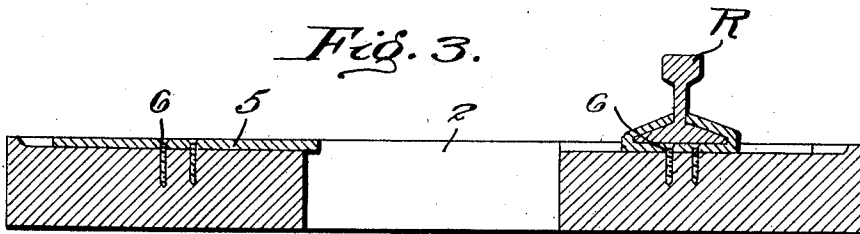
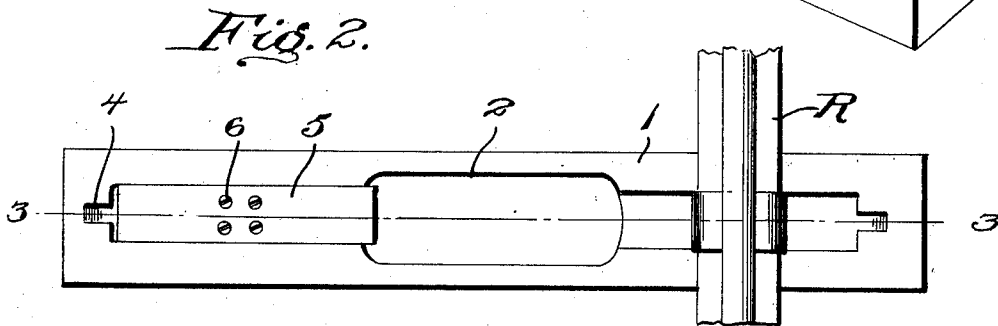
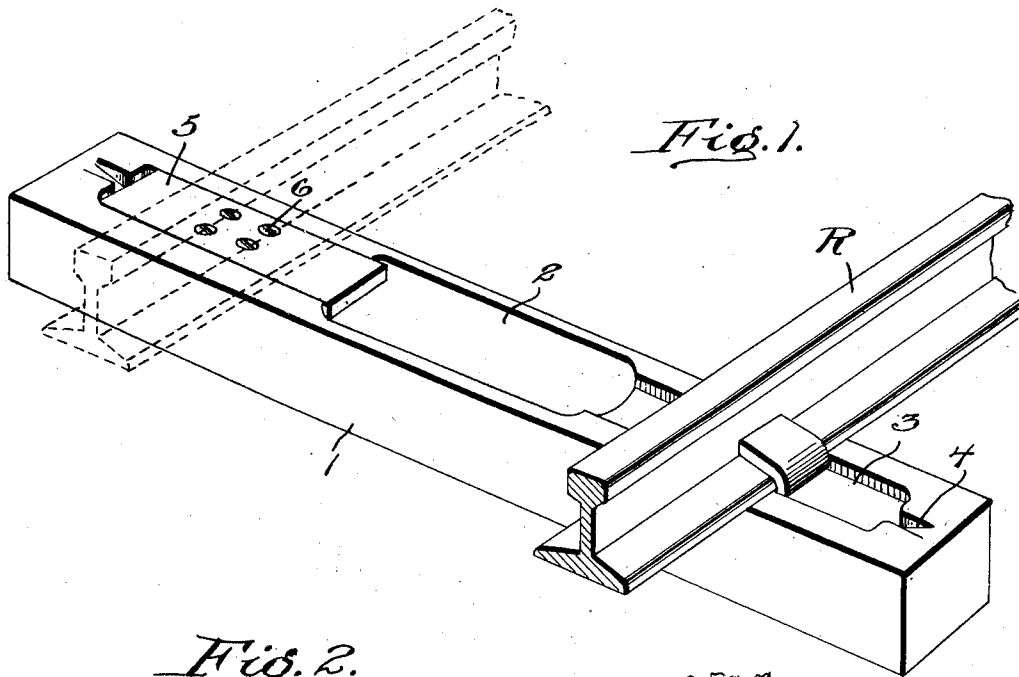


H. J. G. REXROTH.
RAILWAY TIE.
APPLICATION FILED APR. 19, 1911.

997,208.

Patented July 4, 1911.



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UNITED STATES PATENT OFFICE.

HARRY J. G. REXROTH, OF BUCYRUS, OHIO.

RAILWAY-TIE.

997,208.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed April 19, 1911. Serial No. 622,153.

To all whom it may concern:

Be it known that I, HARRY J. G. REXROTH, citizen of the United States, residing at Bucyrus, in the county of Crawford and State of Ohio, have invented certain new and useful Improvements in Railway-Ties, of which the following is a specification.

