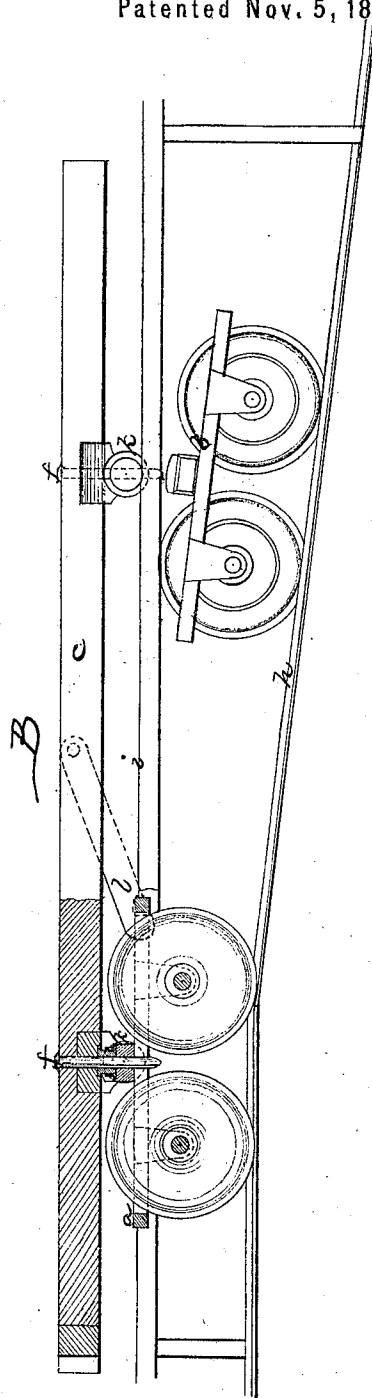
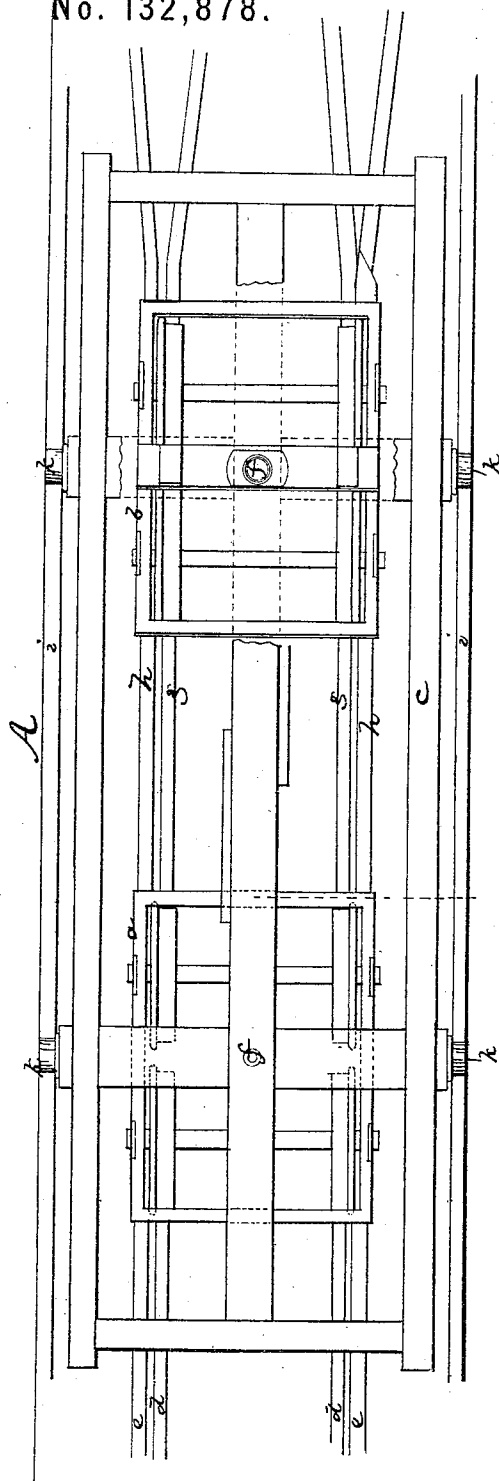


C. D. TISDALE.
Improvement in Connecting and Disconnecting Differently
Gaged Car-Trucks.

No. 132,878.

Patented Nov. 5, 1872.



Witnesses. { M. W. Frothingham.
L. H. Latimer.

Charles D. Tisdale,
By his Atty
Cross & Gould

UNITED STATES PATENT OFFICE.

