(No Model.)

J. B. McCUNE.

LOCOMOTIVE ASH PAN.

No. 341,930. Patented May 18, 1886.

FIG. 1.

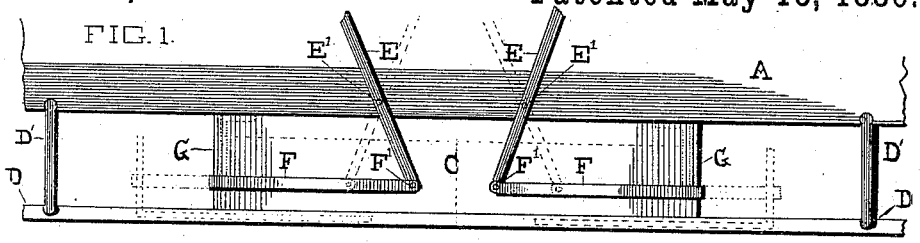


FIG. 2.

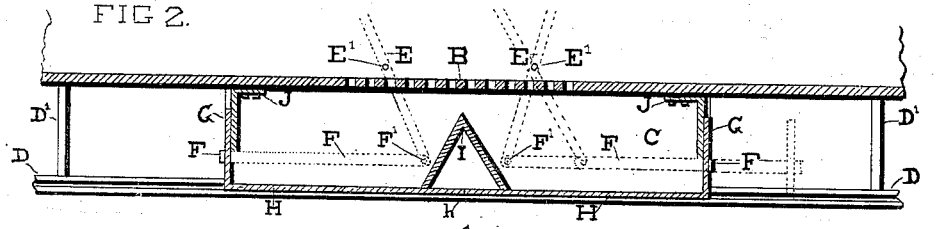


FIG. 3.

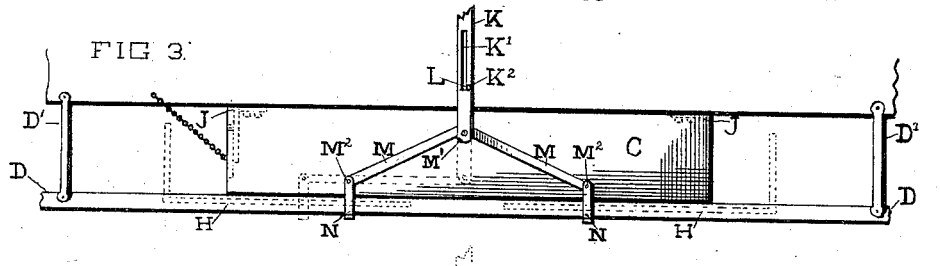


FIG. 4.

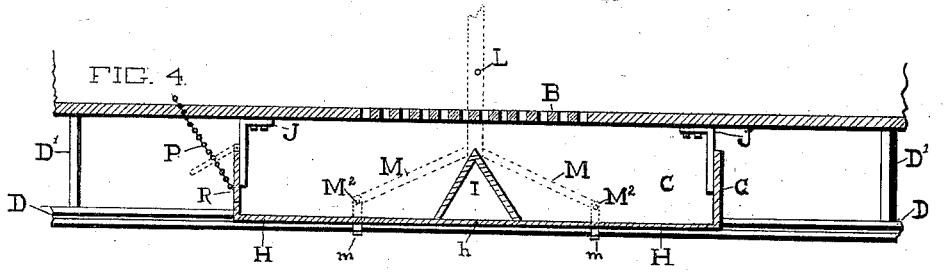
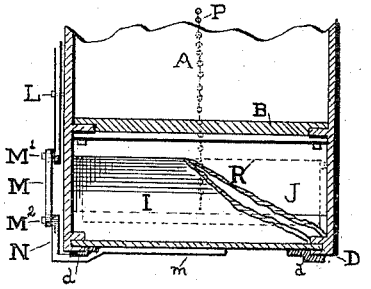


FIG. 5.



WITNESSES.

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JAMES B. McCUNE, OF WHEELING, WEST VIRGINIA.

LOCOMOTIVE ASH-PAN.

SPECIFICATION forming part of Letters Patent No. 341,930, dated May 18, 1886.

Application filed February 9, 1886. Serial No. 191,370. (No model.)

To all whom it may concern:

Be it known that I, JAMES BARBOUR McCUNE, a resident of Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Locomotive and Fire-Engine Ash-Pans; and I do hereby declare that the following is is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to locomotive and fire-engine ash-pans; and it consists in the parts which will be hereinafter described, and pointed out in the claims.

