

No. 834,934.

PATENTED NOV. 6, 1906.

H. A. READER.

DUMP CAR.

APPLICATION FILED OCT. 31, 1904.

FIG. 1.

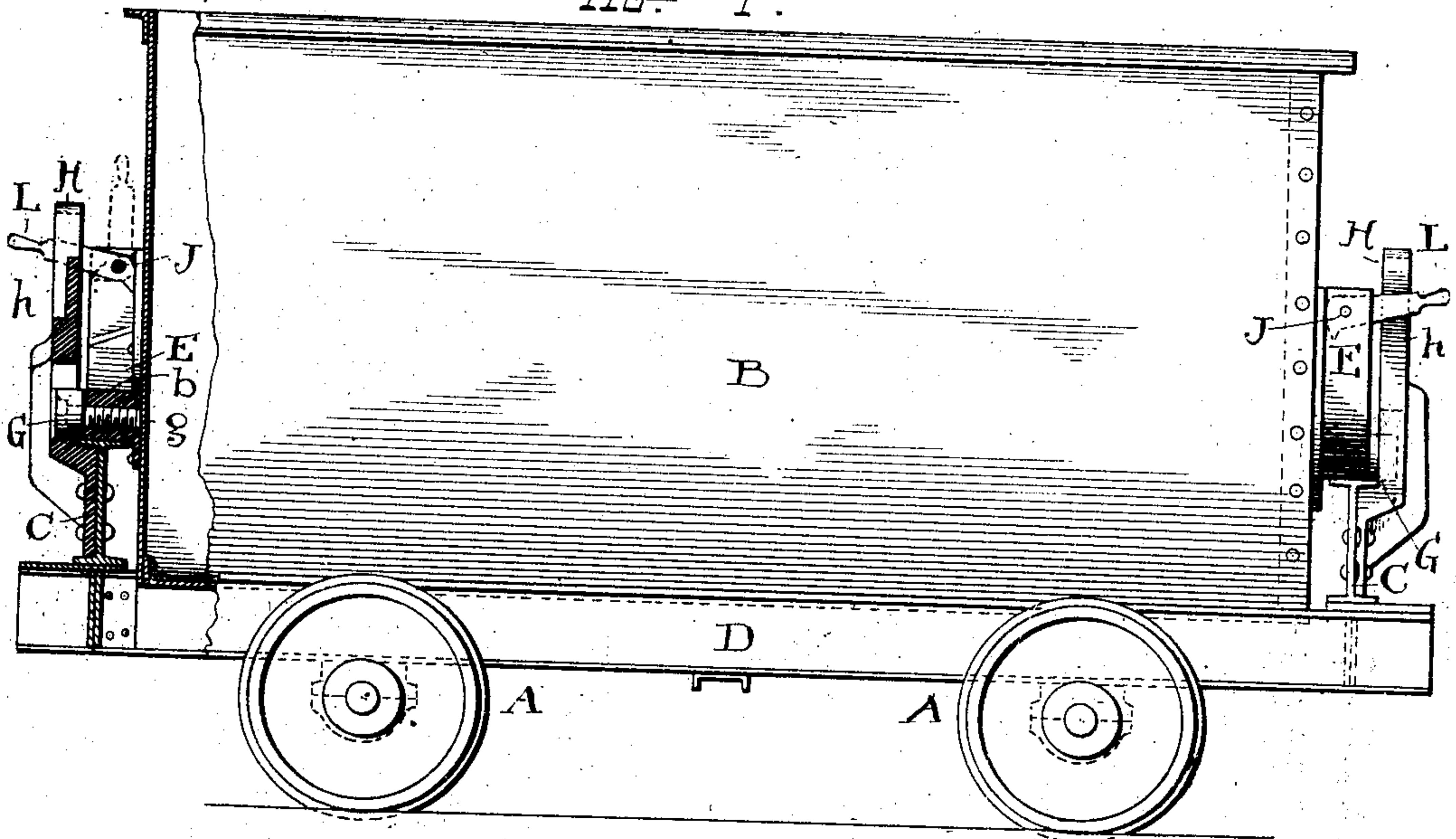
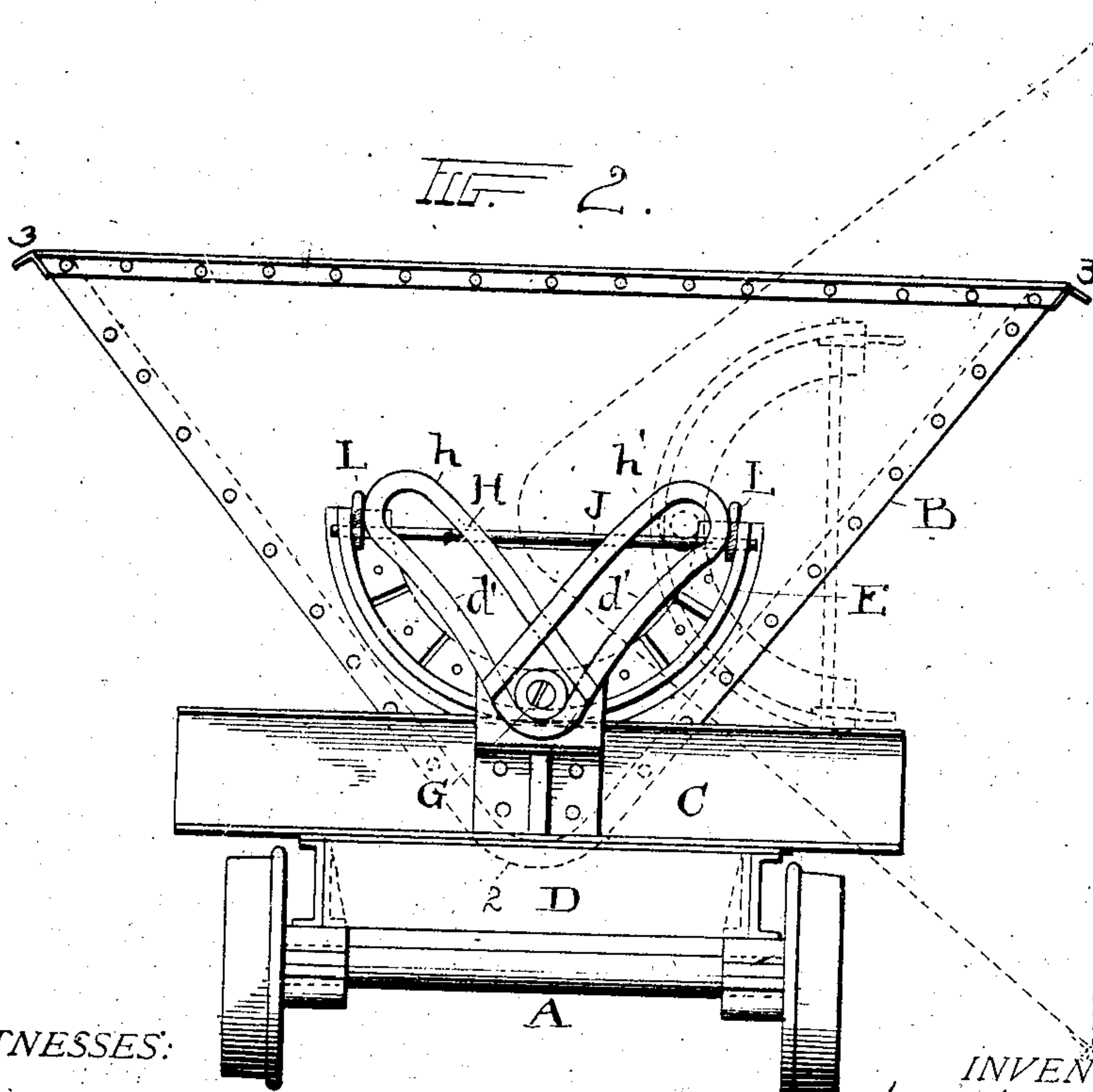


FIG. 2.



