

(No Model)

S. H. STUPAKOFF.
TRACK CROSSING.

No. 582,964.

Patented May 18, 1897.

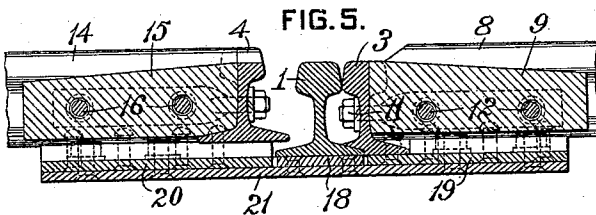
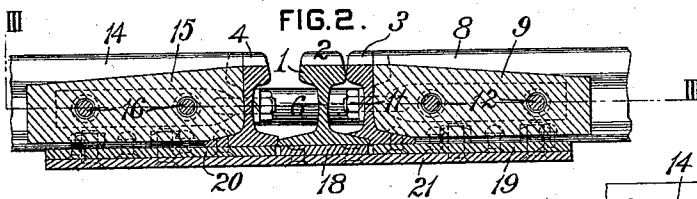
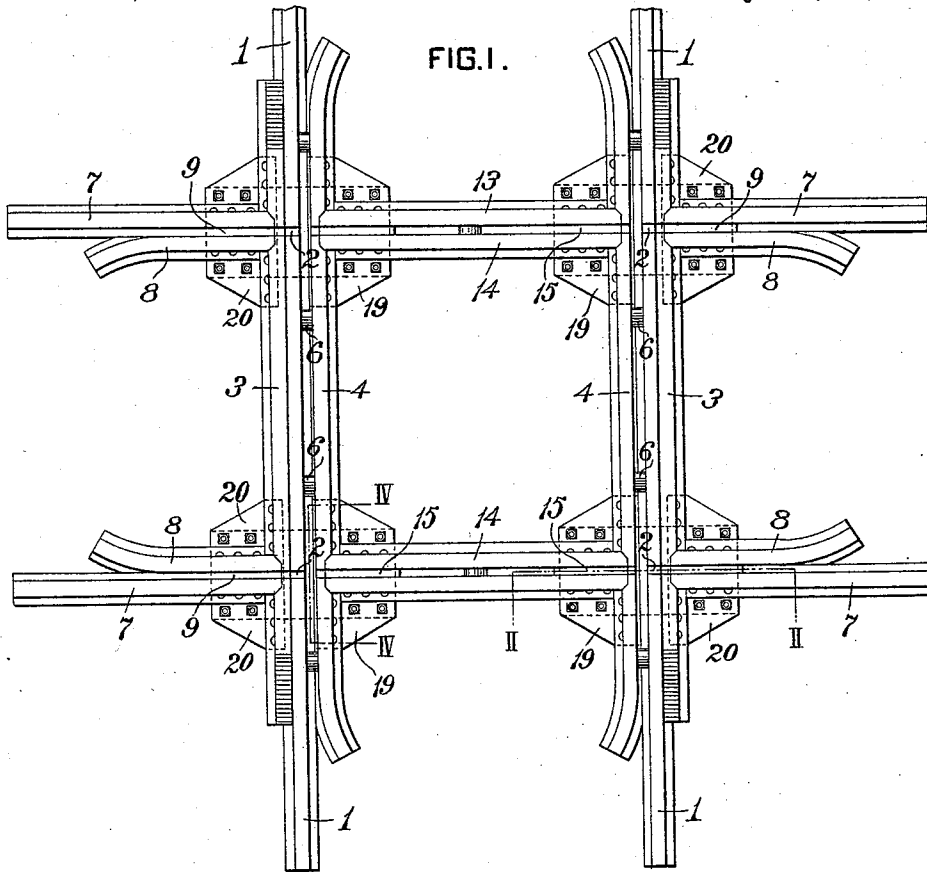
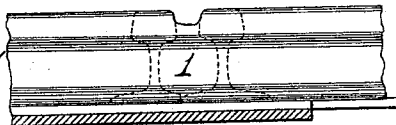


FIG. 4.

WITNESSES:

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Att'y.

UNITED STATES PATENT OFFICE.

SIMON H. STUPAKOFF, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO THE UNION SWITCH AND SIGNAL COMPANY, OF SWISSVALE, PENNSYLVANIA.

TRACK-CROSSING.

SPECIFICATION forming part of Letters Patent No. 582,964, dated May 18, 1897.

Application filed August 1, 1896. Serial No. 601,306. (No model.)

To all whom it may concern:

Be it known that I, SIMON H. STUPAKOFF, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Track-Crossings, of which improvements the following is a specification.

The invention described herein relates to certain improvements in crossings for railway-tracks, the invention being specially applicable to the crossings of street-car and steam-railway lines, and has for its object a construction wherein a practically continuous tread is afforded on the steam-railway track.

