No. 607,146. Patented July 12, 1898.

J. TURNER.

RAILWAY TRANSFER TABLE.

(No Model.) (Application filed June 19, 1896.)

Fig. 1.

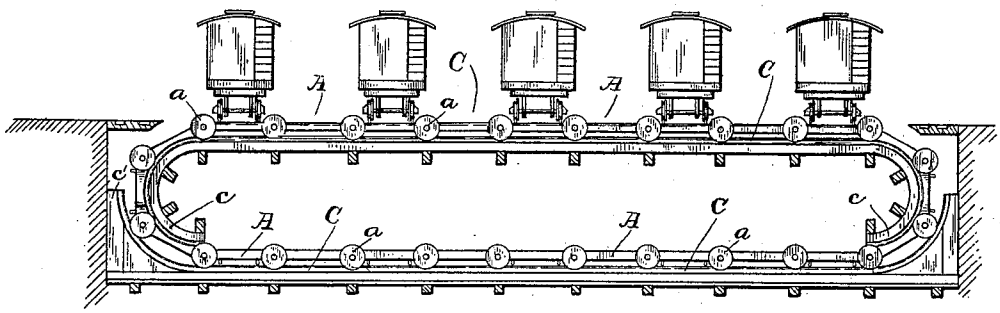


Fig. 2.

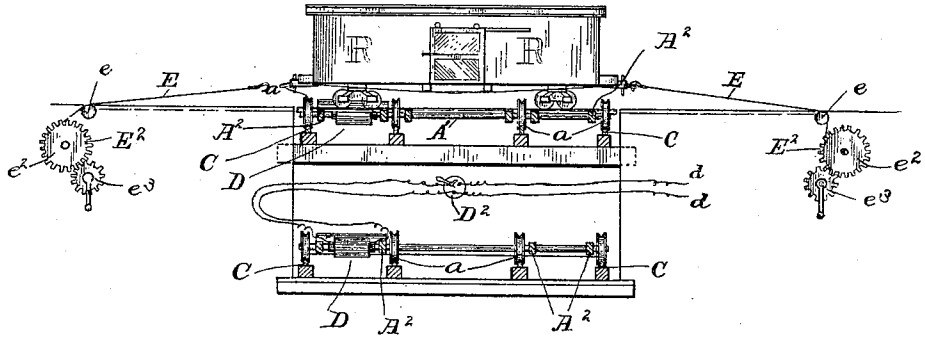
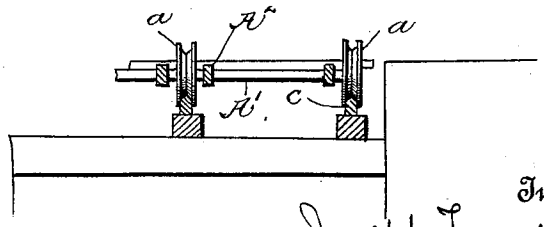


Fig. 3.



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RAILWAY TRANSFER-TABLE.

SPECIFICATION forming part of Letters Patent No. 607,146, dated July 12, 1898.

Application filed June 19, 1896. Serial No. 596,171. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH TURNER, a citizen of the United States, residing at Tillery, in the county of Halifax and State of North Carolina, have invented certain new and useful Improvements in Railway Transfer-Tables; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to railway transfer-tables.

The object of the invention is to provide a transfer-table simple in construction, not liable to get out of order, whereby cars may be moved sidewise from one track to another in a short space of time, thus materially economizing time and labor in the making up of trains and in other necessary shifting of cars.

Further, the object of the invention is to provide a transfer-table of such construction that cars may be shifted laterally with equal facility in either direction and wherein the return of the parts of the device to their first positions after rising is not necessary.

With these objects in view the invention consists, essentially, of a railway transfer-table comprising a series of sections pivotally connected and carrying tracks supporting wheels on the sections and two sets of ways for the reception of the supporting-wheels, the members of the upper section being curved downward at their ends and the members of the lower section being curved upward at their ends, the ends of the members of the respective sets being arranged to overlap.

Further, the invention consists of a transfer-table comprising a series of sections pivotally connected and carrying tracks supporting wheels having V-shaped grooves in their treads and mounted on the sections, and two sets of ways having angular faces for the reception of the supporting-wheels, the members of the upper set being curved downward at their ends and the members of the lower section being curved upward at their ends.

