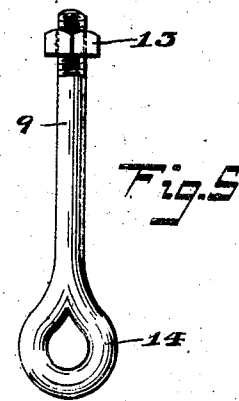
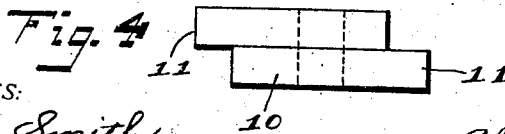
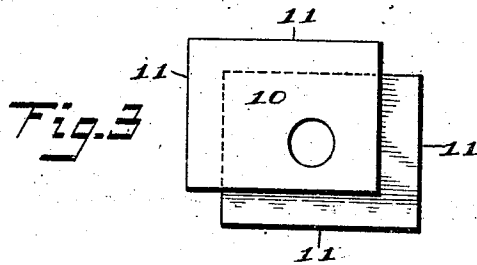
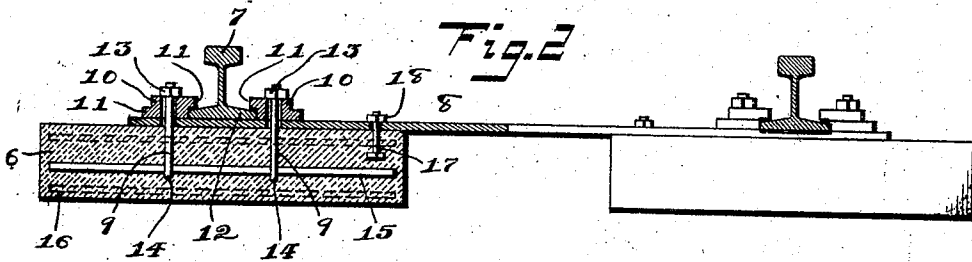
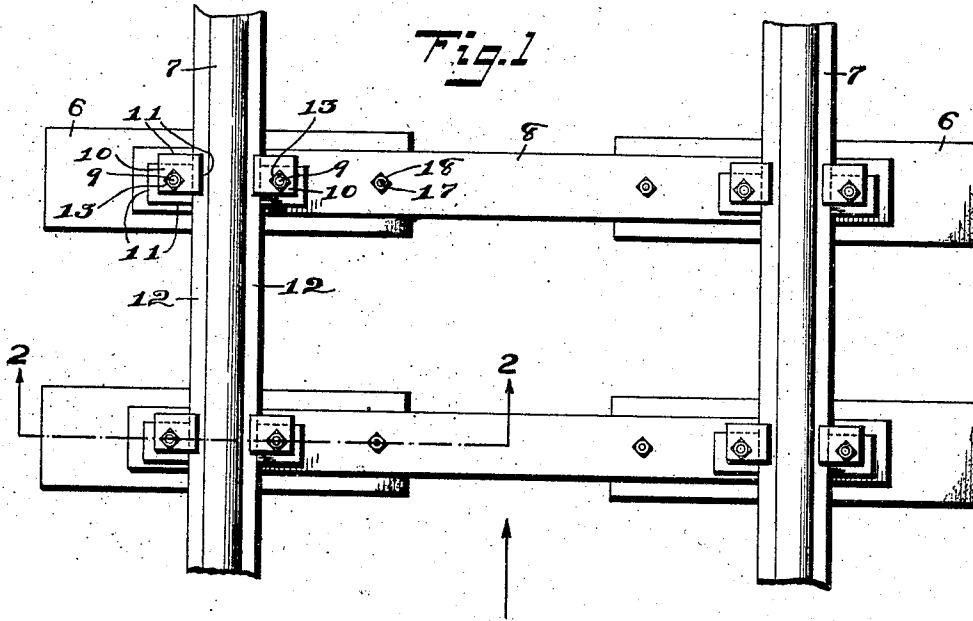


A. T. SPEARS.
RAILWAY TIE.
APPLICATION FILED OCT. 2, 1911.

1,051,972.

