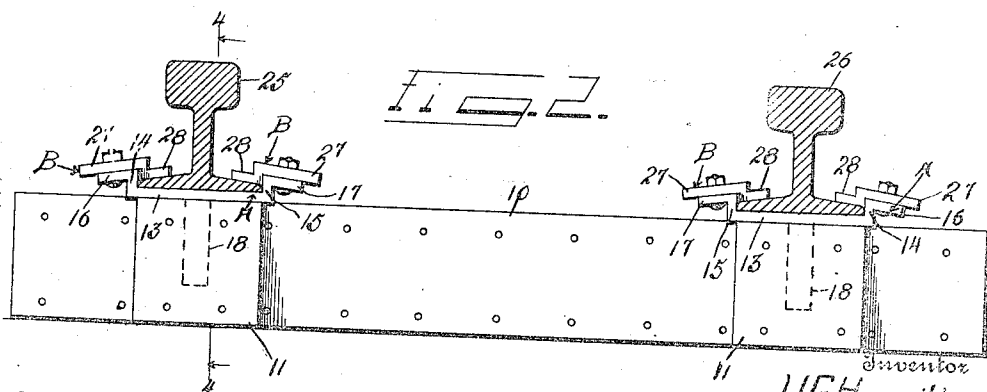
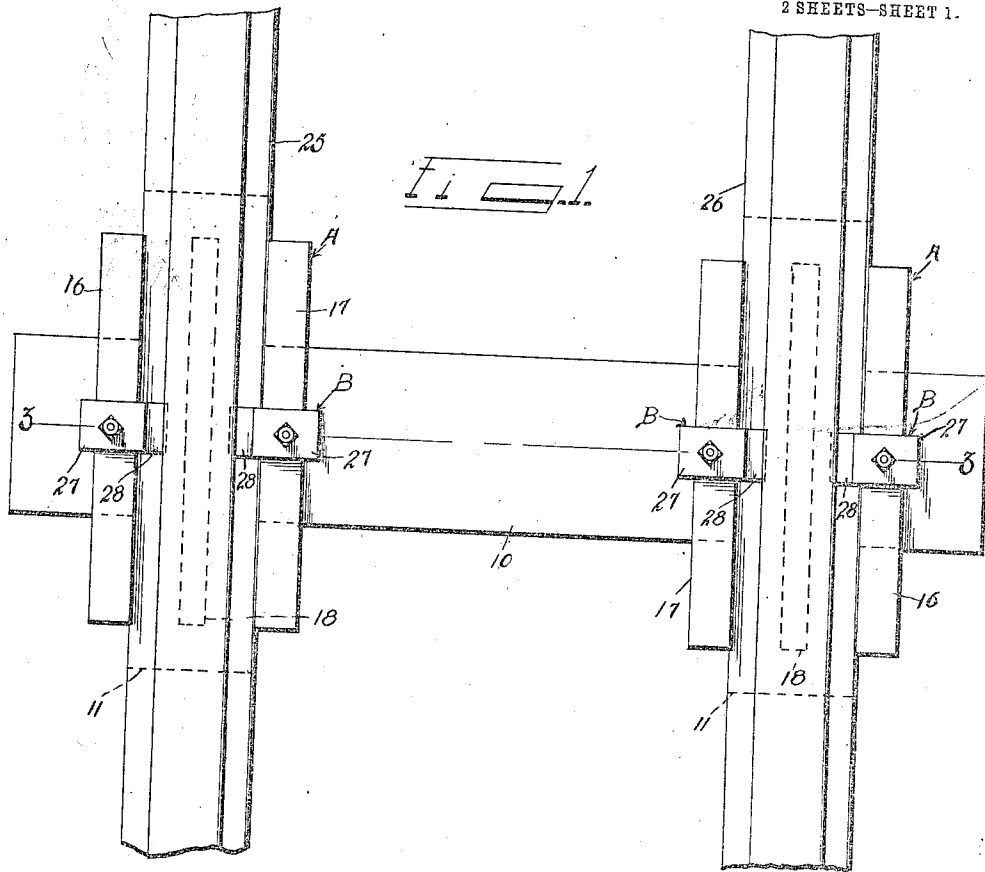


U. G. HAMILTON.
RAILROAD TIE.
APPLICATION FILED MAY 26, 1911.

1,013,655.

