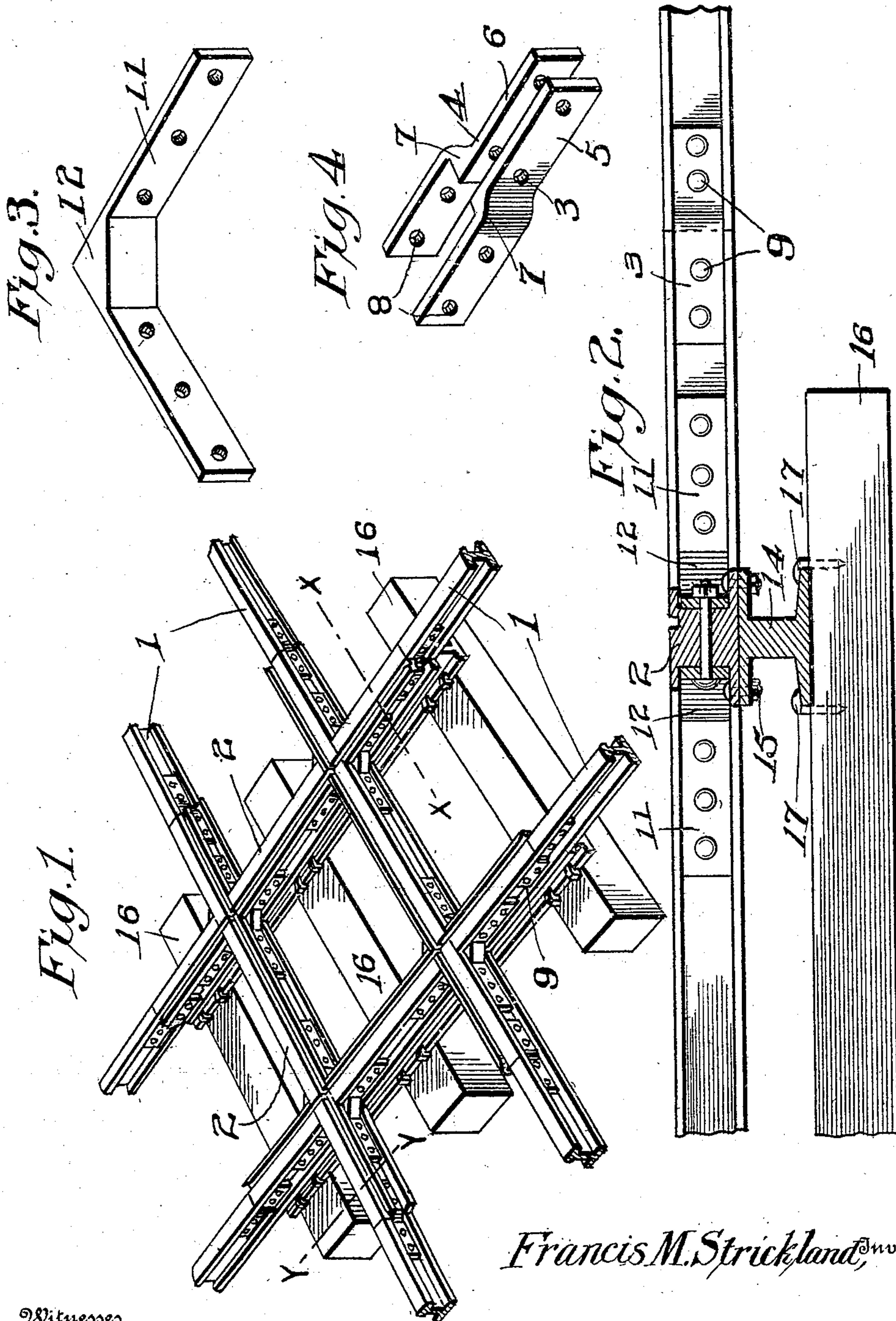


908,351.

Patented Dec. 29, 1908.
2 SHEETS—SHEET 1.



