

No. 658,405.

Patented Sept. 25, 1900.

P. G. STORMER.
RAILWAY TRACK STRUCTURE.

(Application filed Dec. 1, 1899.)

(No Model.)

Fig. 1.

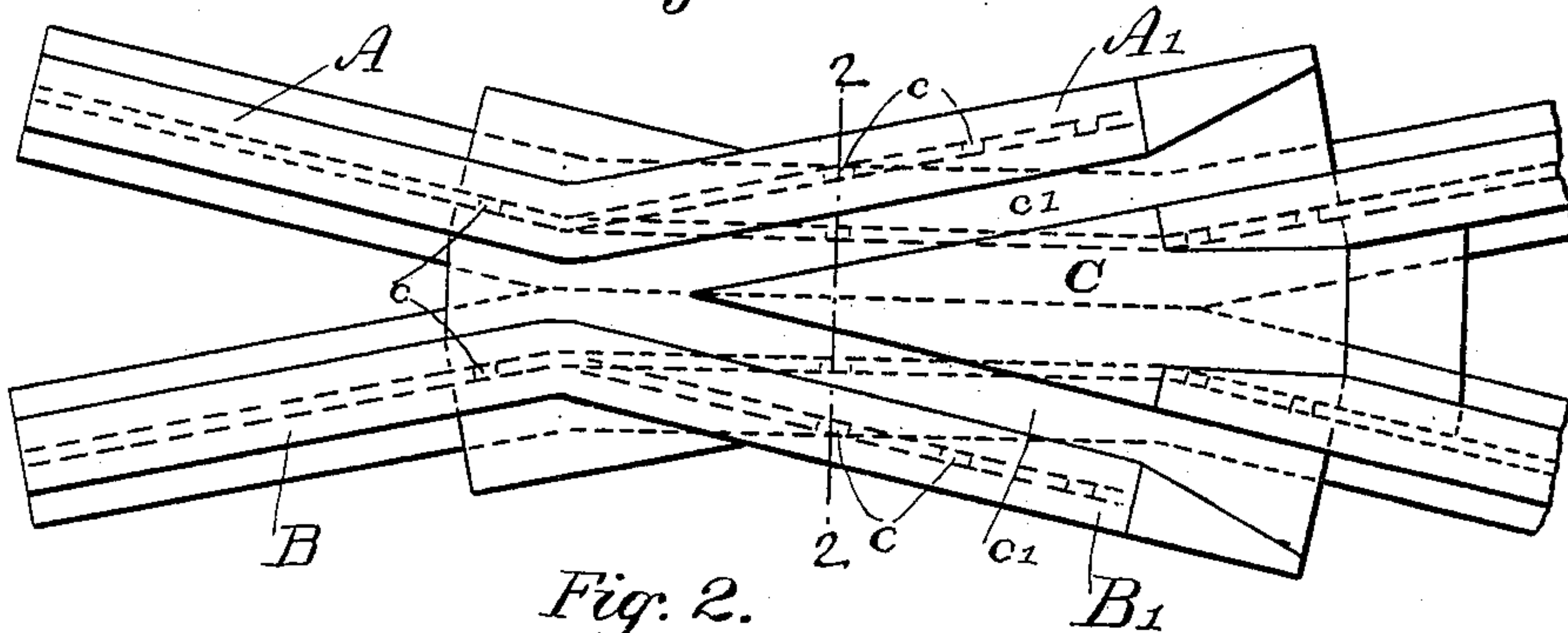


Fig. 2.

