

T. POST. Car-Truck Transfer.

No. 210,051.

Patented Nov. 19, 1878.

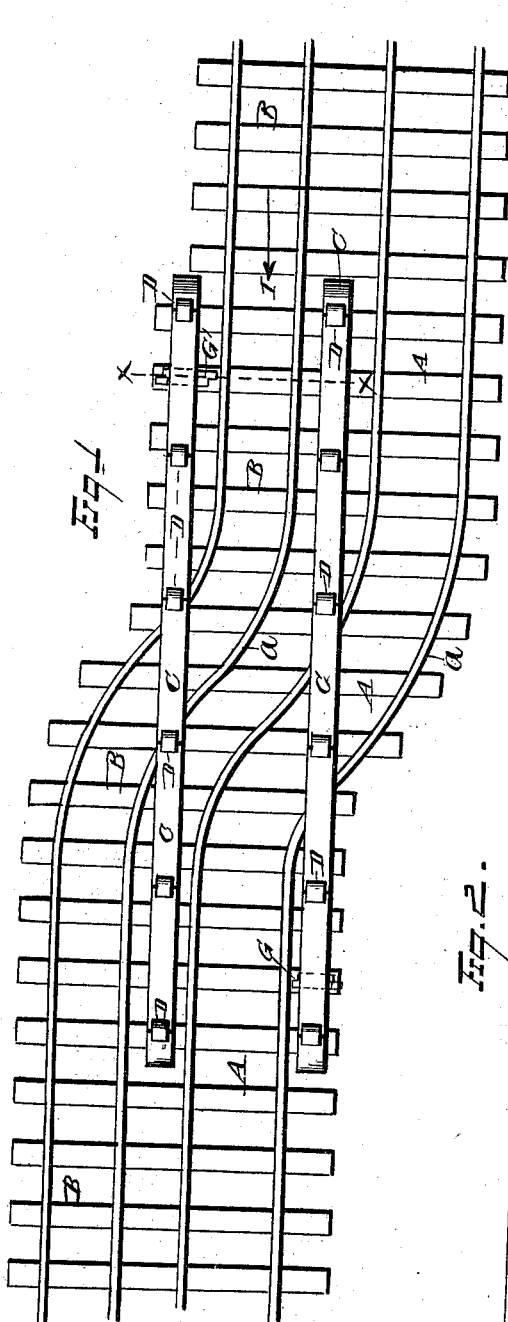


Fig. 1.

