(No Model.)

A. J. FREEMAN.
TRACK SANDING DEVICE.

No. 577,245. Patented Feb. 16, 1897.

Fig. 1.

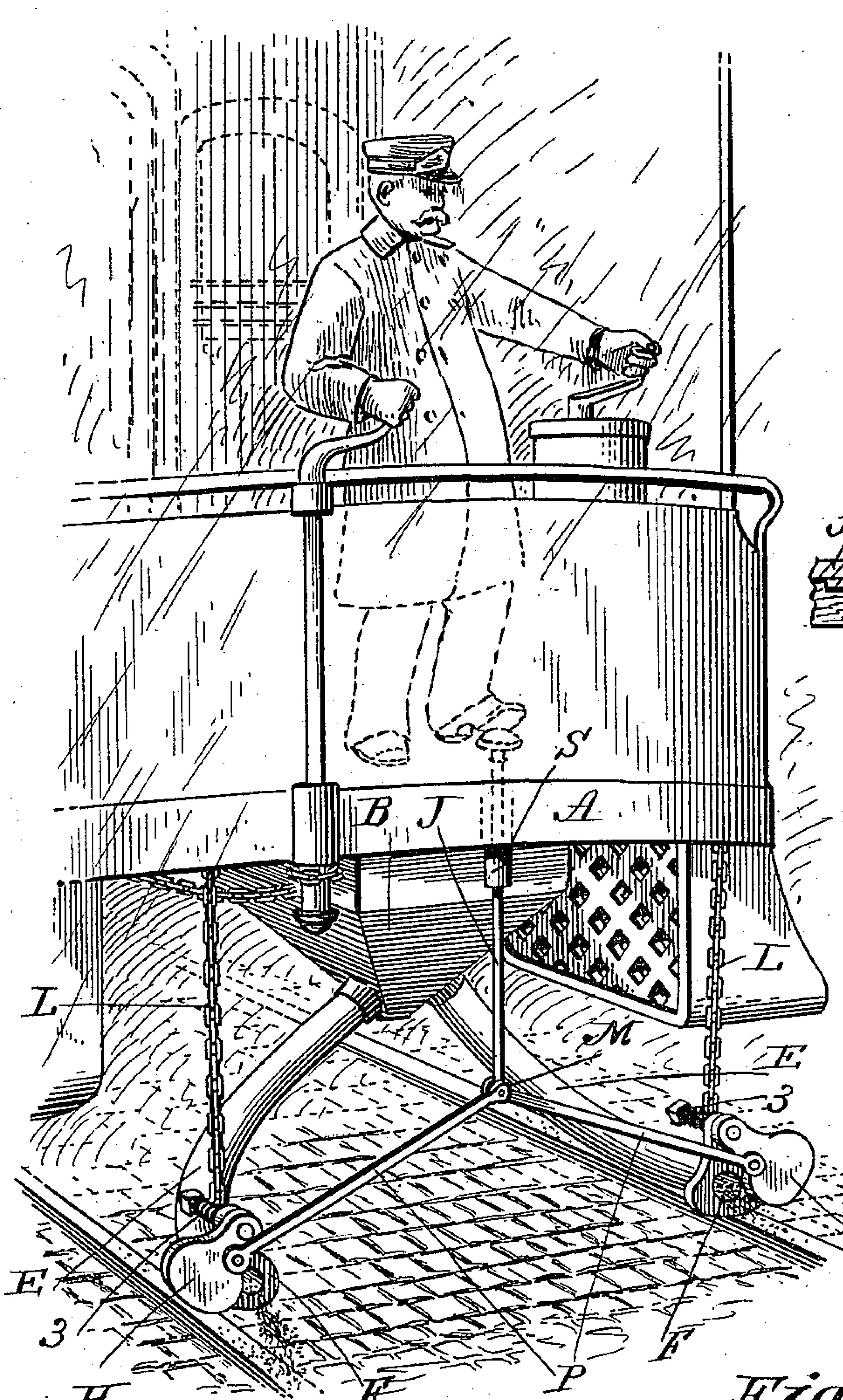


Fig. 2.

