

No. 851,514.

PATENTED APR. 23, 1907.

W. R. HABERLIN.
TOY RAILWAY CROSSOVER.

APPLICATION FILED FEB. 5, 1907.

Fig. 1.

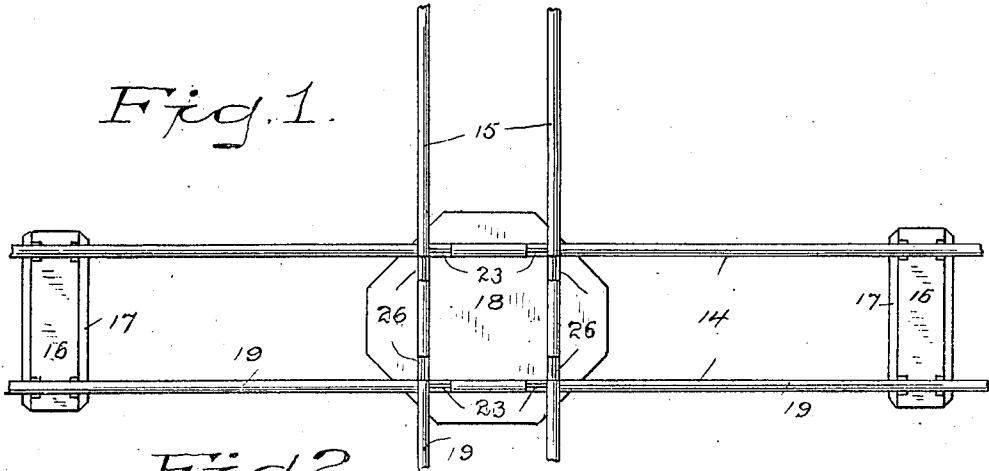


Fig. 2.

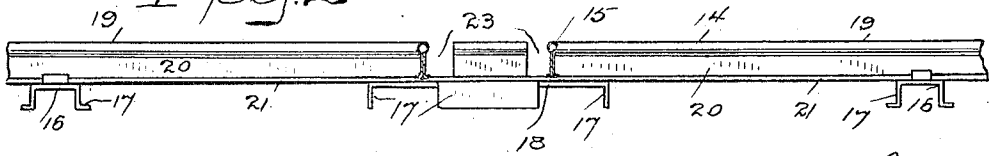


Fig. 3.

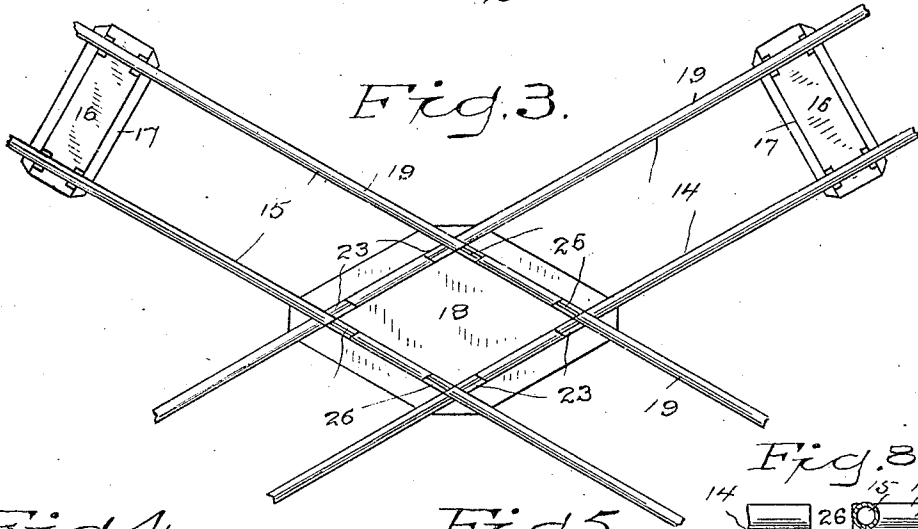


Fig. 4.

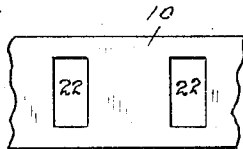


Fig. 5.

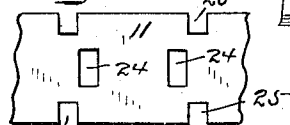
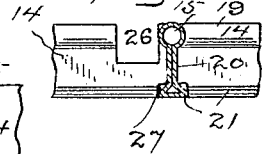


Fig. 8.



WITNESSES

Fig. 6.

H. A. Lamb.
S. W. Atherton

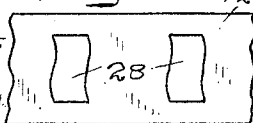
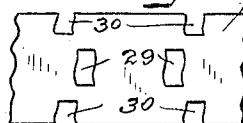


Fig. 7.



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TOY-RAILWAY CROSSOVER.

No. 851,514.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM R. HABERLIN, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Toy-Railway Crossover, of which the following is a specification.

This invention has for its object to provide a cross over for toy railways having sheet metal rails, in which the rails shall be continuous, and which shall avoid the use of specially formed rails and special parts at the crossings, the rails for crossings being formed the same as ordinary rails and the grooves in the rails to receive intersecting rails and wheel flanges being provided for by punching out metal from the strips of sheet metal from which crossing rails are formed, thereby effecting an important saving in the cost of construction, as the crossing rails are continuous and all extra parts are dispensed with, there being a saving in material, in avoiding the production of additional parts and in the cost of assembling.

