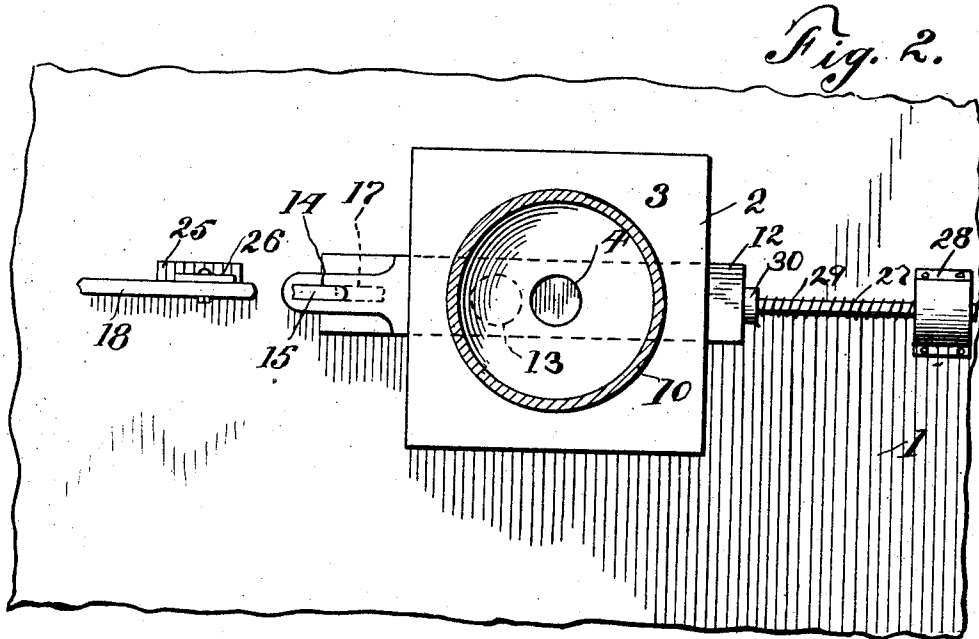
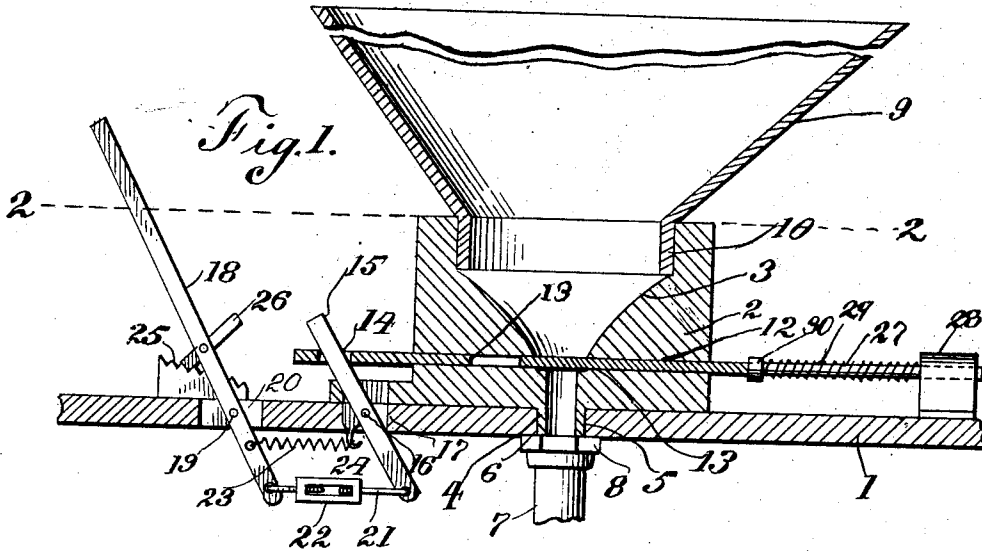


T. J. DELANEY.
SAND BOX FOR STREET CARS.
APPLICATION FILED JUNE 25, 1912.

1,063,019.

Patented May 27, 1913.



Witnesses

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THOMAS J. DELANEY, OF PATERSON, NEW JERSEY.

SAND-BOX FOR STREET-CARS.

1,063,019.

Specification of Letters Patent.

Patented May 27, 1913.

Application filed June 25, 1912. Serial No. 705,737.

To all whom it may concern:

Be it known that I, THOMAS J. DELANEY, a citizen of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Sand-Boxes for Street-Cars, of which the following is a specification.

My invention relates to sand boxes for street cars and has for its object the provision of a sand box constructed to dispense with the objections heretofore experienced with devices of this character, in that the sand boxes are so placed that they become clogged with the sand and in cold weather freeze and prevent egress of the sand from the boxes.

Furthermore, my invention has for its object the provision of an improved means for operating the valve of a sand box that will be more particularly hereinafter described.

