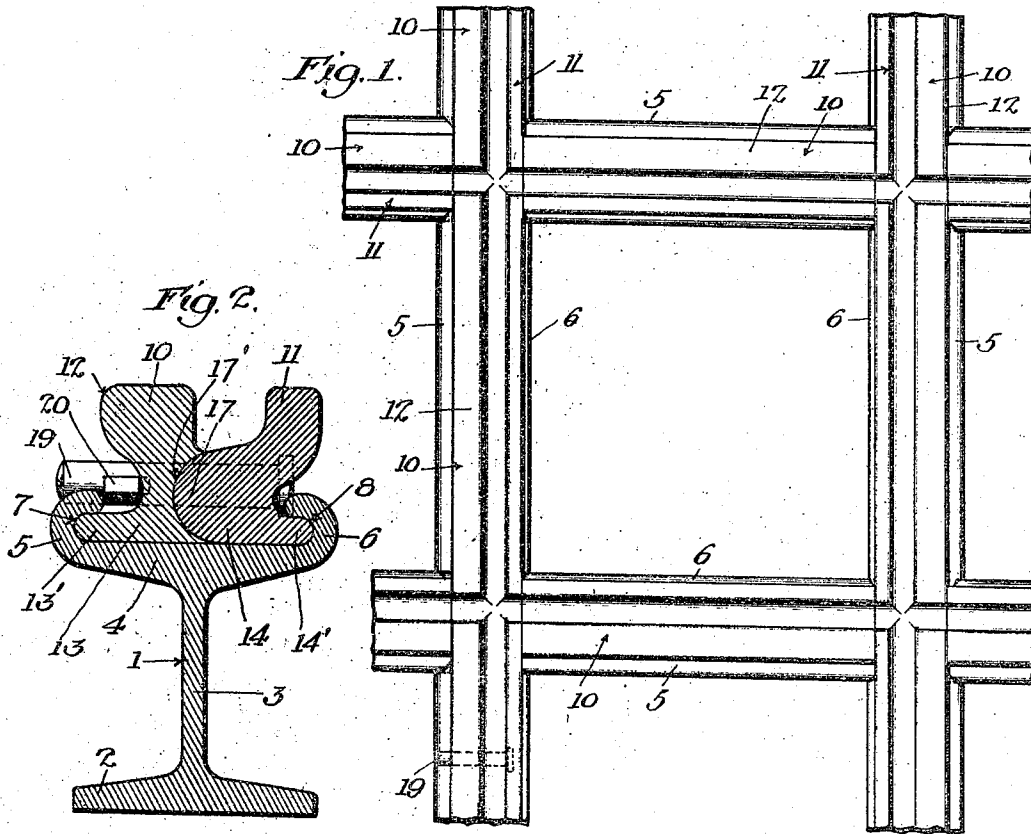


W. H. WHITTINGTON.
RAILWAY RAIL CONSTRUCTION.
APPLICATION FILED MAY 18, 1912.

1,059,510.

Patented Apr. 22, 1913.



Witnesses:
Lute D. Allen
Sully Russo

Inventor:
Wade H. Whittington
By Lyman H. Bailey atty

UNITED STATES PATENT OFFICE.

WADE H. WHITTINGTON, OF LOS ANGELES, CALIFORNIA.

RAILWAY-RAIL CONSTRUCTION.

1,059,510.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed May 18, 1912. Serial No. 698,347.

To all whom it may concern:

Be it known that I, WADE H. WHITTINGTON, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Railway-Rail Construction, of which the following is a specification.

This invention relates to a railway rail construction consisting of a lower permanent foundation member, and an upper removable member, said upper member constituting the track and being removable for repair or replacement without disturbing the foundation members.

The invention is particularly intended for use in railway crossings.

The main object of the present invention is to provide means for retaining the upper member or members of the crossing in position and for withstanding the lateral and vertical strains incident to the use of the crossing by means of engaging parts on said upper and lower members which are formed integrally with said members, thereby dispensing with the use of bolts or like devices for such purpose, and obviating the liability of loosening or displacing the said members by reason of failure or loosening of such bolts or like devices.