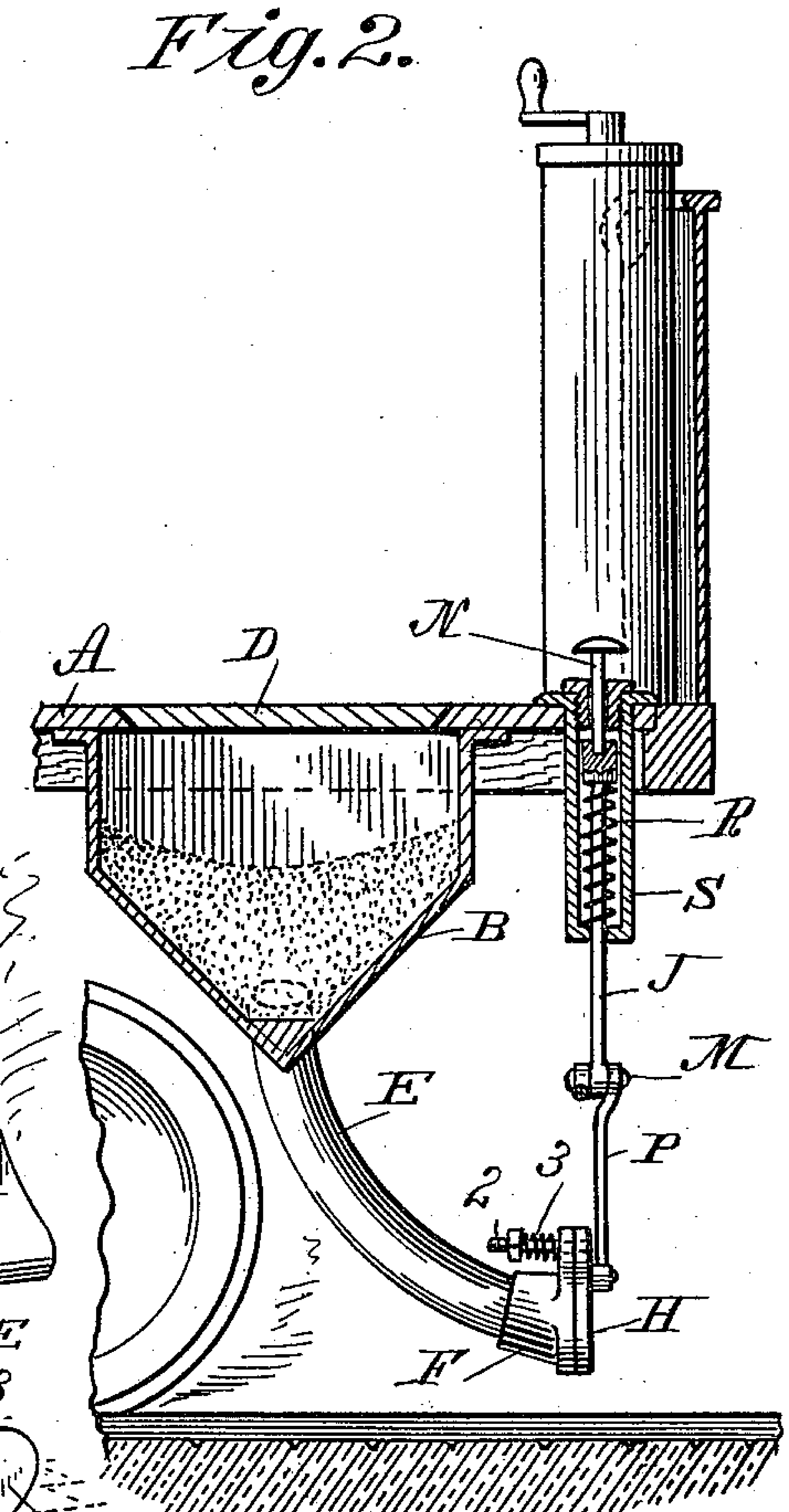
