

No. 763,341.

PATENTED JUNE 21, 1904.

H. CURRENCE & I. MACIVOR.  
STREET RAILWAY CROSSING.

APPLICATION FILED AUG. 20, 1903.

NO MODEL.

Fig. 1.

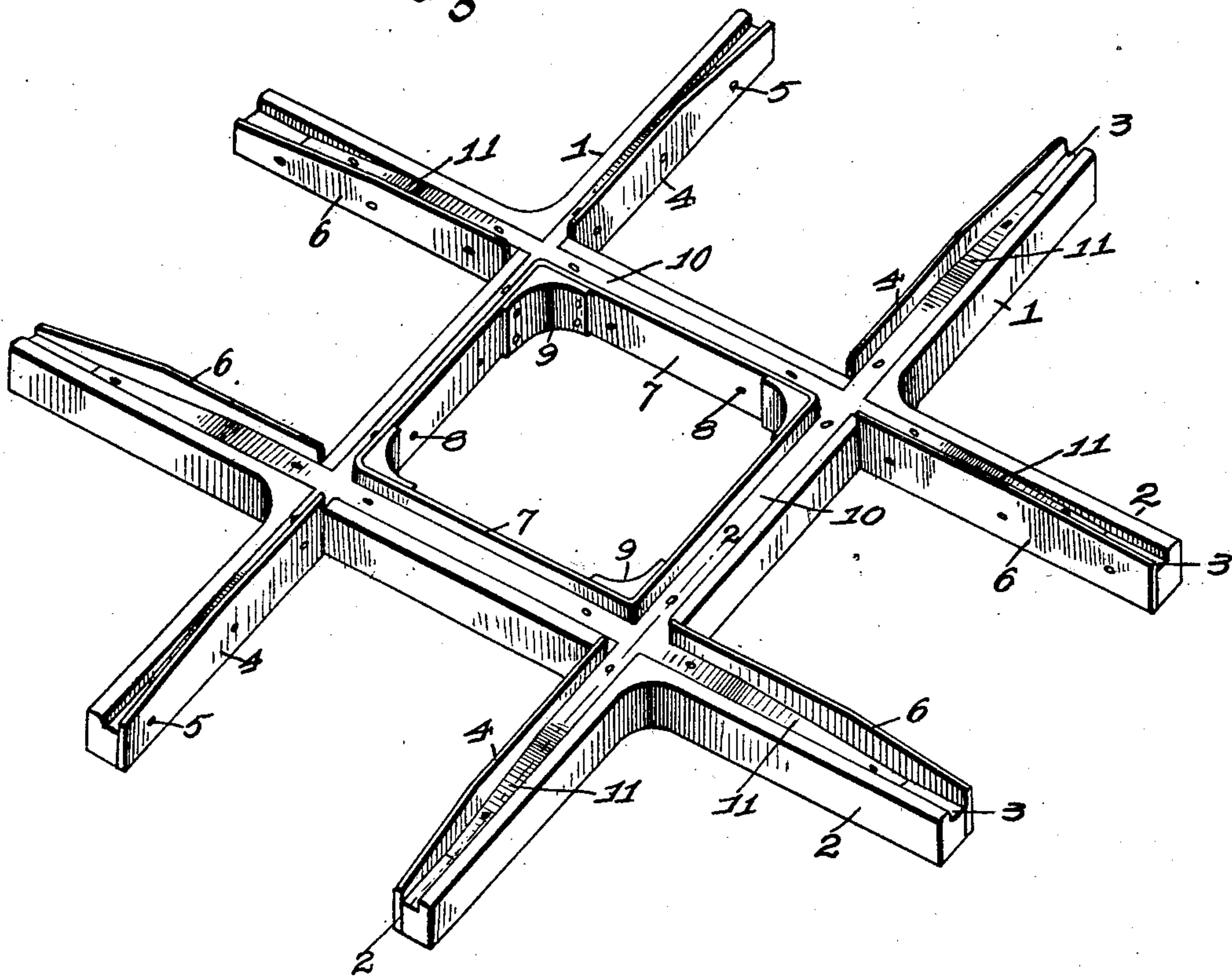
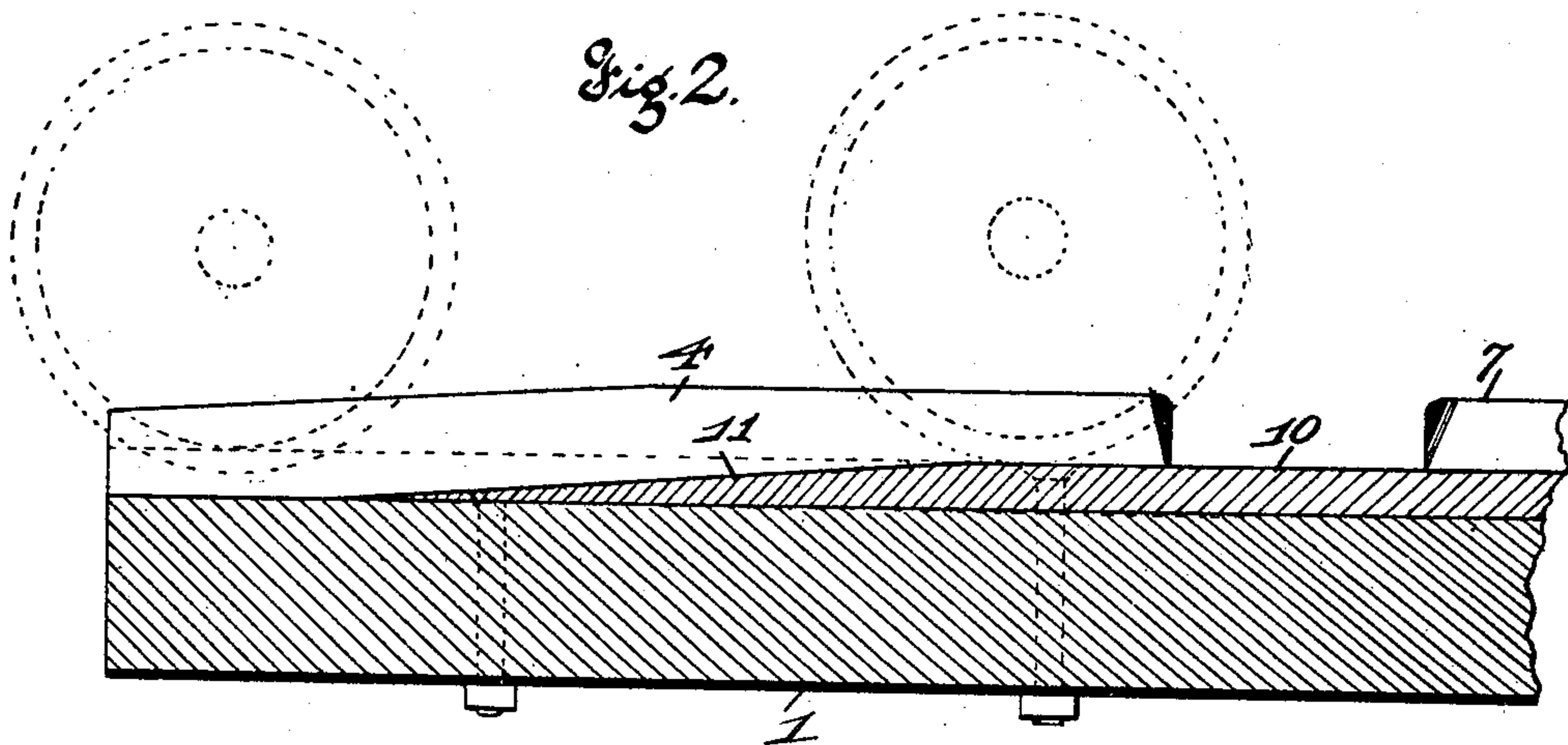


Fig. 2.



