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Patentea Aug. 17.1869.

Fig. 1.

e a f

Fig.

G = G = G

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by his attorney.

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## Anited States Patent Office.

## WILLIAM TUTTLE, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 93,928, dated August 17, 1869.

## IMPROVED TURNOUT FOR STREET-RAILWAYS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, WILLIAM TUTTLE, of Boston, of the county of Suffolk, and State of Massachusetts, have invented a new and useful Improvement in Street-Railways; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a top view of a track and turnout, provided with my improvement, the object of which is to do away with the usual switch or tongue, and to protect the wedge terminus of the main track rail at junction of the turnout, from being crushed or injured by the wheel-treads while passing over it.

Figure 2 is a side view of the wheel-lifter or double inclined plane, applied to the junction-piece D, hereinafter mentioned, and intended for the flange of the wheel to run on, so as to keep the tread out of contact with the nose of the junction-piece while running over it.

In the drawings— A A' and B B' denote the main track rails, C being

the outer rail of a turnout.

Instead of continuing the rail A parallel to the rail B B', I, at some twenty feet from the nose a of the junction-piece D of the turnout C, and main rail A', commence to increase the width between the rails B B' and A, and gradually increase such width to the breadth of the groove d, which is between the part D and the rail C; that is, from E to F, a distance of about twenty feet, I arrange the rail part E F a little out of

parallelism with the rail B B', causing the rail E F, on approaching the point a, to diverge from the rail B B'.

The arrangement of the part E F, in manner as described, enables the car to readily take the turnout, as, in passing to the latter, the driver of the car has only to keep his wheel-flanges, which are next to the rails E F, borne against such guide-rail.

So, in passing along the main track without intention to take the turnout, the driver should keep the other flanges of the wheels borne up to the rail B B'.

There is applied to the part D, and against its inner edge, a double inclined plane or wheel-lifter, G, composed of two reversed inclined planes, ef, arranged in manner, and with respect to the nose a of the piece D, as represented. In passing over the junction-piece D, the wheel-flange will run up the plane e, and next down the plane f, and in doing so, will keep the tread of the wheel entirely clear of the nose or point a, and thus prevent such from being crushed or broken down by the wheel.

I claim as my invention—
The combination and arrangement of the wheeltread lifter G, made as described, with the turnout
and main rail junction-piece D, as explained.

WM. TUTTLE.

Witnesses:
R. H. Eddy,
Samuel N. Piper.