Patented Feb. 4, 1913.



WITNESSES:
Chas. J. Smith,
Bess Epperson.

INVENTOR,
Alfred T. Spears.
BY
Frank P. Shepard,
ATTORNEY.

UNITED STATES PATENT OFFICE.

ALFRED T. SPEARS, OF OKLAHOMA, OKLAHOMA.

RAILWAY-TIE.

1,051,972.

Specification of Letters Patent.

Patented Feb. 4, 1913.

Application filed October 2, 1911. Serial No. 652,419.

To all whom it may concern:

Be it known that I, ALFRED T. SPEARS, a citizen of the United States, residing at Oklahoma city, in the county of Oklahoma and State of Oklahoma, have invented certain new and useful Improvements in Railway-Ties, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

An object of the invention is to lessen the cost and increase the durability of the railway track.

Other objects and advantages of the invention will be set forth in the ensuing description.

Referring to the drawings:—Figure 1 is a fragmental plan view of a railway track, with the improved tie in use. Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1. Fig. 3 is an enlarged plan view of a clip or clamping-plate for holding the rails down. Fig. 4 is an elevation view of the clip or clamping-plate 4 in Fig. 3.

Referring to the several figures, in all of which like characters of reference designate like parts, the improved tie consists, in part, of two separated sections 6 of suitable material, preferably concrete on account of its cheapness and durability. One section 6 of the tie supports one of the track rails 7, and the opposite section the other rail.

In further completing the tie, a strap-iron bar 8 rests with its ends upon the sections 6 and under the track rails 7. Each section 6 of the tie has bolts 9 embedded in it and projecting from its upper face, these bolts passing upward through the strap-iron bar 8 on each side of the rail 7. To hold the rails 7 in place on the bar 8, each bolt 9 has an iron clip or clamping-plate 10 slipped over it, each side face of the clip having an outwardly-projecting lip 11 adapted to project over the base 12 of the rail; and these clips are held down tightly by nuts 13 which are screwthreaded to the bolts 9. In order to adjust the clips 10 to rail bases 12 of different widths, each of the four side faces of the clip is provided with an outwardly projecting lip 11, and no two of said faces are the same distance from the bolt hole in said clip. The lips 11 of two adjacent side faces of the clip 10 project from the lower portion of said faces, while the lips of the other two side faces project from their upper portion, this arrangement affording greater

bearing surface of said clip on the bar 8 than if said lips all projected from an upper portion of said side faces.

The bolts 9 have eyes 14 formed in their lower ends, an iron rod 15 being embedded in the tie section and extended through said eyes to anchor said bolts in said sections. This rod 15 extends through substantially the entire length of the section 6 to reinforce its strength, and other reinforcing rods 16 are embedded in the section if necessary.

A bolt 17 is embedded in the inner end of each tie section 6 and extended up through the strap-iron bar 8, said bolt having a screwthreaded nut 18 which is screwed down to secure said bar to said section.

In forming the tie of two separated sections, and connecting said sections by the elastic strap-iron bar 8, each section will settle in a less strained relation to its mating section; whereas a tie in one piece is soon broken at its center by being required to settle the center of the road bed as its ends are gradually lowered by the weight of the rolling-stock.

The foregoing being a full, clear, and exact description of the invention, what I claim and desire to secure by Letters Patent is:—

The herein described railway tie including two spaced and independent concrete blocks, a metallic bar connecting the concrete blocks and having the ends thereof resting upon the said blocks, bolts partially embedded in the concrete blocks and having the ends thereof projecting outwardly and engaging the bar to hold the bar in position, substantially horizontal reinforcing rods embedded in the concrete blocks, upright bolts having the lower ends thereof formed with eyes which receive the reinforcing rods, the said lower ends of the bolts being embedded in the concrete blocks while the upper ends thereof project through and above the metallic bar, and rail engaging clamps applied to the projecting upper ends of the said bolts for holding the track rails in position.

Witness my hand this 11 day of April, 1911.

ALFRED T. SPEARS.

Witnesses:

CHAS. I. SMITH,
JULIA V. SPEARS.

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