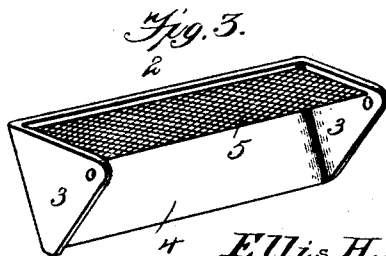
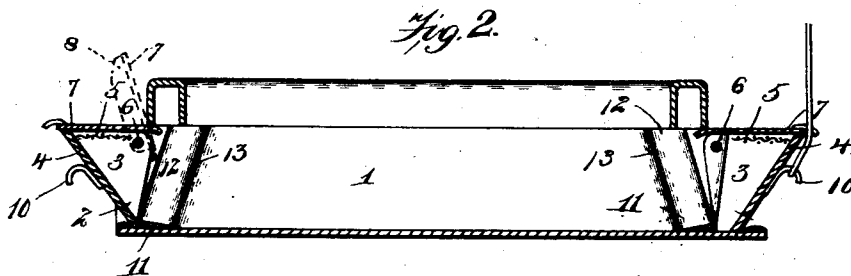
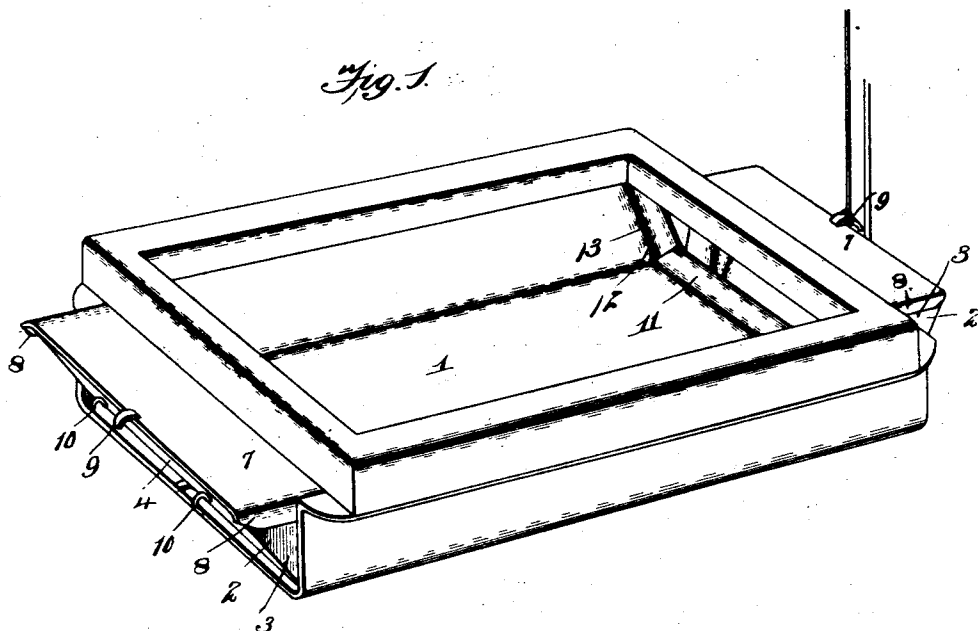


(No Model.)

E. H. MARSHALL.
VENTILATOR FOR LOCOMOTIVE ASH PANS.

No. 525,503.

Patented Sept. 4, 1894.



Witnesses

Blair Shaw
E. H. Marshall

By *his* Attorneys.

Cashow & Co.

UNITED STATES PATENT OFFICE.

ELLIS H. MARSHALL, OF FORT MADISON, IOWA.

VENTILATOR FOR LOCOMOTIVE ASH-PANS.

SPECIFICATION forming part of Letters Patent No. 525,503, dated September 4, 1894.

Application filed April 18, 1894. Serial No. 508,036. (No model.)

To all whom it may concern:

Be it known that I, ELLIS H. MARSHALL, a citizen of the United States, residing at Fort Madison, in the county of Lee and State of Iowa, have invented a new and useful Ventilator for Locomotive Ash-Pans, of which the following is a specification.

My invention relates to a ventilating device for locomotive ash pans, and has for its object to provide a simple, inexpensive, and efficient attachment for ash pans whereby the necessary ventilation and draft are afforded without allowing live coals to escape; to provide simple means for regulating the draft, and to provide means whereby the ash pan may be reached with facility for cleaning.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings: Figure 1 is a perspective view of a locomotive ash pan provided with ventilating devices embodying my invention. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a detail view, in perspective, of one of the ventilating hoods, detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates an ash-pan of the ordinary construction, in general features, in the open ends of which are pivoted the ventilating hoods 2. As the two hoods are substantially identical in construction, the description of one will suffice for both. The hood comprises, essentially, the triangular end-plates 3, which are connected by the front side or wall 4, which is adapted, when the hood is in its normal position, to bear at its lower edge upon the floor of the ash-pan and thus prevent live coals from rolling out. The upper side of the hood is formed by a wire-gauze guard 5. The hood is pivoted at the upper inner angles of its end plates to the sides of the ash pan by means of a pivot pin 6, which also forms the journal for a cap or cover 7 to close the upper side of the hood to exclude the air when a very slight or no draft is required. This cap or cover provided with depending ears 8 which fit upon opposite ends of the hood, and between the same and the

adjacent side-walls of the ash-pan, covers the perforated or screen guard 5, and is provided with a stud 9 whereby it may be raised and lowered from the cab as other dampers, or other device. The hood proper is provided upon its front or outer side with curved studs or projections 10 to facilitate its adjustment. The lower edge of the hood closes against stops 11 which are arranged upon the floor of the ash-pan, similar stops 12 being provided for the inner edges of the end-plates, and the inner sides of these stops are beveled, as shown at 13, to avoid forming a shoulder in the pan.

From the above description it will be obvious that under ordinary circumstances the hood is arranged in its lowered position, with its lower edge resting upon the floor of the ash pan, and the cap or cover raised; thereby providing for a sufficiency of draft without allowing coals to escape; that when less draft is necessary the cap or cover may be closed; and that when it is desired to remove the ashes from the pan the hood may be raised to expose the end thereof.

Further advantages of the construction will be apparent to those skilled in the art to which the invention appertains, and it will be obvious that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages thereof.

The cap or cover and hood at the front end of the ash-pan is adapted to be operated by means of wires, as shown in the drawings, leading from the cab of the engine.

Having thus described my invention, I claim—

1. The combination with an ash-pan, of a hood fitting in the open end thereof and having an imperforate front or outer side adapted to rest at its lower edge upon the floor of said pan, and having a perforate upper side, and a pivotal cap or cover arranged to close said perforate side of the hood, substantially as specified.

2. The combination with an ash-pan, of a hood pivoted in the open end thereof and having a perforate and an imperforate side, a pivotal cap or cover to close the perforate side of the hood, and a pivot pin forming the com-

mon pivot of said hood and cap or cover, substantially as specified.

3. The combination of an ash-pan provided adjacent to its open end with beveled stops,
5 a hood having triangular end-plates arranged contiguous to the side-walls of the ash-pan, an imperforate front plate and a wire-gauze guard, a pivot-pin extending through the side-walls of the ash pan and the inner angles
10 of the said end-plates, and a cap or cover provided with terminal depending ears ful-

crumed upon said pivot-pin between the end-plates and the side-walls of the pan, said cap or cover and hood being provided with lugs, substantially as specified.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

ELLIS H. MARSHALL.

Witnesses:

HENRY J. WESTERHOFF,
HERMANN STROER.