No. 835,325. PATENTED NOV. 6, 1906.

G. J. ROUSE.

RAILWAY TRACK RAIL.

APPLICATION FILED JULY 7, 1906.

Fig. 1.

Fig. 2.

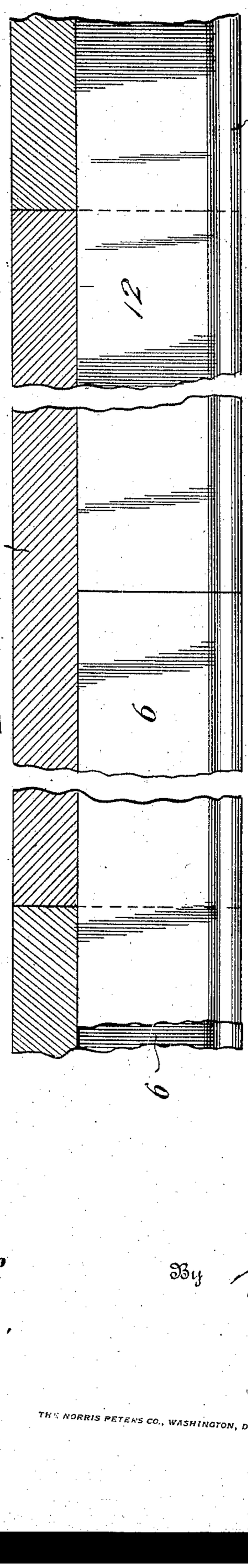


Fig. 4.

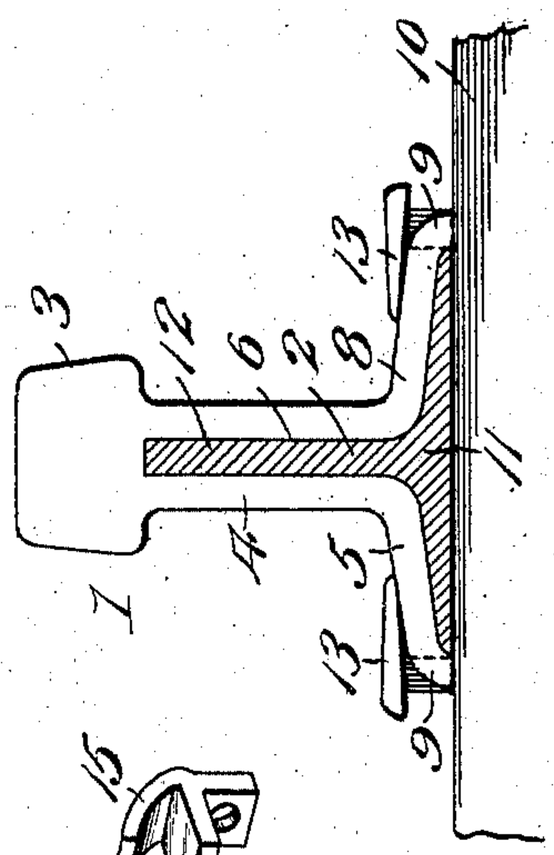


Fig. 5.

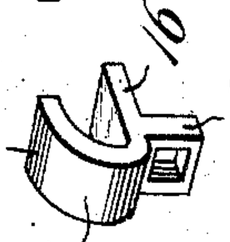
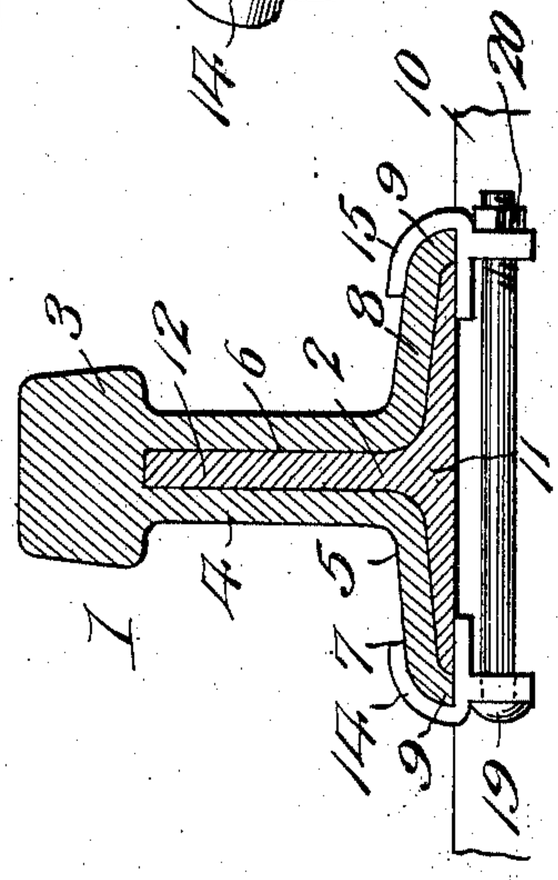


Fig. 3.



Witnesses

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RAILWAY-TRACK RAIL.

No. 835,325. Specification of Letters Patent. Patented Nov. 6, 1906.

Application filed July 7, 1906. Serial No. 325,184.

To all whom it may concern:

Be it known that I, GEORGE J. ROUSE, a citizen of the United States of America, residing at Gays, in the county of Moultrie and State of Illinois, have invented new and useful Improvements in Railway-Track Rails, of which the following is a specification.

My invention relates to improvements in the construction of railway-tracks, and particularly to improvements in the construction of rails therefor.

