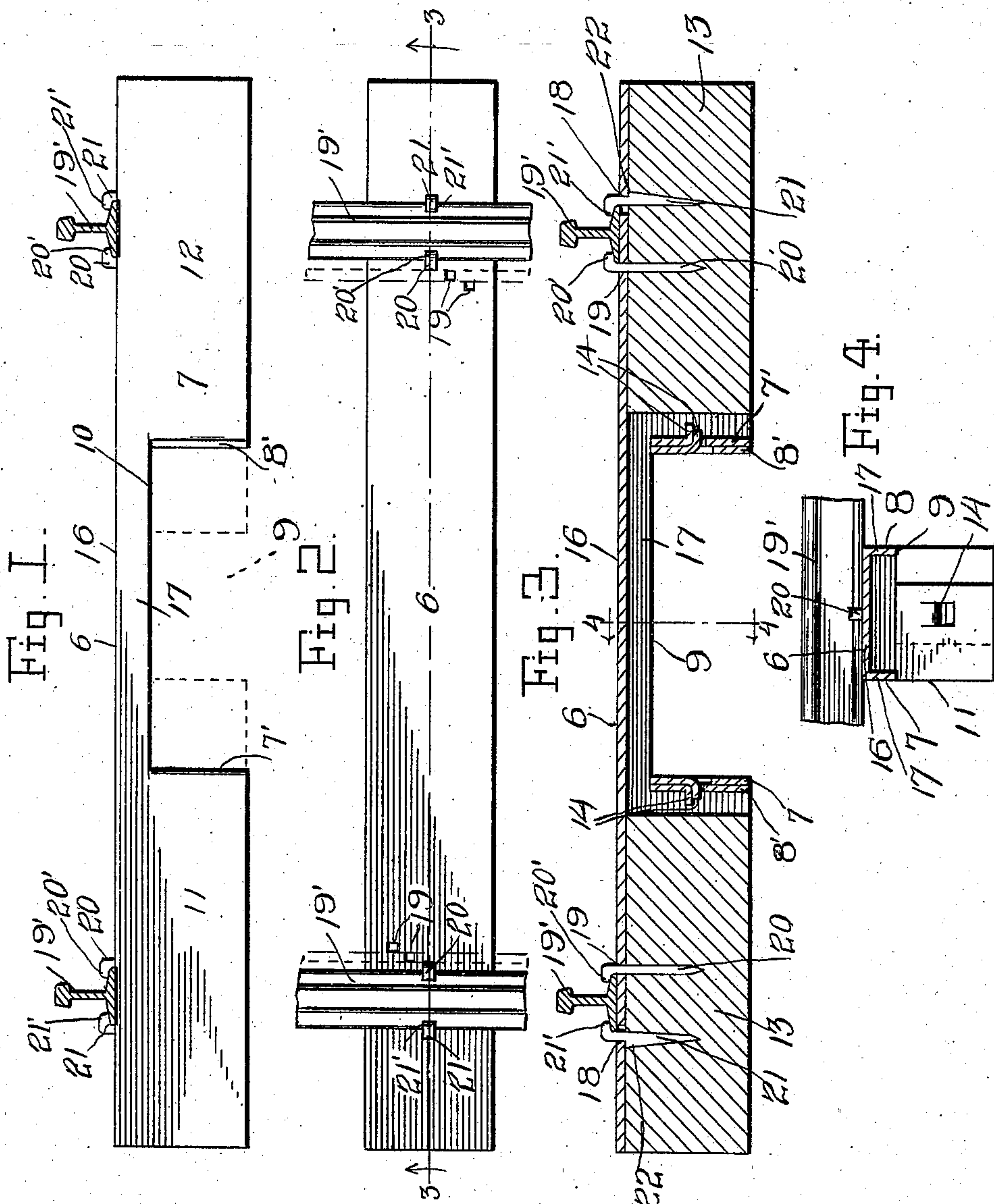


No. 847,780.

PATENTED MAR. 19, 1907.

J. H. JENNINGS.
RAILROAD TIE.

APPLICATION FILED JUNE 5, 1906.



Witnesses

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JOSEPH HENRY JENNINGS, OF MIDDLEWAY, WEST VIRGINIA.

RAILROAD-TIE.

No. 847,780.

Specification of Letters Patent.

Patented March 19, 1907.

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To all whom it may concern:

Be it known that I, JOSEPH HENRY JENNINGS, a citizen of the United States, residing at Middleway, in the county of Jefferson, State of West Virginia, 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 railroads, and more particularly to railroad-ties, and has for its object to provide a tie embodying the essential features of ties previously patented by me, but which will include various definite and meritorious improvements thereover.

A principal object of the present invention is to provide a tie including a novel means for attaching rails thereto and one having such structural arrangement that it may be manufactured at a low figure.

Other objects and advantages will be apparent from the following description, and it is to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is an elevational view of the present tie with rails attached thereto. Fig. 2 is a top plan view. Fig. 3 is a longitudinal section on line 3 3 of Fig. 2. Fig. 4 is a transverse section on line 4 4 of Fig. 3.

