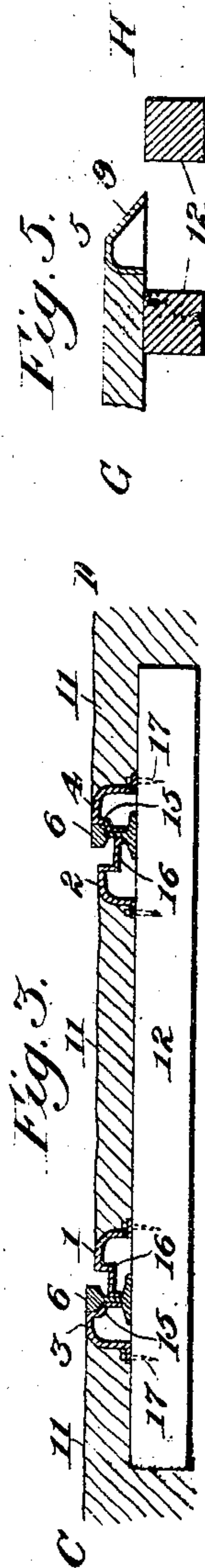
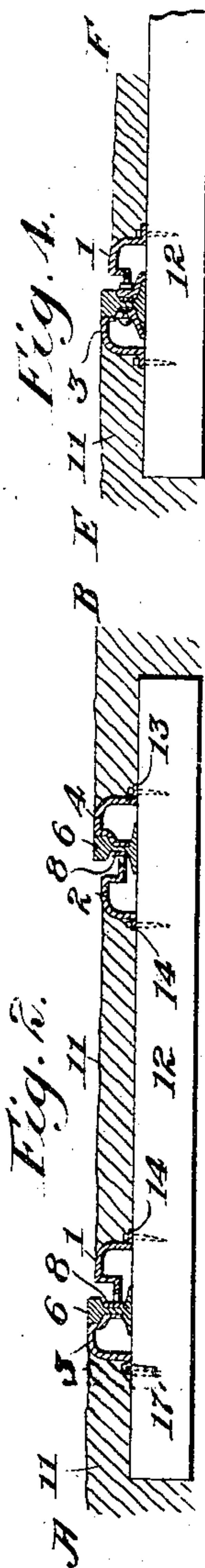
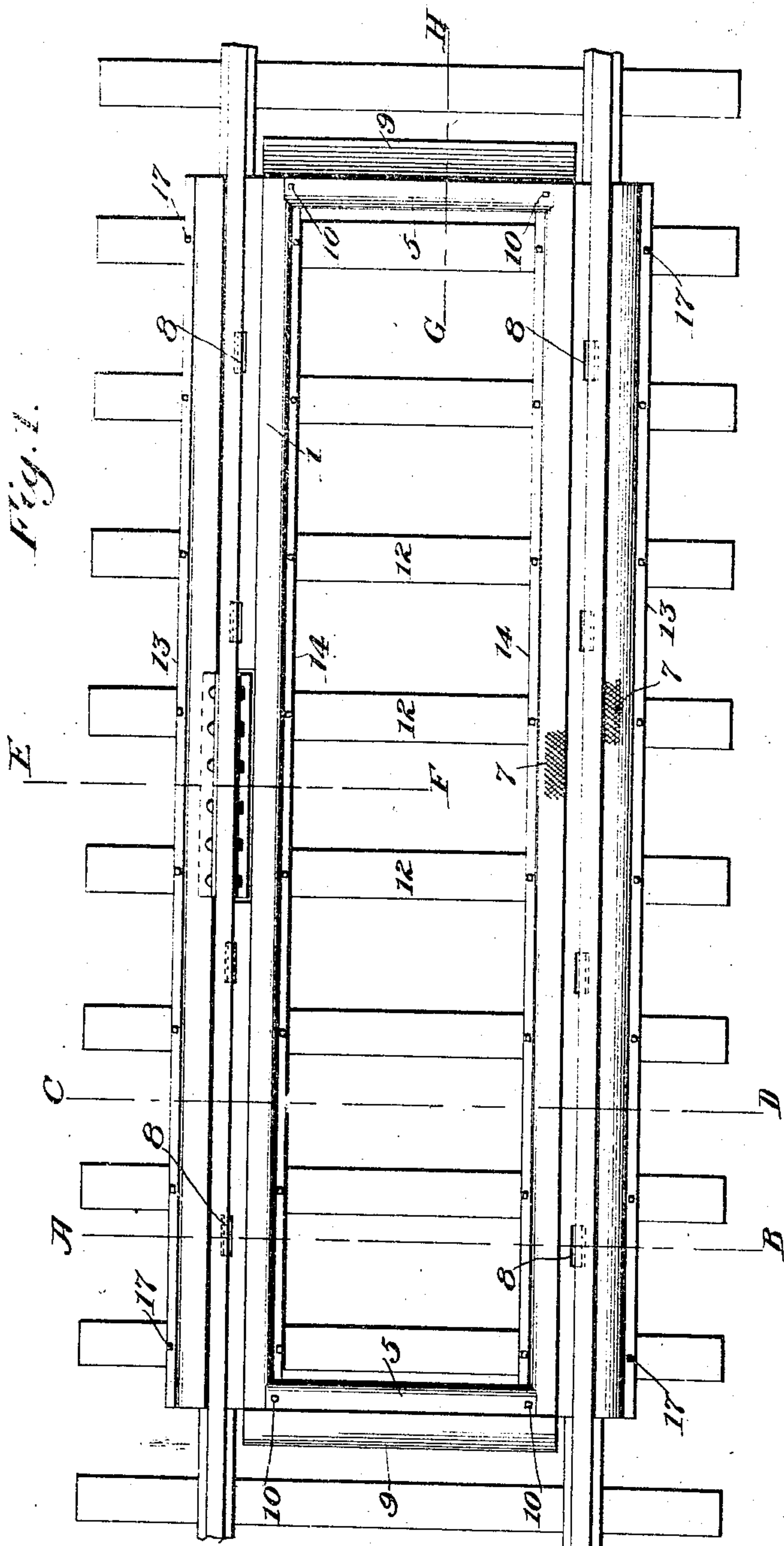


