

(No Model.)

3 Sheets—Sheet 1.

N. W. ROBINSON.
TRANSFER TABLE FOR CARS.

No. 263,225.

Patented Aug. 22, 1882.

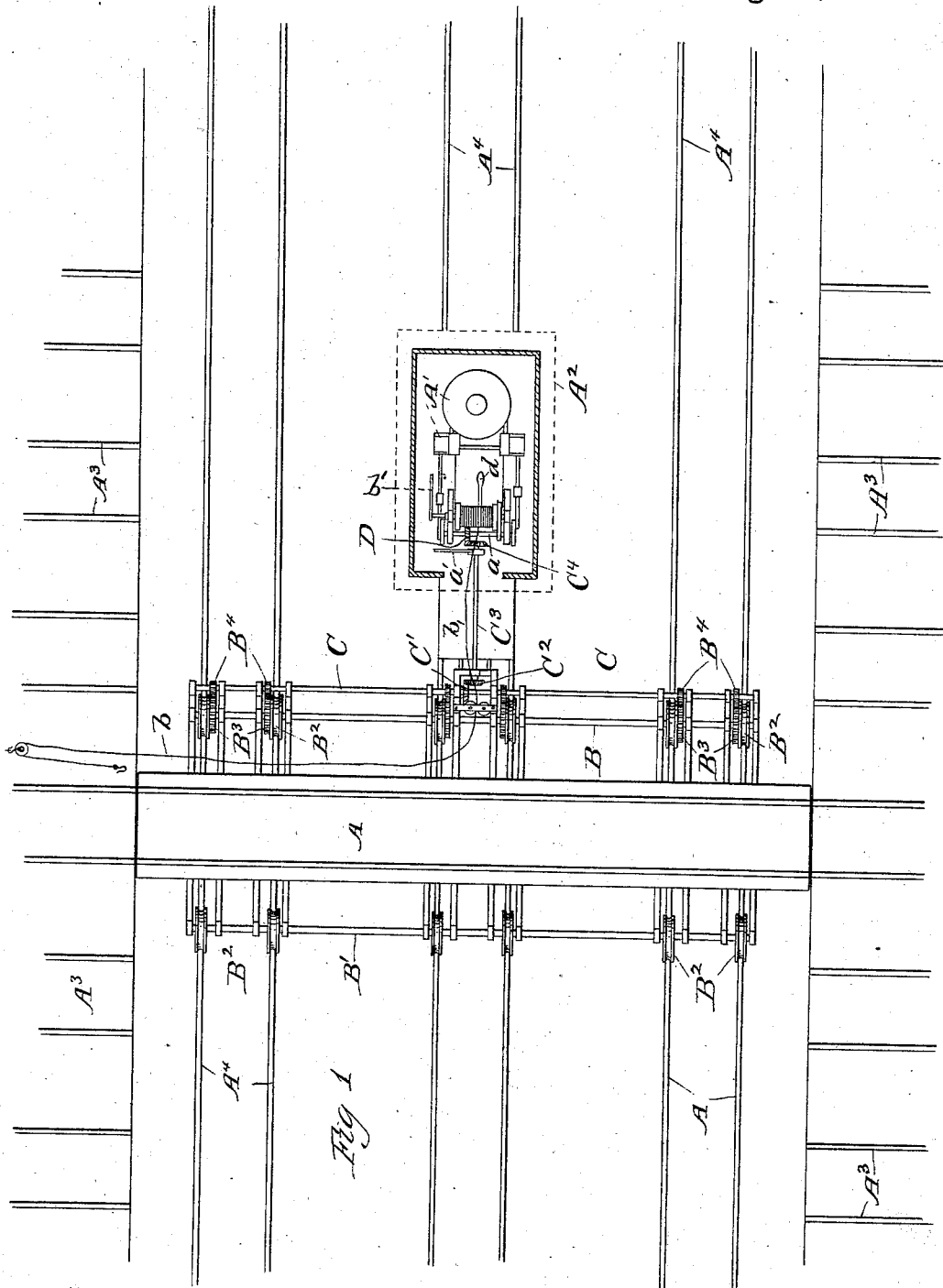


Fig 1

WITNESSES—

F. B. Townsend
L. M. Freeman.

