

(No Model.)

L. T. SLAUGHTER.
LOCOMOTIVE SAND BOX.

No. 492,058.

Patented Feb. 21, 1893.

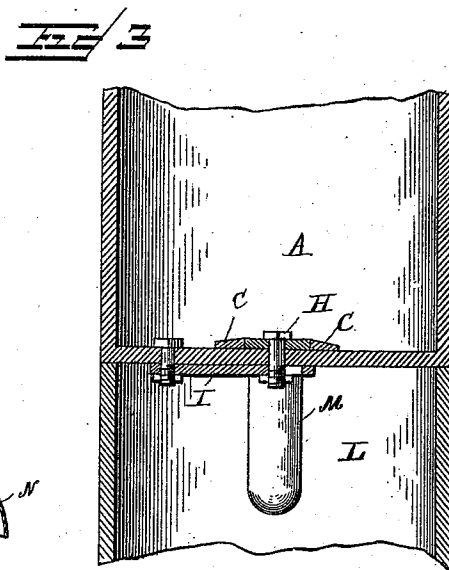
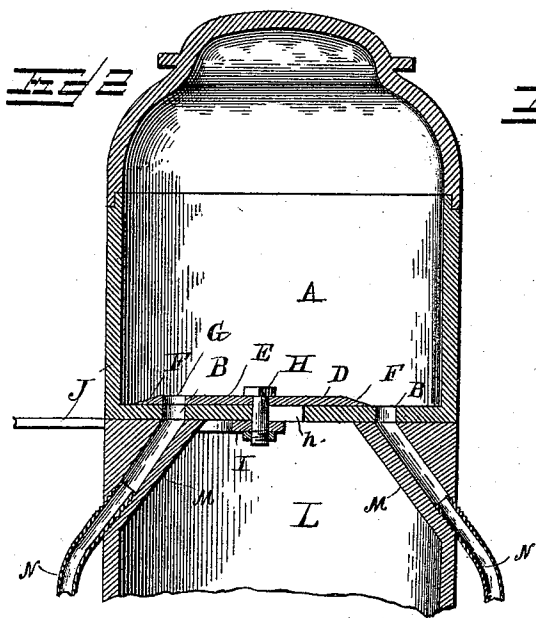
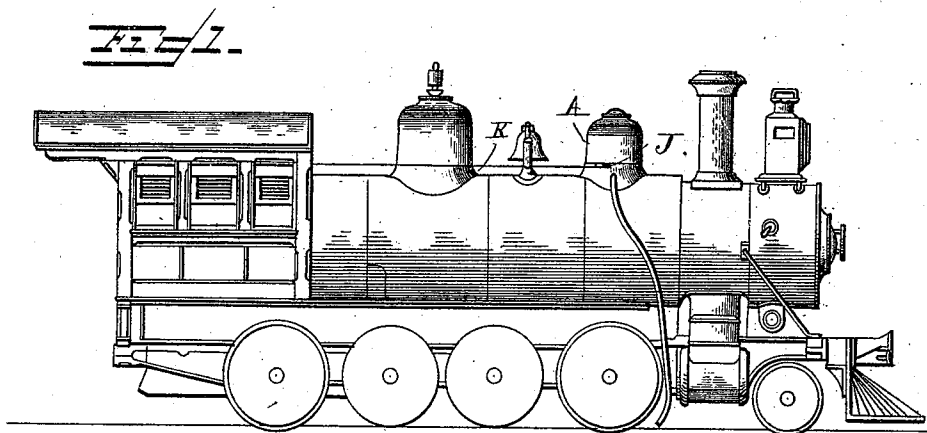


Fig. 4.

Witnesses
W. C. Schneider.

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By his Attorneys,
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UNITED STATES PATENT OFFICE.

LORENZO T. SLAUGHTER, OF ROANOKE, VIRGINIA.

LOCOMOTIVE SAND-BOX.

SPECIFICATION forming part of Letters Patent No. 492,058, dated February 21, 1893.

Application filed August 18, 1892. Serial No. 443,446. (No model.)

To all whom it may concern:

Be it known that I, LORENZO T. SLAUGHTER, a citizen of the United States, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented a new and useful Locomotive Sand-Box, of which the following is a specification.

This invention relates to locomotive sand boxes; and it has for its object to provide an improvement in boxes of this character whereby the flow of sand from the box can be easily controlled and regulated by the engineer, and one which by its construction allows the sand to be always sufficiently heated so as to avoid caking and thus insuring a continuous flow of the sand.

With these and many other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings;—Figure 1 is a side elevation of the sand box in its proper applied position. Fig. 2 is an enlarged vertical sectional view of the sand box. Fig. 3 is a similar view on the line 3—3 of Fig. 2. Fig. 4 is a detail view of the angle lever.

Referring to the accompanying drawings;—A represents the sand box or receptacle of any suitable shape and adapted to be secured in position upon the locomotive as illustrated in the drawings, so that the same can be conveniently controlled by the engineer. The sand box or receptacle A is provided in the bottom thereof with the sand escape perforations B, arranged near opposite sides of the receptacle. The said perforations B are also arranged between the parallel guide strips C, secured to the bottom of the receptacle or box and designed to hold in position the reciprocating sliding gate or valve D, adapted to work over said opening and control the escape of sand therefrom. The said sliding gate or valve E is provided with opposite beveled cutting ends F, which prevent the said valve from becoming clogged with the sand, and also serving to rapidly cut off the flow of sand from the openings. The said sliding gate or valve E is provided near one

end thereof with the perforations G, which is designed to register with one of the escape openings when the opposite end of the gate uncovers the opposite opening, so that both of the openings are uncovered at the same time by the use of a single valve or plate. The valve F is further provided with a pin or bolt H, projecting through the bottom slot $\frac{1}{2}$ in the bottom of the receptacle, and to which is pivotally connected one end of the slotted operating bell crank lever I. The lever I is pivoted to the bottom of the box and has an extended arm J, to which is connected the operating rod or wire K leading to the cab and controlled by the engineer to regulate the flow of sand.

The box A is mounted upon the hollow base L which allows a free circulation of heat to the bottom of the box, and thus keeps the sand sufficiently hot so that it will not be caked and will flow easily. The said hollow base L is provided with the inner bored lugs M, which register with the bottom perforations B and lead to the outside of the base, where suitable sand pipes N are connected therewith and lead to a point alongside of the drivers over the rails where the sand is to be run.

From the foregoing it is thought that the construction and many advantages of the herein described sand box will be apparent without further description.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a locomotive sand box, the combination of the sand receptacle having opposite escape openings or perforations in the bottom thereof and a slot intermediate of said openings, opposite stationary parallel guide strips secured to the bottom of said receptacle on each side of said perforations to inclose the same there-between, a sliding gate or valve reciprocating between said guide strips over said bottom escape openings or perforations and provided with opposite beveled cutting ends, a perforation in one end near the bevel, and a pin or bolt projecting through said intermediate slot, an operating slotted bell crank lever loosely engaging said pin or bolt

to operate said gate or valve, a hollow heat-
base aligning with the bottom of the sand re-
ceptacle and having opposite bored lugs reg-
istering with said bottom escape openings or
5 perforations, and the opposite sand pipes fit-
ting said bored lugs, substantially as set forth.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in
the presence of two witnesses.

LORENZO T. SLAUGHTER.

Witnesses:

C. H. MOORE,

A. L. GOOLEY.