Further, the invention consists of an endless transfer-table composed of sections, the sections being sustained on axles provided with supporting-wheels and motors mounted on the axles and designed to give motion thereto.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of my transfer-table, the surrounding framework, &c., being removed in order to show the arrangement of the parts, there being five cars shown on the table; and Fig. 2 is a transverse section of the table. Fig. 3 is a detail view showing the V-shaped grooves in the wheels and the corresponding track-section.

In the drawings the letter A represents the sections of which the table is composed, which sections are connected to each other pivotally or in any other suitable way which will permit independent up-and-down movement of the sections. In the form here shown the table is shown as composed of a series of axles A′, having preferably fixed thereon the supporting-wheels *a*, there being in the embodiment of the invention herein shown four of the wheels for each axle. The main body of each section is composed of beams A^2, having in each end bearings for the axles and permitting the vibration of the beams on the axles. Arranged transversely on each set of beams or preferably on alternate sets are track-sections B of the same gage as the tracks from which cars are shifted to the table. The supporting-wheels *a* are flanged to retain them in place on their supporting-ways or are provided in their treads, as shown, with V-shaped openings adapted to travel on correspondingly-shaped ways.

The sections are so connected as to form an endless series, and this series is designed to move in either direction to shift the cars carried by the sections in either direction.

The ways C for the support and guidance of the wheels *a* are arranged in parallel pairs one above the other, there being one pair for each set of wheels on the respective sections. The bearing-surfaces of the ways are angular in cross-section and have a raised center to fit into the V-shaped grooves in the wheels *a*. The upper member of each pair of ways is provided with downwardly-curved ends *c*, the ends describing a semicircle, and the lower member of each pair has an upturned curved

end c' corresponding in curvature to the end c of the upper member. The respective curved ends of the members are located a distance apart corresponding to the diameter of the supporting-wheels, so that when the latter pass between the curved ends they are securely held on two sides against displacement.

The endless carriage hereinbefore described is arranged in a position below the tracks of a railway and in such position that when one of the sections is on the upper ways the rail-sections carried thereby will be on a level with the rails of the tracks. The tracks of a railway used in connection with the transfer-table are arranged at equal distances apart and at distances corresponding to the spaces between the rails on the sections A. The described arrangement permits of the moving of cars from any number of tracks upon the transfer-table at the same time, and as the transfer-table is capable of moving in either direction the rapid transfer of cars from one track to another by the use of the table is rendered easy. The tracks may of course extend from one or both sides of the table.

Motion may be imparted to the table in any suitable or desirable way, and as an illustration of one means of propulsion I have shown the alternate axles provided with electric motors D. These motors are supplied with a current of electricity for operating them through conductors d, extending from a source of electrical supply, and the turning on and off of the current and the direction of the current, and consequently the direction of movement of the motors, is governed by the switch D^2, located in the space between the upper and lower pairs of ways by which the table is supported. This space is sufficient for the accommodation of an operator and for any mechanism necessary to the operation of the device.

In order that cars may be moved off the table without employing a locomotive, I provide on each side of the table a device consisting of a rope or chain E, provided with a hook for attachment to a car, and drum E^2, upon which the rope is to be wound. The drum is preferably located beneath the track, and the rope or chain passes over a sheave e, arranged approximately on a level with the track. The end of each drum is provided with a gear e^2, in which meshes a pinion e^3, to which pinion motion is imparted by hand or by suitable power. The railway-tracks are preferably for a short distance from the table inclined slightly downward toward the table, so that cars may be moved by gravity from the tracks to the table.

It will be clear that any desired number of sections may be employed and that the sections may be of any desired length adapting them for the reception of one or more cars at a time.

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

1. A transfer-table comprising a series of sections pivotally connected and carrying tracks, supporting-wheels on the sections, and two sets of ways for the reception of the supporting-wheels, the members of the upper set being curved downward at their ends, and the members of the lower set being curved upward at their ends, the ends of the members of the respective sets being arranged to overlap, substantially as described.

2. A transfer-table comprising a series of sections pivotally connected and carrying tracks, supporting-wheels having V-shaped grooves in the treads and mounted on the sections, and two sets of ways having angular faces for the reception of the supporting-wheels, the members of the upper set being curved downward at their ends, and the members of the lower set being curved upward at their ends, substantially as described.

3. An endless transfer-table composed of sections, the sections being sustained on axles provided with supporting-wheels, and motors mounted on the axles and designed to give motion to the axles, substantially as described.

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

JOSEPH TURNER.

Witnesses:
C. P. TILLING,
J. A. WHITEHEAD.