INVENTOR—

N. W. Robinson
By L. B. Coupland & Co
attys.

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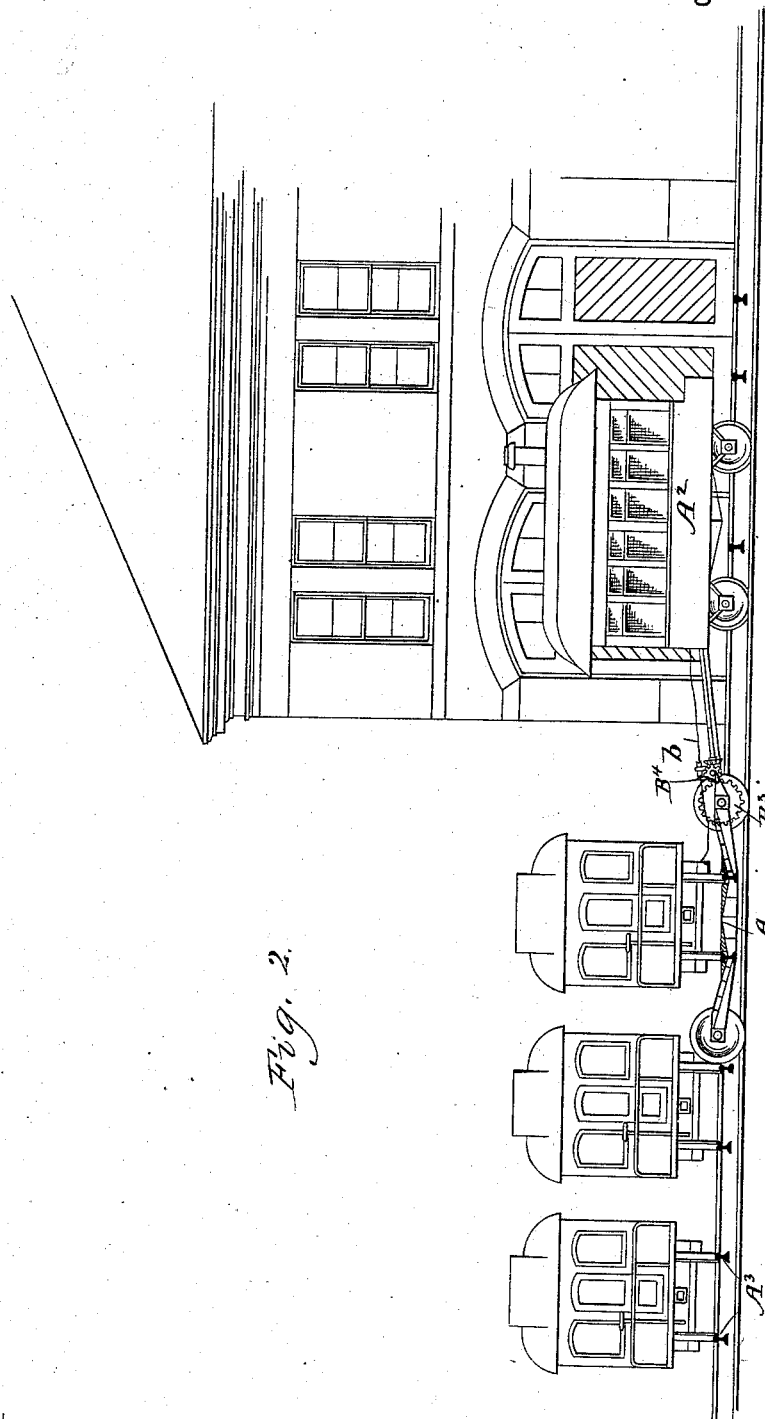


Fig. 2.

WITNESSES—
F. B. Townsend
L. M. Freeman.

