

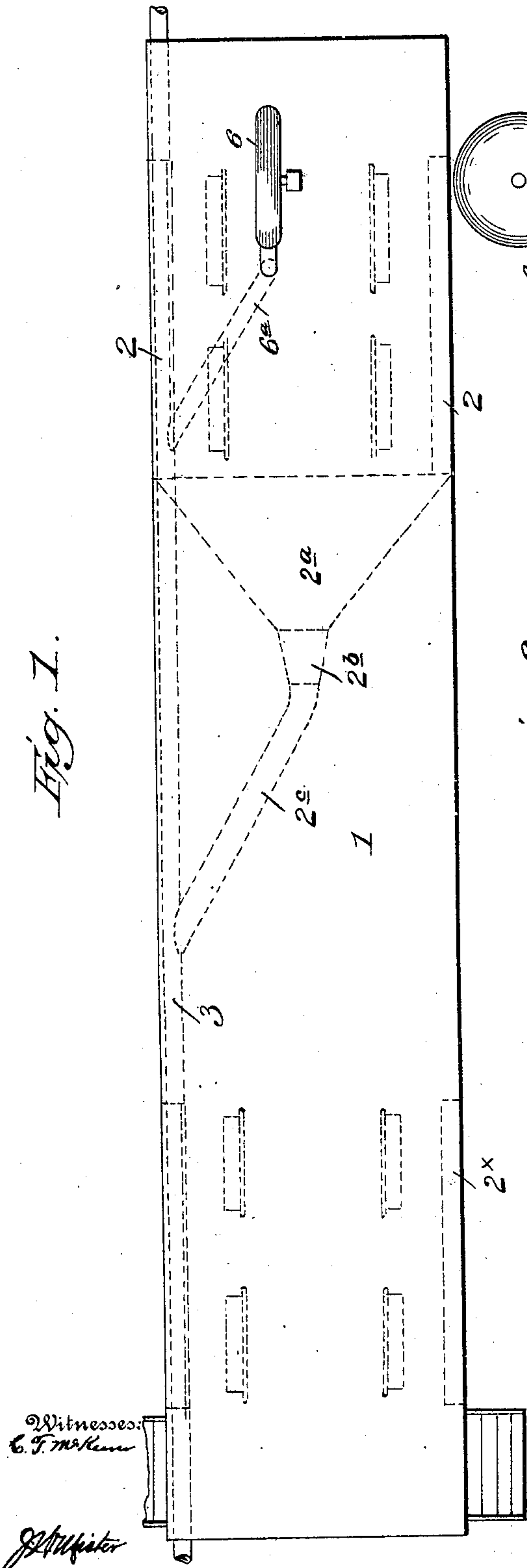
No. 810,831.

PATENTED JAN. 23, 1906.

G. F. WEIR.
DUST COLLECTOR FOR CARS.
APPLICATION FILED JUNE 28, 1905.

2 SHEETS—SHEET 1.

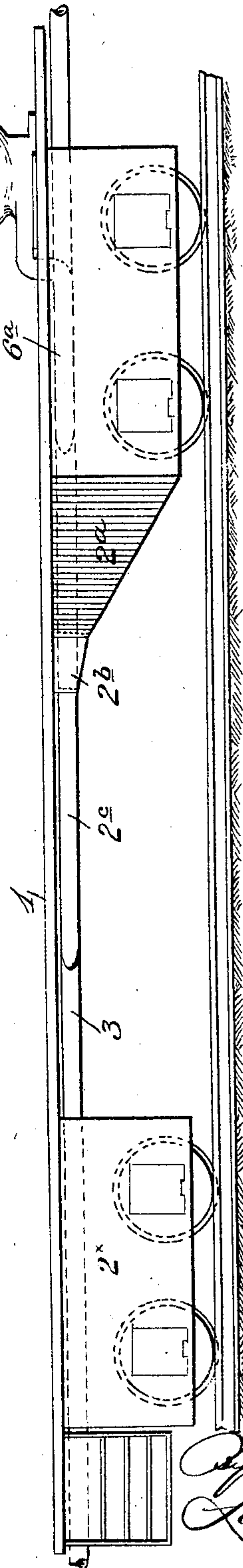
Fig. 1.



Witnesses:
C. F. McKim

J. H. Miller

Fig. 2.



Inventor:

Geo. E. Weir.

Law. P. Rogers & Co.
Attorneys.

