next adjacent slat, in combination with suitable mechanism for reversing the sections, substantially as described.



2. The locomotive ash-pan B, having the door D and opener o, its bottom formed of slats s, pivoted upon axles p in the sides of the pan, the rack-bar r, connected to one or  
5 more sides of the pan, the pinions p', mounted upon the pivotal axles of the slats and adapted to engage with the teeth of the rack-bar, and the lever l, for actuating the reversing mechanism, all combined substantially as described.

10 3. In a locomotive ash-pan, a sectional bottom formed of slats s, journaled in the sides of the ash-pan upon axles p, and provided with the projections b' on the under side of the slats,

the edges of the slats beveled, so as to form a uniformly-flat surface when they are in their  
15 normal position, the stops c and c', the rack-bar r, secured to the side of the pan, the pinions p', mounted on the axles of the slats, and the lever l, all combined substantially as described.  
20

In witness whereof I have hereunto set my hand this 31st day of March, 1886.

ALBERT S. MILLER.

Witnesses:

C. P. JACOBS,

ROBERT HAASE.