No. 886,487.

PATENTED MAY 5, 1908.

R. FARIES.
METAL RAILWAY ROAD CROSSING.
APPLICATION FILED JULY 24, 1907.



Witnesses:

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METAL RAILWAY ROAD-CROSSING.

No. 886,487.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed July 24, 1907. Serial No. 385,399.

To all whom it may concern:

Be it known that I, ROBERT FARIES, a citizen of the United States, residing at Jamesburg, in the county of Middlesex and State of New Jersey, have invented a new and useful Metal Railway Road-Crossing, of which the following is a specification.

My invention relates to crossings at the intersections of railways and highways or streets and has for its object the production of a crossing that will be durable, firm in its place, convenient of application, and suitable for its purpose of safely conveying the wheels of vehicles across the rails of a railway track, as well as reducing to a minimum the expense of maintaining track at crossings for the reasons that, (1) the proportions of my invention are such as to allow of a free tamping of the ties and leveling of the track underneath it, without removing or disturbing the device. (2) my invention cannot be displaced by the action of frost in the track ballast as is now the case with the wooden crossing plank now in common use. I attain these objects by the mechanism illustrated in the accompanying drawing, in which:—

Figure 1 is a top plan of my invention,— Fig. 2 is a sectional view on the line A—B, Fig. 3 is a sectional view on the line C—D, Fig. 4 is a sectional view of one rail of the track and two members, 3—4 of my invention, on the line E.—F. showing particularly the construction of my invention at a rail joint in the track. Fig. 5 is a sectional view of the end pieces 5 on the line G—H.

Similar figures refer to similar parts throughout the several views.