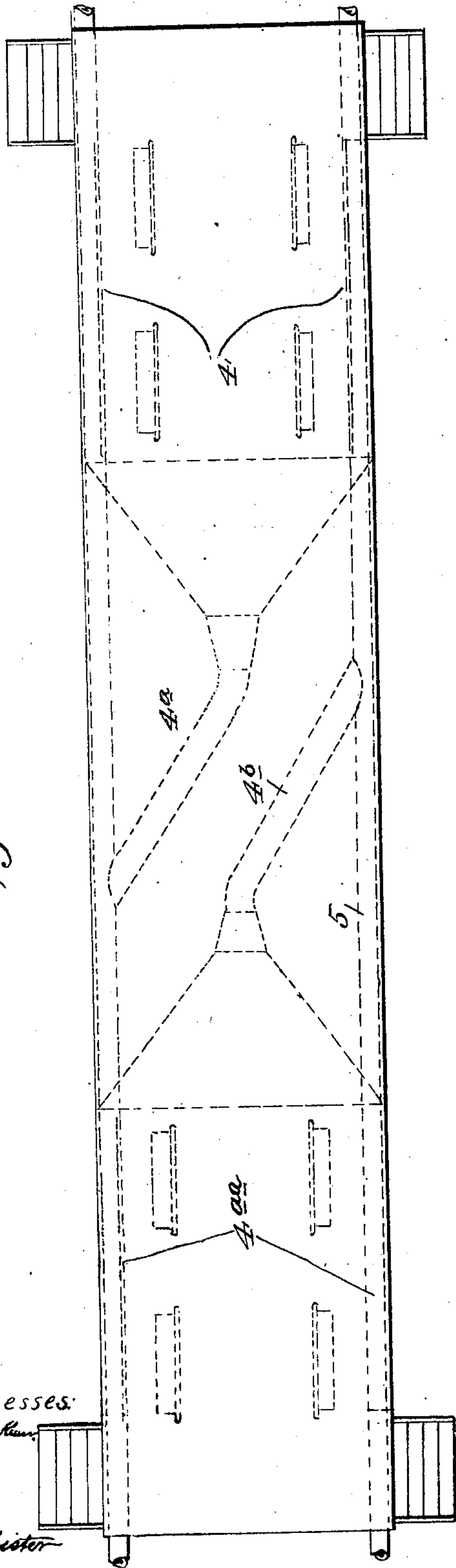
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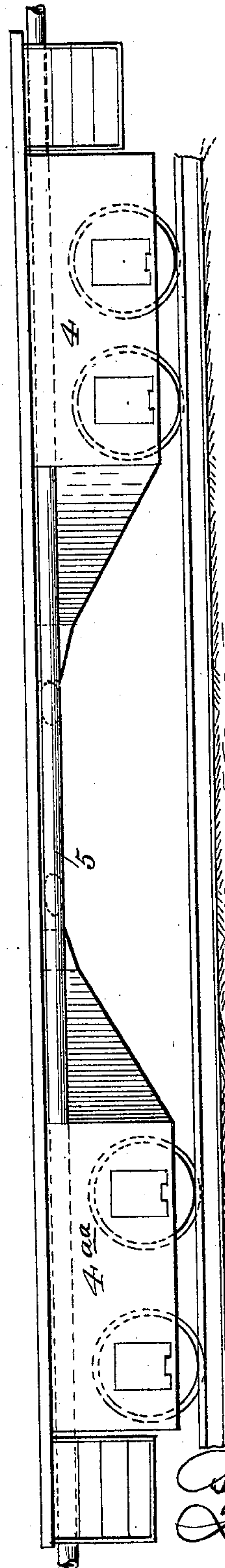
Fig. 3.



Witnesses:
A. T. McKim

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Fig. 4.



Inventor:
Geo F. Weir.

By
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UNITED STATES PATENT OFFICE.

GEORGE F. WEIR, OF ELKHART, INDIANA.

DUST-COLLECTOR FOR CARS.

No. 810,831.

Specification of Letters Patent.

Patented Jan. 23, 1906.

Application filed June 28, 1905. Serial No. 267,417.

To all whom it may concern:

Be it known that I, GEORGE F. WEIR, a citizen of the United States, residing at Elkhart, in the county of Elkhart and State of Indiana, have invented new and useful Improvements in Dust-Collectors for Cars, of which the following is a specification.

My invention relates to improvements in what may be termed "dust-collectors," applicable more particularly in connection with railway-cars.

Objects of the invention are to provide for the ready and effective collecting of the dust caused or thrown up by the action of the wheels or car and to do this in a simple and inexpensive manner.

Said invention consists of the combination of the parts, including their structural features, substantially as hereinafter fully disclosed and specifically noted.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a plan view of the same. Fig. 2 is a side elevation view thereof, and Figs. 3 and 4 are plan and side views of a following car equipped with adjunctive members or parts of my invention.