It is the object of the present invention to provide an improved railway tie, the tie embodying means for securing a rail in proper position thereon, without the use of bolts, nuts or other securing devices.

The invention aims, among other things to so construct the rail securing means of the tie that relative adjustment of the rails will not be necessary, the securing means serving to space the rails at proper distance apart.

Another aim of the invention is to so construct the securing means that it may be readily removed from the tie and replaced, when desired, and will not require the use of special tools in adapting it to clamp a rail disposed upon the tie.

For a full understanding of the invention reference is to be had to the following description and accompanying drawing, in which:—

Figure 1 is a perspective view of the tie embodying the invention. Fig. 2 is a top plan view thereof. Fig. 3 is a vertical longitudinal sectional view on the line 3—3 of Fig. 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawing, by the same reference characters.

In the drawing, the body of the tie is indicated by the numeral 1 and is formed throughout its intermediate portion with an opening 2 which extends vertically there-through, and not only materially lightens the body, it being made of metal, but also serves to receive ballast whereby it will be held in proper place. This opening 2 serves another purpose which will be presently explained.

The body 1 of the tie is formed in its upper face, near each end, with a seat 3 which is preferably oblong and shallow and at its inner end communicates with the opening 2. A recess 4 is also formed partly in the upper face of the tie-body and the bottom wall of the seat 3, at the outer end thereof, and this recess is preferably deeper at its inner end than at its outer end. A plate 5 is disposed within each seat 3 and, when in

normal condition, completely fills the seat, it being confined at its side or longer edges between the side-walls of the seat and abutting at one end-edge against the outer end-wall of the seat, and at its inner end projecting slightly over the corresponding end of the opening 2. Screws or other suitable securing devices 6 are engaged through the intermediate portion of each plate 5 and into the body of the tie and serve to removably hold the plate in place with its upper face flush with the upper face of said body. It will be obvious by referring to Fig. 1 of the drawing, that the attached portion of the plate is of the same or slightly less width than the base-flange of the rail to be secured. It will also be obvious that the outer end of each seat 3 covers only that portion of the recess 4 which is formed in the bottom wall of the respective seat 3. In adapting the plate to clamp a rail disposed upon the tie, the rail is placed in position and the point of a pick, crow-bar or other like tool, is inserted into the exposed portion of the recess 4 and beneath the outer end of the plate 5, and this end of the plate is pried up out of its seat 3 and to position beside the rail, indicated by the reference letter R. In a like manner such a tool is inserted beneath the projecting inner end of the plate 5 and this latter end of the plate is bent up in a similar manner. The bent-up ends of the plate are then hammered or bent into place against the upper face of the base-flange of the rail and against the sides of the rail-web. In this manner, the plates are caused to hold the rails firmly in proper position upon the tie, although they may be readily removed at any time by prying the bent-up ends of the plates away from the rails.

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

1. A tie comprising a body formed in its upper face with a shallow seat and with a recess located at one end of the seat, and a plate secured at its intermediate portion in the seat and projecting at one end partly over the recess.

2. A tie comprising a body formed in its upper face with a shallow seat and with a recess located in the outer end of the seat, the intermediate portion of the tie-body being cut away and the inner end of the seat opening into the cut away portion, and a plate secured at its intermediate portion in

the seat and projecting at its outer end partly over the recess and at its inner end over the end of the cut away portion of the body.

5 3. A railway tie comprising a body formed in its upper face, near each end with a seat, and with a recess located at the outer end of each seat, the tie between the inner ends of the two seats being cut away, and a plate
10 secured at its intermediate portion in each of the seats and projecting at its outer end partly over the recess and at its inner end over the cut away part of the body.

15 4. A railway tie comprising a body formed at its intermediate portion with an opening extending vertically therethrough and in its upper face, at each end of the opening with a shallow seat, the body being formed in its said upper face with a recess at the outer
20 end of each seat, and a plate secured in each seat and having its upper face flush with the upper face of the body, the outer end of each plate projecting partly over the cor-

responding recess and the inner end of each plate projecting over the adjacent end of the opening through the body. 25

5. A railway tie comprising a body formed in its intermediate portion with an opening extending vertically therethrough, the body being formed in its upper face, at each end
30 of the opening, with a seat extending longitudinally of the body and formed in its bottom wall, at its outer end, with a recess, and a plate secured at its intermediate portion in each seat and confined at its side
35 edges between the side-walls of the seat, the plate projecting at its outer end partly over the corresponding recess and its inner end over the adjacent end of the opening in the
40 body.

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

HARRY J. G. REXROTH. [L. S.]

Witnesses:

EMANUEL P. FAUSER,
N. E. KIESS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."