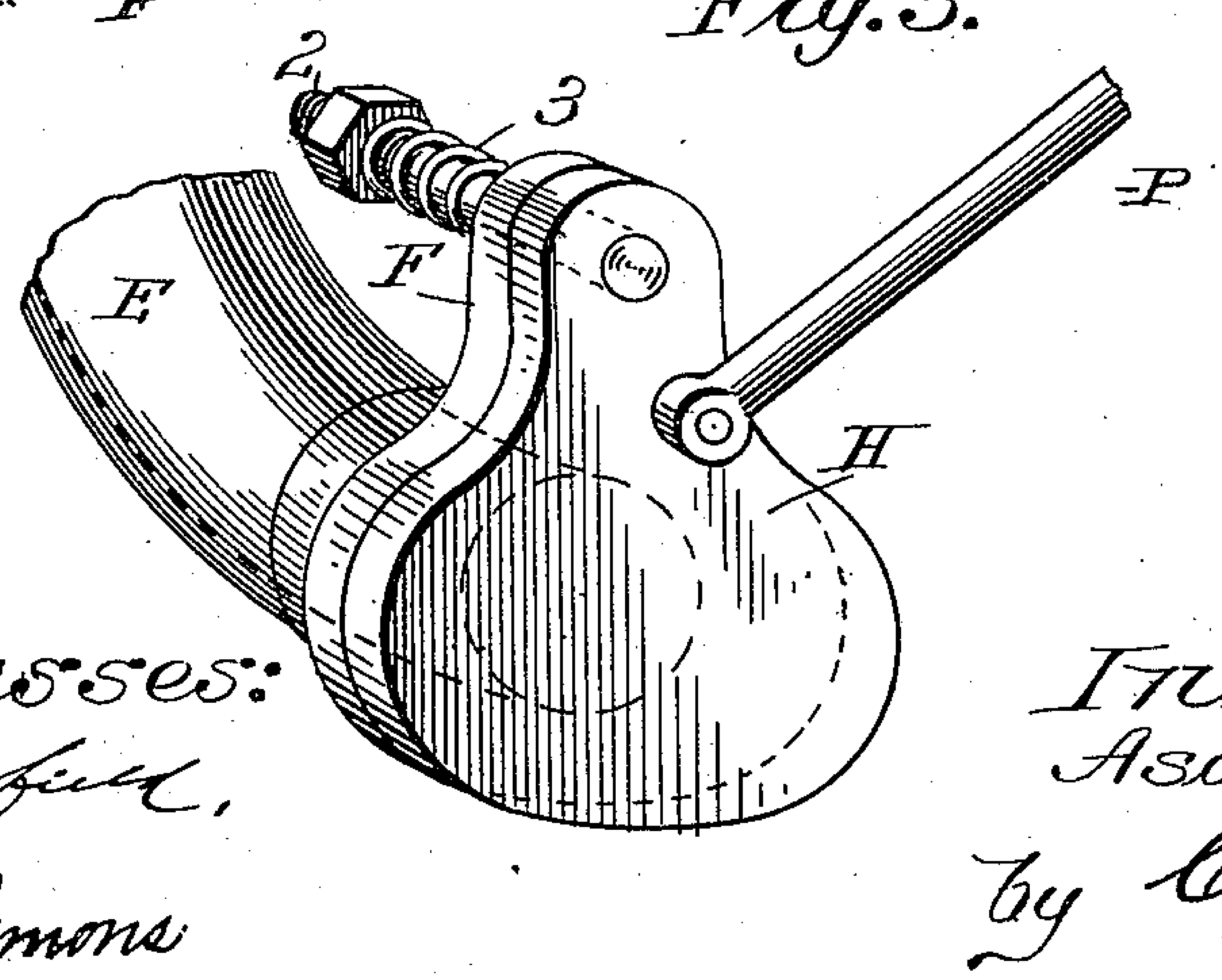


