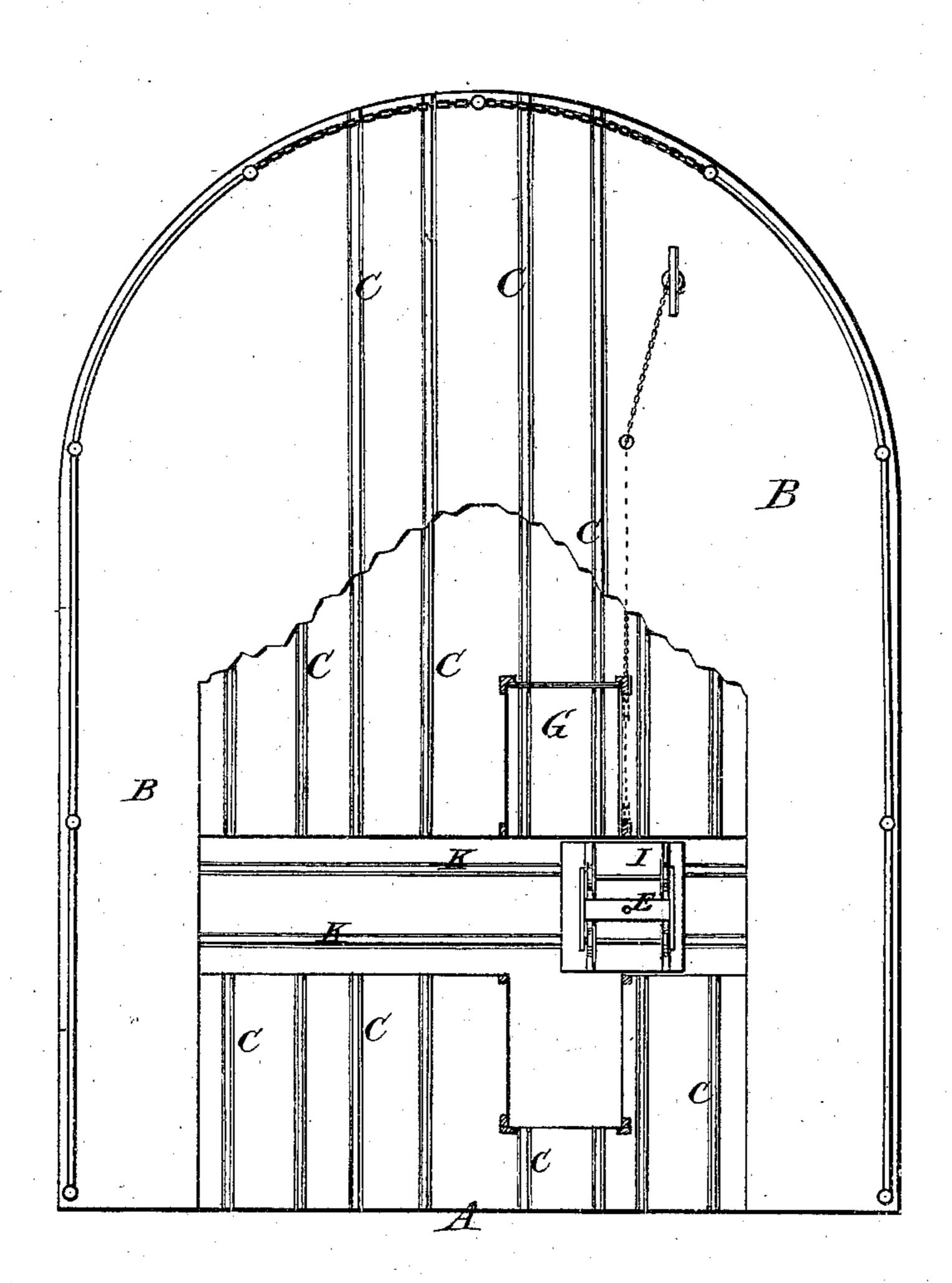
## W. P. HALLIDAY.

## Railway Ferry Track-Platforms.

No. 135,545.

Patented Feb. 4, 1873.