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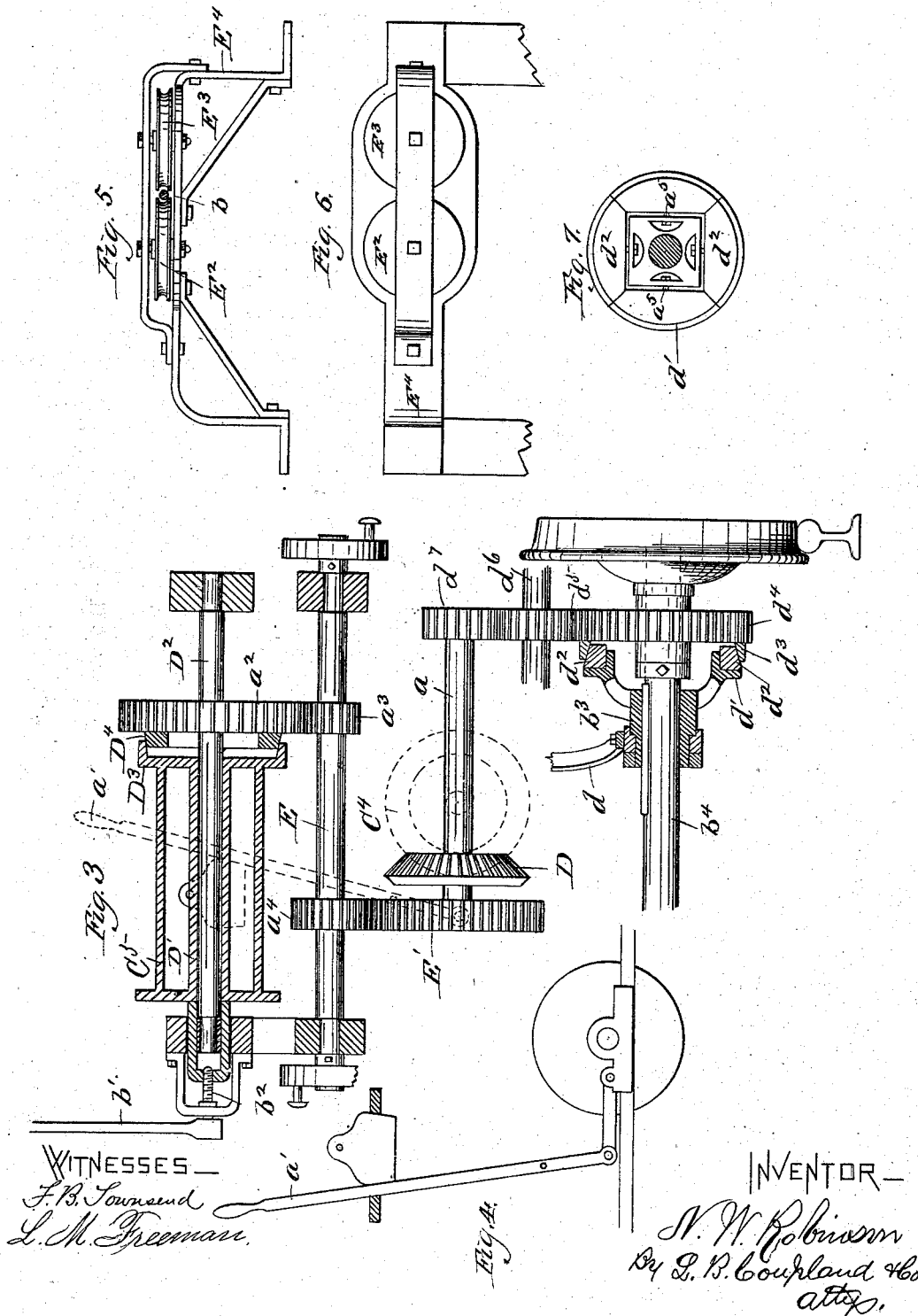
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UNITED STATES PATENT OFFICE.

NORMAN W. ROBINSON, OF PULLMAN, ILLINOIS, ASSIGNOR TO HURD W. ROBINSON, OF SAME PLACE.

TRANSFER-TABLE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 263,225, dated August 22, 1882.

Application filed March 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, NORMAN W. ROBINSON, of Pullman, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Transfer-Tables for Cars, of which the following description will enable others to understand and operate the same, reference being had to the accompanying drawings, and to letters of reference marked there-
10 on, forming a part of this specification.

This invention relates to an improved system for operating transfer-tables used in connection with car-shops or depot-buildings where cars are sheltered when not required for im-
15 mediate service; and it consists in the employment, in combination with a transfer-table, of a dummy-engine for operating the said transfer-table, as hereinafter set forth and claimed, whereby the cars are quickly and conveniently
20 moved into or out of the building or shifted to the different tracks, as may be required.

Figure 1 is a top view embodying my improvement, showing the transfer-table and operating mechanism with a series of tracks leading off at both sides, the upper part of the car-
25 structure, inclosing the dummy-engine, being cut away in a horizontal plane. Fig. 2 is an elevation embodying my improvement, showing the relation of the cars, dummy-engine, and depot-buildings. Fig. 3 is a detached detail, partially in section, of the series of gear-wheels and intermediate shafts relative to the main
30 or engine shaft and the axle of the dummy-engine car. Fig. 4 shows the position of the gear-shifting lever when the mechanism connecting the transfer-table and dummy-engine is out of engagement, and the dotted lines in Fig. 3 show the position of the same when in gear.
35 Fig. 5 is a side elevation of the drag-rope, guide-sheaves, and supporting-bracket. Fig. 6 is a top view of the same, and Fig. 7 is a detached view of the friction clutch-pulley feathered onto the car-truck axle of the dummy-en-
40 gine.

Referring to the drawings, A represents the platform of the transfer-table proper; A', the dummy-engine; A², the car inclosing the same; A³, a series of tracks communicating with the shops or depot-buildings, and A⁴ the transfer-
50 table and dummy-engine tracks running at right angles to the tracks A.

As shown in the drawings, three sets of tracks are used for the transfer-table, the dummy-engine being placed in the middle track. The mechanism of the dummy-engine is so ar-
55 ranged that the power may be applied to run cars onto and off the transfer-table, while the car carrying the engine remains stationary; or, by the shifting of a lever, as will be explained further along, connection is made with the axle
60 of the dummy-car and the position of the engine and transfer-table changed as circumstances may require.