Patented Jan. 2, 1912.

2 SHEETS-SHEET 1.



Witnesses
H. C. Hotel

Henry T. Ring et

Inventor
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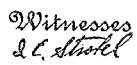
By

[Signature]

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1,013,655.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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RAILROAD-TIE.

1,013,655.

Specification of Letters Patent.

Patented Jan. 2, 1912.

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To all whom it may concern:

Be it known that I, ULYSSES GRANT HAMILTON, a citizen of the United States, residing at Peters, in the county of San Joaquin, State of California, have invented certain new and useful Improvements in Railroad-Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to railroad ties.

The object of the invention resides in the provision of a rail road tie which is formed of concrete or a similar composition and includes means to enable the convenient stable, and secure clamping of track rails that are mounted upon the tie and permit the speedy release of the track rails and their removal when desired.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully described and particularly pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the several views; and in which—

Figure 1 is a plan view of a rail road tie constructed in accordance with the invention, showing a pair of rails supported thereon. Fig. 2 a side elevation of the tie. Fig. 3 a section on the line 3—3 of Fig. 1. Fig. 4 a section on the line 4—4 of Fig. 2. Fig. 5 a detail perspective view of the rail bracket secured to the tie at each end, and Fig. 6 a detail perspective view of the clamping means associated with said brackets to secure the rails thereto.

Referring to the drawings the tie is shown as comprising a rectangular body portion 10 having lateral extensions 11 at each end disposed at corresponding points on opposite sides of the body, said body 10 and extensions 11 being molded as an integral mass. The tie is provided at each end with transverse recesses 12 which are of sufficient length to project into the extensions 11. Mounted upon the tie at each end are corresponding rail brackets A. These brackets are trough shaped and include a bottom member 13 and side members 14 and

15, the latter terminating in outwardly and downwardly positioned flanges 16 and 17 respectively. Extending longitudinally of each bracket A and formed integral with the bottom member 13 is an outwardly disposed web 18 which conforms to the shape of the recess 12 of the tie body and is adapted to seat in said recess respectively when the brackets are associated with the body of the tie. The web 18 of each bracket A is provided with a central opening 19 through which extends a reinforcing rod 20 embedded longitudinally in the body of the tie. This rod serves to hold respective webs 18 in respective recesses 12 of the tie body and thereby secure the brackets A to said body. The web 18 is further provided adjacent each end with pairs of openings 21 and 22 through which extend respectively short rods 23 and 24 embedded in respective extensions 11 of the tie. These pairs of rods 23 and 24 serve to more securely hold the brackets A associated with the tie body. Seated in respective brackets A are rails 25 and 26 which are secured against disengagement from said brackets by means of clamping members B. Each of the clamping members B is formed with offset portions 27 and 28 the former of which rests upon respective flanges 16 and 17 of the brackets A and the latter extends into said bracket and overlies the base of respective rails 25 and 26. These clamping members B are secured to respective flanges 16 and 17 by means of bolts 29 which extend through aligning openings in the clamping members and respective flanges 16 and 17. By this construction of brackets and clamping members it will be apparent that the rails may be easily and quickly applied to and removed from the ties when desired and that said ties will afford a very strong and durable foundation for the tracks.

What is claimed is:

A railroad tie comprising a cementitious body portion having transverse recesses in its upper face, corresponding lateral extensions at each end of said body portion into which the ends of said recesses respectively project, a rail bracket secured to said tie at each end, each of said brackets comprising a trough portion having its sides provided at its upper ends with laterally and downwardly extending flanges, a web integral with the bottom of said trough por-

tion and disposed on said recesses of the tie respectively, throughout the entire extent of the latter, reinforcing rods embedded in said tie passing through the webs of said bracket to secure the latter to the body portion, and clamping means for securing the rails to respective brackets.

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

ULYSSES GRANT HAMILTON.

Witnesses:

PERCY S. WEBSTER,
STEPHEN N. BLEWETT.