My invention will be described in detail hereinafter and illustrated in the accompanying drawings, in which,

Figure 1 is a vertical sectional view of the sand box constructed in accordance with my invention; and Fig. 2, a horizontal section on the line 2—2 of Fig. 1.

In the drawings, similar reference characters will be used to designate corresponding parts in both views.

1 indicates the floor of a street car having mounted thereon a rectangular casting 2 that is provided with a funnel-shaped opening 3 having its lower extremity 4 registering with an opening 5 in the floor of the car and having a nipple 6 formed thereon that engages said floor opening 5.

7 indicates the tube for conveying the sand to the track secured to the lower terminal of the nipple 6 by means of a suitable union 8.

My improved sand box furthermore comprises a hopper 9 funicular in form and having a flange 10 on its lower extremity that is adapted to snugly fit the funnel-shaped opening 3. By this construction, it will be apparent that said sand hopper 9 is capable of being removed from the casting 2 whenever found necessary to clean the funnel-shaped opening 3 and the nipple 6 and delivery pipe 7.

11 indicates a horizontal slot formed in the casting 2 that intersects the lower portion of the funnel-shaped opening 3 and in which is slidably mounted a slide valve 12 having an opening 13 that is adapted to reg-

ister at times with the opening 4 in said casting 2. The slide valve 12 has its terminals extending beyond the front and rear sides of the casting 2 and having one terminal provided with a longitudinal slot 14 in which is mounted the upper terminal of an operating lever 15 pivotally mounted as shown at 16, in a slot 17 in the floor 1 of the car.

18 indicates the operating lever used by the motorman for operating the valve 12 that is pivotally mounted as shown at 19 in a slot 20 in the floor 1 and has its lower extremity secured to the lower extremity of the lever 15 by means of a link 21 that is adjustable in length by means of a turn-buckle 22 in the ordinary manner.

23 designates a spring secured to the lower arm of the lever 18 and to a hook or other suitable fastening means 24 mounted on the under side of the car floor 1.

25 indicates a ratchet secured to the upper side of the floor 1 of the car and 26 a suitable pawl pivotally mounted on lever 18 and adapted to engage said ratchet 25 to hold the lever 18 in an adjusted position.

The rear extremity of the valve 12 has a rod 27 mounted thereon that slidably engages a bearing 28 secured to the floor of the car and 29 indicates an expansible coil spring mounted on said rod 27 and having its two ends engaging the bearing 28 and a shoulder 30 on the rod, said spring 29 operating to assist in moving the valve 12 into the position shown in Fig. 1 so that the opening 13 therein is out of alinement with the lower end of the funnel-shaped opening 3.

In operation, it will be apparent that sand being in the hopper 9 and funnel-shaped opening 3 and the parts being in position shown in Fig. 1, when it is desired to supply sand to the track, the operator by grasping the levers 18 and pulling its upper end toward the right, as shown in Fig. 1, will move the valve 12 to bring the opening 13 into alinement with the opening at the lower end of the funnel-shaped opening 3, the area of the opening 13 exposed to the opening at the lower end of the funnel-shaped opening 3 controlling the amount of sand delivered through the pipe 7. When sand is not desired to be delivered, the valve 13 may be returned to the position shown in Fig. 1 by releasing the pawl 26 from the ratchet 25 when the springs 23 and 29 will operate to move the valve 12 and its connecting parts

into the positions shown in said Fig. 1, and they will so remain until it is desired to open the orifice to the sand container. It will also be furthermore understood that should the delivery duct 7, the nipple 6 or the funicular opening 3 in the casting 2 become clogged because of the sand becoming too wet to escape therefrom, that the entire hopper 9 may be removed by lifting it from engagement with the funnel-shaped opening 3. When so removed, the funicular opening 3 and the parts connected therewith may be cleansed of the clogged sand without difficulty.

Having thus described my invention what I claim is:—

1. A valve operating mechanism for sand boxes comprising in combination with a casting formed with a horizontal slot, a valve slidably mounted in said slot and having a longitudinal slot in its outer extremity, a lever suitably fulcrumed and engaging said slot, an operating lever suitably fulcrumed, an adjustable link connecting the corresponding terminals of said levers, a spring normally tending to oscillate said levers to hold the valve in a closed position, and a de-

tent mechanism to hold said valve in adjusted positions.

2. In a mechanism of the character described, the combination with a car, of a casing secured thereto, said casing being formed with a vertical passage and a horizontal slot, a valve slidable within said slot to close the passage and formed with an aperture adjacent one end, a lever pivoted intermediate its ends within a slot in the car floor, said lever extending through the aperture, a second lever similarly pivoted, an adjustable means for connecting said levers, a detent mechanism for locking the second mentioned lever, a longitudinally extending rod positioned upon said valve, a guide bracket for said rod, and a coil spring surrounding the rod and tending to hold the valve normally in its closed position.

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

THOMAS J. DELANEY.

Witnesses:

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