

(No Model.)

E. I. ROBINSON.
SAND BOX FOR CARS.

No. 414,997.

Patented Nov. 12, 1889.

Fig. 1.

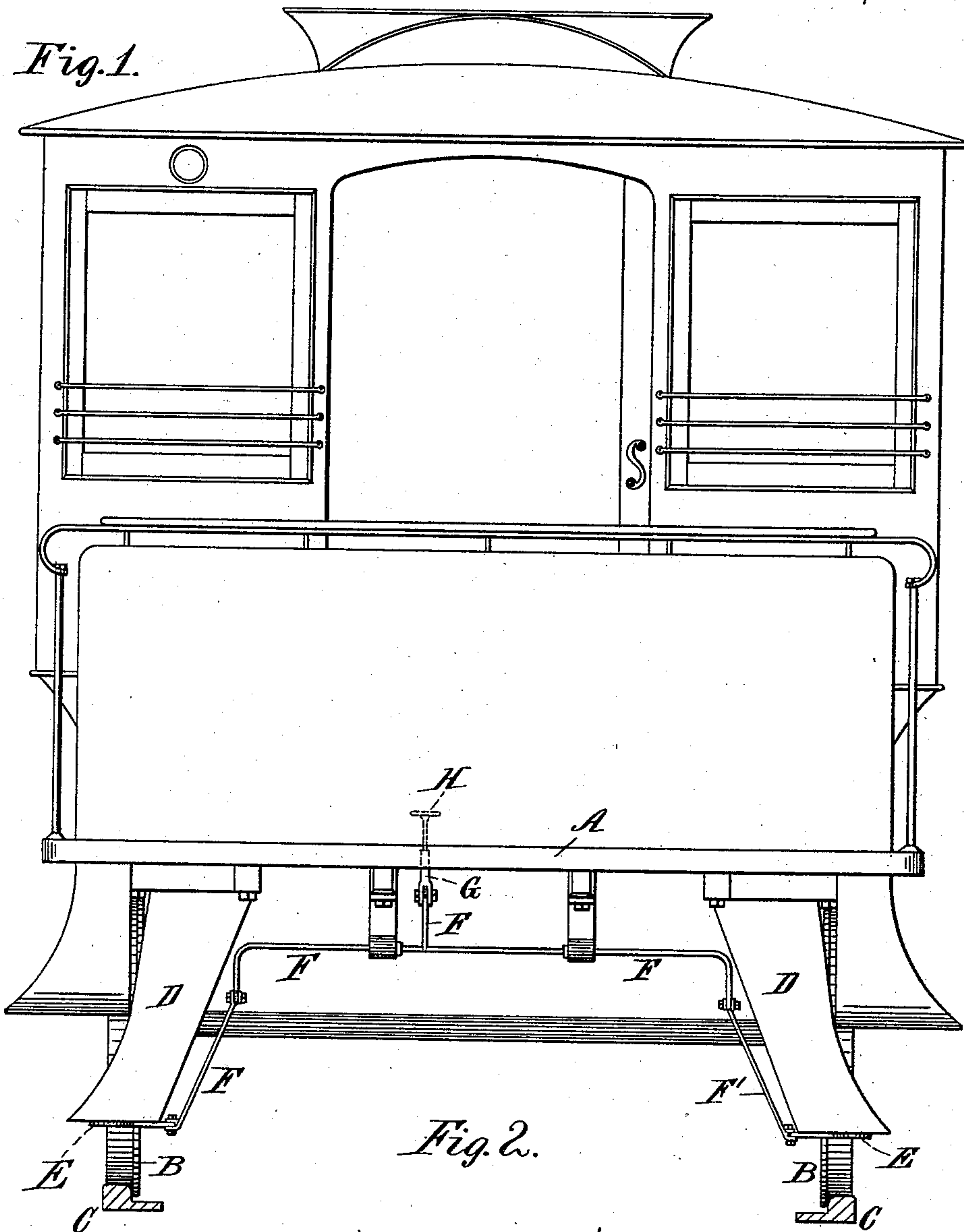


Fig. 2.

