

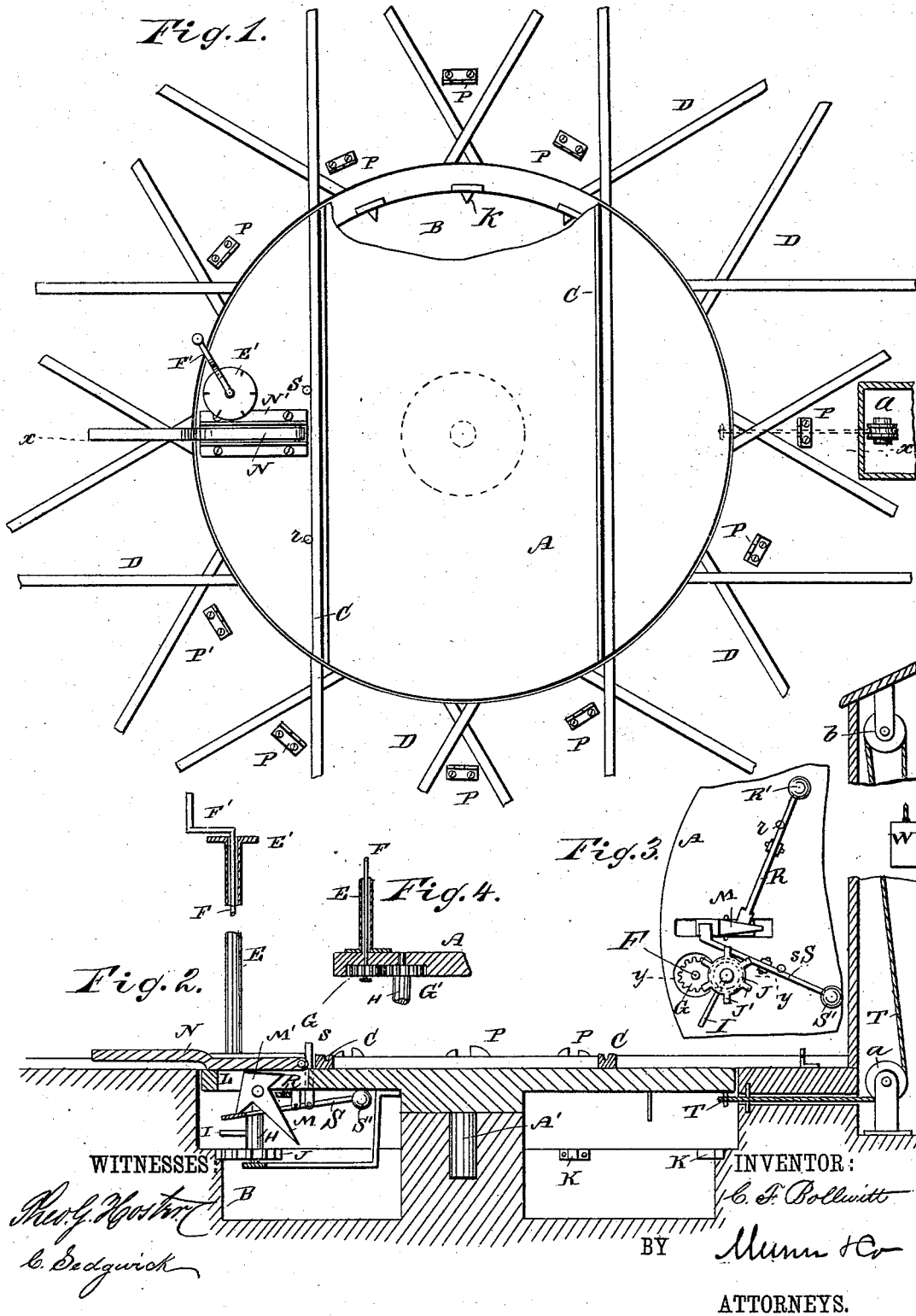
(No Model.)

C. F. BOLLWITT.

TURN TABLE FOR HORSE CARS.

No. 305,278.

Patented Sept. 16, 1884.



UNITED STATES PATENT OFFICE.

CHARLES F. BOLLWITT, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-
FOURTH TO LOUIS R. SASSINOT, OF SAME PLACE.

TURN-TABLE FOR HORSE-CARS.

SPECIFICATION forming part of Letters Patent No. 305,278, dated September 16, 1884.