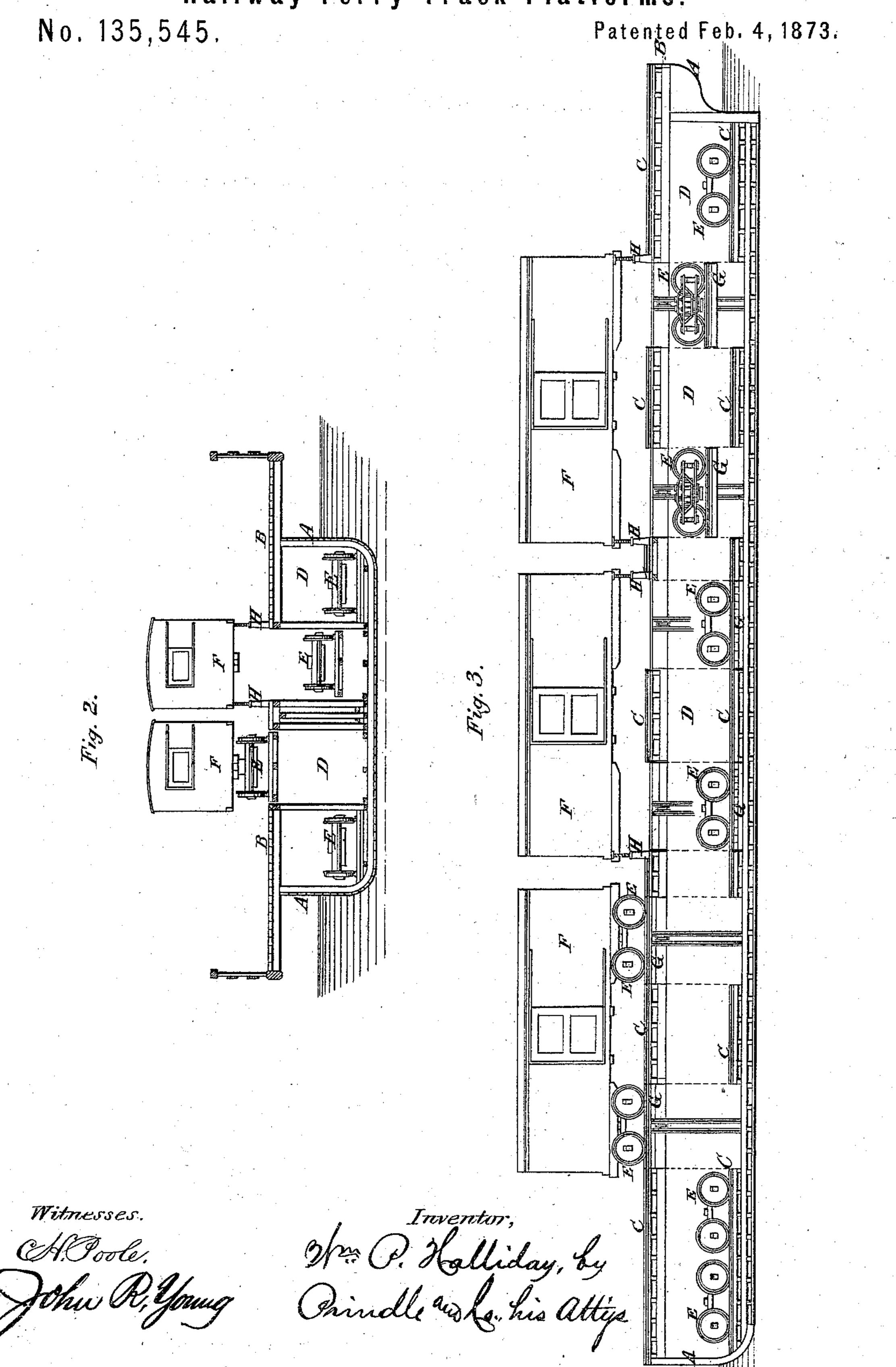
Fig. 1.



Witnesses. John R. Young Mrs P. Halliday, by Orindle Works, his Atty

W. P. HALLIDAY.

Railway Ferry Track-Platforms.



## UNITED STATES PATENT OFFICE.

WILLIAM P. HALLIDAY, OF CAIRO, ILLINOIS.