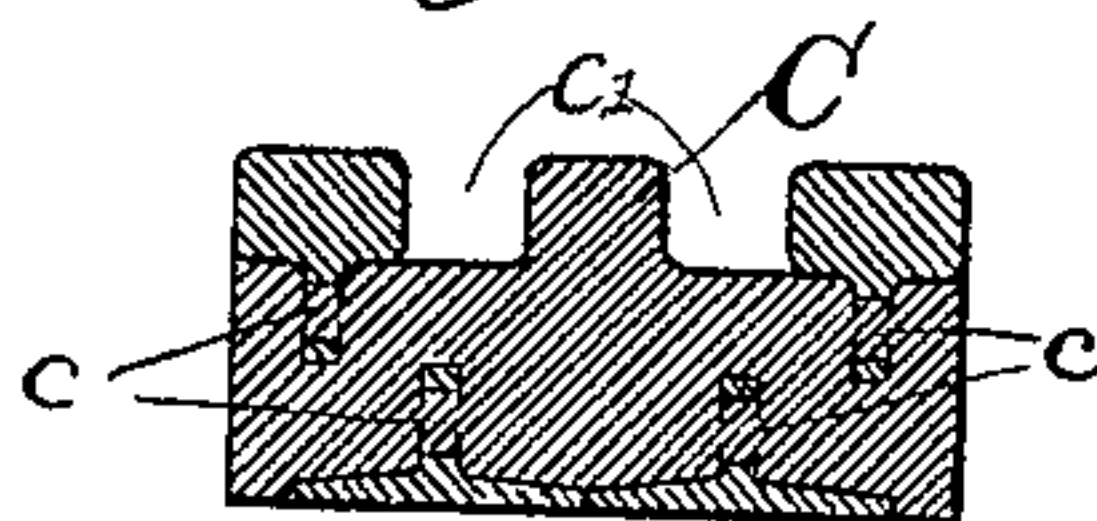


Fig. 3.

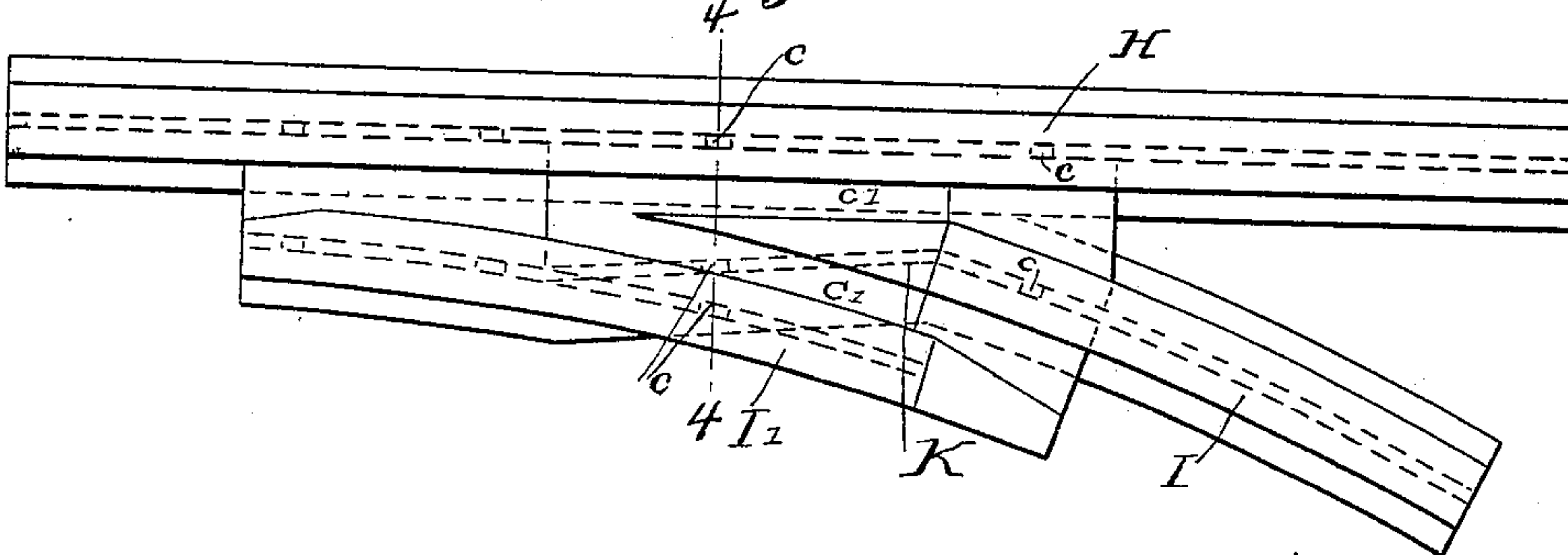


Fig. 4.