Witnesses  
Alfred A. Eick  
M. A. Duon

Inventors  
Harlan Currence  
Evan MacIvor  
by Higdon & Pongan & Hopkins Attys.



# UNITED STATES PATENT OFFICE.

HARLAN CURRENCE AND IVAN MACIVOR, OF ST. LOUIS, MISSOURI.

## STREET-RAILWAY CROSSING.

SPECIFICATION forming part of Letters Patent No. 763,341, dated June 21, 1904.

Application filed August 20, 1903. Serial No. 170,146. (No model.)

*To all whom it may concern:*

Be it known that we, HARLAN CURRENCE and IVAN MACIVOR, citizens of the United States, residing at St. Louis, State of Missouri, have  
5 invented certain new and useful Improvements in Street-Railway Crossings, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.  
10

Our invention relates to improvements in street-railway crossings; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described,  
15 and claimed.

In the drawings, Figure 1 is a perspective view of our improved railway-crossing. Fig. 2 is a sectional view taken on the line 2 2 of Fig. 1, showing the position of the wheels when  
20 crossing the railway-crossing.

The object of our invention is to construct a railway-crossing adapted for street-railway and steam-railway crossings, whereby the noise and vibration incident to the present  
25 crossings are obviated.

Referring to the drawings, 1 1 indicate the rails going in one direction of the crossing, and 2 2 the rails going at right angles to the rails 1 1. The rails 1 1 and the rails 2 2 are  
30 provided with the usual depression or groove 3 for the flanges of the wheels, which according to our invention is made a little deeper and wider. Secured to the rails 1 1 and on the inside of said rails are flange-pieces 4,  
35 which are shown secured to said rails by means of bolts 5. However, these flange-pieces may be formed integral of the rails 1 1 when the rails are manufactured. The rails 2 2 are likewise provided with flange-pieces  
40 6, located on the inside thereof, and are likewise secured to said rails.

Located in the crossing formed by the crossing of the rails 1 1 and rails 2 2 is a flange-piece 7, which is suitably secured to the rails  
45 by means of bolts 8 and corner-pieces 9.

Located in the grooves 3 of the rails 1 1

and rails 2 2 are tapered pieces of steel 10. Said pieces 10 are bolted to the rails 1 1 and rails 2 2 in the groove 3, or they may be swaged therein, or the said pieces may be  
50 formed integral with the rails when made. Said pieces 10 project beyond the crossing from two to four feet in actual practice. The central portion of said pieces for at least the width of the crossing is of uniform thickness,  
55 and the pieces are provided at their terminal portions with tapering portions 11.

In operation when the car passes the crossing the flanges of the wheels will strike the tapering portions 11 and pass over the same  
60 at a very gentle incline, and the car in going over the crossing will be supported by the flanges of the wheels, said flanges being supported by the said pieces 10. The inside flange 7 and the flange-pieces 4 and 6 prevent the  
65 wheels from running off the rails when passing the crossing.

The construction herein shown and described will obviate the noise and vibration now incident to the present street-railway  
70 crossings.

Having fully described our invention, what we claim is—

A railway-crossing, comprising rails 1 1 and 2 2, flanges 4 provided with rounded corners  
75 secured on the inside of the rails 1 1 by means of bolts 5, a continuous inside flange 7 provided with rounded corners secured on the inside of said crossing by means of bolts 8, corner-pieces 9 secured to said continuous  
80 inside flange 7, and tapered steel pieces 10 located in the grooves of said rails and secured therein by means of bolts, substantially as specified.

In testimony whereof we have signed our  
85 names to this specification in presence of two subscribing witnesses.

HARLAN CURRENCE.  
IVAN MACIVOR.

Witnesses:

EDWARD E. LONGAN,  
M. G. IRION.