Application filed March 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. BOLLWITT, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Turn-Table for Horse-Cars, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved turn-table which is so constructed that the driver of the car running on the turn-table can adjust the turn-table in such a manner as to conduct his car to any desired exit-track, which turn-table is locked, unlocked, and thrown back automatically.

The invention consists in a turn-table for horse-cars provided with a pivoted locking-bolt adapted to engage with catches on the platform surrounding the turn-table, under which locking-bolt a lever for raising the same is pivoted, which lever can be shifted by devices which are operated automatically by the revolving of the turn-table, and can be adjusted so as to lock the turn-table in any desired position.

The invention also consists in various parts and details and combinations of the same, as will be fully described and set forth hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved turn-table for horse-cars, parts being broken out and others shown in section. Fig. 2 is a longitudinal sectional elevation of the same on the line *x x*, Fig. 1. Fig. 3 is a plan view of the under side of the revolving platform in part, showing the mechanism for raising the bolt. Fig. 4 is a sectional view on the line *y y*, Fig. 3.

The turn-table A is provided with a central pivot, A', which rests on a suitable projection in the middle of a well, B, in which the turn-table can revolve. On the turn-table platform two parallel rails, C, are secured, and different tracks D lead to the turn-table from different directions. On the turn-table platform A an upright tube, E, is arranged, which is provided at its upper end with a circular flange, E', which is divided into six

parts by radial lines, or into as many parts as there are tracks crossing the table. An upright shaft, F, provided at its upper end with a crank-handle, F', for turning it, is journaled in the tube E, and on its lower end, and within a recess in the under side of the platform A, a cog-wheel, G, is rigidly mounted, which engages with a like cog-wheel, G', mounted on the upper end of a shaft, H, journaled in the platform A, which shaft H is provided on its lower end with a wheel at J, having six radial teeth, J', and the shaft H is also provided with an arm, I, projecting from it. The lower end of the shaft H is suitably journaled in a bracket arm or like device secured on the bottom of the revolving platform.

On the sides of the well B twice as many teeth K are arranged as there are teeth J' on the wheel J—in this case six. In a radial slot, L, in the turn-table a lever, M, is pivoted at its upper end, which lever is provided at its upper end with a triangular head, M'. A bent bolt, N, is pivoted between angle-plates N' on the upper surface of the turn-table in such a manner that the bolt can cover the slot L; but the bolt projects beyond the edge of the turn-table, and is adapted to pass into notches in angular locking-plates P, secured in the platform around the turn-table, which notches or catches P are of the usual construction. If the outer end or part of the bolt N is passed into one of the catches P, the turn-table is locked in position.

Two levers, R and S, are pivoted to the under side of the turn-table in such a manner that their outer ends will be under the corners or points of the triangular head M', and the opposite ends of the said levers are provided with weights R' and S'. From each lever R and S a pin, *r* and *s*, respectively projects through an aperture in the turn-table, the upper ends of the said pins *r s* adjoining the rails, so that they must be depressed by the wheels of a car running on the rails. Both of the pins *r s* of the levers R S are held below the upper edge of the rails C by the weights R' S' when the locking-bolt N rests on the point of the head M' of the lever M, and one below and the other above the rail when the said bolt rests on one of the sides of the head of said lever. A chain or rope, T, connected

with the platform, passes over a pulley, *a*, at the bottom and a pulley, *b*, at the top of an upright structure or tower, and from the other end of the said rope or chain a weight, *W*, is suspended.

The operation is as follows: The driver runs the car on the turn-table, and then turns the crank-handle *F'* on the upper end of the shaft *F* to that section of the flange *E'* corresponding in number to the track at which he wants to run off the turn-table. The lever *M*, when the table is not in use, hangs vertically, and the locking-bolt *N* rests on the point of the triangular head, the locking-bolt thus being kept raised and disengaged from the catches *P*. When the driver has run the car entirely on the platform, he guides the horse to the right or left, thus causing the horse to revolve the turn-table, car and all. Every time that one of the teeth *K* in the side of the well strikes a tooth, *J'*, of the wheel *J*, the wheel *J* will be revolved the distance of one tooth, and when the rails *C* on the turn-table arrive at those rails by which the car is to run from the table the shaft *H* will be turned to such an extent that its arm *I* will strike the lever *M* and swing the same inward and upward, thereby bringing one of the sides of the triangular head *M'* parallel with the under side of the locking-bolt *N*, thus permitting the same to drop into the notch of the corresponding catch, *P*, thereby locking the turn-table in place. By adjusting the crank-handle *F'* to stand over a subdivision of the ring *E'* corresponding to the number of the track at which the car runs off of the turn-table, the wheel *J* is so adjusted that before the turn-table arrives at the desired track the wheel *J* will be struck by the requisite number of teeth *K* to bring the arm *I* into such a position that it can swing the lever *M* down, and thus lower the locking-bolt *N* and lock the turn-table in place. The turn-table has now been shifted and locked and the car can run off; but it is also necessary that the turn-table should be swung back again to its normal position. This is accomplished by running the car off of the turn-table. When the car runs off, the last wheel strikes either one of the pins *r* or *s*, owing to the direction the car approaches the table, thereby swinging that end of the corresponding lever under the end of the triangular head *M'* upward, and thus causing it to swing that end of the triangular head that has been lowered upward, whereby the point of the head *M'* will raise the locking-bolt *N* out of the catch *P*, and thereby release the turn-table. Then as soon as the turn-table is released the weight *W* descends and pulls the turn-table back into its former position, ready for the next car, and so on.

