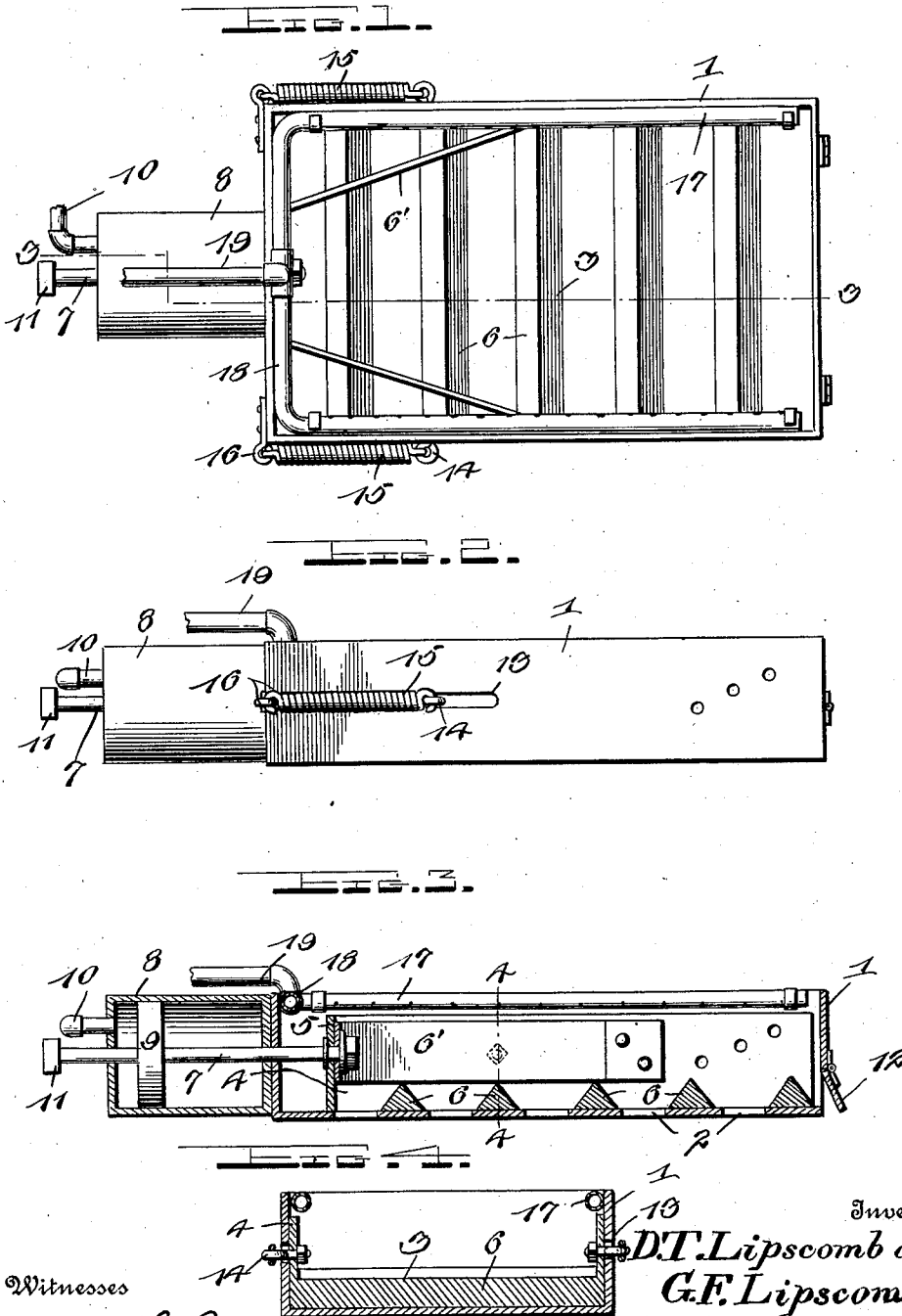


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ASH PAN.
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Patented Sept. 3, 1912.



Witnesses

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ASH-PAN.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, DAVID T. LIPSCOMB and GILBERT F. LIPSCOMB, citizens of the United States, residing at Junior, in the county of Barbour and State of West Virginia, have invented certain new and useful Improvements in Ash-Pans, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in ash pans, and more particularly in ash pans for locomotives, and has for its object to provide a novel and positively operating construction for discharging the ashes from the ash pan.

Another object of the invention is to provide novel sprinkling means whereby the ashes are sprinkled before they are discharged from the ash pan to extinguish any live coals which might be associated with the ashes to prevent the cross ties or other combustible material from becoming ignited by the coals.

Another object of the invention is to provide an ash pan of this character which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is simple in construction and operation.

