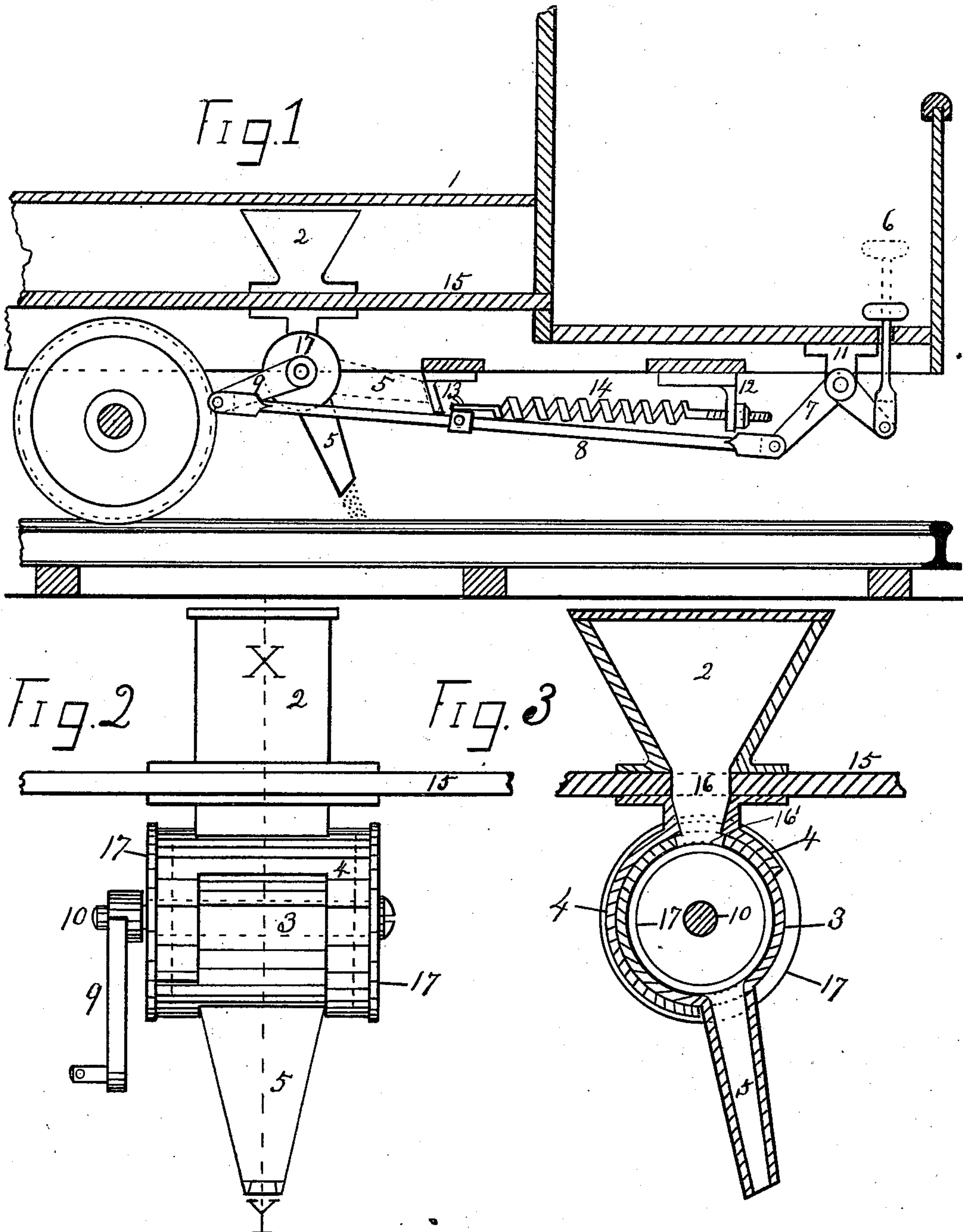


(No Model.)

A. GARING.
SAND BOX FOR CARS.

No. 528,904.

Patented Nov. 6, 1894.



WITNESSES:
M. A. Wellman.
J. B. Shinn.

INVENTOR
Adolph Garing
BY
John Shinn
ATTORNEY.

UNITED STATES PATENT OFFICE.

ADOLPH GARING, OF ALLENTOWN, ASSIGNOR OF ONE-HALF TO CLINTON H. FULLER, OF CATASAUQUA, PENNSYLVANIA.

SAND-BOX FOR CARS.

SPECIFICATION forming part of Letters Patent No. 528,904, dated November 6, 1894.

Application filed June 8, 1894. Serial No. 513,979. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH GARING, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented a new and useful Improvement in Sand-Boxes for Cars—valve and means for operating the same—of which the following is a specification.

My invention relates to sand boxes for cars; and especially to the valve and discharge tube of the same.

My improvement is applicable to street, and other cars, also to locomotives. It is designed for promoting traction in motor-driven cars, or for rendering the brakes effective on all cars, when rails and wheels are wet.

My invention consists in so constructing the discharge tube, that it may be hung in, and form a jointed socket-valve to the discharge tube; and so operating the same that when the flow of sand is stopped at the hopper, the bottom opening of the discharge tube is closed by a stop plate, which will prevent moisture, dirt, snow and water, from entering the tube, to freeze and stop it up. The tube, and valve may be operated by foot, or hand. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 a vertical section, of so much of a street car, as required to show my invention connected thereto. Fig. 2 is a front view of the sand box, valve and discharge tube. Fig. 3 is a section of Fig. 2 taken on the line X, Y, Fig. 2.

Similar numerals refer to similar parts throughout the several views.

The construction of my invention is as follows:

Referring to the drawings, 2 represents the sand box, which when used on street cars, is usually placed under the seat 1, and fastened to the car floor 15.

3 is the cylinder valve, fitted in the hanger 4, and hung under the floor 15, in which is cut a passage 16, that registers with passage 16', when the valve 3 is in position as shown in Fig. 3.

17 are flange-heads, for the ends of the cyl-

inder valve. They are fitted in the ends of the cylinder valve, and fastened to the valve by pins, and also fastened to the shaft 10, to which is fixed arm 9, and by connecting rod 8, connected to the bell crank lever 7, hung on a stud in bracket 11 fastened to the car floor. The bell-crank lever 7, is connected to presser bar 6.

14 is a spiral wire spring. One end is connected to a fixed bracket 12, the other end to the connecting rod 8.

It is obvious, that the form of construction may be varied, without departing from the principle of my invention.

The operation is as follows:—Sand being placed in the box 2, the tension of spring 14, will cause the discharge tube 5, to assume the position shown by dotted lines, Fig. 1, thus closing the passage 16, (Fig. 3.) When the motor man, or driver desires to sand the track, he places his foot on bar 6, and by pressing it down, as shown in Fig. 1, moves the discharge tube 5, to a position shown in Figs. 1 and 3, and opens the valve and passage 16, as shown in Fig. 3, and sand will be discharged on the track as shown in Fig. 1. By removing the foot, the spiral spring 14, will place the discharge tube 5, in a position as shown by dotted lines in Fig. 1. The stop bracket 13, closes the end of tube 5, prevents moisture, dirt, snow and water from entering the tube, freezing and stopping the flow of sand.

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

In sand boxes for sanding car tracks, the combination of a hopper, a hanger, a circular rotary valve depending from said hanger and registering with opening in said hopper, a discharge tube rotating with said valve and adapted to be closed at discharge end by a stop bracket when thrown up out of operative position, substantially as described.

ADOLPH GARING.

Witnesses:

H. H. HOLM,
A. N. ULRICH.