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

1. The combination, with a turn-table for horse-cars, of means for automatically locking the turn-table after it has turned a certain distance, and of a device for adjusting the said

means, substantially as herein shown and described.

2. The combination, with a turn-table for horse-cars, of a bolt pivoted on the turn-table and adapted to engage with notches on the platform around the turn-table, and of means for automatically dropping the bolt after the turn-table has revolved the desired distance, substantially as herein shown and described.

3. The combination, with a turn-table for horse-cars, of a bolt pivoted on the turn-table and adapted to engage with notches on the platform around the turn-table, of means for automatically dropping the bolt after the turn-table has revolved the desired distance, and of means for regulating the dropping of the bolt at the desired point, substantially as herein shown and described.

4. The combination, with a turn-table for horse-cars, of a locking-bolt pivoted on the same and adapted to engage with catches on the platform surrounding the turn-table, a lever pivoted to the turn-table and adapted to raise the pivoted locking-bolt, teeth secured on the side of the well in which the turn-table revolves, and means for operating the lever from the said teeth in the well, which lever raises the locking-bolt, substantially as herein shown and described.

5. The combination, with a turn-table for horse-cars, of a bolt pivoted on the same and adapted to engage with catches on the platform surrounding the turn-table, a lever pivoted in the turn-table, and provided with a triangular head which is held below the locking-bolt, a shaft provided with an arm for striking the said lever and with a ratchet-wheel, and of teeth held on the side of the well and adapted to engage with the ratchet-wheel, substantially as herein shown and described.

6. The combination, with a turn-table for horse-cars, of the pivoted locking-bolt *N*, the lever *M*, pivoted in the slot *L* under the bolt *N*, and provided with the triangular head *M'*, a shaft, *H*, provided with an arm, *I*, adapted to swing the lever *M*, the ratchet-wheel *J* on the shaft *H*, the teeth *K* on the side of the well, and of means for adjusting the shaft *H* and the ratchet-wheel according to the place at which the locking-bolt *N* is to be released, substantially as herein shown and described.

7. The combination, with a turn-table, of a locking-bolt, a lever for raising the same, the shaft *H*, provided with an arm, *I*, adapted to act on the said lever for releasing the locking-bolt, the tubular standard *E*, the shaft *F*, the cog-wheels *G* and *G'* for turning the shaft *H*, the cog-wheel *J* on the shaft *H*, and the teeth *K* in the sides of the well, substantially as herein shown and described.

8. The combination, with a turn-table for horse-cars, of a pivoted bolt for locking the same in place, a lever provided with a triangular head held below the said bolt, two pivoted levers adapted to act on the opposite ends of the triangular head, and of pins provided on the said levers, projecting above the surface

of the turn-table and adapted to be acted upon by the wheels of the car, substantially as herein shown and described.

9. The combination, with a turn-table for horse-cars, of a pivoted bolt for locking the same in place, catches secured on the platform surrounding the turn-table, for holding the pivoted bolt, a lever provided with a triangular head and pivoted below the locking-bolt, a shaft, H, provided with an arm, I, for throwing the lever with the triangular head, the

tube E, having a circular flange, E', on its upper end, which circular flange is subdivided into equal parts, the shaft F in the tube E, the cog-wheels G and G', and of teeth held on the sides of the well and adapted to engage with the cog-wheel on the lower end of the shaft H, substantially as herein shown and described. 15

CHARLES F. BOLLWITT.

Witnesses:

M. HERNANDEZ,
CHARLES BRANDT.