Fig. 3.



Witnesses:
J. D. Garfield,
K. I. Clemons

Inventor
Asa J. Freeman.
by Chapin & Co
Attorneys

UNITED STATES PATENT OFFICE.

ASA J. FREEMAN, OF SPRINGFIELD, MASSACHUSETTS.

TRACK-SANDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 577,245, dated February 16, 1897.

Application filed November 11, 1896. Serial No. 611,751. (No model.)

To all whom it may concern:

Be it known that I, ASA J. FREEMAN, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Track-Sanding Devices, of which the following is a specification.

This invention relates to track-sanding devices for cars, the object being to provide improved devices of this class arranged to be operated by a person on the platform of a car for depositing sand upon the car-tracks in regulated quantities; and the invention consists in the peculiar construction and arrangement of the parts of said devices relative to the car and the track, all as hereinafter fully described, and more particularly pointed out in the claim.

In the drawings forming part of this specification, Figure 1 is a perspective view of one end of a car having track-sanding devices applied thereto embodying my improvement. Fig. 2 is a sectional view of a part of a car-platform and of certain parts of said devices, and illustrating other parts of the latter in side view, as below described. Fig. 3 illustrates detail parts hereinafter described.

Referring to the drawings, A is a car-platform, and secured to the under side thereof, as shown in Figs. 1 and 2, is a sand-box B, of metal or other suitable material, the bottom of which box tapers inwardly and downwardly, said box being rectangular in form. The bottom thereof, constructed as above described, has the form of an inverted pyramid. An opening into said box is made in the car-platform, to which a suitable cover D is fitted, through which opening said box may be filled with sand. From opposite sides of said sand-box and near the lowest point in the bottom thereof two openings are made, into which are fitted the curved sand-conduits E. Said conduits are suitably supported by their outer extremities, which lie near the surface of the track, by two chains L L, one end of which is secured to the end of said conduit and the other in any suitable way to the under side of the car-platform. The said conduits curve forward, as shown in the drawings and more clearly in Fig. 2. On the free ends of said conduits means for opening and closing the ends thereof are provided and consist of valves F, to which are pivoted the gates H on the pivot-pins 2. Said pivot-pins project rearwardly for a sufficient distance to receive the spring 3 thereon, and a suitable thread is cut on said pin to receive a nut by the manipulation of which said spring 3 may be more or less compressed and said gate, in which said pivot-pin is secured, held in contact with the face of the valve F with as much force as may be desired. The hole in the valve F, through which said pivot-pin 2 passes, is of such diameter as to permit the free movement of said pin therein. In Fig. 3 is clearly shown the above-described valve.

The means for operating the gates on the ends of the conduits E consist of two rods P, having one end of each connected pivotally to each of the gates H and having the opposite ends thereof pivotally united by a pin M, which pin also passes through the end of a vertical rod J. Said rod J passes up through the bottom of a long socket S, which socket passes through and is secured to the platform of the car. A suitable head screwed onto the end of said rod J and loosely fitting the interior diameter of the socket S serves to keep said rod J in vertical alinement, whereby the easy operation of the rods P is effected. On said rod J, within the socket S, is provided a spiral spring R, bearing upon the bottom of the said socket and the under side of the head on said rod, whereby when said rod is pushed downward to open the gates of said valves said spring is compressed, and pressure on said rod being removed said spring serves to return said rod to the position shown in Fig. 2 and close said valve.

The rod J is operated as follows: The top of said rod within the socket S does not reach within a considerable distance of the upper extremity of said socket, and a bushing having a central perforation therethrough is screwed into the upper end of the socket S, and through said perforation a foot-post N passes, having a stem thereon sufficiently long to pass therethrough and engage with a head screwed onto the top of the rod J and yet leave a sufficient length of stem projecting above the said bushing, so that by placing the foot on said foot-post N the rod J may be operated and through it the rods P to open the gates H on the ends of the sand-conduits E, whereby the sand with which the box B has been previously filled is distributed on the rails in front of the wheels as the car is in motion. The said sand-conduits E always remain charged with sand, and said gates H must always be opened and closed against the pressure of said sand in said conduit.

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

A track-sanding device consisting of the conical-shaped sand-box B, the sand-conduits E, E extending from said sand-box to a position in front of the forward wheels of the car, the valves F, F located at the end of said conduits, the gates H, H, pivoted on said valves by the pin 2, the spring 3, on said pin for holding said gates operatively against said valves, connecting-rods P, P, pivoted by one end to said valve-gates and by their other ends to each other and to the vertical rod J, the socket S, the spring R, engaging the said socket and the rod J, and a foot-post N, one end of which projects above the platform of the car, and the other end of which engages the top of the rod J, substantially as described.

ASA J. FREEMAN.

Witnesses:
H. A. CHAPIN,
K. I. CLEMONS.