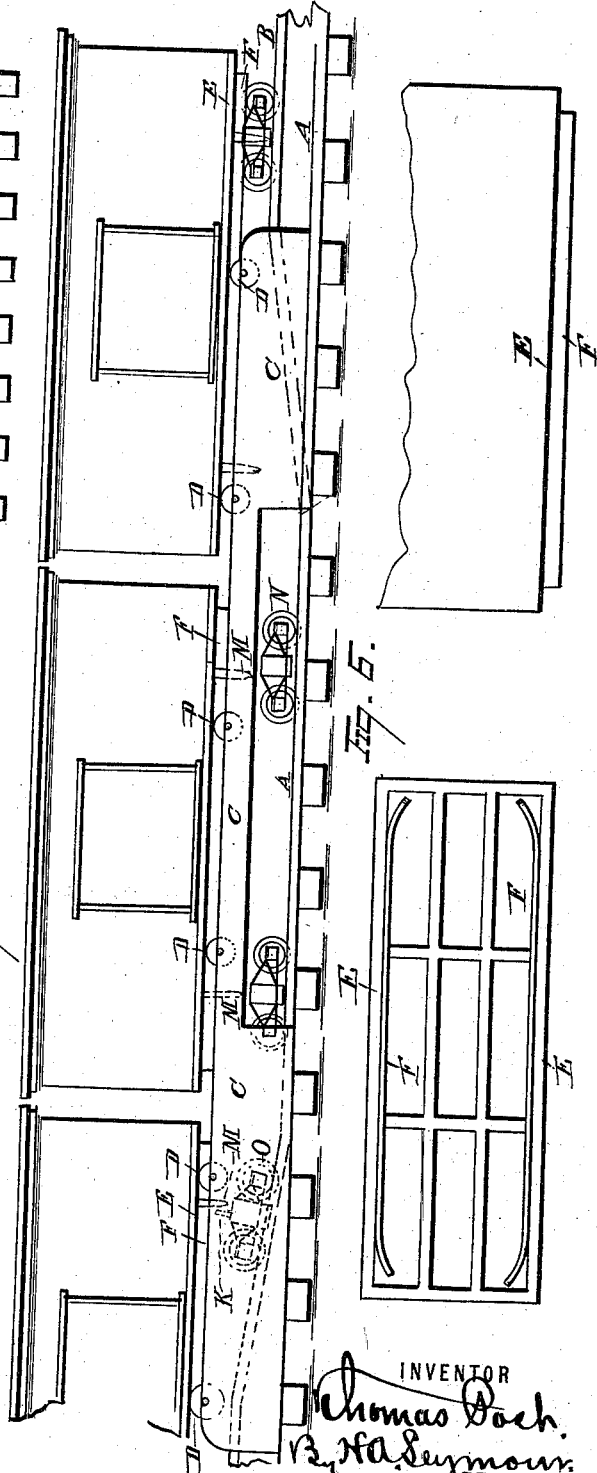


Fig. 2.

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Fig. 3.

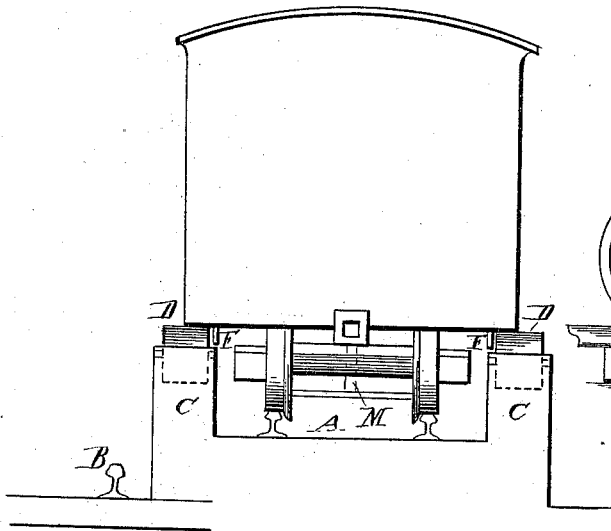


Fig. 4.

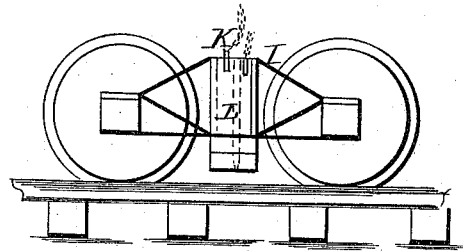
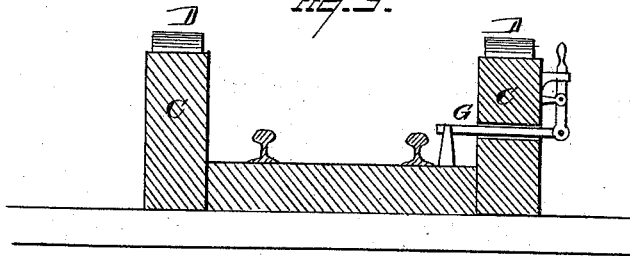


Fig. 5.



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UNITED STATES PATENT OFFICE.

THOMAS POST, OF WILMINGTON, NORTH CAROLINA, ASSIGNOR TO HIMSELF
AND JAMES F. POST, JR., OF SAME PLACE.

IMPROVEMENT IN CAR-TRUCK TRANSFERS.

Specification forming part of Letters Patent No. **210,051**, dated November 19, 1878; application filed
October 16, 1878.

To all whom it may concern:

Be it known that I, THOMAS POST, of Wilmington, of the county of New Hanover and State of North Carolina, have invented certain new and useful Improvements in Car-Truck Transfers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in car-truck transfers, the object being to provide a transfer of such construction that the trucks of a car or complete train of cars may be quickly shifted from narrow to broad gage, or vice versa, and the broad and narrow gage trucks kept on their separate and independent tracks.

In the accompanying drawings, Figure 1 is a plan view of my improved car-truck transfer. Fig. 2 is a side elevation of the same, representing a train of cars having their trucks changed from broad to narrow gage. Fig. 3 is an end view of the apparatus. Fig. 4 is a side elevation of one of the trucks. Fig. 5 is a transverse vertical section through line X X of Fig. 1. Fig 6 is a plan view of the car-bottom.

A and B, respectively, represent broad and narrow gage railroad-tracks, arranged parallel with each other. These tracks are arranged on a sharp curve, as at *a a*, so that a straight line, *b b*, will pass through the center of the narrow-gage track B on one side of the curve and the center of the broad-gage track A on the opposite side of the curve.