On the shafts or axles B B' of the transfer-table proper are placed the series of car-wheels
65 B², upon which the transfer-table moves.

Upon the shaft B are placed a number of gear-wheels, B³, which are adapted to engage with the series of pinions B⁴ on the shaft C. This shaft C is also provided with the bevel-
70 gear wheels C', adapted to engage with the bevel-gear wheel C² on the shaft C³, having on the opposite end the bevel-gear wheel C⁴, engaging with the corresponding wheel, D, located on the intermediate shaft, a. By this
75 arrangement power and motion are transmitted from the engine to the transfer-table, and the mechanism is thrown in and out of gear by means of the lever a'. The drum C⁵ consists of the outer shell and the inner sleeve, D', in-
80 closing the shaft D², as shown in Fig. 3 of the drawings, and is made to rotate therewith by means of the clutch D³, forming a part of the drum C⁵, engaging with the annular shoulder D⁴ on the gear-wheel a², which in turn en-
85 gages with the pinion a³, located on the crank or engine shaft E, carrying the pinion a⁴, which engages with the gear-wheel E'. The drum C⁵ receives the coil of the drag-rope b, and is thrown in and out of gear by means of the lever
90 b', connected with the projecting end of the sleeve D through the medium of the screw b², as shown in Fig. 3 of the drawings.

The lever d (shown in Fig. 1 and broken away in Fig. 3) serves to throw the engine
95 mechanism in and out of gear with the front axle of the dummy-car, this lever being attached to the sleeve b³, feathered onto the axle-shaft b⁴.

Secured to the sleeve b³ is the clutch-wheel
100 d', carrying the wooden friction-quadrants d², as more clearly shown in Fig. 7 of the draw-

ings, the bearing-surfaces of which are cut away at an oblique angle, and when thrown in gear engage with the inner corresponding surface of the annular projecting rim d^3 , formed integral with the gear-wheel d^4 , which engages with the pinion d^5 on the intermediate shaft, d^6 , which in turn engages with the pinion d^7 on the shaft a , by which motion is transmitted from the main or crank shaft of the engine to the dummy-car wheels. The quadrants d^2 as they become worn are set out by the screw-bolts a^5 . (Shown in Fig. 7 of the drawings.)

One end of the drag-rope b is attached to the drum C^5 , from thence passing through between the sheaves E^2 E^3 , journaled in the bracket B^4 , then through the snatch-block F , and having on the outer end the hook F' , adapted to engage with the body to be moved, the snatch-block, through which the drag-rope is rove, being secured at any convenient point and shifted as may be necessary. By means of the double sheaves the drag-rope may be run off to either side of the dummy-engine to move the cars.

Fig. 2 shows the relation of the dummy-engine, cars, and buildings.

This shifting or moving cars from one department or building to another in the course of construction or onto the switch-tracks connecting with the main lines is now usually done by man-power, being both slow and expensive, while by my arrangement the cars can be handled with the greatest possible facility and the item of expense reduced to the lowest minimum.

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

1. In a transfer system, as described, the combination, with the transfer-table A and the shaft B, of the series of gear-wheels B^3 , the

pinions B^4 , the shaft C, the bevel-gear C' C^2 , the shaft C^3 , the bevel-gear C^4 D, and the shaft a , substantially as and for the purpose set forth.

2. A transfer-table, substantially as described, adapted to traverse two or more sets of tracks, and provided with a series of bearing-wheels, B^2 , mounted in line along one side of said table, and gear-wheels B^3 B^4 , severally connected with said bearing-wheels, combined with counter-shaft C, bearing pinions B^4 B^4 , severally in engagement with said gear-wheels B^3 , and dummy-engine mounted upon an independent carriage, but by means of shaft C^3 in connection with said counter-shaft C, whereby power is uniformly transmitted to each of said bearing-wheels independently.

3. A traveling transfer-table permanently connected to and operated by a dummy-engine mounted upon a separate carriage, combined with a drag-rope and winding-drum operated by said engine independently of the traction-wheels, and suitable guide-pulleys, whereby the cars may be drawn onto or off the transfer-table, as set forth.

4. The combination, with a dummy-engine and traveling transfer-table actuated thereby, of the drum C^5 , provided with the clutch-box D^3 , the drag-rope b , the sheaves E^2 E^3 , and the bracket E^4 , substantially as herein shown and described.

5. The combination, with the engine car-axle b^4 , of the sleeve b^3 , the clutch-wheel d' , the adjustable quadrant-blocks d^2 , and the gear-wheel d^4 , provided with the annular rim d^3 , substantially as and for the purpose described.

NORMAN W. ROBINSON.

Witnesses:

L. M. FREEMAN,
H. H. HOLTON.