

(No Model.)

M. S. STARKWEATHER.
TRACK SANDING APPARATUS.

No. 533,242.

Patented Jan. 29, 1895.

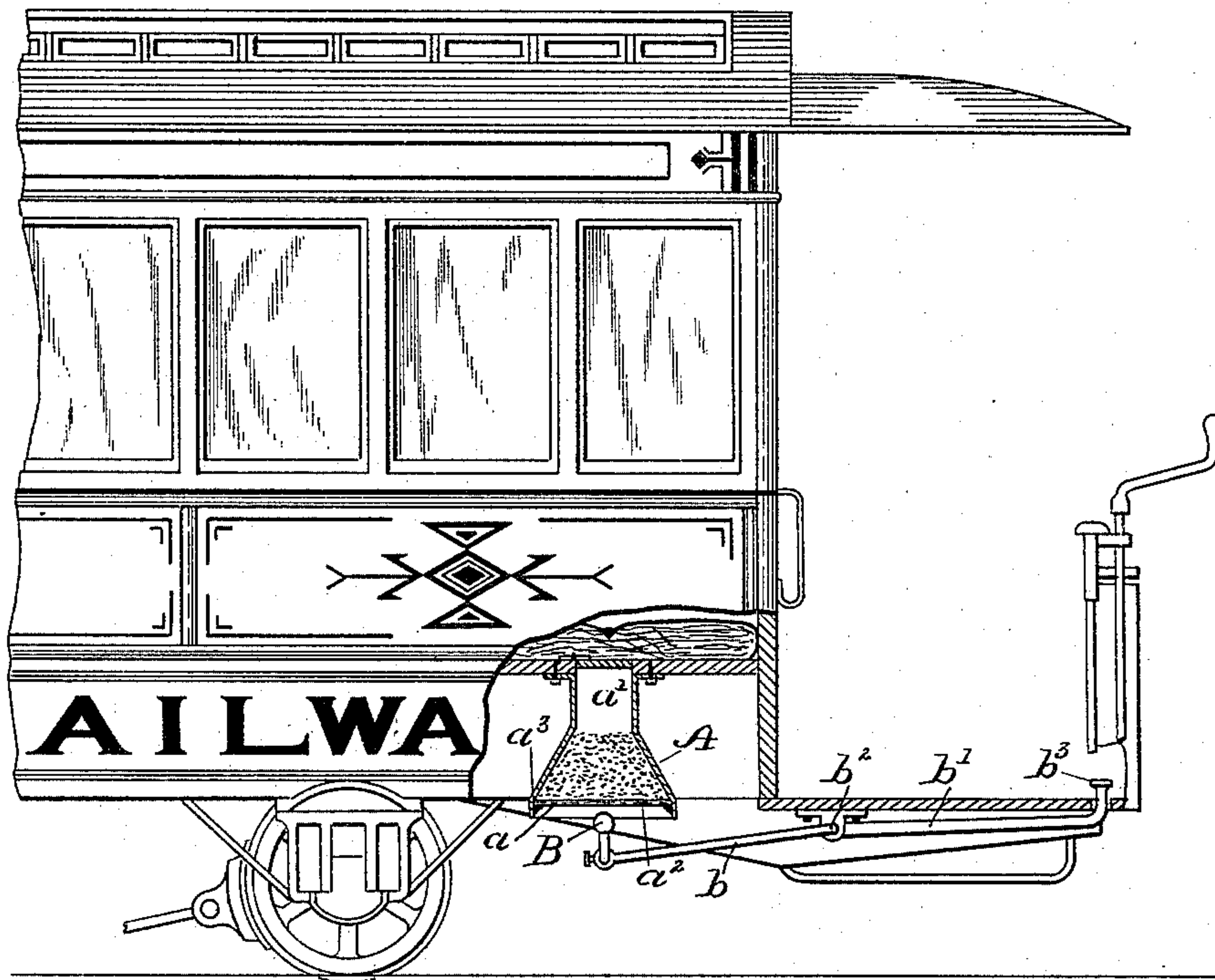


Fig. 1.