Referring now to the drawings, the present tie is formed of channel-iron, including a top plate 6 and depending side walls 7 and 8. Each side wall is cut away at its center, as indicated at 9, and at each side of the cut-away portions the walls are cut into longitudinally, as shown at 10, at the upper portion of the cut-away portion, to form flaps 7' and 8', which are bent inwardly at right angles to the side walls and which are overlapped. There are thus formed two end portions 11 and 12, which are hollow and within which are disposed wooden or other fibrous filling-blocks 13. The overlapping portions of the flaps 7' and 8' are punched inwardly to form inwardly-turned tongues 14, which prevent separation of the flaps. The two end portions 11 and 12 are connected by a central

portion 16, which is formed by a portion of the top plate 6, and this central portion has depending flanges 17 at its edges, which are formed by cutting away the side walls 7 and 8 and by the bending of the flaps. The end portions 11 and 12, as shown, are open at their outer ends and their under surfaces.

Formed in the top plate 6, adjacent to each end thereof and communicating with the interior of the corresponding end portion, there is an opening 18, and formed through the top plate inwardly of and adjacent to each of these openings 18 there are a plurality of openings 19 disposed at different distances from the openings 18 both longitudinally and transversely of the tie.

In fastening the rails 19' to the tie two types of spikes are used, one having the usual formation, and another having a rearwardly-extending upwardly-directed shoulder 22, adjacent to its upper end, these spikes being shown at 20 and 21, respectively, and the spike 21 has the portion of its rearward face below the shoulder 22 slanted downwardly to the point of the spike. In use a spike 21 is passed through each opening 18 with its rearward face directed toward the adjacent end of the tie, and the rail is then disposed with its base-flange beneath the inwardly-directed nose 21' of the spike. It will be understood that the spike is then driven into the filling-block 13 to bring its shoulder below the under surface of the top plate 6, the opening 18 being of sufficient length to permit the shoulder portion of the spike to pass therethrough. A spike 20 is then engaged in the correct opening 19, the several openings 19 being provided to suit rails of different widths, and the spike is driven home to bring its nose 20' into engagement with the base-flange of the rail, this driving of the spike by reason of its engagement of the rail, forcing the latter and the spike 21, with the block 13, toward the adjacent end of the tie, to firmly seat the shoulder 22 beneath the top plate 6 and the upper portion of the spike against the end of the opening 18. The spike 21 is thus securely held against removal, and the spikes hold the filling-blocks 13 in position, as will be readily understood.

By reason of the fact that the end flaps 7' and 8' terminate short of the top plate 6 there are formed air-openings at the inner ends of the end portions 11 and 12 and the bottom and outer ends of these end portions,

and the filling-blocks 13 are thus thoroughly ventilated to prevent disintegration thereof.

What is claimed is—

1. A tie comprising a top plate, depending
5 walls carried by the sides of the top plate, inwardly-extending, overlapped flaps carried by the inner ends of the adjacent walls, filling-blocks disposed between the walls at each
10 end of the tie, and tongues carried by the overlapped plates and extending into the filling-blocks, the tongues of the outer plates extending through the inner plates, said top plates having spike-receiving openings there-
in above the filling-blocks.

15 2. A tie comprising a piece of channel-iron, including a top plate and depending walls, said walls being cut away at their central portions to form recesses terminating short of
20 the top plate, and being cut into longitudinally from the upper corners of the recesses to form flaps, the flaps at each end being bent inwardly and overlapped to form hollow end
portions, a filling-block disposed at each end portion and spikes engaged through the top
25 plate and extending into each filling-block.

3. A tie comprising a piece of channel-iron, including a top plate and depending walls, said walls being cut away at their central portions to form recesses terminating short of
30 the top plate, and being cut into longitudinally from the upper corners of the recesses to form flaps, the flaps at each end being bent inwardly and overlapped to form hollow end portions, a filling-block disposed in each end
35 portion, one of each pair of said flaps having a tongue struck therefrom and through the other flap.

4. A tie comprising a piece of channel-iron including a top plate and depending walls,

said walls being cut away at their central por- 40
tions to form recesses terminating short of the top plate, and being cut into from the recess to form flaps, the flaps at each end being bent inwardly and overlapped to form hollow
end portions, and a filling-block disposed in 45
each end portion.

5. A tie comprising a top plate having oppositely-disposed depending side walls at its ends, and inwardly-extending overlapped
50 flaps carried by the walls, said overlapping flaps being punched one into the other to prevent separation thereof.

6. In a tie, the combination with a top plate and depending side walls, of inwardly-
55 extending end flaps carried by the walls and terminating short of the top plate, and a filling-block between the walls.

7. A tie comprising hollow end portions and a connecting intermediate portion, said
60 end portions having openings at the upper portions of their inner ends and being open at their bottoms and outer ends.

8. A tie comprising a top plate, depending side walls carried by the top plate, inwardly-
65 extending end flaps carried by the walls, and a filling-block engaged between the walls.

9. A tie comprising a top plate, depending walls carried by each side of the top plate in
70 spaced relation, inwardly-extending flaps carried by the inner ends of the walls, and filling-blocks disposed between the walls at each end of the tie.

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

JOSEPH HENRY JENNINGS.

Witnesses:

HARRY E. CHANDLEE,
M. T. MILLER.