CHARLES D. TISDALE, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND SAMUEL SHACKELL, OF SAME PLACE.

IMPROVEMENT IN CONNECTING AND DISCONNECTING DIFFERENTLY-GAGED CAR-TRUCKS.

Specification forming part of Letters Patent No. 132,878, dated November 5, 1872.

To all whom it may concern:

Be it known that I, CHARLES D. TISDALE, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Connecting and Disconnecting Car Trucks and Bodies for Wide and Narrow Gage Tracks; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

In the use of wide and narrow gage railway tracks upon connecting lines, where the cars of one line are run over the tracks of the other, it has been customary to some extent to use trucks with sliding wheels adapted or adaptable to both tracks, and to some extent to transfer each car-body from one set of trucks for one gage to another set of trucks for another gage; and for some reasons the last mode is considered preferable, except for the time and labor consumed in making the transfer. To effect such transfer the car-body is jacked and raised sufficiently for the trucks beneath it to be slid from under it, and the trucks of the other gage are then brought under it, the track at such point having both wide and narrow gauge rails. To raise a car requires, of course, a great power, and it is a somewhat slow operation.

My invention is intended to facilitate the transferring operation, and to effect this I make use of an inclined track for the car-trucks to run down upon and an elevated and horizontal track for the car-body to run upon, the car-body being provided with rollers, which enable it to run upon the elevated rails, and the body and trucks being connected by bolts, from which the trucks separate as they run down the incline, leaving the bolts depending from the body and in position to attach the other trucks, the separation of each car-body from its trucks being thus effected by gravity, and their connection simply requiring the car-body to be run horizontally and the car-trucks to be run up the incline and under the moving car-body until the pin enters its hole in the center of the truck. It is in this method of disconnecting the car-body and trucks and of connecting said body to another set of trucks

adapted to a different gage that my invention consists.

The drawing represents at A in plan, and at B in sectional elevation, the construction embodying my invention.

a b denote two trucks; *c*, the bottom frame of a car-body; *d d*, two rails of a narrow-gage track; *e e*, two rails of a wide track. Each truck is connected to the frame *c* by a bolt-pin, *f*, from which pin the truck will be disengaged if the truck be sufficiently lowered below the body-frame. From the two tracks *d e* two downwardly-inclined tracks, *g h*, run, and over this inclined track are two opposite elevated rails, *i*, which are horizontal, said rails being in or near the plane of the bottom of the car-body frame, having such relation thereto that as a car comes to them rolls *k* at the side of the car-body frame run upon the rails *i* and support the car-body if the trucks are dropped therefrom. These rails are to be so placed that as a car reaches the upper end of the inclined rails the rolls *k* run upon the rails *i*, and as the car then moves on the trucks freed from the support of the car-body roll down the incline, and by their descent disengage from the bolts *f* and run off upon a suitable siding. This leaves the other rails of the double track free to receive the trucks of the different gage upon which the car is to run, and said trucks are pushed or drawn up the incline until the bolt-hole of each truck comes directly under and into connection with the bolt over it, with which it is fully coupled by the rise and forward movement of the truck and the corresponding onward movement of the car to the horizontal rails. To facilitate the coupling hooks *l* may be used, the shank of each hook being pivoted to the body and the hook taking hold of the axle, so that the parts will be in proper position to bring the bolt into its hole when the truck in its ascent reaches the proper plane for such connection. Each roll *k* turns on a suitable pin projecting from one of the cross-pieces of the car-body; but instead of such an arrangement they may be at the tops of the rails, or independent beams may be provided to place under the bodies at the proper times.

It will thus be seen that the disconnection of the trucks and car-bodies is effected wholly

by gravity or, in connection with end movement of the body, without using any force; and that, to connect trucks for a different gage with a body thus disconnected, the trucks have only to be drawn or pushed up the inclined rails, and to be moved forward with the body, the coupling and uncoupling of trucks and bodies being thus very rapidly and economically effected.

I claim—

1. The combination of the elevated horizontal rails *i*, the downwardly-inclined tracks *g* *h*, and the main track *d e*, when the elevated

rails *i i* are arranged for the car-body to roll horizontally upon them from the main tracks or without rise or descent of the car-body.

2. The hooks *l* or equivalent devices or mechanism for keeping the ascending car-trucks in proper position to connect with the car-body, substantially as described.

Executed this 15th day of June, A. D. 1872.

C. D. TISDALE.

Witnesses:

FRANCIS GOULD,

M. W. FROTHINGHAM.