In carrying out my invention I equip what may be called the "lead" or forward end car 1 with collectors or chutes 2, one arranged at each side at each end thereof opposite the trucks and their wheels for receiving and collecting the dust thrown up by the action of the wheels or cars. Said collectors or chutes are preferably rectangular in outline and suitably secured laterally to the car, with their front and bottom ends opening outward to receive the dust, the two at the forward end of the car terminating at their inner or rear ends into a common funnel or tapered portion 2^a, having its smaller end connected, preferably, by a nozzle 2^b to a branch pipe 2^c, extending diagonally and connected to and delivering into an additional principal pipe-section 3, extending the complete length of the car along one edge at the bottom thereof. Said pipe-section 3 is flexibly coupled to a corresponding pipe-section of the following car and the latter pipe-section to a like pipe-section of a third car, the like pipe-section connection being observed throughout the entire train of cars, thus providing for delivering the dust at the rear end of the train. The collectors 2^x at the opposite or rear end of the car have no connection with the dust discharging or conducting pipe-section 3. Upon the following

car, Figs. 3 and 4, at each end and otherwise arranged as the dust-collectors at the forward end of the lead car are corresponding dust collectors or chutes 4 4^{aa}, and also upon the opposite side of said following car is an additional pipe-section 5 in like manner as pipe-section 3 of said lead car delivering or discharging at the end of the train by like pipe-sections connected therewith and arranged upon the successive cars of the train. Said dust collectors or chutes 4 themselves deliver via branch pipes 4^a 4^b into the pipe-sections 3 and 5, respectively, as shown, said branch pipes, however, extending in diagonally opposite directions from the delivery ends of their respective chutes or collectors.

It will be noted that when the lead car is reversed end for end the connection of the pipe-section 3 is made with the pipe 5 of the following car and the collector 4 previously in use put out of service and the collector 4^{aa} brought into requisition and the contents thereof delivered via the pipe 4^b into the pipe-section 5 and finally discharged at the end of the train, as aforesaid.

A rotary blast-fan 6, adapted to be suitably driven from the truck-wheels, has its housing or casing connected by a branch pipe 6^a with the pipe-section 3 for creating a suction in the dust-collector of the lead car, the purpose of which is obvious. This adjunctive part or fan, however, is not necessary to the carrying out of my invention.

I claim—

1. A dust-collector for cars, comprising a chute arranged laterally and outside of the car-wheel truck, and effective to receive the dust thrown up by the action of said wheels, a lateral dust-conducting pipe arranged upon the car, and a diagonal branch-pipe connection between said lateral pipe and said chute.

2. A dust-collector for cars, comprising a chute arranged laterally and outside of the car-wheel truck, and effective to receive the dust thrown up by the action of said wheels, said chute having a tapered delivery rear or inner end member, a lateral dust-conducting pipe-section arranged upon the car, and a diagonal branch pipe effecting connection between said lateral dust-conducting pipe-section and said member.

3. A train dust-collector, comprising a chute arranged upon the lead car, laterally and outside of the wheel-truck, and effective to receive and collect the dust thrown up by the action of the wheels, said car having a lateral

pipe-section connected to said collectors and following car equipped with like dust-collectors and lateral pipe-sections having branch-pipe connections with the latter dust-collectors, the lateral pipe-sections of the lead car being interchangeably used with either of said latter pipe-sections of the following car.

4. A dust-collector for cars, comprising a number of chutes arranged laterally and outside of the truck-wheels and opening downward to receive the dust resulting from the action of the truck-wheels, a lateral dust-conducting pipe-section upon the car, an upward and rearward tapered nozzle member fixed to and common with both of said chutes, and a diagonal pipe connection between said tapered member and said lateral dust-conducting pipe.

5. A dust-collector for cars, comprising a chute arranged upon the lead car, laterally and outside of the forward truck-wheels and effective to receive the dust resulting from the

action of the car truck-wheels, a lateral dust-conducting pipe arranged upon the car, said chutes having connected or fixed to their delivery end an upward and laterally or rearward tapered nozzle member common to both of said chutes, and similar opposite end chutes arranged upon a following car each two of these latter chutes also having a common nozzle member, opposite lateral dust-conducting pipe-sections, and branch-pipe connections between said nozzle members and said lateral dust-conducting pipe-sections arranged to extend in oppositely-diagonal directions from the respective nozzle members of said chutes.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

GEORGE F. WEIR.

Witnesses:

PERRY L. TURNER,
MERLE DOTY.