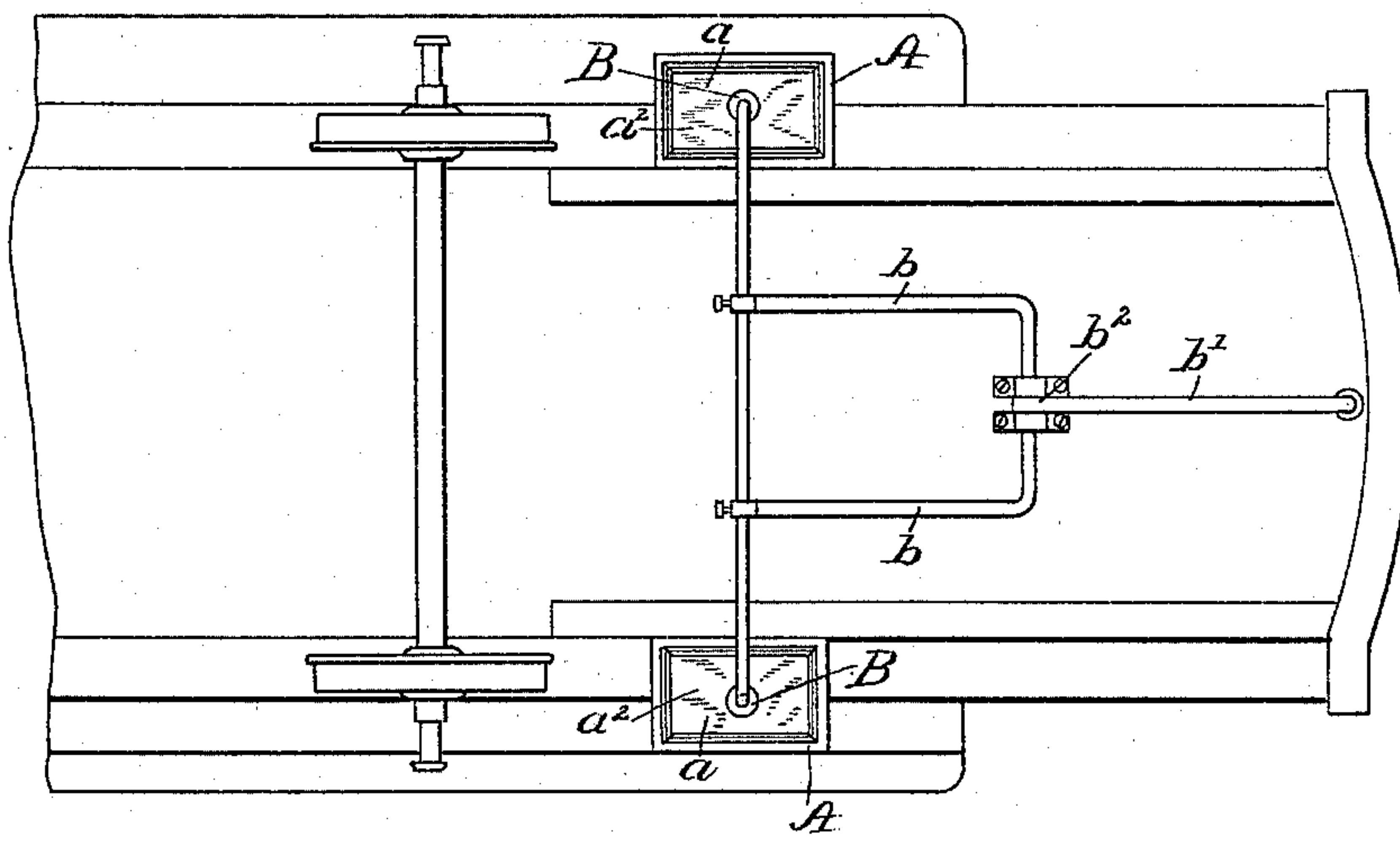


Fig. 2.

WITNESSES.

J. W. Dolan.
Henry S. Mayrhofer

INVENTOR.
Martin S. Starkweather
by his atty
Charles A. Raymond

UNITED STATES PATENT OFFICE.

MARTIN S. STARKWEATHER, OF BOSTON, MASSACHUSETTS.

TRACK-SANDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 533,242, dated January 29, 1895.

Application filed November 26, 1894. Serial No. 529,914. (No model.)

