No. 746,529. PATENTED DEC. 8, 1903.

P. J. LASSEN.

NOISELESS CROSSING.

APPLICATION FILED JAN. 14, 1903.

NO MODEL.

Fig. 1.

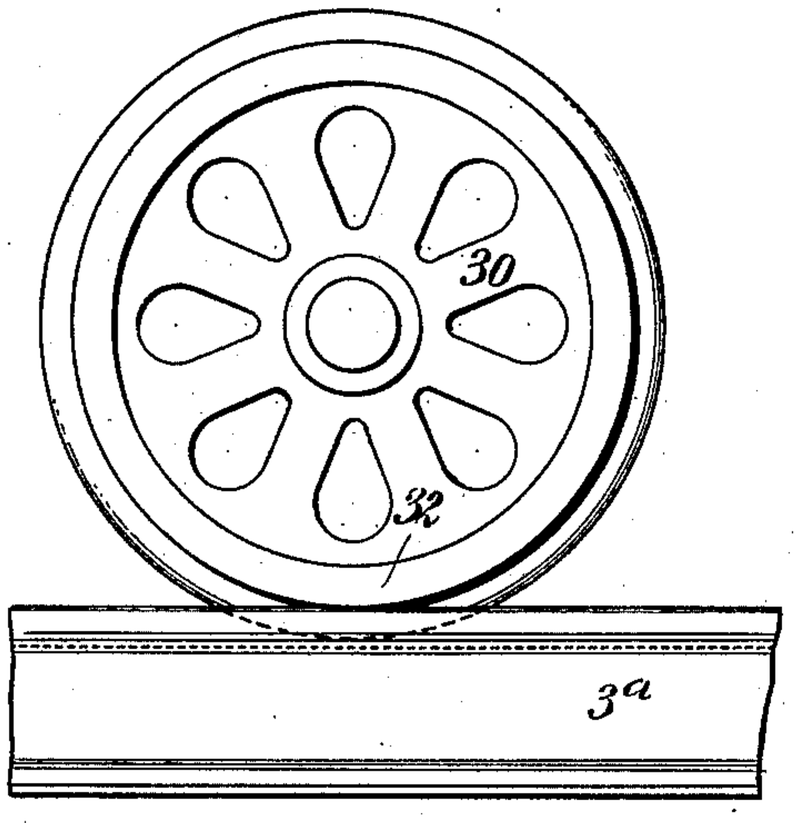


Fig. 2.