A further object of the invention is to provide means for connecting the upper and lower members of the crossing in such manner as to reduce to a minimum the amount of labor and time required for removing or replacing the crossing.

Another object of the invention is to reduce the cost of the renewal of the crossing to a minimum.

Other objects of the invention will appear hereinafter.

The accompanying drawings illustrate embodiments of the invention, and referring thereto: Figure 1 is a plan of the crossing. Fig. 2 is a vertical section of one side of the crossing, showing one form of construction of the upper and lower members.

The crossing comprises a lower member 1 which may be cast or forged of iron or steel and is secured in permanent position at the location of the crossing, being, for example, secured to ties or embedded in a cement bed or otherwise fixed rigidly in position. This lower member may be formed of integral casting or forging, or of any desired number of pieces secured together in any suitable manner, and may be provided with a foot

portion consisting of bottom flanges 2 adapted to be fastened to ties, a web 3 extending upwardly from said foot portion and a head or top portion 4 at the top of the web 3, said top portion 4 being provided with flanges 5 and 6 at its edges, said flanges 5 and 6 extending upwardly and then inwardly to form grooves 7 and 8.

The top member comprises a tread rail 10 and a guard rail 11, said tread rail 10 being formed with a tread portion or head 12 and with a foot portion 13 resting on the top portion 4 of the bottom member, said foot portion 13 having a lateral extension or tongue 13' which extends and fits into the groove 7 of the bottom member. The guard rail 11 is provided with a foot portion 14 having a laterally extending flange or tongue 14' fitting in the groove 8 of the bottom member. Furthermore, the two rails 10 and 11 fit or interlock together by longitudinal tongue and groove joint, one of said rails being formed with a longitudinal projection 17 and the other member with a groove 17' fitting said projection. When the rails are fitted together in this manner, the effect of their own weight and of the weight of the train passing over them is to press the rails 10 and 11 more firmly in position on the bottom member. In order, however, to avoid any liability of the rails jumping out of position by reason of vibration through movement of the cars or vehicles over the same, suitable connecting means such as pins 19 may be used, extending transversely through said rails and held in position by wedges or keys 20.

The lower member 1 is a permanent fixture in the roadbed and in case the crossing is to be repaired, it is only necessary to remove and renew the upper member, this being done by driving out the wedges 20 and then tipping rail members 10 and 11 upwardly so as to disengage them simultaneously from the flanges 5 and 6 of the bottom member. The new top rail members 10 and 11 are then placed in position, being placed on the lower member with their flanges 13' and 14' in engagement with the grooves 7 and 8, the adjacent portions of the rails being tipped upwardly at the time of insertion and being pressed down so as to force the flanges 13' and 14' outwardly into tight engagement with said grooves and bring the foot portion of the rails 10 and 11 down flat onto the head 4 of the bot-

tom member. The pins 19 are then driven through the transverse perforations in the rails and are secured in position by driving in the wedges 20.

- 5 The lower member of the crossing may be secured permanently in position in any suitable manner, for example, by spikes engaging with the lower flanges of said member, and driven into ties, or in any other
10 suitable manner.

What I claim is:

1. A railway rail construction, comprising a lower member and a head portion provided with an upwardly and inwardly extending flange at each side forming a longitudinal groove at each side of said head
15 portion, and an upper member longitudinally divided to form two rails having flanges engaging respectively in said
20 grooves, and means connecting said rails of the upper member to hold them in rigid relation to each other.

2. A railway rail construction, comprising a lower member and a head portion provided with an upwardly and inwardly extending flange at each side forming a longitudinal groove at each side of said head portion, and an upper member longitudinally divided to form two rails having flanges engaging respectively in said grooves, and
25 means connecting said rails of the upper member to hold them in rigid relation to each other, one of said rails of the upper member having a longitudinal groove and the other rail having a longitudinal projection engaging in said groove.
30

In testimony whereof, I have hereunto set my hand at Los Angeles, California this 3rd day of May, 1912.

WADE H. WHITTINGTON.

In presence of—

ARTHUR P. KNIGHT,
MARY E. BLASDEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."