As shown in Figs. 1 and 3 the convex rolled metal members 3 and 4 are fastened on the outside of the railway rails 6 and have flanges 13 which rest on the railway ties 12, and are secured to the latter by wood screws 17 which pass through holes in flanges 13 and penetrate the ties. These members, 3 and 4 also have depending flanges, 15, which rest against the head, web and base of the rail being formed so that they will fit nearly between the head and the base of the rail as shown in Fig. 3. As shown in Figs. 1 and 3 the convex rolled metal strips 1 and 2 are fastened on the inside of the railway rails, 6, and have flanges 14 which rest on the ties 12, and are secured to the latter by wood screws, 17, which pass through holes provided in the flanges 14 and penetrate the ties. These members 1 and 2, also have depending

flanges, 16, which rest against the web and base, of the rail and are so constructed as to leave, when in position, a space of a proper width for the passage of wheel flanges between the members 1 and 2 and the rails 6. The convex rolled metal end pieces 5, having one side sloping downward to an intersection with the plane of the surface of the ties, are placed at the ends of the inside members 1 and 2 joining them together, I have provided bolt holes at each end of members 1, 2 and 5, into which I propose to fasten short bolts, 10.

In order to make the inside members 1 and 2 secure against the rail and to prevent any vertical motion of these parts, I propose to have at intervals along the inside strips or parts 1 and 2, cuts made in the metal flange 16, and this cut portion of the metal bent upwards making small lugs, 8, to engage the under side of the head of the rail 6, as is shown in Fig. 2.

The sectional view Fig. 4, shows how I propose to cut away portions of the depending flange 15 of the outside member and of the depending flange 16 of the inside member to allow of the presence of rail joint fastenings, which may occur in the crossing. Fig. 1 shows this alteration in plan.

In order to avoid the disadvantage of having a smooth surface on the exposed portions of members 1, 2, 3 and 4, I propose to have the exposed portions of these members, roughened, scored, or cross-hatched as is shown in part at 7, Fig. 1.

The railway crossing is made complete by filling between members, 1—2, and the end pieces 5;—also on the outside or approach to the crossing and against the outside members 3 and 4 with gravel, crushed stone, asphalt, cinder, or another suitable material. This is indicated by character 11, in the sectional views on the accompanying drawing.

It will be seen that the parts of this invention are so formed and proportioned as to present a limited area of horizontal surface resting on the surface of the ties. It is therefore true that the effect of frost in the track ballast which acts toward displacing railway crossings by forcing them upward, will also be limited.

I claim:

1. In a track crossing, the combination of inner and outer convex metal members fastened against each rail of the track, each of said members having a horizontal flange

through which are passed wood screws securing the members to the railway ties, each of said members having also a depending flange meeting against the rail, the depending flange of the outer member meeting against the head, web and base of the rail, the depending flange of the inner member meeting against the web and base on the opposite side of the rail, substantially as specified and described.

2. In a track crossing, the combination of inner and outer convex metal members fastened against each rail of the track, each of said members having a horizontal flange through which are passed wood screws securing the members to the railway ties, each of said members having also a depending flange meeting against the rail, the depending flange of the outer member meeting against the head, web and base of the rail, the depending flange of the inner member meeting against the web and base on the opposite side of the rail, and convex metal end pieces fastened to the ends of the said inner member with bolts,

the said end pieces having sloping sides, substantially as specified and described.

3. In a track crossing, the combination of inner and outer convex metal members fastened against each rail of the track, each of said members having a horizontal flange through which are passed wood screws securing the members to the railway ties, each of said members having also a depending flange meeting against the rail, the depending flange of the outer member meeting against the head, web and base of the rail, the depending flange of the inner member meeting against the web and base on the opposite side of the rail, and the depending flange of said inner members having at intervals along the length of said flanges a vertical lug meeting against the under side of head of the rail, substantially as specified and described.

ROBERT FARIES.

Attest:

JOHN E. JENNINGS,
G. W. KUGLER.