The invention consists in a sectional movable bottom, the abutting sectional ends being covered by a stationary bridge to prevent the coal and ashes from falling through the joint.

The invention further consists in levers for operating the sliding sections.

In the accompanying drawings, Figure 1 represents a side elevation of the bottom of a locomotive fire-box with my improved ash-pan attached thereto. Fig. 2 is a central longitudinal section of Fig. 1. Fig. 3 is a side view, similar to Fig. 1, but showing a modification in the construction of the pan and the lever used for operating the same. Fig. 4 is a central vertical longitudinal section of the construction shown in Fig. 3, and Fig. 5 is a cross-section of said Fig. 3.

The letter A indicates the bottom of a locomotive fire-box, and B a grate.

C represents the fixed sides of the ash-pan, suspended by suitable means from the frame or fire-box of the locomotive.

D D represent flanged or grooved guides secured to the bottom of the ash-pan sides, and attached to the frame or fire box of the locomotive by rods D'.

E E represent two levers, preferably on the fireman's side of the locomotive. These levers are pivoted at E' to the frame or fire-box.

F F are arms jointed at F' to the levers E. The outer ends of these arms are turned inward at right angles, and secured to the turned-up ends G on the outer ends of the movable-bottom sections H. Said movable sections are flanged at *d*, and they are adapted to move in the grooved guides D when actuated by the levers.

I represents a bridge in the shape of an inverted V. This bridge is secured to the fixed sides of the ash-pan and rests on the grooved guides. The movable-bottom sections H H may slide under this bridge, so that the abutting ends *h*, forming the joint, will be covered by the bridge to prevent the cinders and ashes which may fall through the grate from passing through the joint.

J J represent stationary curtain-pieces extending across the ends of the ash-pan, secured to the under side of the fire-box and to the fixed sides C C. The movable bottoms H H are adapted to pass freely under the lower edges of the end pieces J J. The ends G G of the movable bottoms H H, when the ash-pan is closed, rest against the outside of the fixed ends J J. When the removable sections H H and their ends G G are forced out by the actuating means, the fixed ends J J act as scrapers and remove the ashes from the bottom H H. The guides D D extend out to a considerable distance beyond the ends J J, so as to enable the operator to slide the movable sections out on either one or both ends to the fullest desired extent.

The lever shown in Figs. 3, 4, and 5 is a modification from the construction shown in Figs. 1 and 2. This modification consists in a vertical bar, K, extending upward, preferably on the fireman's side. Said bar is provided with a longitudinal slot, K', and a bottom communicating recess, K^2. A pin, L, is suitably secured to the side of the frame or other convenient place.

M M indicate two rods, jointed to the lower end of the lever K. The outer ends of these rods are pivoted to arms N N. The lower ends of the arms N N extend outward, downward, and around one of the guides D, and then are provided with long horizontal extensions *m*, which are secured, respectively, to the under sides of the movable bottoms. The lever K is suitably secured in a guard or guide in the locomotive-frame. When the recess K^2 in said lever is disengaged from the pin L, and said pin placed in vertical line with the slot K' and the lever forced down, the movable sections H H are forced apart, as indicated by dotted lines, whereby the ashes in the pan are dumped

out. When the bar is raised and locked by the pin in the recess, the sections are closed.

R is a damper on the front end of the ash-pan, hinged at the top edge to swing upward, and is operated by a chain or rod, P, extending up into the cab of the engine.

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

1. An ash-pan having a sectional or two-part bottom, said bottoms having side flanges, grooved side guide-rails for the reception of said flanges, and levers secured to the movable sections, whereby said sections may be opened and closed, substantially as described, and for the purposes set forth.

2. An ash-pan having fixed sides and ends, grooved guide-rails along said sides, a fixed bridge secured to the sides and located within the pan, movable flanged bottom sections, the flanges whereof being movably located in the grooved guide-rails, and levers to open and close the movable sections, substantially as described, and for the purposes set forth.

3. An ash-pan having fixed sides and ends and a movable sectional flanged bottom, side grooved guide-rails for the reception of the flanged sides of the movable sections, an inverted-V-shaped bridge centrally located within the ash-pan to cover the abutting ends of the movable sections when closed, and a lever provided with arms for connecting said movable sections, substantially as described, and for the purposes set forth.

In testimony that I do claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

JAMES B. his × mark. McCUNE.

Witnesses:
E. B. HOWARD,
CHARLES C. HOOK.