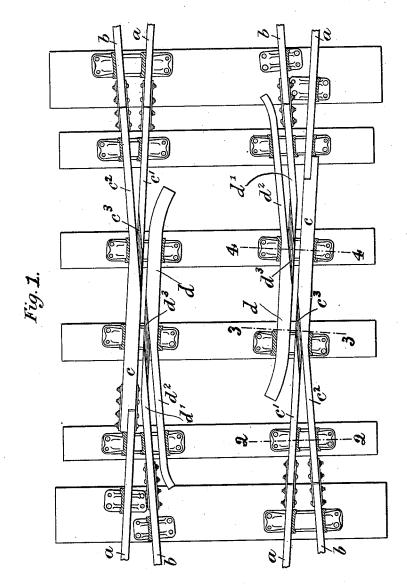
## R. PRICE-WILLIAMS. RAILWAY CROSSING.

(Application filed May 17, 1897.)

(No Model.)

2 Sheets-Sheet 1.



Witnesses Est Bauock B. It. Miller, Richard Price Williams
By his Altorneys,
Bulsion Danisson Wight

No. 648,880.

Patented May 1, 1900.

## R. PRICE-WILLIAMS. RAILWAY CROSSING.

(Application filed May 17, 1897.)

(No Model.)

2 Sheets-Sheet 2.



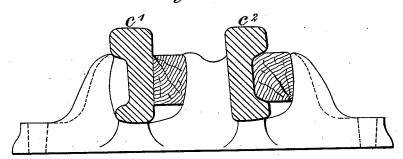
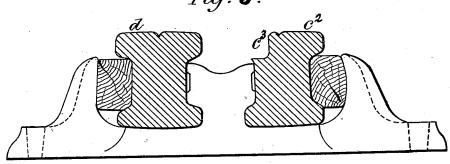
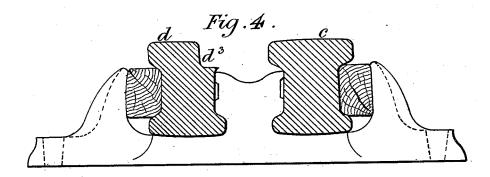


Fig. 3.





Witnesses. EA Gallocle Q. M. Miller

## United States Patent

RICHARD PRICE-WILLIAMS, OF LONDON, ENGLAND, ASSIGNOR OF ONE-HALF TO EDWARD PRITCHARD MARTIN, OF DOWLAIS, ENGLAND.

## RAILWAY-CROSSING.

SPECIFICATION forming part of Letters Patent No. 648,880, dated May 1, 1900.

Application filed May 17, 1897. Serial No. 636,933. (No model.)

To all whom it may concern:

Be it known that I, RICHARD PRICE-WIL-LIAMS, a subject of the Queen of Great Britain, residing at No. 32 Victoria street, Westmin-5 ster, London, England, have invented certain new and useful Improvements in Railway-Crossings, of which the following is a specifi-

In my British Patent No. 2,148 of 1869 is 10 shown a double rail split at one end and connected at this end with rails of the main and the crossing line and at the other end with a main-line rail, the double rail having a groove formed in it and being combined with cross-15 ing rails terminating in wings on their inner sides. I did not at that time, however, contemplate a guard-rail in which one end was split and formed with a guard branch and another branch connected with the main or 20 cross track and having a groove at the junction of the two branches. In my aforesaid patent is shown a guard-rail made solid or unsplit and having one end laid adjacent to a bent rail that has a groove formed in it for 25 the passage of the flange of the wheel. The outer end of the guard-rail terminates abruptly without being joined or connected with another rail, and the inner end lies inside the grooved rail and terminates abruptly in an 30 unreduced end.

According to my present invention I employ split rails like those in my before-mentioned British patent connected with the rails of the main and cross tracks, and I also em-35 ploy guard-rails, each of which is split at one end, forming two branches, one of which connects with a rail of the branch track, while the other is bent or curved and forms a guard therefor. This latter branch connects with 40 the solid part of the guard-rail, its inner surface being parallel with or forming a smooth continuation of the inner surface of the solid portion of the guard-rail. The rail is grooved between the inner ends of the branches for

45 the passage of the flanges of the wheels. This construction enables me to dispense with some of the securing devices heretofore employed for attaching together the two parts of the guard-rails shown in my before-men- | of the main line, and each of which is split at

tioned patent, and I avoid the abrupt termi- 50 nation of the inner end of the inside guardrail. I also avoid the awkward presence of three or more projections at the point where

the wheels cross the groove in the guard-rail.

In the drawings, Figure 1 is a plan of an 55 obtuse-angled crossing constructed in accordance with my invention; and Figs. 2, 3, and 4 are sections to a larger scale on the lines 22, 3 3, and 4 4 of Fig. 1.

a a are the ordinary rails of the main line, 60 and b b those of the branch line. c c and d d are the double rails, c'  $c^2$  and d'  $d^2$  being their split portions and  $c^3c^3$  and  $d^3d^3$  grooves which are formed in them. These parts just mentioned are similar to those shown in my be- 65

fore-mentioned British patent.

d d are the guard-rails. Each of the rails is wide throughout a portion of its length, the opposite end being split and bent into V shape, the groove  $d^3$  being arranged at the 70 inner end of the bifurcation to enable the wheels to readily pass. The rails d are bent or curved inwardly at opposite ends, as indicated in Fig. 1.

It will be observed that the inner surface 75 of the solid portion of the guard-rail forms a continuation of the inner surface of the branch  $d^2$  of this rail. There are no joints and no abrupt ends anywhere between the opposite ends of the inner surface of the guard-rail. 80 There are no parts to become dislocated or to present obstructions. The rails a and b are relatively narrow as compared with the rails c and d. They are arranged at an angle to each other at the crossing and are joined in 85 well-known ways to the relatively-wide rails c and d. The rail c is about twice as wide as rail a throughout a portion of its length and is slotted at one end, the two halves being spread apart into V shape to form two branches. 90 The groove  $c^3$  in each rail crosses one of the branches to permit the flanges of the wheel to readily pass across the main tracks.

I claim as my invention-The combination with the rails of the main 95 and crossing lines of the double rails, c, each of which is connected at one end with a rail

one end and has the two branches of the split portion connected with rails of the main and crossing lines; and guard-rails, each of which is split and has two branches, one of which is split and has two branches, one of which is split and has two branches, one of which is split and has two branches, one of which is split and has two branches of the split portion of the guard-rail.

RICHARD PRICE-WILLIAMS. crossing lines; and guard-rails, each of which is split and has two branches, one of which is connected with a rail of the crossing line and the other of which is bent to form a guard, the inner surface of the last-mentioned branch

Witnesses:

C. ARGLES, JAS. GRIFFITHS.