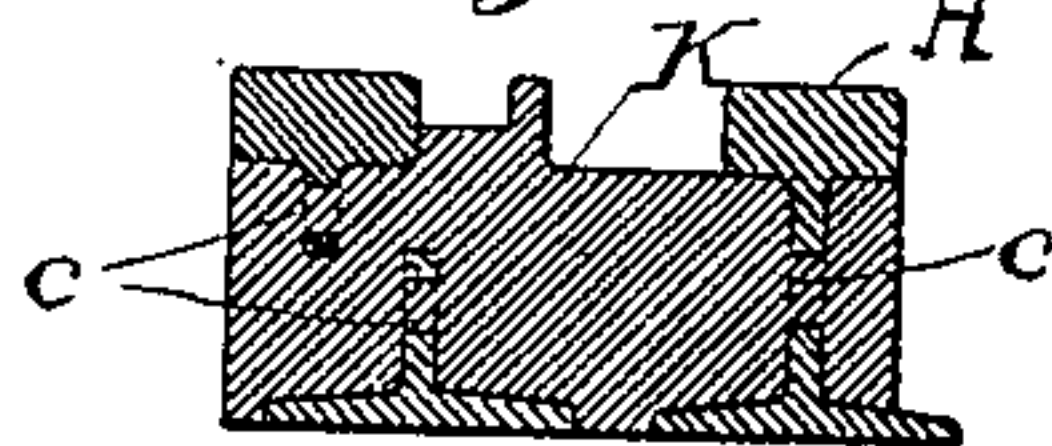
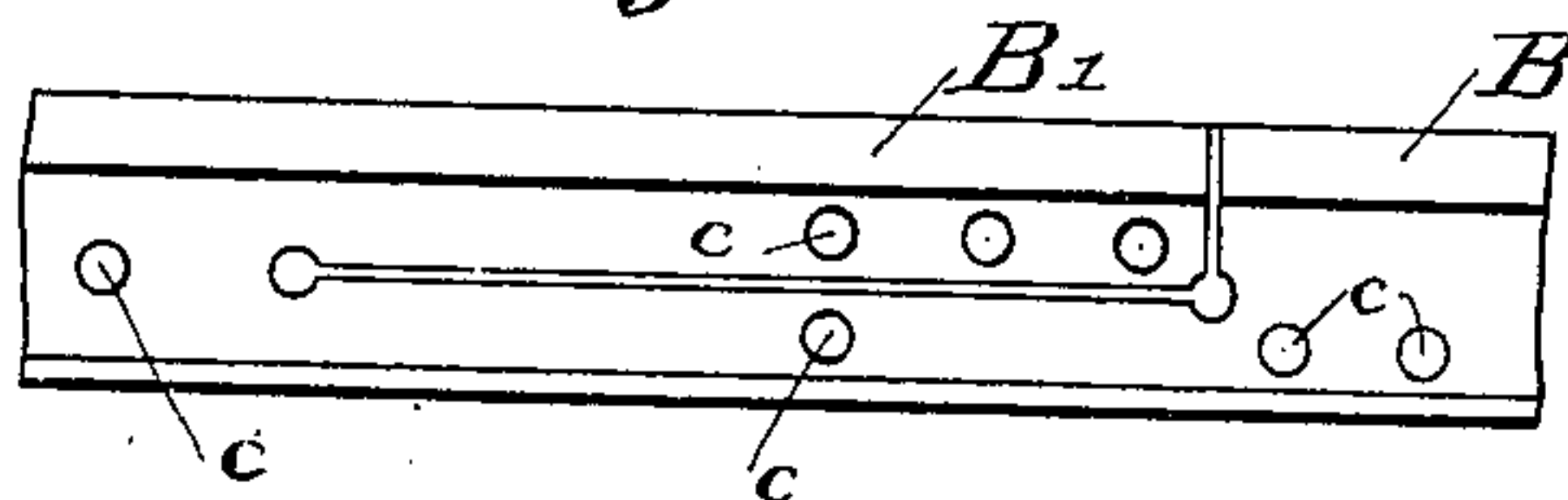


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PETER G. STORMER, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE
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RAILWAY-TRACK STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 658,405, dated September 25, 1900.