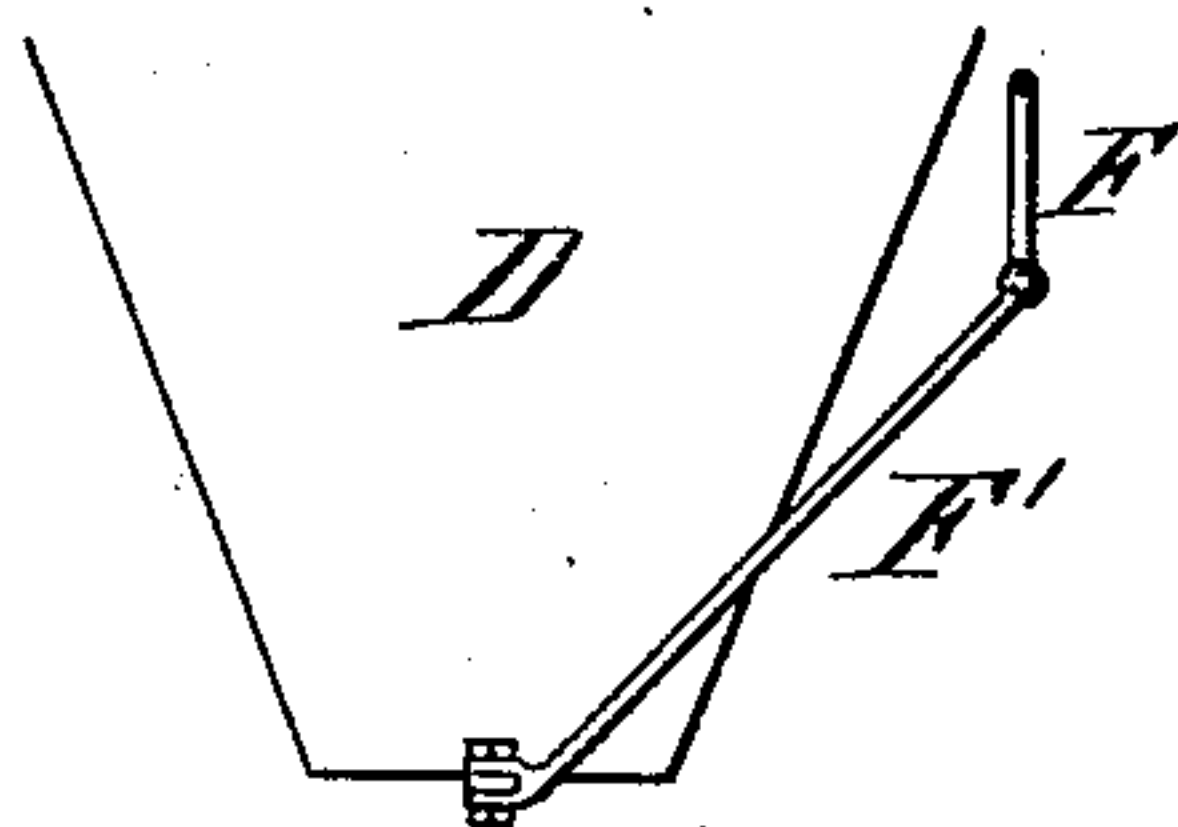
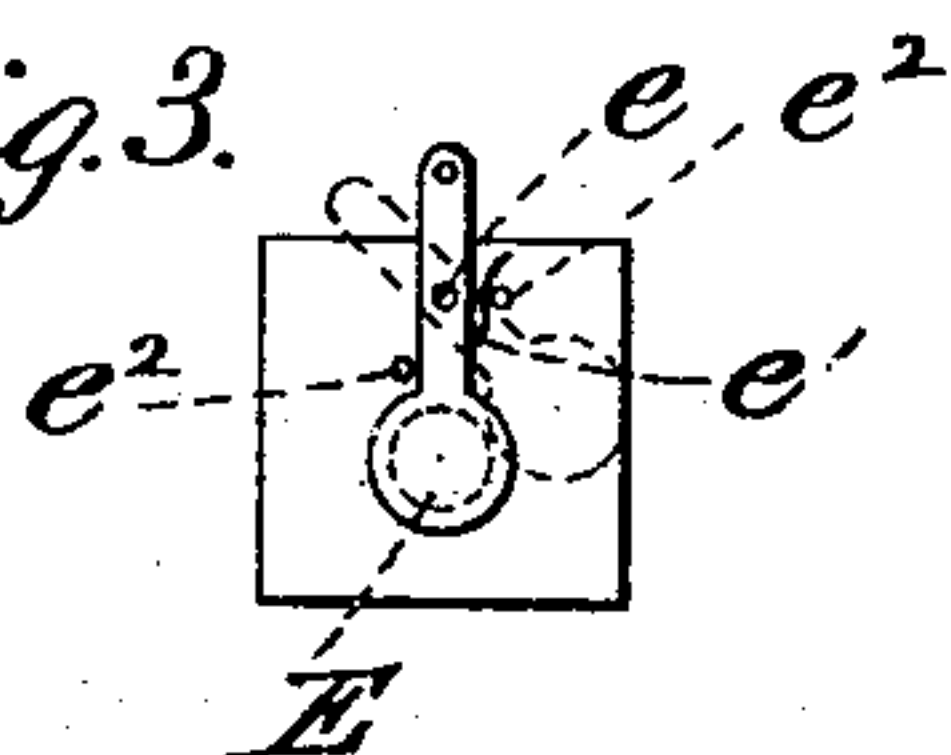