With the above and other objects in view the invention consists in the novel features of construction and in the arrangement and combination of parts hereinafter more fully described, pointed out in the claim, and shown in the accompanying drawings in which,

Figure 1 is a top plan view of an ash pan constructed in accordance with our invention, Fig. 2 is a side elevation, and Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1. Fig. 4 is a sectional view taken on the line 4—4 of Fig. 2.

Referring more particularly to the drawings, 1 indicates the body of a pan having the transversely arranged slots 2 formed in the bottom thereof. A discharge member 3 is slidably arranged in the body member, said discharge member comprising the side portions 4, which are suitably connected at one end by means of the end piece 5. Transversely disposed triangular shaped closure plates 6 are provided and are suitably connected at their ends to the sides 4 of the discharge member, said plates are adapted to be normally disposed over the slots 2 to close

the same. A U-shaped brace member 6' is provided, having its ends secured to the side portions 4 and its intermediate portion secured to the end piece 5. A piston rod 7 is provided having one of its ends secured to the end piece 5 of the discharge member. A cylinder 8 is suitably mounted adjacent one end of the body of the ash pan, in which the piston rod 7 is adapted to reciprocate, said piston rod being provided with a circular head 9 whereby when steam or compressed air is introduced in the cylinder through the inlet pipe 10 the piston will be moved toward the body of the ash pan and slide the discharge member forward so as to uncover the slots 2 to allow the ashes to drop through. An enlarged head 11 is formed on the outer end of the piston to limit the inward movement thereof. The steam or compressed air which is introduced into the cylinder is to be controlled by means of a valve arranged near the fireman's seat so he can easily and quickly dump the ash pan when desired. By having the discharge plates formed inverted triangular shaped it will be seen that there will be no flat surfaces for the ashes to rest on whereby they will be easily discharged through the slots 2. A swinging door 12 is hinged on the lower side of the forward end of the ash pan and adapted to swing outwardly whereby any of the ashes that may be in front of the discharge member will be discharged out through the end of the body of the pan. Guide slots 13 are formed in each side of the body of the pan adapted to receive the eye bolts 14 which are carried by this discharge member. These eye bolts 14 are suitably connected by means of the coil spring 15 to the eye bolts 16 secured to the rear end of the ash pan, the coil spring retaining the discharge member in a normal position so that the closure plates 6 will be arranged over the slots 2 to close the same.

It is a well known fact that ashes which are discharged from the locomotive, which is in use, contain a great number of live coals which, if the ashes are discharged on to the railroad track are liable to ignite with cross ties or other combustible material and cause considerable damage. To extinguish these live coals before discharging the ashes we provide perforated pipes 17 which are arranged at each side of the ash pan and are suitably connected at one end by means of

the cross pipe 18, said cross pipe being suitably connected at its central portion with the inlet pipe 19. This inlet pipe may be suitably connected with the tender of the engine and the flow of water therethrough be controlled by means of a valve arranged near the fireman's seat so that prior to the discharge of the ashes he can easily operate the valve and sprinkle the ashes to extinguish any live coals which might be associated therewith. When it is desired to discharge the ashes from the pan steam or compressed air is introduced into the cylinder 8 through the inlet pipe 10 which will force the piston 7 inwardly and slide the discharge member 3 toward the front end of the ash pan, the inverted triangular shaped closure plates being moved forward to uncover the slots 2 to allow the ashes to be discharged there-through. When the steam or compressed air is turned off the tension of the spring 15 will return the discharge member to its normal position.

From the above description taken in connection with the drawings it will be readily apparent that we have provided a simple and durable ash pan whereby the ashes contained therein can be quickly and easily discharged therefrom.

While we have shown and described the preferred form of our invention it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying our invention into practice without sacrificing any of the novel features of construction or departing from the scope thereof.

What we claim is:—

In a device of the character described, the combination with an ash pan having

transverse openings formed in the bottom thereof, of a sliding discharge member arranged in said pan, triangular shaped closure plates carried by the discharge member to normally close said transverse openings, a U shaped brace member having its ends secured to the sides of the discharge member and its intermediate portion secured to one end of the discharge member, a cylinder, a piston rod reciprocating within the cylinder, a head formed on said piston rod and arranged within the cylinder, said piston rod being suitably connected to one end of the discharge member, an inlet pipe at one end of the cylinder, whereby steam or compressed air is introduced therein for moving the discharge member in one direction to discharge ashes through the openings in the discharge pan, said piston rod having an enlarged head formed on the outer end thereof to limit the inward movement of said rod, said ash pan having guide slots formed in each side thereof, eye bolts carried by the discharge member and disposed within said slots, eye bolts secured to one end of the ash pan, and coil springs connecting the eye bolts of the discharge member with the eye bolts on the ash pan whereby the discharge member will be returned to its normal position when the pressure of steam or compressed air is released.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

DAVID T. LIPSCOMB.
GILBERT F. LIPSCOMB.

Witnesses:

ARTHUR MILLER,
SARAH A. SIPE.