Application filed December 1, 1899. Serial No. 738,804. (No model.)

To all whom it may concern:

Be it known that I, PETER G. STORMER, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Improvement in Railway-Track Structures, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to railway-track structures—such as frogs, switchmates, &c.—and is an improvement upon the structures described and claimed in my Patents Nos. 627,543 and 627,544, dated June 27, 1899.

The present invention is designed to obviate the use of plates inserted in the structure at the intersection of the two tracks and the attendant labor and expense of properly fitting the same to the rails of the structure and alining the grooves thereof.

With this object in view my invention consists in the combination, with the rail members of a track structure, one or more of which have their upper portions separated from their lower portions and laterally displaced therefrom to form a wing or guard rail, of a cast-metal body or filling which unites said members into a practically-integral structure and also constitutes that portion of the structure which is subject to the greatest wear, its upper surface being properly grooved to form the intersecting portions of the flangeways.

The invention also consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a railway-frog embodying my invention. Fig. 2 is a section of the same on the line 2 2 of Fig. 1. Fig. 3 is a plan view of a switchmate, also embodying the invention. Fig. 4 is a transverse section on the line 4 4 of Fig. 3. Fig. 5 is a detail view of a section of rail, showing the cut by means of which a part of its upper portion may be displaced laterally.

Referring specifically to the frog shown in Figs. 1 and 2, A and B designate two rails of exactly similar construction. These rails are cut and have their upper portions later-

ally removed or displaced for a part of their length to constitute the wing or guard portions A' B', in the same manner as in my said patents. The two rails cut and bent in this manner and properly disposed with reference to each other are placed in a suitable mold, and melted steel is poured between them to form the solid central portion and filling C. The web portions of the rails are provided with holes or perforations, (indicated at c,) through which the molten metal flows, and thus forms with the rails a practically-integral structure. The top surface of the cast portion C is allowed to come up substantially level with the tops of the rails, and wheel-grooves c' in proper alinement are formed either by being cored therein in the operation of casting or by planing them therein after the structure is removed from the mold. In either case I insure their perfect alinement.

In the switchmate shown in Figs. 3 and 4 H is the continuous main rail, and I a combined turnout and guard rail, having the severed and displaced upper portion I', as in my Patent No. 627,544. K is the said cast-steel filling, level with the rail-heads and grooved to form the flangeways.

The cast metal, it will be seen, flows underneath the heads of the rails in both the above structures and forms a solid support therefor, especially at the laterally-displaced portions. I also save the time and labor required to fit separate inserted plates properly to the rails in order that there shall be no play or looseness of said plate and provide a solid substantial structure.

Having thus described my invention, what I claim, and desire to protect by Letters Patent, is—

1. In a railway-track structure, the combination with the rail members, one or more of which have their upper portions separated from their lower portions and laterally displaced therefrom to form a wing or guard, of a cast-metal filling which unites the said members, the top of said filling being substantially flush with the tops of the rails, and having flangeways formed therein, substantially as described.

2. In a railway-track structure, the combi-

nation with the rail members, one or more of which have their upper portions laterally removed or displaced from the web, of cast-steel uniting said rails and forming the center of the structure, said cast-steel extending substantially flush with the tops of the rails and having flangeways formed therein, substantially as described.

3. In a railway-track structure, having a rail member a portion of whose upper portion is severed from its lower portion and laterally removed or displaced therefrom, of a cast-steel filling extending through and uniting the rail members, and forming the floor of the structure, said filling having the intersecting portions of the wheel-grooves formed therein.

4. In a railway-track structure, the combination with one or more rail members having their upper portions severed from their lower

portions and removed laterally therefrom, of a cast-steel filling extending underneath the heads of and between the rails flush with their upper surfaces, and having formed therein the intersecting flangeways of the structure, substantially as described.

5. In a railway-frog, the combination with the two rail members, each of which has its upper portion severed and laterally removed from its lower portion for a part of its length, of a solid cast-steel filling extending between and through the said rails, and forming the point of the frog, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

PETER G. STORMER.

Witnesses:

MYRTLE E. SHARPE,
H. W. SMITH.