The main object of the invention is the production of a rail structure whereby the rails of a track will be securely held and more firmly supported to sustain the same against both vertical and lateral strains, so as to effectually prevent the rails from spreading or becoming displaced or depressed at the joints, thus effectually obviating the objections to tracks and rails of ordinary construction.

A further object of the invention is to provide means whereby the rails, while made of convenient length for assemblage and transportation, are designed to be connected in such a manner as to form a practically continuous track which obviates the use of fish-plates and other like joint connections to hold them connected and support them against the strains to which they are subjected under the weight of the rolling-stock.

In the accompanying drawings, Figure 1 is a side elevation of a section of a continuous track-rail embodying my invention. Fig. 2 is a longitudinal section through adjoining rails of the track. Fig. 3 is a vertical cross-section on the line 3 3 of Fig. 1. Fig. 4 is a similar view on the line 4 4 of Fig. 1. Fig. 5 is a detail view, showing the construction of a coöperating pair of clamps.

In carrying my invention into practice in the production of a continuous track-rail I provide rails consisting of sections 1 and 2. The section 1 constitutes a tread-section conforming in general appearance and construction with a commercial rail, to wit, comprising a head 3, a web 4, and a supporting-base 5. In accordance with my invention the web 4 is bifurcated or formed with a longitudinal channel, groove, or mortise extending continuously through the section 1, while the base 5 is composed of two outwardly and oppositely extending flanges 7 and 8, forming a hollow base, the outer edges of the flanges being downturned, as shown at 9, to rest upon the ties or sleepers 10.

Each inner or reinforcing rail-section 2 comprises a base 11, having an upwardly extending or vertical longitudinal web or tongue 12. The rail-sections are coextensive in length with each other and with an ordinary commercial rail, and the base 11 is of proper size and form to occupy the hollow base 5, while the web 2 is adapted to correspondingly fit within the channel or mortise 6.

In the operation of assembling the rails to form a track the sections 2 are first laid upon the ties in longitudinal alinement in the ordinary manner and the tread-sections 1 engaged therewith and fastened in the manner hereinafter described. The inner or reinforcing sections 2 are disposed so as to break joint with the sections 1, or, in other words, so that each section 2 will extend from a point midway of one of the tread-rails across the joint between it and an adjacent rail and to a point midway of the length of the latter-named rail, this construction being carried out throughout the length of the track. Hence the rail-sections 2 will cross the joints between the tread-sections 1, and, as the two sets of rail-sections are arranged in abutting relation, a practically continuous track-rail will be provided in which the inner rail-sections will be so disposed as to prevent both depression and sidewise movement of the abutting ends of the tread-rails and operate to stay and hold the tread-rails from movement in any direction under the weight of the rolling-stock and pressure of the wheels thereof. The flanges of the base 5 of the sections 1 fit over the bases 11 of the sections 2, and the base portions of both sets of rail-sections rest upon the ties and are preferably made wider than the base of an ordinary rail to secure greater stability to resist turning over of the rails from pressure of the flanges of the wheels.

The ends of the sections 1 may be secured to the underlying ties by ordinary spikes 13, the portions 9 of the flanges 7 and 8 being preferably notched to receive the shanks of the spikes in the customary manner. These spikes will be sufficient to retain said rail-sections in place without the use of fish-plates, bolts, and other similar fastenings, as the joints of the tread-sections are reinforced and held from movement by the inner rail-sections. The sections 1 and 2 are held in assembled relation at suitable intervals, preferably between the ties, by clamps 14 and 15, each comprising a base 16 to extend under the portions 9 and outer edges of the flanges

of the base 11, and a jaw 17 to hook over the flange 7 or 8, as the case may be. Each clamp is further provided with a depending lug 18, the lug of the clamp 14 being formed with a rectangular opening and the lug of the clamp 15 with a round opening to respectively receive the squared and threaded portions of the shank of a connecting tie-bolt 19, provided with a securing-nut 20. This bolt holds the pair of clamps assembled and in engaging relation with the bases of the rail-sections to hold the same from independent movement.

It will be apparent that my invention provides a rail structure whereby a substantially continuous reinforced track may be constructed and which will have great strength and durability and will obviate the necessity of employing the insecure joint-fastenings commonly used. The rails may be used in connection with commercial rails by simply terminating the tread-section 2 at the point of junction and connecting the improved rail with the commercial rail through the use of the ordinary joint-fastening.

Having thus described the invention, what is claimed as new is—

1. A track-rail comprising outer rail-sections of commercial form, each having a hollow base and a longitudinal groove through the web thereof, and inner rail-sections, each provided with a base to fit within the base of the outer rail-section and a web to occupy the groove in the web of said outer section, the said inner sections being arranged to break joint with the outer sections.

2. A track-rail comprising tread-rail sections, each comprising a body of commercial form having a head, a hollow base composed of outwardly-extending flanges and a bifurcated web forming a longitudinal groove communicating with the hollow base, and inner or reinforcing rail-sections, each comprising a base adapted to fit in the hollow base of the tread-sections and a web to fit the groove or channel of the bifurcated web, the inner rail-sections being arranged to break joint with the tread-sections.

3. In a track structure, the combination of ties, a track-rail comprising interfitting outer or tread and inner or reinforcing sections arranged to break joint, said sections having base portions, one receiving the other, clamping devices engaging said base portions and holding the rail-sections connected, and means for fastening the outer rail-sections to the ties.

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

GEORGE J. ROUSE.

Witnesses:
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