Francis M. Strickland, Inventor

Witnesses

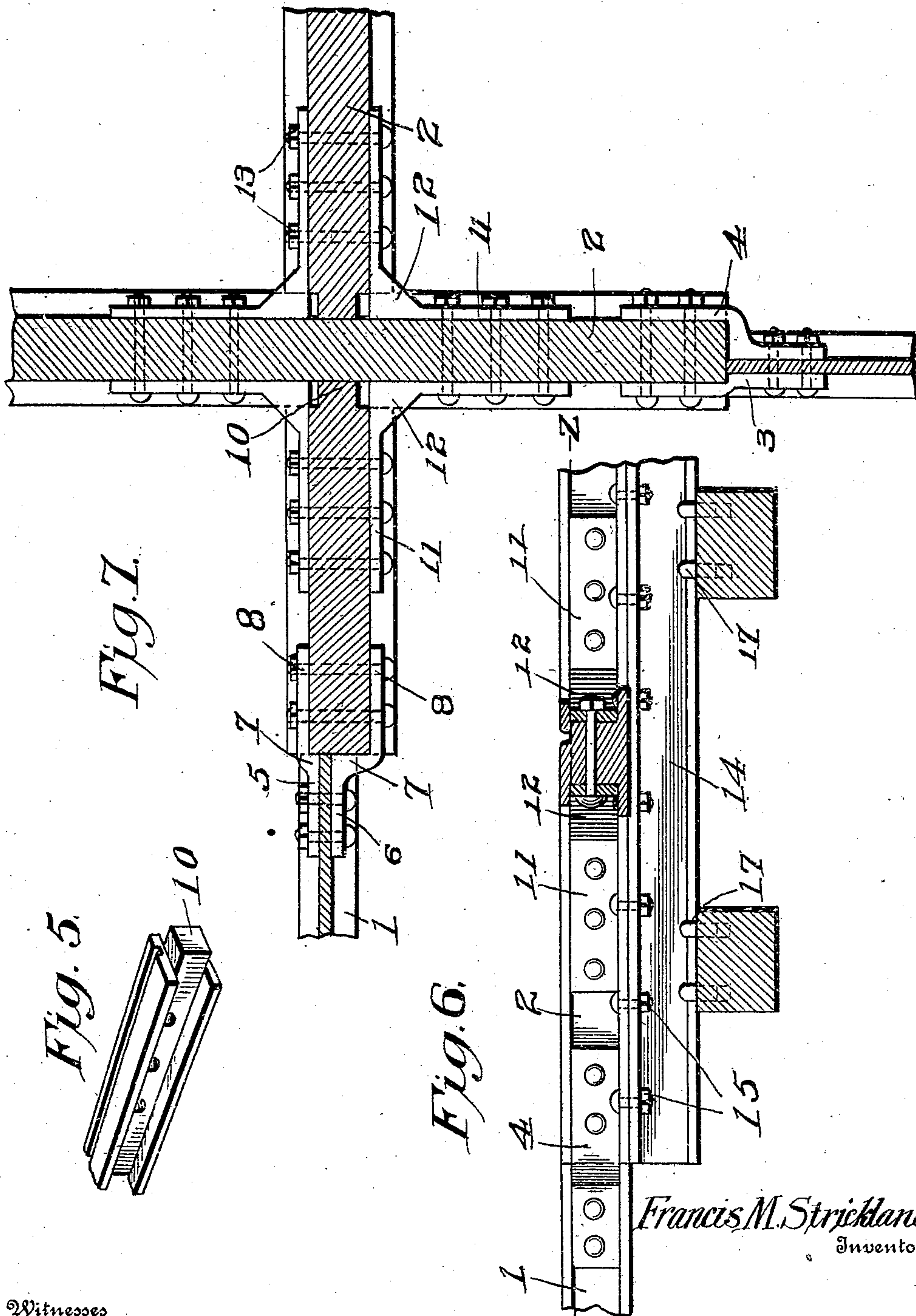
G. A. Catter.

Irving L. M. Cathran

By E. E. Vrooman,
his Attorney.

908,351.

Patented Dec. 29, 1908.
2 SHEETS—SHEET 2.



Francis M. Strickland,
Inventor

Witnesses

G. A. Cotter.

Irving L. Mc Cathran.

By *E. E. Vrooman*,
his Attorney.

UNITED STATES PATENT OFFICE.

FRANCIS M. STRICKLAND, OF EAST LAKE, ALABAMA.

RAILWAY-CROSSING.

No. 908,351.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed July 24, 1908. Serial No. 445,188.

To all whom it may concern:

Be it known that I, FRANCIS M. STRICKLAND, a citizen of the United States, residing at East Lake, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Railway-Crossings, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to an improvement in railway crossings, and the object thereof is the provision of a crossing, which is so fastened that the rails will not be subjected to excessive wear from the hammer blows of the wheels in passing thereover.

Another object contemplated by this invention is the provision of a crossing which when assembled will present a strong rigid structure, and the several parts of which may be readily removed and replaced when worn, without dismembering the entire organization.

To the accomplishment of the recited objects and others coördinate therewith, the preferred embodiment of my invention resides in that construction and arrangement of parts hereinafter described, illustrated in the accompanying drawings, and embraced within the scope of the appended claims.