To all whom it may concern:

Be it known that I, MARTIN S. STARKWEATHER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Track-Sanding Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

My invention relates to the class of track sanding devices which are organized to instantly deliver to the track a relatively large quantity of sand and which are useful for emergencies rather than for ordinary track sanding.

My invention is illustrated as carried into effect by means of boxes or receptacles secured to the framework of the car and having openings over the tracks in front of some of the wheels of the car which are closed by an easily destructible material like thin glass. It is of course desirable that there be two receptacles, one over each track. It is preferable that these receptacles enlarge or expand from their upper end downwardly in order to facilitate the dropping of the sand. There is used in connection with these sand holding boxes a striker adapted to be operated by the engineer, motorman or driver to break the glass or other destructible bottom when desired.

In the drawings Figure 1 is a view in end elevation of one end of a car, a part of the same being represented as broken out to show the construction and application of my improvement. Fig. 2 is a view of the same in plan inverted.

Referring to the drawings: A represents the sand holding receptacles. They may be made of wood or any other suitable material. They are fastened to the framework of the car in such a way as to bring their bottoms a over the rails and in front of the wheels, and they each have an opening a' which may be beneath the side seat of the car or within the car and so as to be easily reached. The sides of each receptacle preferably flare outwardly toward the bottom and this provides each box with an enlarged opening in the bottom. This opening is maintained closed excepting in case

of emergency by a thin plate a^2 of glass or other easily broken material. I prefer glass, and it rests upon a narrow ledge a^3 , and the sand which is placed in the box through the opening a' keeps the plate in place.

Beneath each box there is a striker B preferably in the shape of a metal ball or enlargement at the end of a lever b , and these levers preferably come together to a common operating rod b' which is pivoted at b^2 and is bent through the platform to provide an end b^3 by means of which the driver or motorman can operate the striker, either by foot, or by hand, if the end is extended sufficiently high, as desired.

As used the fragile plates are put in place and the receptacles filled with sand through the openings a' , and the strikers B being beneath the plates it is only necessary when occasion demands that they be moved upward sufficiently quickly to break the plates when the contents of the receptacles will immediately fall upon the tracks.

I prefer that the gravel, dirt or sand used be mixed with sawdust or small chips or particles of other relatively light material, both for the purpose of making it lighter whereby a relatively larger quantity can be carried upon the same surface of glass, and also for the purpose of preventing it from freezing when it is damp. It is to be understood that the entire under surface of the receptacles may not be of glass or destructible.

Of course it will be understood that it will be necessary to either place the sanding device between the side wheels of the car, and in which event, one receptacle at least will be necessary, or, if they are placed in front of the wheels it will be desirable, of course, to have at least one at each end of the car. It is also to be understood that when the plates are broken the contents of the boxes immediately fall upon the tracks and that the receptacles are not again in condition for use until they have been provided with new plates and filled with the sand. The object of this quick delivery of the sand is to provide the rails with a sufficient quantity of gritty material as quickly as possible, so that the wheels may be immediately restrained upon the application of the brakes.

The plates may be secured to the boxes in

any desired way. I have shown them as attached by removable cleats. They may be held by a groove formed in opposing sides of the box and be slipped into place from one side of it.

It will be understood that one box will answer, or, in other words that delivery of sand to one track will suffice.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A track sanding apparatus comprising a box or receptacle secured upon a car in front of a wheel, having a bottom easily destructible in whole or in part, and supporting sand or other gritty material, as and for the purposes described.

2. In a track sanding apparatus a sand receptacle upon a car in front of a wheel and over a track having an opening at its upper end, outwardly inclined sides, an enlarged opening

at its bottom and a destructible plate therein for closing the same, all as and for the purposes described.

3. A track sanding apparatus comprising a sand holding receptacle having a destructible sand retaining or holding plate and a device to act against said plate and break it whereby the sand is liberated from the box or receptacle, as and for the purposes described.

4. The combination of two receptacles placed in a car in front of the wheels thereof and having removable plates destructible in whole or in part and devices for destroying said plates adapted to be actuated by the motorman or driver of the car, as and for the purposes described.

MARTIN S. STARKWEATHER.

In presence of—

F. F. RAYMOND, 2d,
J. M. DOLAN.