The invention is hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a top view of my improved crossing. Fig. 2 is a sectional elevation, the plane of section being indicated by the line II II, Fig. 1. Fig. 3 is a section plan view, the plane of section being indicated by the line III III, Fig. 2. Fig. 4 is a sectional elevation, the plane of section being indicated by the line IV IV, Fig. 1; and Fig. 5 is a sectional elevation, similar to Fig. 2, of a modified form of the crossing.

In the practice of my invention the rails 1 for the steam or main track are made continuous or unbroken, and at suitable points notches 2 are cut therein for the flange of the wheels on the crossing-track. Outside of the main rails 1 are arranged the bracing or auxiliary supporting rails 3, whose flanges, as shown in Fig. 2, are cut away, so as to permit the head of the rail 3 bearing closely against the head of the rail 1 and a portion of the inner flange of the rail 3 fitting over the flange of the rail 1. Inside of the main rails 1 are arranged guard-rails 4, whose flanges are slightly cut away, so as to bring the heads of the guard-rails into proper relation with the heads of the main rails. The guard-rails 4, main rails 1, and brace-rails 3 are held together by means of bolts 5, passing through the webs of said rails, and filling-pieces 6, arranged between the webs of the rails and preferably surrounding the bolts 5. As shown in Figs. 1 and 2, the heads of the brace-rails

3 are recessed for the reception of the ends of the rails 7 for the crossing-tracks and the outer ends of the outer sections 8 of the guard-rails of such crossing-tracks. As shown in Fig. 2, the flanges of rail 7 and guard-rail sections 8 are cut away for a distance equal to the width of the flange on the outside of the brace-rails 3, so that the ends of the rails 7 and sections 8 will rest upon the flanges of the brace-rails 3. Between the rails 7 and sections 8 are placed filling-blocks 9, which at their inner ends are made of such a height that their upper edges will be on a level with the bottom of the notches 2 in the main rails 1. The rails 7, sections 8, and filling-pieces 9 are bound together by means of bolts 12, as clearly shown in Fig. 3. The rail 7 and guard-rail 8 are tied to the brace-rails by fish-plates 10, held in position by the bolts 12 and provided at their inner ends with threaded stems and adapted to pass through the webs of the brace-rails, where they are held by nuts 11, as shown in Figs. 2 and 3.

The portion of the crossing-track between the main rails 1 is formed by rails 13 and guard-rails 14, whose ends are fitted into recesses in the heads of guard-rails 4, as shown in Figs. 1 and 2. Between the rails 13 and guard-rails 14 are placed filling-pieces 15, and the rails and filling-pieces are bound together by bolts 16, as shown in Fig. 3. The rails 13, guard-rails 14, and filling-pieces 15 are tied to the guard-rails 4 by fish-plates 17, held to the rail by bolts 16, and provided with threaded stems passing through the webs of the guard-rails and there held by suitable nuts.

As shown in Fig. 2, the main rail is arranged upon a metal plate 18, and the guard-rails 4, rails 13, and guard-rails 14 are secured to metal plates 19, while the brace or auxiliary rails 3, rails 7, and guard-sections 8 are secured to plates 20. These plates 18, 19, and 20 are riveted to a common brace-plate 21. The main rail 1 is held upon its plate 18 by the overlapping flange of the brace-rail 3, as shown in Fig. 2.

When for any reason it is undesirable not to notch or cut the main rail, the ends of the rails 7 and guard-rails 8, outside of the crossing, and the rails 13 and guard-rails 14, inside the crossing, are supported on blocks 22 of a

height approximately equal to the depth of the flanges of the wheels on the crossing-track, so that the wheels on the crossing-track will pass over the main rails, riding on the flanges thereof.

It is characteristic of my improvement that the parts of the crossings, except the supporting-plates, are made from the ordinary rails, and hence no new material or shapes of rails are required.

I claim herein as my invention—

1. A railroad-crossing having in combination two main track-rails of a length greater than the gage of the intersecting track, guard and brace rails arranged alongside of the main rails and connected thereto and to each other, two rails arranged between the main track-rails and forming parts of the intersecting track and guard rails arranged alongside of the intermediate rails, the latter with their guard-rails being tied to the main rails, substantially as set forth.

2. A railroad-crossing having in combination two main rails of a greater length than the gage of the intersecting track, two rails

arranged between the main rails, guard-rails arranged inside of and secured to the main and intermediate rails, the main guard-rails having the inner edges of their heads notched or recessed for the reception of the ends, intermediate rails and the guard-rails secured thereto, substantially as set forth.

3. A railroad-crossing having in combination two main rails of greater length than the gage of the intersecting track, brace or auxiliary rails arranged outside of and bearing against the main rails, two rails arranged between the main rails and forming part of the intersecting track, guard-rails arranged inside of the main and intermediate rails, the main guard and brace rails having their heads notched or recessed for the reception of the ends of the main and guard rails of the intersecting track, substantially as set forth.

In testimony whereof I have hereunto set my hand.

SIMON H. STUPAKOFF.

Witnesses:

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