

JOHN S. NEWBERRY, EDWARD C. DEAN & J. McMILLAN.
Improvement in Turn-Tables for Changing Car-Trucks.
No. 127,095.

Patented May 21, 1872.

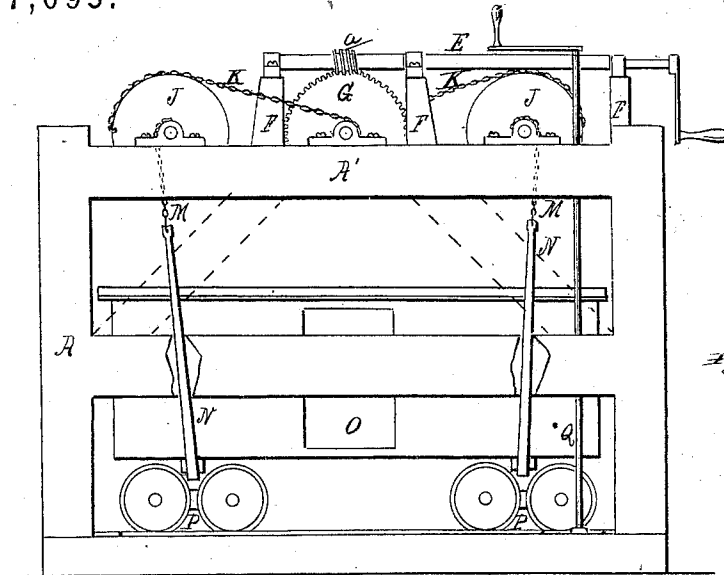


Fig. 1.

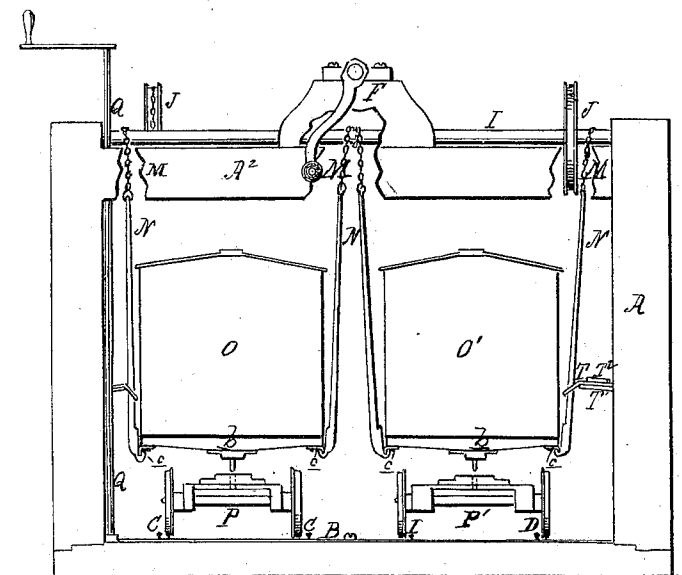


Fig. 2.

ATTEST:

H. F. Eberts
Myron H. Church.

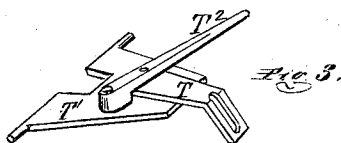


Fig. 3.

