(No Model.) 2 Sheets—Sheet 1.

J. FLINDALL.

SNOW PLOW.

No. 263,502. Patented Aug. 29, 1882.

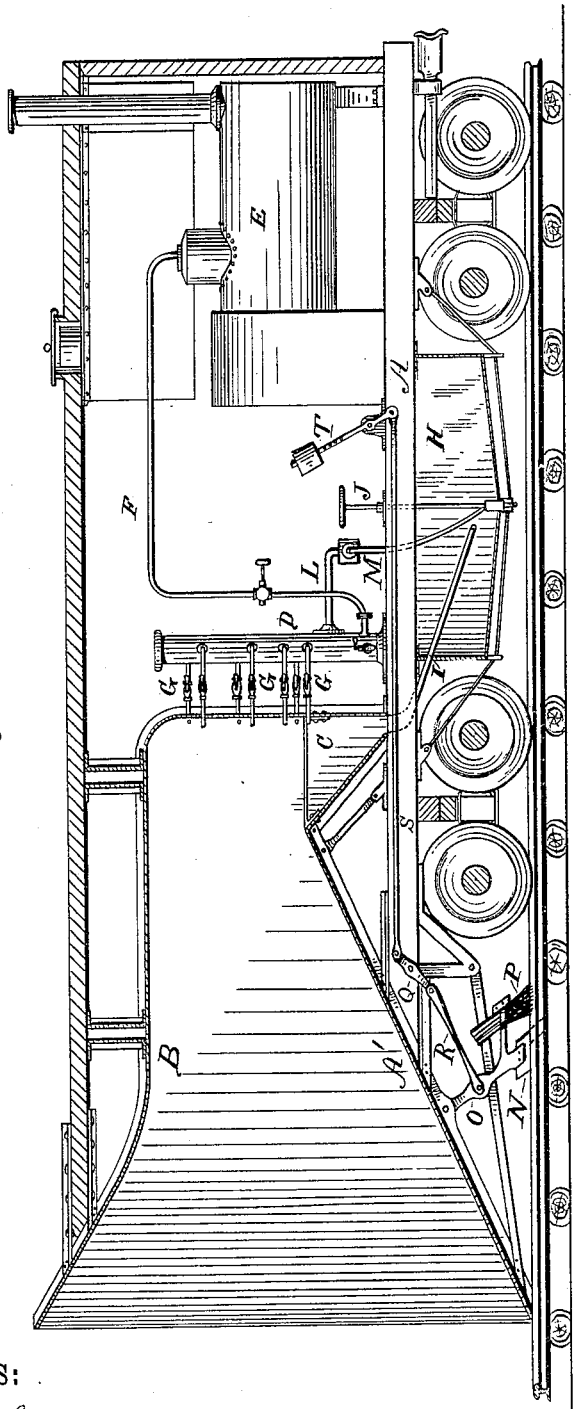

Fig. 1.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

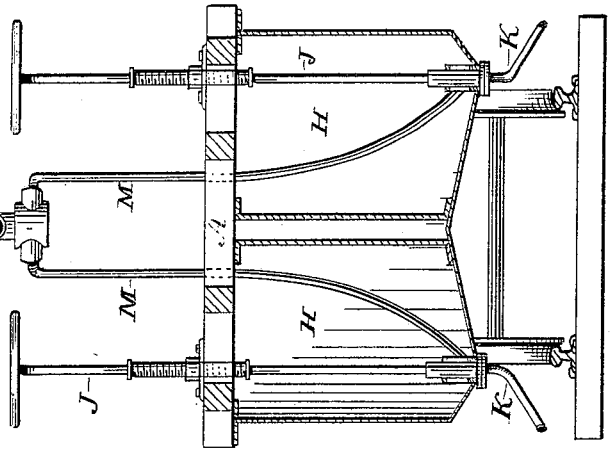
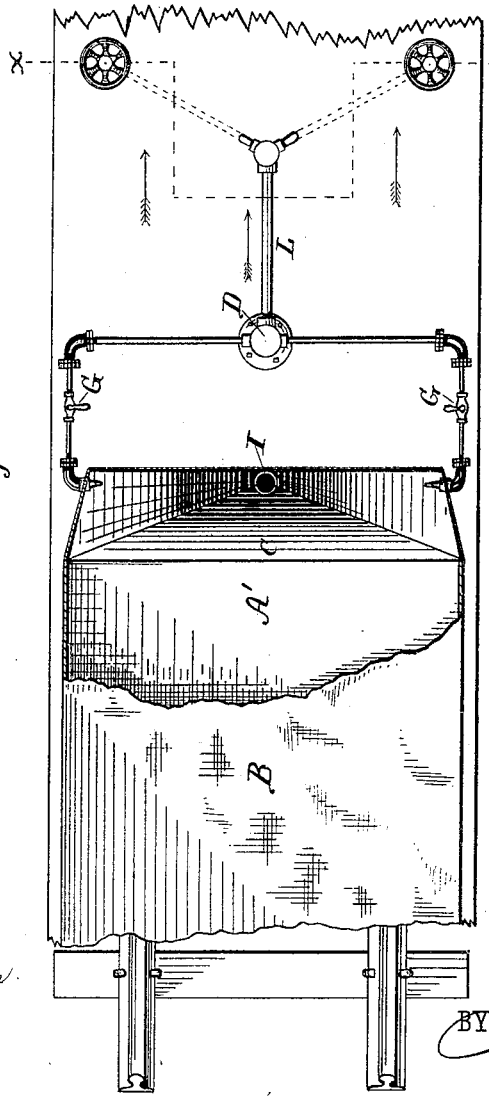


