(No Model.)

J. W. WARHURST.

TURN TABLE FOR STREET RAILWAYS.

No. 389,620. Patented Sept. 18, 1888.

Fig. 1.

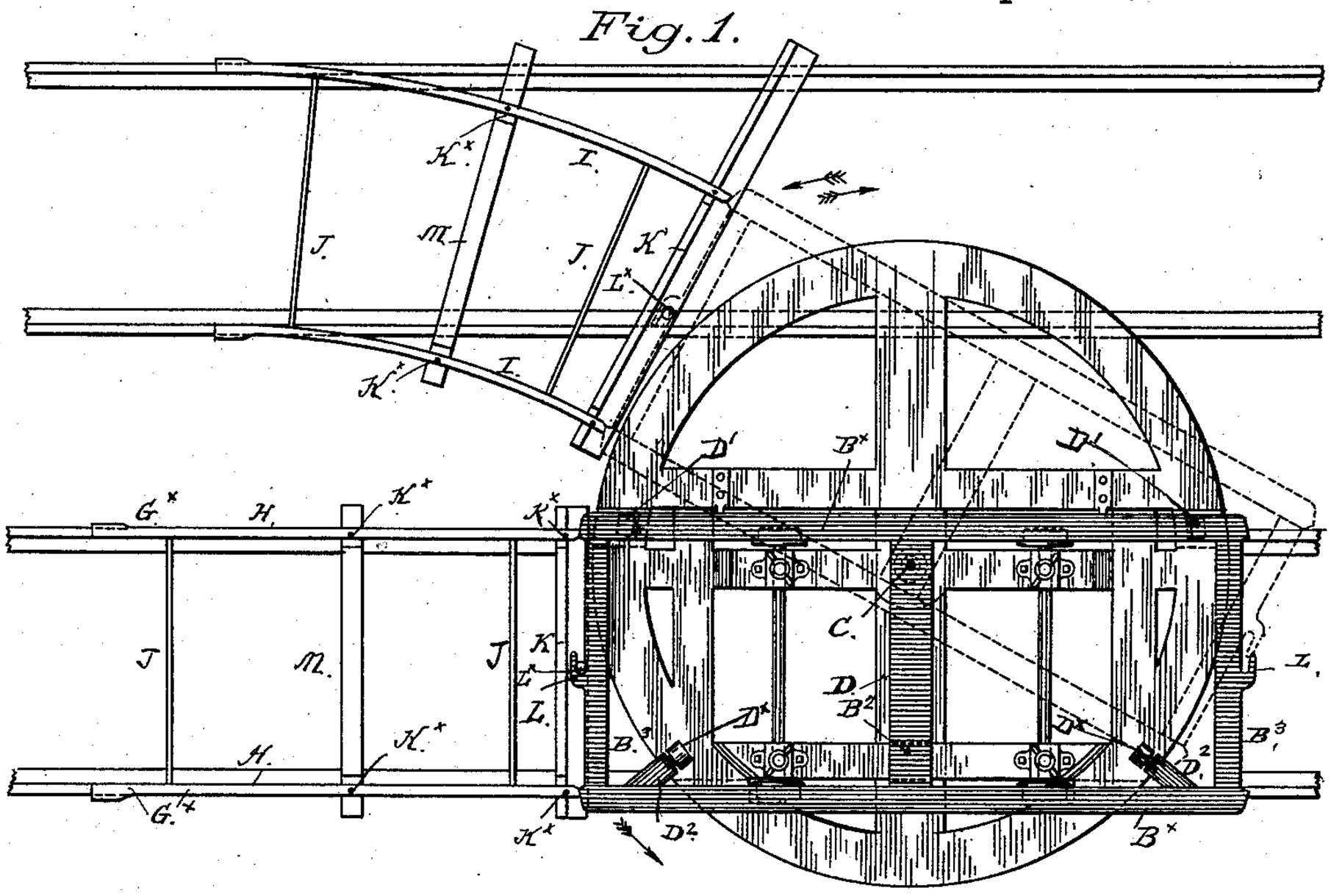


Fig. 3.

