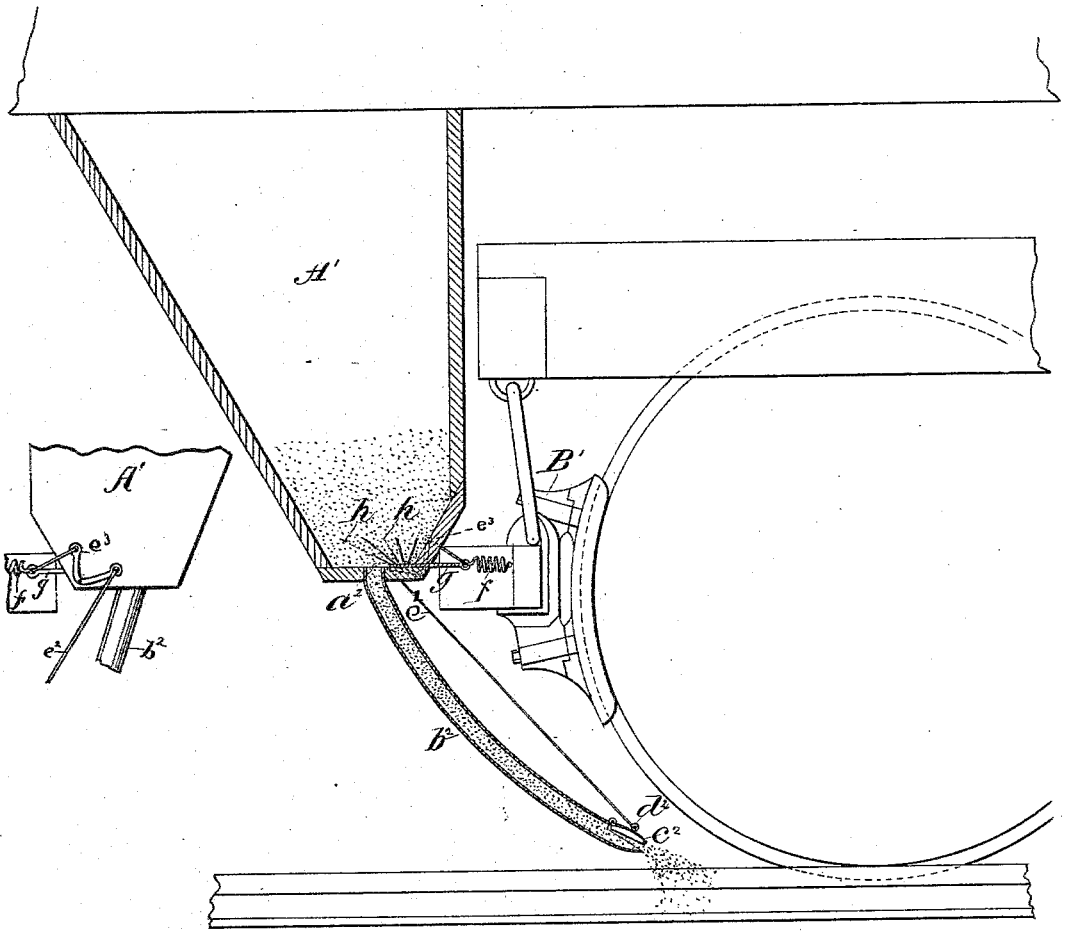
(No Model.)

L. E. SLOAN.

SANDING DEVICE FOR CARS.

No. 301,762. Patented July 8, 1884.



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UNITED STATES PATENT OFFICE.

LEANDER E. SLOAN, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-THIRD TO JAMES A. SLOAN, OF SAME PLACE.

SANDING DEVICE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 301,762, dated July 8, 1884.

Application filed April 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, LEANDER E. SLOAN, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Sanding Devices for Railroad-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention applies to the running-gear of cars and locomotives; and it consists in a certain mechanism for feeding sand to the rails to prevent the wheels from slipping on them.

The drawing is a vertical section of my device, with the crank mechanism shown in detail.

A′ is the sand-box, which may be either suspended from the floor of the car or bracketed to the truck, one just in front of each wheel, but so high that its base will be about on a line with the brake-beam. An opening is made in the base of the box A′ at a^2, from which a curved spout, b^2, leads, and this opening is closed when the brakes are off by a valve, g, that is connected with the brake-beam B′ by a spring, f. This valve g has wires h h projecting from it into the box A′, which serve, when the valve is moved, to stir up the sand, so that it will flow easily. The lower end of the spout b^2 is provided with a valve, c^2. This valve is hinged to the lower extremity of the spout b^2, and is operated by a wire, e^2, the lower end of which is hooked to said valve at d^2, and the upper end to a bell-crank lever, e^3, this bell-crank lever being fulcrumed to the base of the sand-box A′, and its end opposite that to which the wire e^2 is secured is attached to the spring f.

From the above description it will be readily understood that when the brakes are applied the valve g will be drawn partly out of the box, owing to its connection with the brake-beam. This will uncover the opening at a^2, through which the sand contained in the box A′ will flow down in the curved spout b^2. As the motion that draws the valve g out is also imparted through the bell-crank lever e^3 to the wire e^2, which is connected to the hinged valve c^2 on the lower end of the spout b^2, this latter valve is lifted at the same time, and the sand is let out on the rails in front of the wheels.

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

1. In a car or locomotive brake system, a sand-box having a pipe leading under the wheel of the car, and a valve connected with the brake-beam, whereby the setting of the brakes will open the sand-valve, as set forth.

2. In a car or locomotive brake system, in combination with the brake-beam or connections, a sand box and valve with intermediate connections, whereby the setting of the brakes opens the valve to admit sand to the rails, and the release of the brakes closes the valve and stops the flow of sand, substantially as set forth.

3. In a car or locomotive brake system, the sand-box A′, having opening a^2, curved spout b^2, sliding valve g, with wires h h, spring f, crank-lever e^3, wire e^2, hinged valve c^2, and connection with brake-beam B′, substantially as shown and described, and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

LEANDER E. SLOAN.

Witnesses:
S. S. STOUT,
H. G. UNDERWOOD.