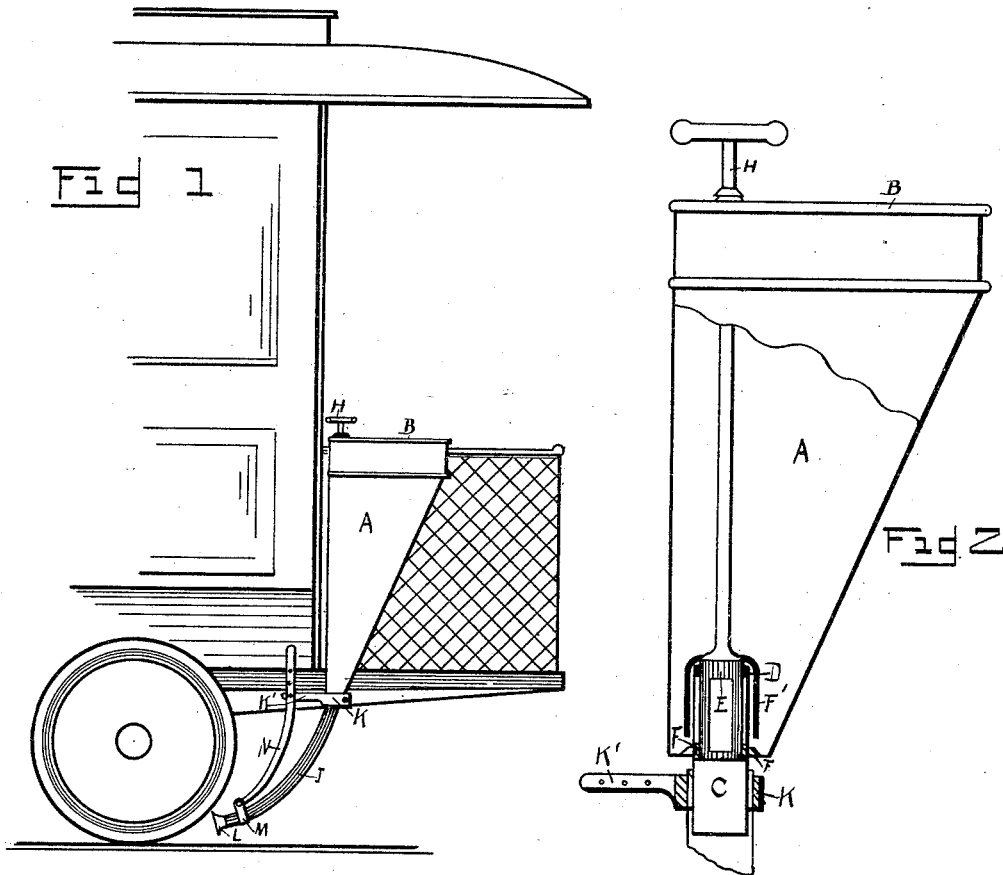


(No Model.)

G. T. DREW.
SAND BOX FOR CARS.

No. 458,621.

Patented Sept. 1, 1891.



WITNESSES:

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GEORGE T. DREW, OF OMAHA, NEBRASKA.

SAND-BOX FOR CARS.

SPECIFICATION forming part of Letters Patent No. 458,621, dated September 1, 1891.

Application filed February 20, 1891. Serial No. 382,192. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. DREW, of Omaha, in the county of Douglas and State of Nebraska, have invented certain useful
5 Improvements in Sand-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the
10 same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to new and useful improvements in sand-boxes for street-cars and locomotives.

The object of this invention is to provide a sand-box that shall have an adjustable feed and be simple of construction and readily operated; and in furtherance of this object
20 the invention consists in the construction, combination, and arrangement of parts, as hereinafter more fully described, and finally pointed out in the claims.

In the accompanying drawings, Figure 1
25 illustrates my device as attached to the platform of an electric motor, while Fig. 2 shows a detail of the sand-box.

A in the drawings represents a suitable reservoir or sand-box of sheet metal and of
30 a suitable size and preferably cone-shaped, as shown. Upon the top this reservoir is provided with a detachable cover B and at the lower end with the guide-tube C.

The guide-tube C is provided at the upper
35 end with a collar D and is held centrally within the bottom of the reservoir, as illustrated. Adjustably working within this tube is the tubular cut-off E, which is provided at the lower end with an exterior collar F and
40 within the body portion with two openings which are adapted to register with two similar openings within the guide-tube C. This cut-off works loosely within the guide-tube, and is permitted vertical as well as rotary
45 motion. This cut-off is further provided at the upper end with three or more fingers or agitators F', of wire, which are adapted to loosen the sand and clear the openings within the guide-tube C. An operating-handle H
50 extends from the cut-off E beyond the reservoir, so that the device may be operated from without. The collar F', abutting against the collar D, prevents the cut-off from being withdrawn from the guide-tube when the device is operated vertically in loosening the

sand and clearing the opening. Below the box is provided with a flexible hose I, which is held upon the tube C by means of the collar K, which is provided with an extending arm K', as illustrated in Fig. 2. At the lower
60 end the tube is provided with a nozzle L and a collar M, to which is pivoted the connecting-arm N, which is adapted to be adjustably held upon the extending arm K', as will be understood by referring to Fig. 1.

When the nozzle has been adjusted so as to feed nicely and all the effects have been properly arranged, the operation of my device is as follows: When it is desired to feed
70 the sand, the handle H is turned so as to bring the openings within the cut-off opposite those within the guide-tube C, when the sand will readily escape. Should the sand clog, however, it is simply necessary to sharply work the cut-off vertically within the guide-
75 tube a few times, when it will readily escape. The reservoir is conveniently attached to the side of the car or upon the side rails and is readily operated and adjusted.

Having thus described my said invention, 80 what I claim as new, and desire to secure by United States Letters Patent, is—

1. In a sand-box, the combination of the following instrumentalities, to wit: a slotted guide-tube, a cut-off within said guide-tube
85 circularly adjustable, agitators attached to said cut-off, and an adjustable feed-tube, all arranged substantially as and for the purpose set forth.

2. In a sand-box, the combination of the
90 following instrumentalities, to wit: a slotted guide-tube, a cut-off within said guide-tube vertically adjustable, agitators attached to said cut-off, and an adjustable feed-tube, all
95 arranged substantially as and for the purpose set forth.

3. In a sand-box, the combination of the following instrumentalities, to wit: a slotted guide-tube, a cut-off within said guide-tube circularly and vertically adjustable, agita-
100 tors attached to said cut-off, and an adjustable feed-tube, all arranged substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE T. DREW.

Witnesses:

G. S. BENAWA,
GEO. W. SUES.