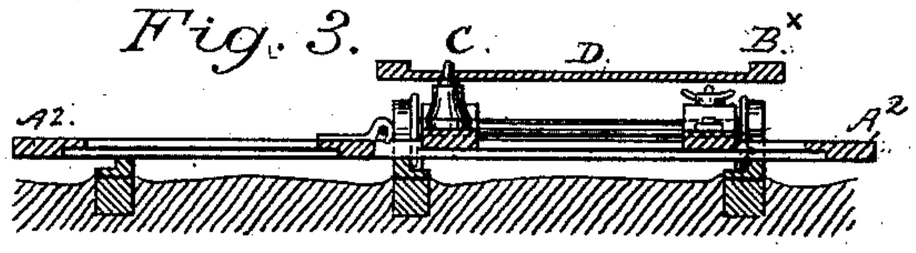


Fig. 7.

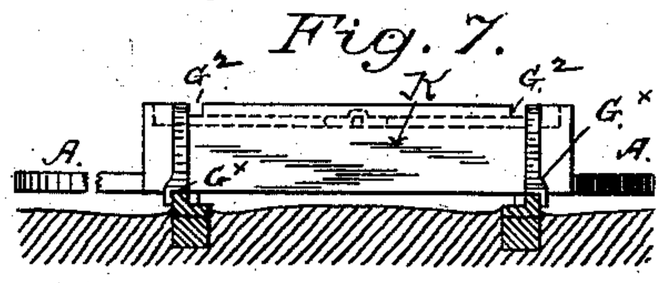


Fig. 4.

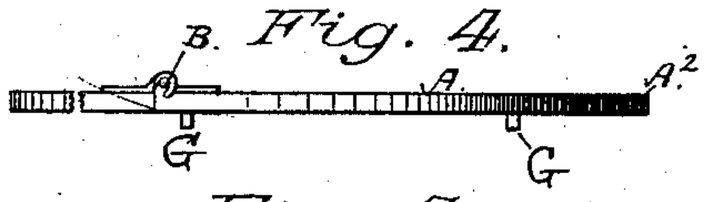


Fig. 5.

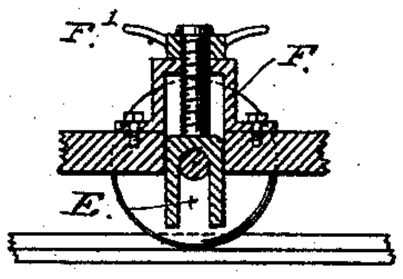
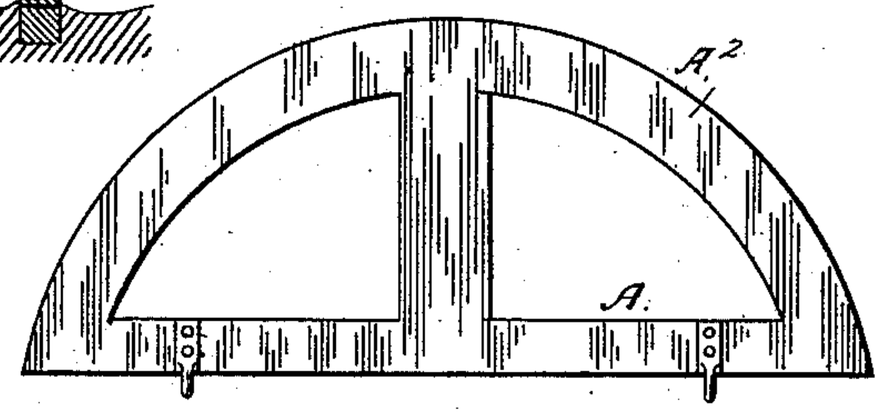


Fig. 2.