INVENTORS

J. S. Newberry,
Edward C. Dean,
James M. Millan
per attorney
Thos. S. Sprague

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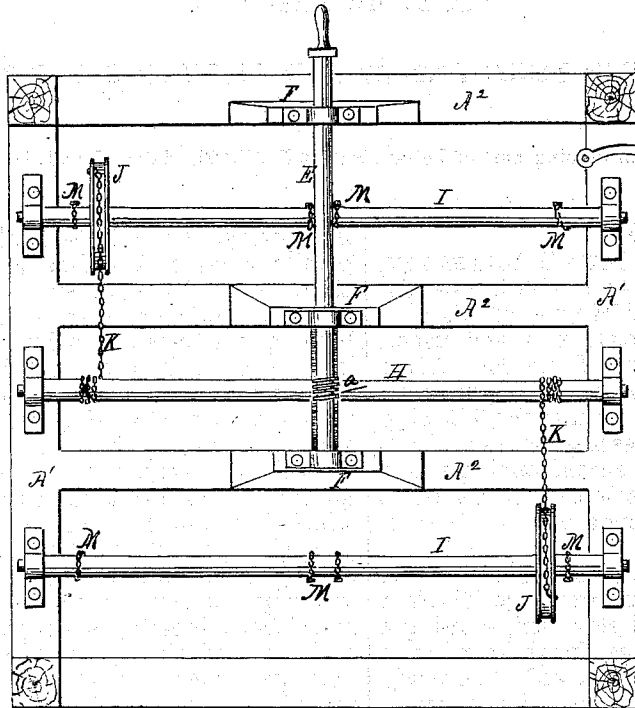


Fig. 1.

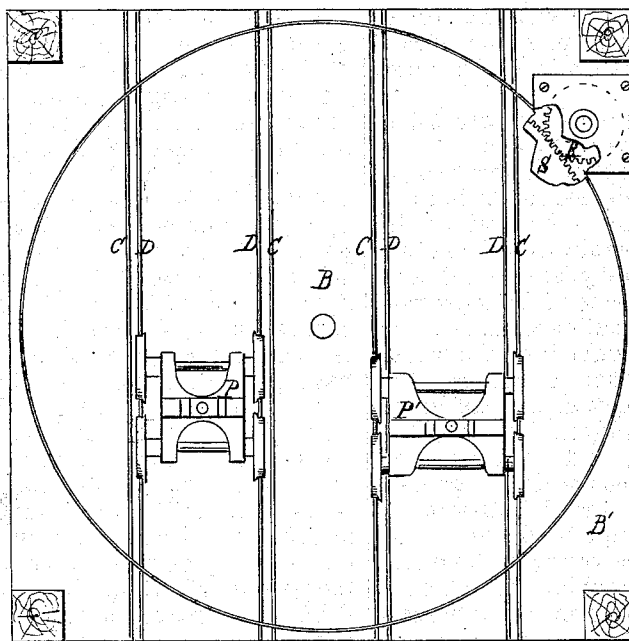


Fig. 2.

Attest
W. F. Eberts.
Frederic W. Church.

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UNITED STATES PATENT OFFICE.

JOHN S. NEWBERRY, EDWARD C. DEAN, AND JAMES McMILLAN, OF DETROIT, MICHIGAN.

IMPROVEMENT IN TURN-TABLES FOR CHANGING CAR-TRUCKS.

Specification forming part of Letters Patent No. 127,095, dated May 21, 1872.

To whom it may concern:

Be it known that we, JOHN S. NEWBERRY, EDWARD C. DEAN, and JAMES McMILLAN, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in a Turn-Table for Lifting Railway Car-Bodies from and changing their Trucks; and we do declare that the following is a true and accurate description thereof, reference being had to the accompanying sheets of drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1, Sheet 1, is a side elevation of our device with a portion of the frame-work broken away. Fig. 2 is an end elevation, showing a broad and narrow gauge freight-car lifted from their respective trucks, which are ready for transfer. Fig. 3 is an enlarged perspective view of a lifting-rod guide. Fig. 4, Sheet 2, is a plan. Fig. 5 is a plan of the platform and turn-table, a small portion of each being broken away to show the rotating gear, and with a broad and a narrow gauge truck on the tracks of the turn-table.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of this invention relates to a peculiar turn-table and a device for lifting two car-bodies off their trucks, to be used at the junction of a broad-gauge railway with another of a narrower gauge, whereby the cars of the one may be placed on the trucks of the other railway and proceed to destination without being obliged to transfer the freight from the cars of one road to those of the other, as has heretofore been the case. The invention consists in the peculiar mechanism employed for lifting the cars from their trucks, and, in connection therewith, a double-tracked and double-gauged turn-table, which, when turned half around, will bring the narrow-gauge trucks under the broad-gauge car, and vice versa; in the method of operating said turn-table; and in the peculiar guides employed for preventing the car-bodies from swaying while being raised or lowered.