## IMPROVEMENT IN RAILWAY-FERRY TRACK-PLATFORMS.

Specification forming part of Letters Patent No. 135,545, dated February 4, 1873.

To all whom it may concern:

Be it known that I, WILLIAM P. HALLIDAY, of Cairo, in the county of Alexander and in the State of Illinois, have invented certain new and useful Improvements in Transfer Boats or Barges for Railway Cars; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of the upper side of a portion of a boat constructed in accordance with my improvements, a part of the deck being broken away, so as to show the arrangement of the interior; and Figs. 2 and 3 are, respectively, a cross and a longitudinal section

of the same.

Letters of like name and kind refer to like

parts in each of the figures.

At many points where breaks in lines of rail-way communications are occasioned by streams of water it becomes necessary that bridges should be provided, or that the cars should be transferred across the rivers, in order that passengers and freight may pass onward to their destination without change of cars. The first method named is open to serious objection in many places, on account of the large outlay of money required and the obstructions occasioned to navigation, neither of which objections apply to the latter method.

Again, it sometimes occurs that the connecting lines of rail have different widths of gage, and that, therefore, the trucks of the cars should be removed, and others corresponding to the track to be run over substituted in their places. To perform such operation it is requisite that the cars should be at rest with relation to the track, and that conveniences not readily attainable upon an ordinary track or

bridge should be provided.

To remedy these objections is the design of my invention, which consists, principally, in a transfer boat or barge provided with droptables, for lowering into and raising from the hold the trucks of cars, substantially as and for the purpose hereinafter specified. It consists, further, in combining with the drop-tables above named suitable transfer-tables, for use in changing the lateral position of the cartrucks within the vessel's hold, substantially as and for the purpose hereinafter shown. It

consists, finally, in a transfer boat or barge provided upon its deck and within its hold with railroad tracks having different widths of gage, and having suitable drop and transfer tables for moving the car-trucks, substantially as and for the purpose hereinafter set forth.

In the annexed drawing, A represents a barge having any desired form, upon the deck B of which is provided one or more lines of double rails, C, that are adjusted to the width of gage of the connecting roads. Within the hold D are provided other lines of rails C, which are arranged in parallel lines to and directly beneath those upon the deck, and have corresponding gages. At intervals corresponding to the positions usually occupied by the trucks E of the cars F are provided droptables G, which, by means of suitable mechanism, may be lowered into the hold, where the rails upon said tables coincide with those of the lower tracks, and enable trucks lowered therewith to be transferred to the spaces between said tables.

As thus constructed, the operation of changing the car-trucks is as follows: After the cars are in position upon the boat their bodies are blocked up by jack-screws H, or otherwise suspended, so as to relieve the trucks from their weight. The trucks, resting each upon a drop-table, are now lowered into the hold of the vessel, run from said tables onto the lower tracks, and their places supplied by other trucks having the requisite width of gage; after which said drop-tables are raised to position, said trucks connected to or with their cars, when the latter are ready for moving from the boat and continuing their journey upon the connecting road.

In order to accommodate the large number of trucks which might be required in order to provide for the contingencies of traffic, additional tracks are provided upon each side of the boat within the hold, and transfer-tables I placed between each pair of drop-tables, said transfer-tables having a lateral motion upon suitable tracks K, which extend from side to

By this arrangement of parts it will be seen that the change of trucks can be made with such ease and facility as to render sufficient the time necessary for moving a barge and its

contents across a river, so that no appreciable delay will be occasioned by the change of gage, and one of the heretofore serious annoyances of railroad travel is avoided.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. A transfer boat or barge for railway cars provided with drop-tables, by means of which car-trucks may be lowered into or raised from the hold, substantially as and for the purpose specified.

2. A transfer boat or barge for railway cars provided with vertically-moving drop-tables and horizontally and laterally moving trans-

fer-tables, substantially as and for the purpose shown.

3. A transfer boat or barge provided upon its deck and within its hold with railroad tracks having different widths of gage, and having suitable drop and transfer tables for moving car-trucks, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 4th day of

November, 1872.

WILLIAM P. HALLIDAY.

Witnesses:

W. H. Morris, Bon M. Hagey.