A×

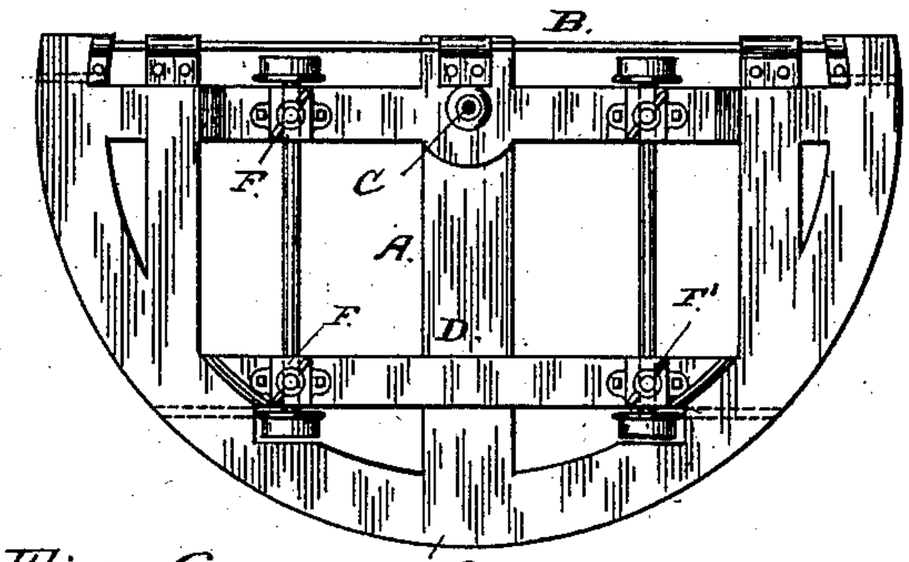


Fig. 6.

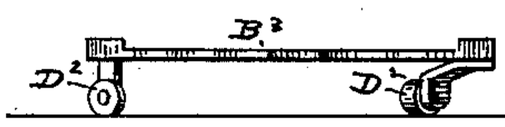
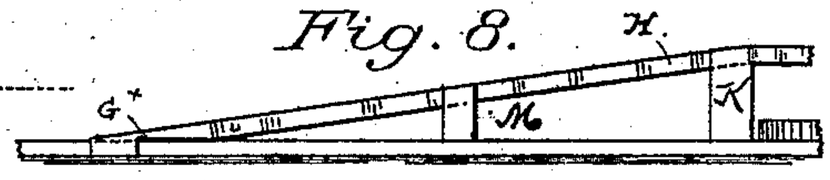


Fig. 8.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN W. WARHURST, OF SAN FRANCISCO, CALIFORNIA.

TURN-TABLE FOR STREET-RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 389,620, dated September 18, 1888.

Application filed March 5, 1888. Serial No. 266,291. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. WARHURST, residing at San Francisco, in the county of San Francisco and State of California, have invented an Improved Portable Turn-Table and Switch for Street-Railway Cars, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which—

Figure 1 is a plan of my portable turn table for street-railways. Fig. 2 is a plan showing the two portions of turn-table separated. Fig. 3 is a section taken transversely to the track. Fig. 4 is an edge view of turn-table. In Fig. 5 is shown the adjustable bearing or boxes for trucks. Fig. 6 is an end view of turn-plate. Fig. 7 is an end elevation of the inclined rails, of which Fig. 8 is a side elevation.

My invention relates especially to a portable turn-table for street-railway cars, and has for its object the production of a device for switching cars from one track to the other of cable and horse railways during the blockade of such streets caused by fires or public gatherings, &c.

A is the frame or bed-plate, constructed of some light material, suitably braced and capable of easy handling and divided transversely, as at $A^{\times}$, and hooked or hinged to its counterpart through the mediums of the strengthening-rod B, so that this portion of the frame can be unhooked or folded over upon the part A for transportation from place to place.

The switching-frame $B^{\times}$ is composed of two parallel metal plates suitably supported by transverse bars B^2 B^3 B^3. The ends of this frame project a little beyond the frame A, and said frame A is pivoted eccentrically to the bar B^2 near the inner switching rail or plate by means of the pivot C, connected to the center raised cross-beam, D, of the frame A.