In the drawing, A represents a substantial frame-work, erected over parallel tracks at the junction of a broad with a narrow-gauge railway; and B is a turn-table, inclosed by said

frame-work. On this turn-table are laid two parallel lines of broad-gauge tracks, one at either side and equidistant from the pivot, and whose rails are seen at C. Within these broad-gauge lines are laid two narrow-gauge lines, whose rails are lettered D, and having a common center line; or, in other words, these rails are equidistant from the others at each side of the truck. The inner broad-gauge rails of each broad-gauge truck should further be gauged as far apart as the narrow-gauge rails, which lie within them. Assuming the narrow-gauge line to be four feet nine inches in width and the broad-gauge six feet, this arrangement would give a central track on which might be run either a broad or a narrow gauge engine, to be turned about, if necessary, and prove very convenient, but is not an essential feature of our invention, the principal object being to provide the turn-table with a pair of six-foot trucks, each of which straddles or incloses a four-feet nine-inch track. E is a shaft, journaled in standards F, erected on the girts A² of the frame, and is designed to be rotated by a small steam-engine placed conveniently near the frame. On this shaft is a worm, a, meshing with a worm-wheel, G, on a transverse shaft, H, journaled in suitable bearings on the top chords A¹ of the frame, which shaft H is thereby slowly rotated, but with a great lifting capacity. I I are two other shafts, one at either side of and parallel with the shaft H, and like it are journaled in or on the top chords; each carries a drum, J, around which a chain, K, is led and secured, the other end of the chain having several turns taken about and secured to the shaft H. To each of the shafts I four chains, M, are secured, and pendent from which are stout iron rods, N, the lower ends of which are formed to hook under the ends of the king-bolt beams b of the car-bodies O O', which may be provided with metallic clip-plates c for the hooks to engage with, as shown in Fig. 2, for the purpose of lifting them from their trucks P P'. Q is a vertical shaft, journaled in proper boxes at or near one corner of the frame-work, and is designed to be rotated by steam-power when required. Its lower end, under the truck platform B', carries a pinion, R, which meshes with toothed segments S in the periphery of the turn-table, so that the latter may be read-

ily turned on its axis so that when two cars of different gauges, and intended for dispatch in opposite directions, are run upon the table they may be hoisted up clear of their trucks, when, by turning the table with the trucks half around, the narrow-gauge truck P will be brought under the broad-gauge car-body O, and vice versa, as shown in Fig. 2. The bodies are now lowered upon the trucks and the complete cars proceed to their respective destinations.

In order to prevent the swaying of the car-bodies while suspended the outer pairs of the rods N are guided by the adjustable guides T, through which they pass. These guides are movable on a plate, T¹, hinged to the frame-side by means of a hand-lever, T², which an attendant may move out or in to cause the king-bolt to enter the proper receptacle in the truck in lowering the car-body, although any equivalent means may be used to accomplish the same purpose.

We do not wish to confine ourselves to the exact method of rotating the turn-table shown and described, but give it the preference for sim-

plicity and celerity of operation when steam-power is used; nor yet do we wish to confine ourselves to the exact means shown and described for raising the car-bodies from their trucks while the latter are exchanged or shifted from one car to the other; but

We claim broadly—

1. The employment of the double-tracked and double-gauged turn-table, with suitable means for raising and lowering the loaded car-bodies for shifting and exchanging their trucks when said trucks are of different gauges, and the hoisting apparatus is located over the double-tracked and double-gauged table, substantially as described.

2. Also, the guide T, hinged plate T¹, and lever T², in connection with the rods N, as and for the purpose set forth.

JNO. S. NEWBERRY.
EDWARD C. DEAN.
JAMES McMILLAN.

Witnesses:

H. F. EBERTS,
MYRON H. CHURCH.