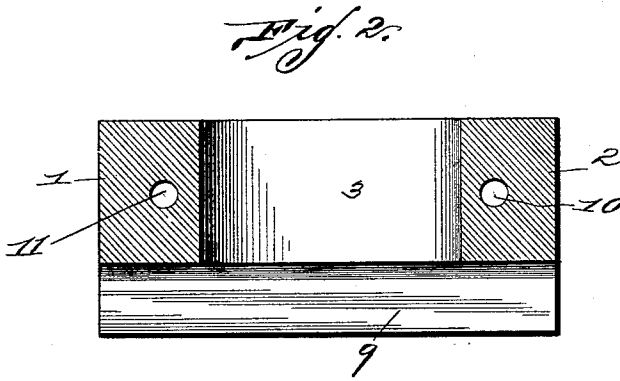
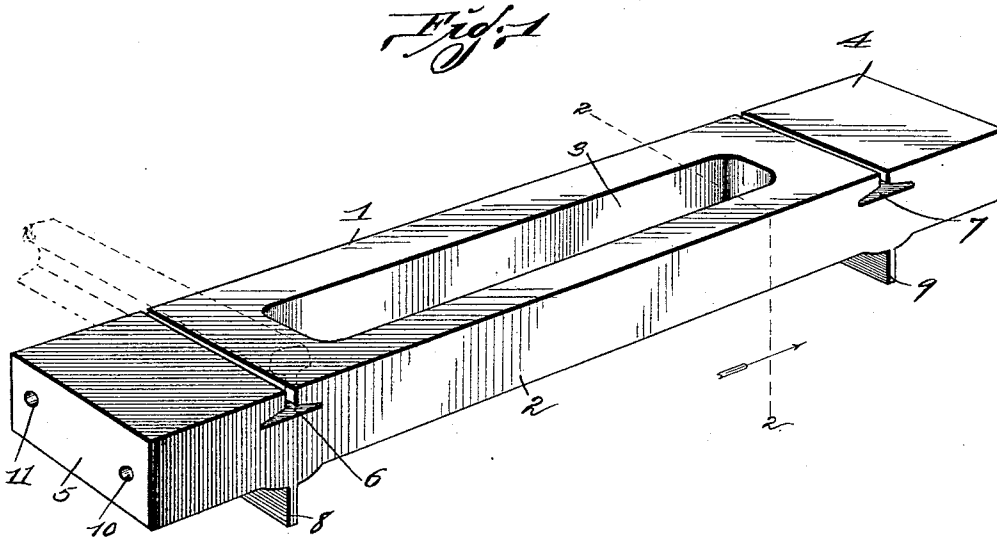


(No Model.)

C. A. T. PETERS.
RAILROAD TIE.

No. 569,469.

Patented Oct. 13, 1896.



Attest
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UNITED STATES PATENT OFFICE.

CHARLES A. T. PETERS, OF DEXTER, MISSOURI.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 569,469, dated October 13, 1896.

Application filed May 18, 1896. Serial No. 591,992. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. T. PETERS, of the city of Dexter, Stoddard county, State of Missouri, have invented certain new and useful Improvements in Railroad-Ties, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved railroad-tie; and it consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

In the drawings, Figure 1 is a perspective of my improved railroad-tie, the position of the rail being shown in dotted lines. Fig. 2 is a vertical sectional view on the line 2 2 of Fig. 1.

My improved railroad-tie is made of iron and is approximately level upon its upper surface, and consists of the parallel horizontal bars 1 and 2, which are rectangular in cross-section, as shown in Fig. 2, and are placed some distance apart, leaving the vertical aperture 3 extending longitudinally of said tie from a point just inside of one rail across the track to a point just inside of the adjacent rail. The mating ends of the bars 1 and 2 are joined by the rectangular blocks 4 and 5, through which extend the recesses 6 and 7, designed to receive the bottom of the railroad-rail. Directly under the recesses 6 and 7 and extending transversely of the tie in a position parallel with said recesses are lugs 8 and 9, extending downwardly at right angles from the body of the tie. These lugs 8 and 9 are approximately rectangular in cross-section up to a point near their bases, from which point they are widened out to make a strong bond with the bottom of the tie. Extending through the entire length of the tie are air-passages 10 and 11, so positioned that an air-passage extends through the centers of each of the bars 1 and 2, approximately as shown in Fig. 2. The passages 10 and 11 are cored out for the purpose of lightening the tie and for the purpose of providing the circulation of air through the rails in order that all parts of the tie may be affected substantially to the same extent by the changes and variations of heat and cold.

In practical operation my railroad-tie is placed upon the grade approximately in the position desired, and the bottom of the rails are shoved endwise into the recesses 6 and 7. These recesses are so constructed as to readily

admit the rail and yet hold it firmly at any position after it is once placed. The lugs 8 and 9 are designed to sink into the grade and prevent the tie from moving out of place. The aperture 3 is designed to be filled with sand or dirt, or, if desired, filled with cement, and together with the lugs 8 and 9 will effectually hold the tie in position.

If the rails become loose in the recesses 6 and 7, one end of the tie may be drawn forward or backward out of transverse alignment with the rail and thus tighten its grip upon the rail, or suitable wedges may be driven into the recesses beside the rail.

When a good road-bed has been once thoroughly equipped with my improved railroad-ties, it will last forever. There are no spikes to become loose, no wood to rot, and nothing that can possibly decay or get out of place, and a road thus equipped is well insured against not only the derailment of trains by accident, but by strikers, rioters, and robbers, as it will be a very difficult task to tear up a track built in accordance with my invention.

I claim—

1. A railroad-tie, consisting of a bar of iron having transverse recesses in the ends of its upper surface, said recesses being designed to receive the bottom flanges of the rail, and having the vertical opening extending through its center from near the inside of one rail to near the inside of the opposite rail, and also having air-passages extending through its entire length, and lugs projecting downwardly from the under surface of said tie into the road-bed, substantially as specified.

2. A railroad-tie, consisting of the parallel horizontal bars 1 and 2, said bars being rectangular in cross-section, the rectangular blocks 4 and 5 joining the ends of said bars 1 and 2 and forming the aperture 3 between said bars, said rectangular blocks 4 and 5 having the recesses 6 and 7 in their upper faces and designed to receive the bottom flanges of the rails, the lugs 8 and 9 extending downwardly at right angles from the lower sides of said rectangular blocks 4 and 5, all cast integral, substantially as specified.

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

CHARLES A. T. PETERS.

Witnesses: .

E. M. WEBER,
EMIL WEBER.