

F. CASS.

Ferry-Boats for Trains of Cars.

No. 143,808.

Patented Oct. 21, 1873.

Fig. 1.

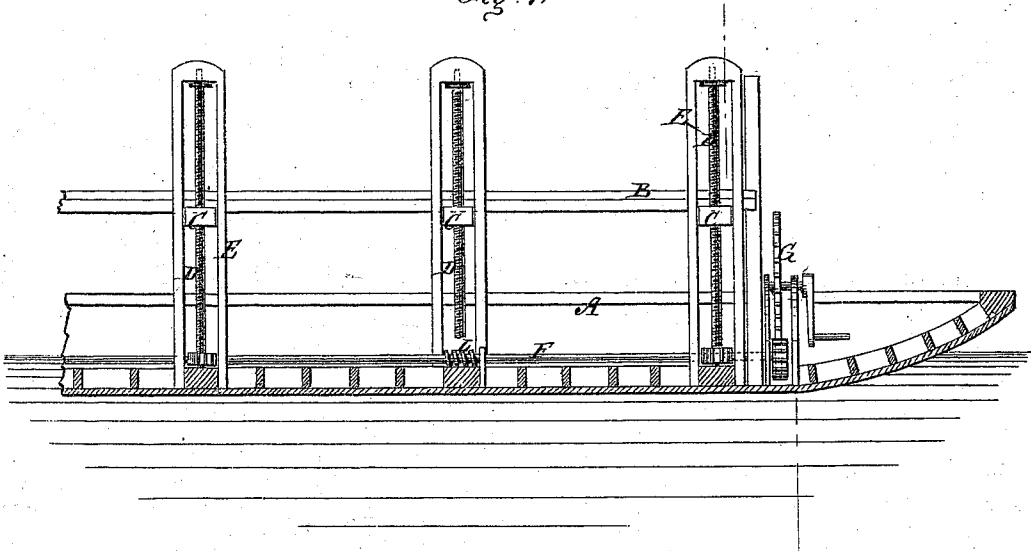


Fig. 2.

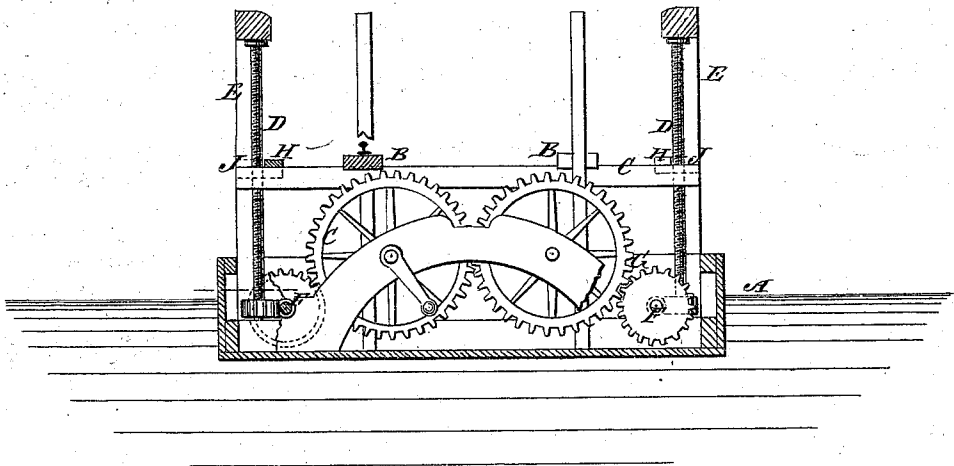
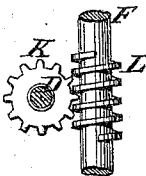


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRANK CASS, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN FERRY-BOATS FOR TRAINS OF CARS.

Specification forming part of Letters Patent No. **143,808**, dated October 21, 1873; application filed August 9, 1873.

To all whom it may concern:

Be it known that I, FRANK CASS, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Railway-Car Ferry-Boat, of which the following is a specification:

My invention consists of a truck on a railway-car ferry-boat, mounted on a series of screws on each side and arranged with vertical guide-posts, and the screws of each side are geared to a line-shaft running the whole length of the truck, and at one end the two line-shafts are geared together and connected with a power mechanism, so that the railway-track can at any time be adjusted up or down to coincide with the shore tracks, so that the rising and falling of the tide will not interfere with the running of the cars on and off the boat.

Figure 1 is a longitudinal sectional elevation of my improved ferry-boat taken on the line *xx* of Fig. 2. Fig. 2 is a transverse section taken on the line *yy* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the hull of the scow or other boat; B, the railway-track; C, the framing on which the truck is mounted; D, the screws on which the framing is mounted; E, the vertical guide-posts; F, the line-shafts gearing with

the screws; and G, the train of gearing connecting the two line-shafts together. The framing C consists mainly of cross-pieces, the ends of which enter the posts which are slotted, and long tie-beams H connecting the cross-pieces and running along the boat from end to end, and notched and fitted to the posts, as shown by the dotted lines at J, so as to slide up and down on them. The screws are arranged in the slots of the posts, and in bearings at the ends, and screw through the cross-beams C at the ends, and at the lower ends said screws gear by worm-wheels K with worms L on the shafts F. The power for working the screws by the train G, will be arranged so as to time them in either direction to raise and lower the track.

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

The combination, with a navigable float or the hull of a vessel, of a vertically adjustable deck or platform extending the entire length of the vessel, and carrying a railroad-track, substantially as and for the purposes set forth.
FRANK CASS.

Witnesses:

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