WITNESSES:

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DUMP-CAR.

No. 834,934.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY ARTHUR READER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Dump-Cars; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to dump-cars; and the invention consists in a car and means connected therewith for limiting and controlling the rotation or travel of the body of the car to and from dumping position and its alinement on its supports, all substantially as shown and described, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a side elevation of a complete car embodying my invention, a portion of the new mechanism being sectioned vertically at one end of the car. Fig. 2 is an end elevation of the car, both ends being alike.

My invention is designed to afford definite stopping mechanism for the body beyond which it cannot turn and which is uniform in its operation at both ends and always restores the body to the same starting-point centrally of the car.

Now referring to the parts, A represents the trucks; B, the car-body; D, the supporting-frame, and C the cross supports or tracks at the end of the frame on which the car-body rests.

It will be noticed that body B is triangular in end elevation and that the cross beams or tracks C are preferably but not necessarily of the I-beam pattern. The said body B is adapted to rotate and travel on these tracks, and to these ends I provide the same with a preferably segmental or semicircular carrier E at each end which rides upon the cross-tracks I. The said carriers are fixed upon the ends of body B above the lower angle thereof, while the two other angles 3 of said body come on opposite sides and lie in the same horizontal plane normally as shown. Integral with each of said segmental carriers E are bosses *b*, in which are engaged the threaded stems *g* of rollers G, and these rollers enter into the stop and alining mechanism for the body, as will now be seen. Thus

I firmly secure a standard H on each end of frame D which is of a substantially Y pattern, having two reversely-inclined stems *h* and *h'* at its top provided with grooves or channels lengthwise in which roller G is confined and adapted to travel, according as the body B is turned to one side or the other to dump the load. As shown, the said channels are open on both sides, but they might be closed on their outer sides, and normally roller G rests down in the angle of said channels and serves to fix the exact point to which each end of the body must return after each rotation, thus preventing a possible twist in the position or alinement of the body on its supports. The said channels furthermore are shown as having slightly-arched or inwardly-curved outer edges *d'*, which form a substantially cycloidal curve and accommodate said channels to the changing positions of the roller G as it travels from one end of said channel to the other when the body B is rolled or turned to one side on its segmental carriers E. By these means the body B is positively stopped from turning farther when the rollers G reach the top of the corresponding channels in arms or forks of the fixed standards H, as seen in dotted lines, Fig. 2, and then as the body is turned back to righted position the said rollers running in the said channels are arbitrarily returned to their starting-point, and thus the body B is carried back to its starting-point at both ends and to which it is forced to return always to whichever side it may have been rotated to unload.

A rod J is shown as connecting the ends of segmental carrier E at each end, on which are supported two hand-controlled stop-levers L, fixed on said rod and adapted to be turned down between the arms *h* and *h'* of standards H and the ends of the segments E and serving to prevent rotation of body B in either direction when both said levers are down in normal position. When either lever is raised and thrown back relatively, as seen in dotted lines, Fig. 1, the body B may be turned down on either side.

What I claim is—

In dumping-cars, a supporting-frame having straight transverse tracks at each end, in combination with a triangular car-body having one of its angles set centrally of said frame between said tracks and the other angles at the sides and top thereof, a segmental

carrier on each end of the car-body above the lower angle thereof adapted to roll on said tracks, and a projection from the middle of each segment provided with a roller on the
5 end thereof, and a fixed upright centrally behind said tracks having diverging slotted wings adapted to be engaged by said roller as the car is rotated, and means at the ends of

said segments to hold the car-body in upright position.

In testimony whereof I sign this specification in the presence of two witnesses.

HENRY ARTHUR READER.

Witnesses:

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