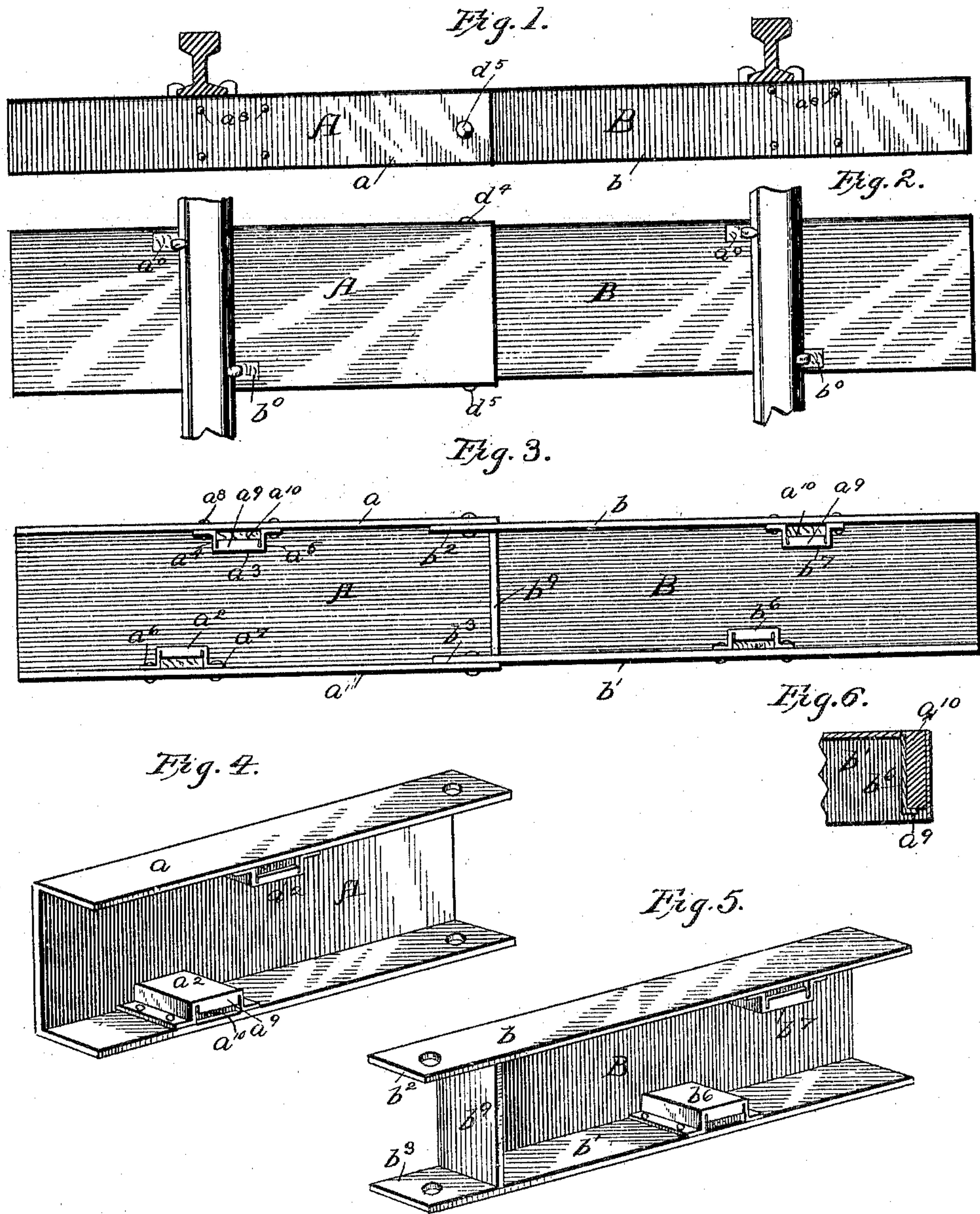


No. 817,098.

PATENTED APR. 3, 1906.

J. F. BAILEY.  
RAILROAD TIE.

APPLICATION FILED JULY 6, 1905.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES FRANKLIN BAILEY, OF VALDOSTA, GEORGIA.

## RAILROAD-TIE.

No. 817,098.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed July 6, 1905. Serial No. 268,374.

*To all whom it may concern:*

Be it known that I, JAMES FRANKLIN BAILEY, a citizen of the United States, and a resident of Valdosta, in the county of Lowndes and State of Georgia, have invented certain new and useful Improvements in Railroad-Ties, of which the following is a specification.

My invention is an improvement in railroad-ties; and it consists in certain novel constructions and combinations of parts hereinafter described and claimed.

Referring to the drawings forming a part hereof, Figure 1 is a side view of my improved tie with the rails in place thereon. Fig. 2 is a top plan view of the same. Fig. 3 is a bottom plan view. Fig. 4 is a perspective view of one of the sections from below. Fig. 5 is a similar view of the other section, and Fig. 6 is a transverse vertical section through one of the pockets.