In said drawings:—Figure I is a perspective view of my improved railway crossing. Fig. II is a sectional elevation taken along lines X—X of Fig. I. Fig. III is a perspective view of one of the angular brace members. Fig. IV is a view in perspective of the particular type of rail joint employed. Fig. V is a fragmentary perspective view of one of the rail sections. Fig. VI is a sectional elevation taken along lines Y—Y of Fig. I, and Fig. VII is a plan view in section, taken along lines Z—Z of Fig. VI.

Similar reference characters indicate corresponding parts throughout the several views.

Referring more particularly to the drawings, numerals 1 and 2 designate the railway or main rails, and rail sections or girder tram-rails respectively, which, generally speaking, constitute the form of crossing usually adopted at the intersection of steam-railroad and street-railway tracks. The contiguous terminals of these rails are connected by a novel yoke coupling comprising two coöperative sections (3) and (4), and having a shank portion (5) and an angular rabbeted portion (6), and a shoulder or re-inforcement (7) at

the point of formation of said angle or medially of the longitudinal extent of each section, the reinforced portion of one, preferably the outer, of said members being considerably larger than the corresponding portion of the other member. The outer section also differs from the inner section, in that the rabbet is of greater depth. Furthermore, the sections of the coupling or joint are provided with horizontally alined perforations (8), preferably four in number, two on the shank and two on the rabbet, for the reception of the bolts (9). Connected with this type of coupling, the railway-rails and the tram-rails occupy proper relative positions, that is, owing to the disposition of the rabbeted portions of the coupling, the variation in the cross sectional contour of the rails is compensated by offsetting the railway-rail, so that the latter forms a substantial continuation of the tram-rail. The reinforcements of the coupling sections insure perfect rigidity, and preclude lateral displacement of the rails, and especially is this true of the enlarged re-inforcement on the outer section, since the impending weight of rolling stock is diverted to the outside rail.

One pair of tram-rails is divided into sections, and at the points of engagement with the other tram-rails, the terminal portions of the flanges are cut away so as to leave a protrusion (10) which fits firmly between the flanges of the intersecting rails. At each angle formed by the junction of the tram-rails, I employ a correspondingly shaped brace member (11), which is provided with an enlarged, substantially triangular, apex (12) and when positioned intermediate the flanges of the rails and secured thereto, by bolts (13), obviates all liability of the structure loosening, or becoming otherwise inoperative. As exhibited in the drawings this entire crossing is mounted on stringers (14), and fastened by bolts (15), the stringers being in turn secured to the ties (16) by spikes (17). However, if it is found desirable, the crossing may be attached directly to the ties.

It should be understood that in its broader aspects the invention comprehends not only the employment of the various means described, but of equivalent means for performing the recited functions. To exemplify, I have shown the tracks of the crossing extending at right angles to each other, while it will be obvious that my invention is

equally applicable to crossings in which the tracks intersect at other angles. Furthermore, the stringers (14) may be laid directly on the ballast or road bed, thus eliminating the ties, the primary function of which, in this instance, is performed by the stringers. While the arrangement shown is thought, at the present time, to be preferable, it is desired to reserve the right to effect such modifications and variations thereof as may come fairly within the scope of the appended claims.

Having thus described the invention, what is claimed, is:—

1. In a railway crossing, the combination with main rails and cross rails, of a sectional joint, the sections thereof having shank portions for engagement with the main rail, and rabbeted portions for engagement with the cross rail, one of said rabbeted portions having a greater depth than the other rabbeted portion.

2. In a railway crossing, the combination with main and cross rails, of a medially reinforced sectional joint, the sections thereof having shank portions for engagement with the main rail, and rabbeted portions for engagement with the cross rail,

one of said rabbeted portions having a greater depth than the other rabbeted portion. 30

3. In a railway crossing, the combination with main rails and cross rails, of a joint embodying sections of varying dimensions and constituting means for offsetting the main rail with respect to the cross rail, so that said rails will be in alinement with and a substantial continuation of each other, and angle braces for said cross rails. 35

4. In a railway crossing, the combination with main rails and sectional and continuous cross rails, of a joint embodying members of varying dimensions and constituting means for offsetting the main rail with respect to the cross rail so that the rails will be in alinement with and a substantial continuation of each other, the sections of said cross rails having terminal projections adapted to interfit the flanges of the continuous cross rails. 45

In testimony whereof I hereunto affix my signature in presence of two witnesses. 50

FRANCIS M. STRICKLAND.

Witnesses:

C. F. DODSON,
J. H. FINCH.