The switching-frame is supported and operated upon the four wheels or rollers D' D' $D^{\times}$ $D^{\times}$, two of which, D' D', are placed immediately under the side bar, B^*, nearest pivot C, and the other two are mounted upon short arms or axles D^2 D^2, which extend in from the corners of the frame D, so that the rollers will always ride upon the circular plate A^2 of the frame A.

The trucks of frame A are preferably made low, the wheels being of small diameter, and when the turn-table is trundled to the point of blockade the wheels are removed from contact with the surface of the ground or the tracks under the turn-table, so as to let it down upon the track. For this purpose the axles, which are preferably of such length as to cause the wheels to match the tracks of the railway and have the wheels rigidly attached to them, are suspended in open forked bearings or boxes E in the cross-beams of the plates of frame 7. These bearings are provided with screw-threaded arms passing through strap-plates F at the top of the frame. The arms are operated by hand-nuts F′, which carry the boxes up and down in the strap-plate flush with the lower face of the cross-brace, to which they are connected, and the frame A is thereby lowered upon the track, where it is held by the engagement of the downwardly-projecting lugs G G on the under side of the frame, as shown in Fig. 4, with the rails of the railway-track. In this position free movement of the switching frame or tracks can be had, and it can be rotated easily upon the wheels at any point along the circular track of the frame A to receive the blockaded car from one track and transfer it to the adjoining or parallel track for a return-trip. In order to place the car in suitable position upon the switching frame or track and transfer it from thence to the return or parallel track, I employ two portable switching-tracks, H I, suitably held together by the transverse rods J J and adjustably connected to the head blocks or ties K by pins $K^{\times}$, the upper ends of the inclined rails resting in notches G^2 G^2 in the top of the head-blocks K. These head-blocks are placed across the track and serve to raise the end of the switching-tracks to a level with the switching-frame, in which position the portable tracks are held in line with the track-plates of the frame by a hook, L, on the edge of the outer cross-bars of the frame engaging with a pin, $L^{\times}$, on the head-block.

Suitable supporting-ties, M, are placed midway under these switch-rails and extend from rail to rail of the track.

The switching-rails of the track I are curved to partially bridge the space between tracks and give the proper direction of the car from

its track to the turn-plate or switch-frame, and thereby lessen the diameter of the circular frame or bed-plate of the machine in construction.

The lower ends of the switch-rails are hammered or beveled to a thin edge and flanged, as at $G^{\times}$, so as to hug the outer faces of the railway-rails and prevent lateral movement when the cars are being transferred from rail to rail or track to track.

By this construction it will be seen that a light and portable turn-table for street-railways is had, and that blockaded cars can be easily transferred from one track to the other and sent back over the route again without delay, the passengers walking around the blockade to make the transfer.

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

1. The combination of a circular track or base-plate, suitably mounted on wheels or trucks and adapted to be lowered upon the rail-track, with a rotatable switching-frame provided with suitable rollers and car guiding and sustaining rails.

2. In a portable turn-table for street-railways, the combination, with the track-plate and rotating switching-frame mounted upon wheels or trucks and adapted to be lowered upon the track, of the adjustable straight and curved switching-rails mounted on head-blocks and provided with suitable projections or lugs at the lower ends thereof fitting against the sides of the rails to prevent lateral movement of the switching-rails, as specified.

3. The projections or short retaining-bars upon the lower face of the track plate or frame, adapted to engage the sides of the track, to prevent vibration or lateral movement when the machine is lowered upon the track or tracks, as set forth.

4. In a portable turn-table for street-railways, the combination of a track-plate and switching-frame suitably mounted thereon, of the adjustable trucks or wheels provided with forked or open boxes or bearings with screw-threaded stems operating in strap-plates connected to the frame of the track-plate, whereby the machine is raised and lowered, so that the trucks or wheels can be removed, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

JOHN W. WARHURST. [L. S.]

Witnesses:

C. W. M. SMITH,

CHAS. D. WHEAT.