With these and other objects in view I have devised the novel toy railway crossover of which the following description in connection with the accompanying drawings is a specification, reference characters being used to indicate the several parts:

Figure 1 is a plan view illustrating a right angle crossing made in accordance with my novel invention; Fig. 2 an elevation corresponding therewith; Fig. 3 a plan view illustrating an oblique angle crossing; Figs. 4 and 5 views of portions of blanks or strips from which the rails are formed punched for a right angle crossing; Figs. 6 and 7 similar views of blanks or strips punched for an oblique angle crossing; and Fig. 8 is an enlarged cross-section of a rail illustrating the manner in which it is formed by shaping the blanks or strips longitudinally, and showing an intersecting rail in elevation.

10 and 11 denote the rail blanks or strips for a right angle crossing, 12 and 13 rail blanks or strips for an oblique angle crossing, 14 the rails of one pair, 15 the rails of the other pair, 16 rail supports which are simply plates provided with downwardly turned flanges indicated by 17 and 18 crossing supports which are likewise plates of suitable shape and size to support the rails at a crossing and are provided with downwardly turned flanges 17.

The rails are formed by curving the blanks

at their mid-width to form the tread, indicated by 19, then bringing the sides of the blanks together to form the web of the rail, indicated by 20, and then curving the edges outward and recurving them inward to form the flanges, indicated by 21. The rails are secured to supports 16 and 18 by soldering, riveting or in any suitable manner. The rails 14 for a right angle crossing are formed from blanks 10. These blanks have openings 22 punched at their mid-width which when the rails are bent to shape form grooves 23. These grooves are wide enough and deep enough to receive the webs and treads of the intersecting rails 15, which engage the outer ends thereof, and to leave on the inner side of rails 15 ample space for the flanges of wheels. The rails 15 for a right angle crossing are formed from blanks 11. These blanks have openings 24 punched at their mid-width and openings 25 punched at their edges just out of alignment with openings 24 on the outer side thereof. When blanks 11 are bent to shape to form rails 15, openings 24 form grooves 26 which lie on the inner side of rails 14 and receive the flanges of wheels, and openings 25 in the edges of the blanks form recesses 27 in the flanges of the completed rails 15 which receive the flanges of the intersecting rails 14, the webs and treads of rails 14 lying in grooves 23, as already explained.

The rails for an oblique angle crossing are formed from blanks 12 and 13. The openings in these blanks are made in the same position as in blanks 10 and 11, but the sides of the openings are curved instead of straight, as in the other form, to adapt them when the blanks are folded to the shape of the completed rails to receive and match with the other pair of rails at an oblique angle instead of a right angle. The central openings in blanks 12 are indicated by 28, the central openings in blanks 13 by 29 and the side openings in blanks 13 by 30.

Having thus described my invention, I claim:

1. A toy railway crossing comprising two pairs of rails formed from sheet metal and crossing each other at an angle, the blanks to form the rails of one pair being provided with central openings which when the rails are shaped form grooves therein to receive the treads and webs of the second pair of rails and also the flanges of wheels, and the blanks to form the second pair of rails being pro-

vided with central openings, which when the rails are shaped form grooves to receive the flanges of wheels, and with openings in their edges which form grooves to receive the flanges of the first pair of rails.

2. A toy railway crossing comprising two pairs of continuous rails formed from strips of sheet metal, the strips from which said rails are formed having openings punched therein which when the rails are bent to shape form grooves to receive the treads of wheels.

3. A toy railway crossing comprising two pairs of continuous rails formed from sheet metal, the strips from which said rails are formed having openings punched therein which when the rails are shaped and assembled form grooves which permit the rails to interlock at the crossings and also to receive the flanges of wheels.

4. A toy railway crossing comprising two pairs of continuous rails formed from strips of sheet metal, the strips from which one pair of rails are formed having central openings punched therein which when the rails are shaped and assembled receive the flanges and webs of the second pair of rails and also the grooves of wheels, and the strips from which the second pair of rails are formed having openings punched in their centers and sides, the openings at the center forming grooves which are adapted, when the rails are assem-

bled, to receive the flanges of wheels and the openings at the sides forming grooves which receive the flanges of the second pair of rails.

5. A toy railway crossing comprising two pairs of continuous rails formed from blanks of sheet metal, said rails being provided at their points of intersection with grooves which permit the rails to interlock and are adapted to receive the flanges of wheels.

6. A toy railway crossing comprising two pairs of continuous rails formed from blanks of sheet metal, the rails of one pair being provided with grooves which receive the treads and webs of the second pair of rails and also the flanges of wheels and the rails of the second pair being provided with grooves which receive the flanges of wheels and with other grooves which receive the flanges of the first pair of rails.

7. A toy railway crossing rail formed from a blank of sheet metal having openings punched therein which when the blank is bent to shape form grooves in the completed rail which receive an intersecting rail and also the flanges of wheels.

In testimony whereof I affix my signature, in presence of two witnesses.

WILLIAM R. HABERLIN.

Witnesses:

A. M. WOOSTER,
S. W. ATHERTON.