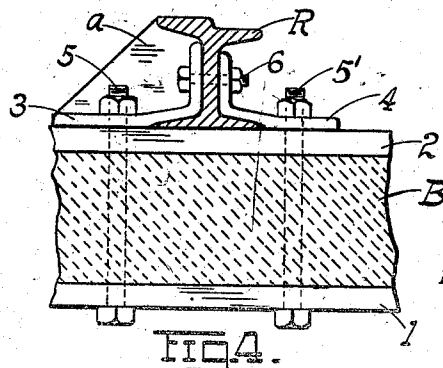
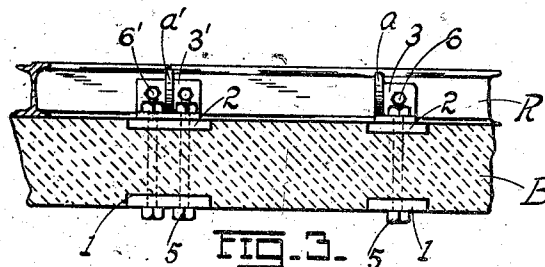
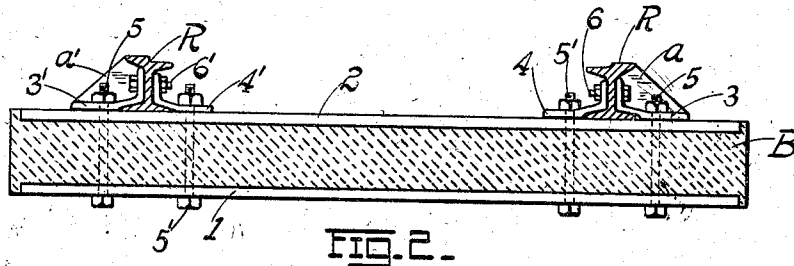
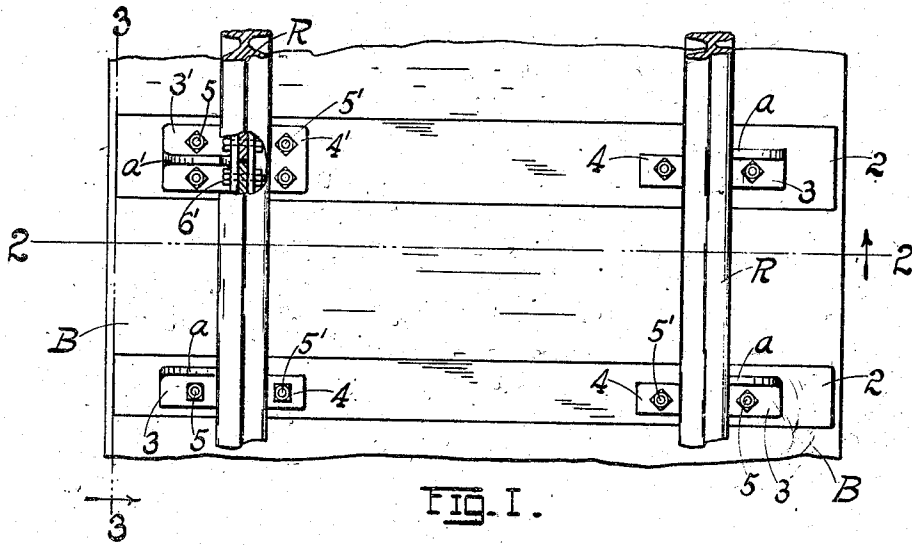


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 TRACK CONSTRUCTION.
 APPLICATION FILED SEPT. 7, 1909.

941,674.

Patented Nov. 30, 1909.



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TRACK CONSTRUCTION.

941,674.

Specification of Letters Patent. Patented Nov. 30, 1909.

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To all whom it may concern:

Be it known that I, HENRY EHMAN, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Track Constructions, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in track constructions particularly adapted for street cars; and it consists in the novel details more fully set forth in the specification and pointed out in the claim.

In the drawings, Figure 1 is a top plan of a section of my improved track; Fig. 2 is a transverse section on the line 2—2 of Fig. 1; Fig. 3 is a section at right angles to Fig. 2 on the line 3—3 of Fig. 1; and Fig. 4 is an enlarged cross section taken through the rail and concrete base.

The object of my invention is to provide a track for street cars which will entirely dispense with the use of wooden or composition ties, the supporting bed for the rails being entirely of concrete, to which the rails may be secured at very little cost.

The invention more particularly resides in features of construction, the advantages of which will be clearly apparent from a detailed description of the invention, which is as follows:—

Referring to the drawings, B, represents a layer of concrete extending the full length and width of the track, and of a thickness corresponding to that prevailing in the usual wooden ties. Disposed at intervals along the bottom of the concrete layer are series of transverse reinforcing plates 1 embedded so as to come flush with the bottom surface of the concrete, a plate 1 having a corresponding opposite upper reinforcing plate 2 likewise embedded in the concrete so as to come flush therewith. The plates 2 serve as means for supporting the rails R, and likewise serve as means for securing thereto the clamps 3 and 4 respectively. The outer clamp or shoe 3 is in the form of an angular plate following the web and outer flange of the rail, being reinforced by a rib *a* inclining from the outer edge of the outer rail tread (which tread it helps to support) to the outer bottom edge of the shoe 3, the

horizontal lower portion of the shoe bearing on the plate 2 for a few inches beyond the base of the rail, the engaging portions of the shoe and plate having securing bolts 5 passed therethrough, and through the bed B and opposite bottom plate 1.

The inner clamp or shoe 4 engages the web and inner flange of the rail, bolts 5' likewise securing the parts in the manner similar to the bolts 5. In addition thereto, bolts 6 secure the vertical portions of the shoes to the web of the rail.

At the joint between two rails, the shoes are widened, the outer shoe 3' having the rib *a'* disposed centrally and opposite the joint, the shoe 4' being correspondingly widened to receive the connecting bolts 6' as shown.

It will be seen from the foregoing that a track of the character described is quickly laid, and repairs thereto may be made in a short space of time. The cost per mile is much less than with wooden ties, and in those portions of the country where wood is scarce the track here shown is eminently desirable. It can not decay, in the sense that wood decays, and any disintegration of the concrete may be readily remedied.

Having described my invention, what I claim is:—

A track comprising a concrete bed extending the length and width of the track, top and bottom transverse reinforcing plates embedded therein and flush with the opposite faces of the bed, rails resting on the upper series of plates and on the concrete bed between the plates, outer clamping shoes engaging the web and outer flange of the rail, and the top plate beyond the rail, and having a rib extending from the outer edge of the outer rail-tread to the lower end of the shoe, an inner shoe engaging the web and inner flange of the rail, and securing bolts passed through the shoes, plates and concrete bed, and a second series of bolts connecting the shoes to the rail web, substantially as set forth.

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

HENRY EHMAN.

Witnesses:

EMIL STAREK,
JOS. A. MICHEL.