In the practical application of my invention I provide a tie composed of two sections A and B. The sections comprise plates having their longitudinal edges bent downward to form depending flanges  $a' b'$ , the flanges of the adjacent ends of the sections overlapping and being secured together by rivets  $d^4 d^5$ . Longitudinal incisions  $b^2 b^3$  separate the flanges of the section B from the upper surface of the plate, and that part of the upper surface between the incisions is turned downwardly to form a transverse flange  $b^9$  of equal depth with the longitudinal flanges.

It will be evident from the description of this attachment that a hinge-joint is formed between the sections of the tie, the motion of the parts with respect to each other being limited by the overlapping flanges and the transverse flange forming a support for the hinge-joint.

Openings  $a^0 b^0$  are provided in the upper face of the sections at points corresponding to the position of the spikes, which secure the rail to the tie. Below the openings are arranged pockets  $a^2 a^3 b^6 b^7$ , the pockets being formed by a plate having its edges bent downwardly to form the sides  $a^4 a^5$  of the pocket and outwardly to form the flanges  $a^6 a^7$ , attached to the inner face of the flanges by means of the rivets  $a^8$ . A flange  $a^9$ , integral with the inner face of the pocket, projects into the lower opening of the pocket, and a block of wood  $a^{10}$  or other fibrous material is arranged within the pocket to receive the rail-attaching spikes.

In constructing my improved tie the tie may be formed of a single plate and afterward divided or may be formed of two plates, and the block of wood is made of larger size than the pocket and driven thereinto, thus providing a firm hold for the spike.

When the flanges are embedded in the ballast, the tie is restrained both from transverse and from longitudinal movement with respect to the road-bed, and by the provision of the hinge a tie is formed free from the objections found in the ordinary metallic tie—that is, lack of resiliency.

My improved tie is both resilient and flexible, yet not to a degree sufficient to impair the alinement of the rails.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination a railroad-tie adapted to support a rail and to be connected thereto by means of spikes, and comprising a plurality of sections, each composed of a plate having its longitudinal edges bent to form depending flanges, the flanges on the adjacent ends of the sections overlapping, rivets securing the overlapping flanges, a transverse depending flange formed on the inner end of one of the sections, pockets secured to the inner face of the flanges of each section, in positions corresponding to the position of the spikes, each comprising a plate having its longitudinal edges bent downwardly to form the sides of the pocket, and outwardly to form a flange for engaging the inner face of the flanges of the sections, rivets for securing the pockets in place, an inwardly-projecting flange at the bottom of the pocket, and a block of wood frictionally retained within the pocket.

2. In combination a railroad-tie adapted to support a rail and to be connected thereto by means of spikes, and composed of a plurality of sections each comprising a plate provided with depending flanges, a hinge-joint connecting the adjacent ends of the sections, means for limiting the movement of the sections with respect to each other, a transverse support beneath the hinge connection, a plurality of pockets secured to the tie in positions corresponding to the positions of the spikes, and blocks of wood frictionally retained within the pockets.

3. In combination, a railroad-tie adapted to support a rail, and to be connected thereto by means of spikes, and comprising a plu-



rality of plates provided with depending longitudinal flanges, a hinge-joint connecting the adjacent ends of the sections, means for limiting the movement of the sections with  
 5 respect to each other, a plurality of pockets secured to the tie in positions corresponding to the positions of the spikes, and blocks of wood frictionally retained within the pockets.

4. In a railroad-tie the combination of a plurality of plates provided with depending flanges on their longitudinal edges, and with openings in their upper faces, a hinge connection between adjacent ends of the plates, means for limiting the motion of the plates with respect to each other, a plurality of pockets secured to the faces of the longitudinal flanges beneath the openings, and blocks of wood frictionally retained within the pockets.

20 5. In a railroad-tie, the combination of a plurality of plates provided with depending flanges on their longitudinal edges, a hinge connection between the adjacent ends of the plates, a plurality of pockets secured to the  
25 flanges, and blocks of fibrous material frictionally retained within the pockets.

6. In combination a railroad-tie comprising a plurality of sections hinged together, means for limiting the motion of the sections with respect to each other, a plurality of pockets opening on the face of the tie, and blocks of fibrous material frictionally retained within the pockets. 30

7. A railroad-tie, comprising alined sections connected by a hinge-joint, means beneath the joint for supporting the same, and means for limiting the motion of the sections with respect to each other.

8. A railroad-tie comprising alined sections connected by a hinge-joint, a plurality of openings in the face of the tie, and blocks of fibrous material frictionally retained within the openings.

9. A railroad-tie comprising alined sections, hinged together at their adjacent ends, the sections being provided with openings in their upper faces, and blocks of fibrous material frictionally retained within the openings.

JAMES FRANKLIN BAILEY.

Witnesses:

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