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN FLINDALL, OF CHICAGO, ILLINOIS.

SNOW-PLOW.

SPECIFICATION forming part of Letters Patent No. 263,502, dated August 29, 1882.

Application filed September 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN FLINDALL, a subject of the Queen of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Snow-Plows for Cleaning Railway-Tracks, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

My invention relates to snow-plows which are provided with means for melting snow and a tank for receiving the water resulting therefrom; and the invention consists in certain novel features of construction, as will be hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of my improved snow-plow partly in section. Fig. 2 is a plan view of the chamber and pipes for melting the snow; and Fig. 3 is a transverse vertical section, showing the mechanism for discharging the melted snow.

A represents a truck having an inclined apron or floor, A′, at its forward end, which extends to the railway-track, and is covered by a flaring hood, B. The rear end of the apron A′ extends above the floor of the truck or car and leads to a chamber, C, into which the snow is to be discharged. The chamber C is formed with three of its sides sloping to a point in the bottom thereof, and its rear wall, which also forms the back of the hood B, is perpendicular. At the rear of the chamber C is located an upright cylinder, D, which is connected with the boiler E by means of the steam-pipe F, and which is provided with a series of pipes, G, extending laterally therefrom on each side, and projected rectangularly, so as to enter the hood B at its sides, just in front of the rear wall thereof. The pipes G are arranged in alternate order, one above another, and are provided with cocks by which they may be opened or closed, as may be required.

Underneath the floor of the truck is secured a tank, H, for receiving the melted snow from the chamber C by means of the pipe I, leading from the bottom of said chamber. The bottom of the tank is constructed so as to run the water to two orifices, which are provided with valves operated by vertical rods J, extending through the floor of the car, and provided with hand-wheels. The said orifices are provided with vertically-slotted sockets in which the valves are raised or lowered to open or close the orifices by turning the rods, which are supported in threaded bearings in the floor. The tank is provided with laterally-extending pipes K, communicating with the said orifices, for discharging the water at the sides of the track. For keeping the orifices from being closed by ice forming therein, a pipe, L, leading from the cylinder D, and provided with two branches, M, is extended so that the branches shall reach the orifices and convey steam thereto. This pipe is provided with a cock, so that the steam shall be shut off from the tank while the melted snow is not being discharged, it being designed that the water shall be conveyed to some place where it will not interfere with the tracks before being discharged.

When the snow is of ordinary depth it is designed that the lower pipes, G, shall alone be used, and the upper pipes are to be turned on when the snow is very deep.

A scraper, N, having an angular recess for fitting the rail, is secured to a lever, O, just above the track on opposite sides of the truck, and a brush, P, is secured to a rearward-projecting arm of the lever, so as to rest upon the rail. The lever O is connected by means of lever Q and rods R and S with a lever, T, inside the car, having a weight for holding the scraper and brush against the rails. In use the truck A is to be attached to the front of a locomotive.

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

1. The combination of the inclined apron A′, the chamber B for receiving the snow, the cylinder D and pipes G discharging into the said chamber, substantially as shown and described.

2. The combination of the cylinder D, the feed-pipe F, and the series of rectangularly-arranged pipes G, having cocks, and the chamber B, substantially as shown and described.

3. The combination of the hood B, chamber C, having sloping walls, the drain-pipe I, lead-

ing from the bottom of said chamber, and the pipes G, arranged one above another and made to enter the hood on each side thereof, substantially as shown and described.

4. The combination of the cylinder D, the pipe L and its branches M, the tank H, having orifices in its bottom, and discharge-pipes K, and the valves and rods J, substantially as shown and described.

5. The combination of the rods J, having hand-wheels and threaded bearings, the valves or plugs secured to the said rods, the tank H, and the vertically-slotted sockets secured in orifices in the bottom of said tank, substantially as shown and described.

6. The combination of the angular scraper N, brush P, levers O and Q, rods R and S, and the weighted lever T, whereby the scraper and brush are held in contact with the rails, substantially as shown and described.

JOHN FLINDALL.

Witnesses:
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JAMES H. BOLMAN.