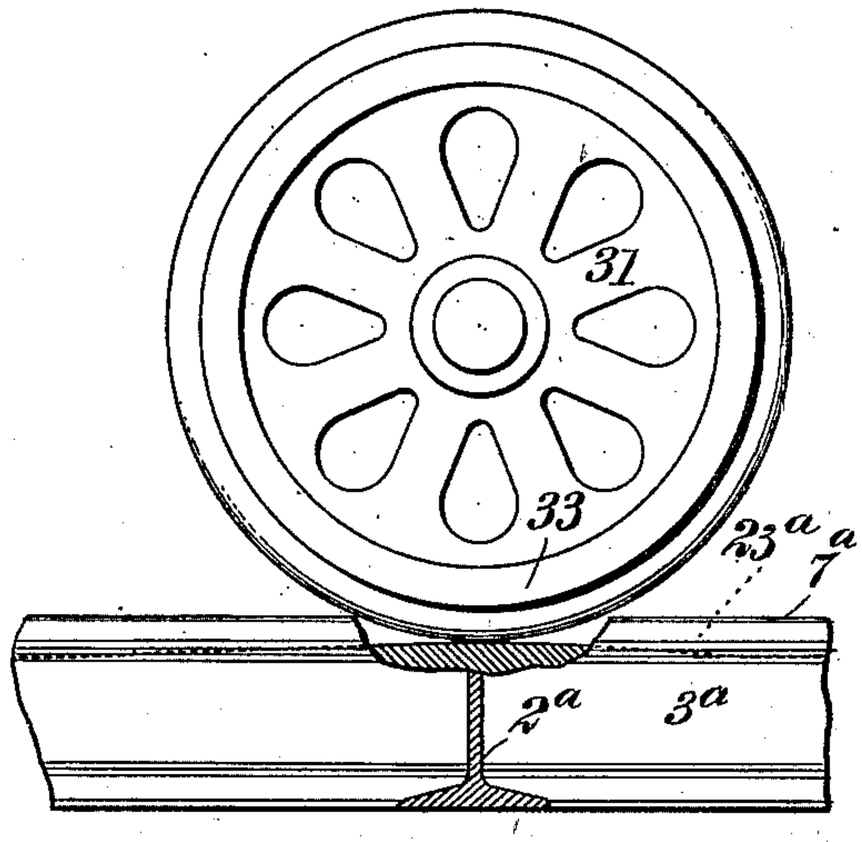
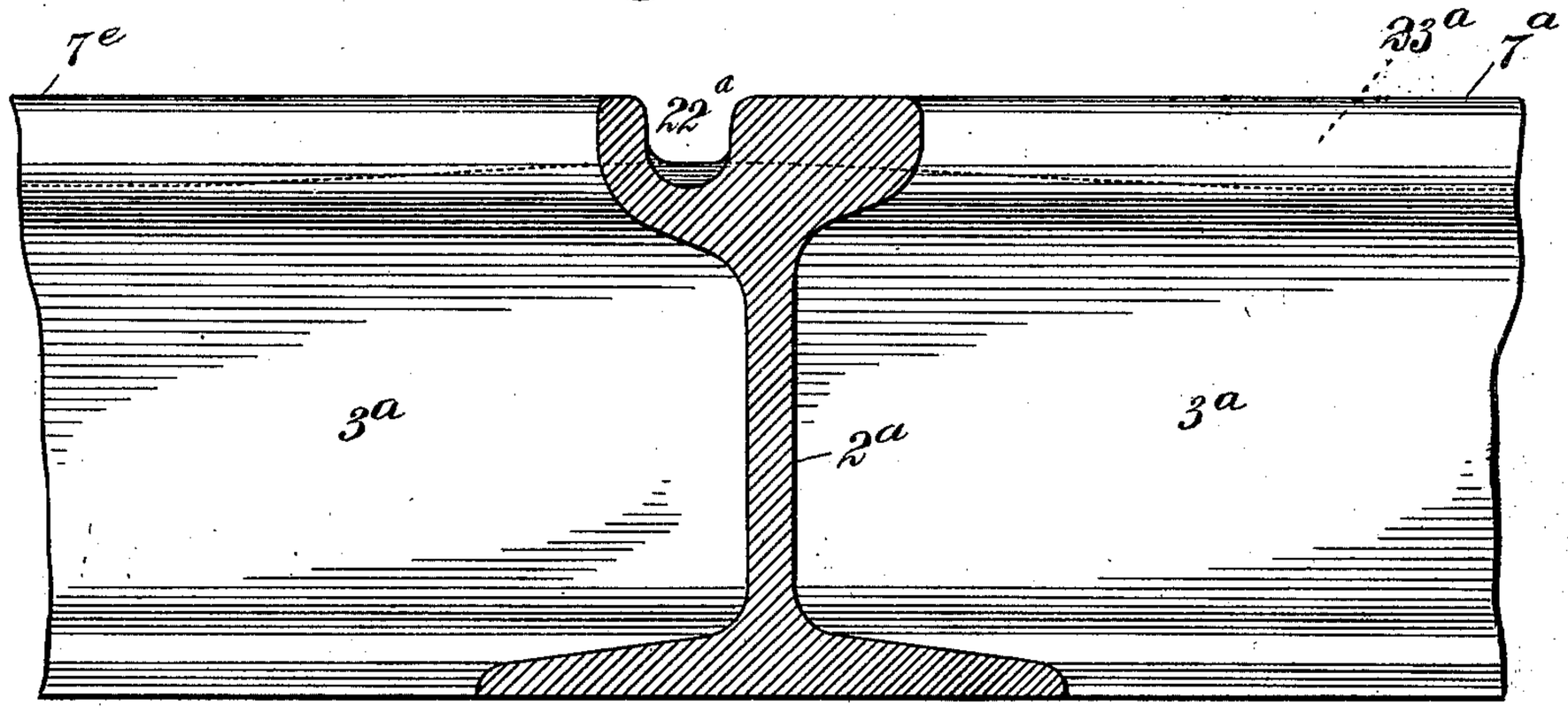


Fig. 3.



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No. 746,529. Patented December 8, 1903.

UNITED STATES PATENT OFFICE.

PETER JOHN LASSEN, OF NEW YORK, N. Y.

NOISELESS CROSSING.

SPECIFICATION forming part of Letters Patent No. 746,529, dated December 8, 1903.

Application filed January 14, 1903. Serial No. 139,045. (No model.)

To all whom it may concern.

Be it known that I, PETER JOHN LASSEN, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Noiseless Crossing, of which the following is a full, clear, and exact description.

My invention relates to railway-crossings, and more particularly to the production of such a crossing as will allow cars to pass the same without noise or shock.

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

Figure 1 is a side elevation showing a rail with a wheel resting thereon. Fig. 2 is a side elevation, partly in section, showing the crossing at a rail-junction; and Fig. 3 is an enlarged view of the crossing at the immediate point of intersection of two rails crossing each other.

As shown in the figures, a rail extending north and south is shown at 2^a, and a rail extending east and west is shown at 3^a. The tread portions 7^a of each of these rails is level or straight; but the flange-grooves 22^a 23^a are inclined slightly, being somewhat higher at the immediate point of the intersection of the rails, as indicated in Fig. 3.

In the form shown in the figures the tread portion of the rail 7^a is level, and the bottom of the groove 23^a is raised slightly at the intermediate intersection of the rail extending in the other direction. By this means the car is not lowered at any point of its run, but is raised slightly — say one-sixteenth of an inch—at the moment when it reaches an intersecting rail. Its ascent and descent are so gradual as not to be noticeable, and the car passes over without a bump or a jolt.

The car-wheels 30 31, provided with the treads 32 33, normally rest upon the rails in the usual manner. Upon approaching a point where the rails intersect, however, the groove 23^a becomes shallower, as indicated in Figs. 2 and 3, so that the flange of the wheel rests upon the bottom of the groove, and thereby slightly elevates the wheel. This enables the car to be raised gradually upward over the rail 2^a and then gradually lowered until the treads 32 33 can rest upon the rail-surface 7^a. By this means the crossing is rendered practically noiseless.

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

In a railway-crossing, the combination of a plurality of rails intersecting each other, each rail being provided with a tread-surface and with a groove parallel with said tread-surface, said groove having a bottom integral with said rail and raised at points where said rails intersect.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

P. JOHN LASSEN.

Witnesses:

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