C C are car-suspension frames, the same being arranged parallel with each other, and at a sufficient distance apart to receive and support the bodies. Frame C is located at one end between and parallel with tracks A B, while its central portion spans the curve *a* in track B, and its opposite end is located outside and parallel with the narrow-gage track B. Frame C is arranged at one end, outside and parallel with the broad-gage track A, while its central portion spans the curve in said track, and the opposite end of said frame is located between and parallel with the tracks A B, as clearly illustrated in Fig. 1.

It will be observed that on one side of the curved portion of the tracks the broad-gage track A is located between the transfer-frames, while on the other side of the curved portion of the tracks the narrow-gage track B is located outside the frames C C. The tracks A and B at their curved portions *a a* are sufficiently depressed below the grade of the main track so that the car-trucks may run beneath the central portion of the frames C C. The upper sides of the transfer or suspension frames are provided with rollers D, of any desired number, which serve to support the car-body while being moved over the transfer-frames.

In order that the car-bodies may have a smooth continuous bearing-surface for the rollers, string-pieces E are secured to the opposite sides of the bottom of the car, and as the car-body is moved on the frames it is supported upon the string-pieces E, which rest upon the rollers. F are guides attached to the inner sides or edges of the string-pieces E, and project below the same. The ends of the guides are preferably curved, to center the car-body as it is drawn onto the transfer-frame. The guides serve to retain the car-body in a central position on the transfer-frame, which is essential, in order that the truck-pin may be caused to register with the socket in the truck when the latter is being automatically connected with the car-body, as will be hereinafter explained.

G G' are chock-bolts, placed at each end of the transfer-frame, bolt G arranged adjacent to one of the rails of the broad-gage track, and bolt G' near one of the rails of the narrow-gage track. These bolts are adapted to be moved over their respective rails and hold a truck in a stationary position on the steep grade of the tracks at such points. To the outer ends of the chock-bolts are pivoted the levers H H, to enable the bolts to be readily operated by an attendant.

I represents the truck-bolsters, and each is provided with two vertically-adjustable abutments or stops, K, which are located on opposite sides of the pin hole or socket L of the truck.

The operation of my improved car-truck transfer is as follows: Assume that it is desired to shift the cars from a narrow to a broad

gage track, the cars will be run onto the transfer-frame from the narrow-gage track B, in the direction indicated by the arrow marked 1. As the transfer-frame extends above the track B a distance slightly in excess of the height of the car-trucks, the car-body will move over the frames C C, the string-pieces resting on the rollers journaled in the transfer-frames, while the body of the car will be prevented from any lateral displacement by means of the guides extending lengthwise of the car, and serving as bearings against the inner sides of the rollers on transfer-frames. As the car-body is moved onto the transfer-frame and supported thereby in a horizontal position, the forward truck will descend the steep grade of the track B between the transfer-frame until the truck-pin M is released from engagement with the narrow-gage truck N. As the body of the car is moved toward the opposite side of the frame, the rear truck will be disconnected in the same manner. The detached narrow-gage trucks may be pushed along the track beneath the transfer-frame and drawn onto a siding until desired for further use. A broad-gage truck, O, is then pushed part way up the steep incline of the broad-gage track A, located between the opposite ends of the transfer-frame, and the chock-bolt forced over the track, whereby the truck is held stationary on the inclined plane of the broad-gage track. The abutment or vertically-adjustable stop K of the truck, located on the side of the socket or pin hole farthest from the car, is raised by means of a chain or lever. As the car-body is moved to the opposite side of the transfer-frame the truck-pin M will strike the raised abutment or stop K and move the truck along with the car. The truck is gradually carried up the grade, and the pin M guided into the

pin hole or socket in the truck-bolster, thus automatically connecting the truck with the car-body. Another truck is then secured on the inclined plane and connected with the car in the manner above described; and, if desired, the trucks of an entire train may be shifted without uncoupling the cars of the train.

It is evident that many slight changes may be made in the arrangement and construction of the several parts described without departing from the spirit of my invention, and hence I do not limit myself to the exact construction and arrangement of parts shown and described; but,

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

1. The combination, with separate and independent broad and narrow gage tracks constructed with curves *a a*, of a transfer-frame arranged to span said curved portions of the track, substantially as set forth.

2. The combination, with the transfer-frame and narrow and broad gage tracks, of chock-bolts adapted to be moved over one of the rails of either the broad or narrow gage tracks and retain the truck on the inclined plane of either track, substantially as set forth.

3. The combination, with the transfer-frame, of trucks provided with vertically-adjustable abutments or stops and the car-bodies with truck-pins, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of September, 1878.

THOMAS POST.

Witnesses:

JAMES F. POST,
FREDERICK D. POISSON.