(No Model.)

W. H. D. NEWTH.

LOCOMOTIVE ASH PAN.

No. 303,659. Patented Aug. 19, 1884.

Fig. 1

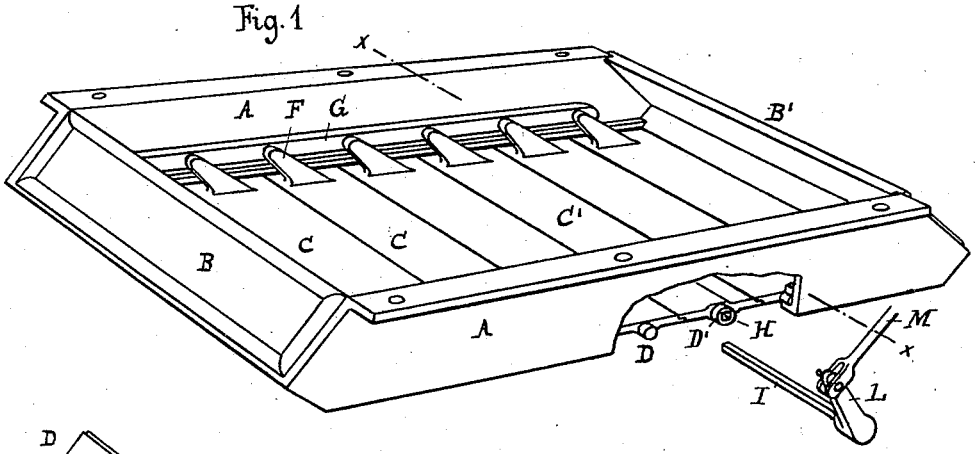


Fig. 3

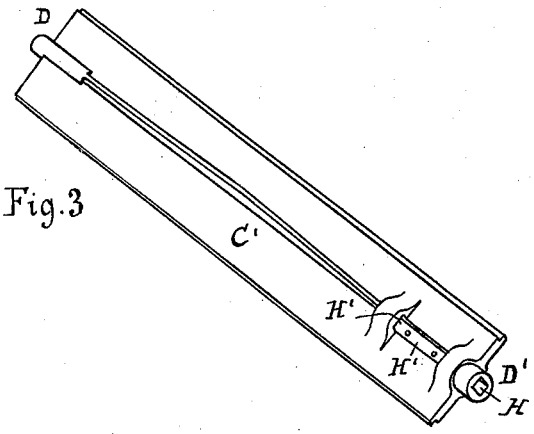
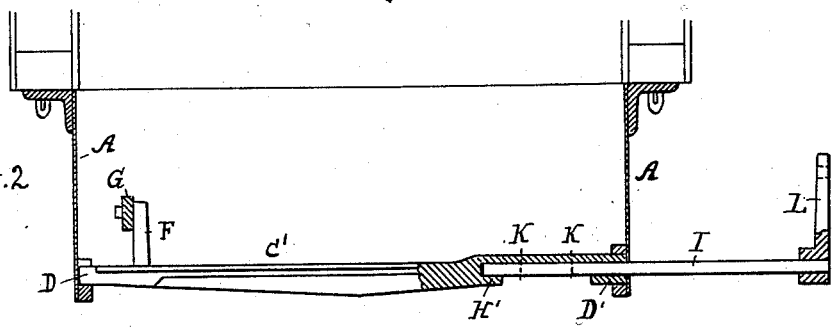


Fig. 2



Witnesses:

H. L. Whittemore

Miles King.

Inventor:

William H. D. Newth

UNITED STATES PATENT OFFICE.

WILLIAM H. D. NEWTH, OF DETROIT, MICHIGAN.

LOCOMOTIVE ASH-PAN.

SPECIFICATION forming part of Letters Patent No. 303,659, dated August 19, 1884.

Application filed April 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. D. NEWTH, a resident of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Locomotive Ash-Pans; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to an improvement in the construction of locomotive ash-pans such as are provided with a bottom consisting of a series of dumping-slats. The usual way of operating these dumping-slats is by connecting them together in any suitable way, so that the rotation of one slat will simultaneously operate the whole series. One of the series of slats is then, preferably on the outside of the ash-pan, provided with a crank, to which a rod is connected leading to the cab of the engine. By means of this connecting-rod the fireman is then enabled to dump the contents of the ash-pan from the cab.

Owing to the varying construction and arrangement of the parts in different styles of locomotives, it is a practical difficulty to devise means of operating the dumping-slats which will form the most suitable standard construction, so that the operating parts of the ash-pan may be readily adjusted to suit any style of locomotive.

It is the object of my improvement to furnish such a standard construction.

In the accompanying drawings, which form a part of this specification, Figure 1 is a perspective view of my improved ash-pan. Fig. 2 is a cross-section on line *x x* thereof. Fig. 3 is a detached perspective of the under side of the operating-slat.

A A are the sides of the ash-pan, and B B′ the front and rear dampers, respectively.

C C are a series of dumping-slats forming the bottom of the ash-pan. Each of these slats is provided upon each end with trunnions D, by means of which they are pivotally supported by the sides of the ash-pan.

F are lugs cast upon the upper sides of the slats, and G is a connecting-bar, to which the upper end of each lug F is pivotally connected.

One of the series of slats (marked C′) is provided upon one end with a hollow trunnion, D′, preferably of larger diameter than the trunnions D. This hollow trunnion D′ forms a socket, H, for the bar I, which is preferably made square.

H′ is another socket, corresponding to the socket H, and between the two sockets H H′ the slat may form a recess, H″, adapted to allow the bar I to be inserted through the hollow trunnion into the socket H′, and be held in position therein by one or more bolts or rivets, K.

L is a crank secured upon the outer end of the bar I, and M is a rod pivotally secured to the crank L, and leading to the cab of the engine.

Before mounting the ash-pan on a locomotive the slat C′ must be put in the proper place among the series of slats C to get the bar I in a position free from interference with the drivers or other part of the locomotive. Then, by drilling a hole through the side wall of the ash-pan in line with the axis of the trunnion D′, the bar I may be inserted, when its proper length and the best position of the crank L for operating may be easily ascertained by operating the ash-pan or otherwise. After having obtained the desired adjustment of the bar I, crank L, and connecting-rod M, the parts may be permanently secured to place.

What I claim as my invention is—

1. The combination, with the dumping-slats C, connected together as shown, of the slat C′, having a hollow trunnion, D′, and a socket formed in the body of the slat, the bar I, inserted through the hollow trunnion and into the socket in the body of the slat, the crank L, and connecting-rod M, substantially as and for the purpose specified.

2. In a locomotive ash-pan provided with a series of dumping-slats, connected together as shown, the combination of the slat C′, having a hollow trunnion, D′, forming a socket, H, for the bar I, and provided with a socket, H′, formed in the body of the slat, with a recess between the two sockets, the bar I, inserted through the hollow trunnion and held in said sockets, the crank L, and connecting-rod M, substantially as and for the purpose specified.

W. H. D. NEWTH.

Witnesses:
B. C. JOLLY,
MILES KING.