Fig. 3.



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SAND-BOX FOR CARS.

SPECIFICATION forming part of Letters Patent No. 414,997, dated November 12, 1889.

Application filed September 7, 1889. Serial No. 323,334. (No model.)

To all whom it may concern:

Be it known that I, EDWARD I. ROBINSON, a citizen of the United States, residing in the city of Cincinnati, county of Hamilton, and State of Ohio, have made a new and useful Improvement in Sand-Boxes, of which the following is a specification.

My invention relates to sand-boxes for cars, adapted for storing sand and delivering it to a track in front of the car-wheels when desired; and it consists in the parts and combinations of parts hereinafter described and claimed.

Referring to the drawings, Figure 1 is a front elevation of a street-car provided with sand-boxes. Fig. 2 is a side elevation of one of the sand-boxes detached from a car. Fig. 3 is a plan view of the bottom of the sand-box, showing in dotted lines the position of the valve when open.

A is the floor of a car of the ordinary construction mounted upon car-wheels B B.

C C are rails on which the car is moved.

D D are sand-boxes secured underneath the car-floor and adapted to store sand. They are provided with means for delivering it to the track in front of the car-wheels when desired, as hereinafter set forth.

The sand-boxes are preferably mounted upon the car-floor in front of the car-wheels, having their delivery directly over the track, but may be placed in any convenient position on the car. The interior walls of the sand-boxes are preferably sloped inwardly toward

the bottom. There is an orifice in or near the bottom of the box guarded by a valve E, by which the flow of sand to the track is governed. This valve is pivoted at *e* and is operated by means of lever F, connecting-rod F', and rod G, pivoted at its lower end to lever F and provided with a socket at its upper end to receive a foot-piece H, the foot-piece extending up through the car-floor, so as to be within reach of the operator of the car. The foot-piece is readily removed, and as rod G does not extend through the floor of the car the sand-boxes are practically locked until the foot-piece or a substitute is replaced.

e' is a spring adapted to return the valve to its position over the orifice when the pressure is removed from the foot-piece.

e² e² are stops on the bottom of the sand-box to limit the movement of the valve.

The sand is introduced into the box through an opening in the top.

I claim—

The combination, in a car, of a sand-box D, a valve E, guarding the delivery of sand therefrom and operated by a foot-piece H, taking into a socket in a rod G, hinged to a bent lever F, a connecting-rod F', and spring *e'*, substantially as and for the purpose specified.

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Witnesses:

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