No. 809,555. PATENTED JAN. 9, 1906.

A. S. DREIBELBIS.

RAIL AND TIE FASTENER.

APPLICATION FILED SEPT. 5, 1905.

Fig. 1.

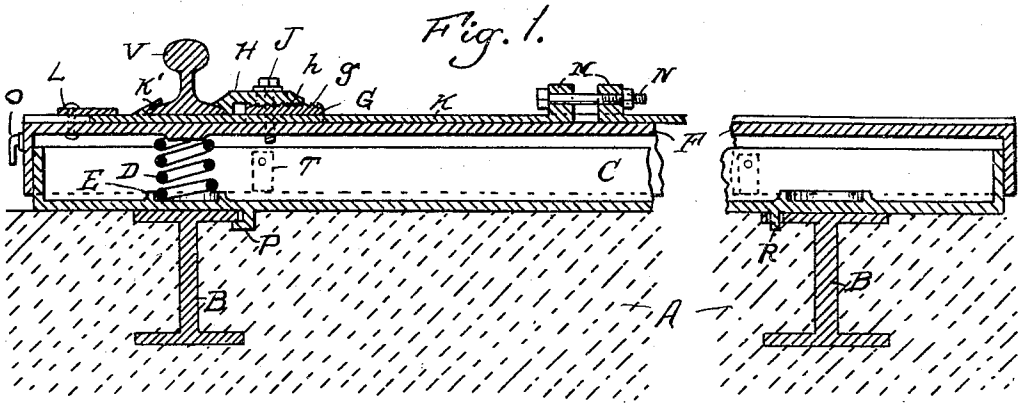
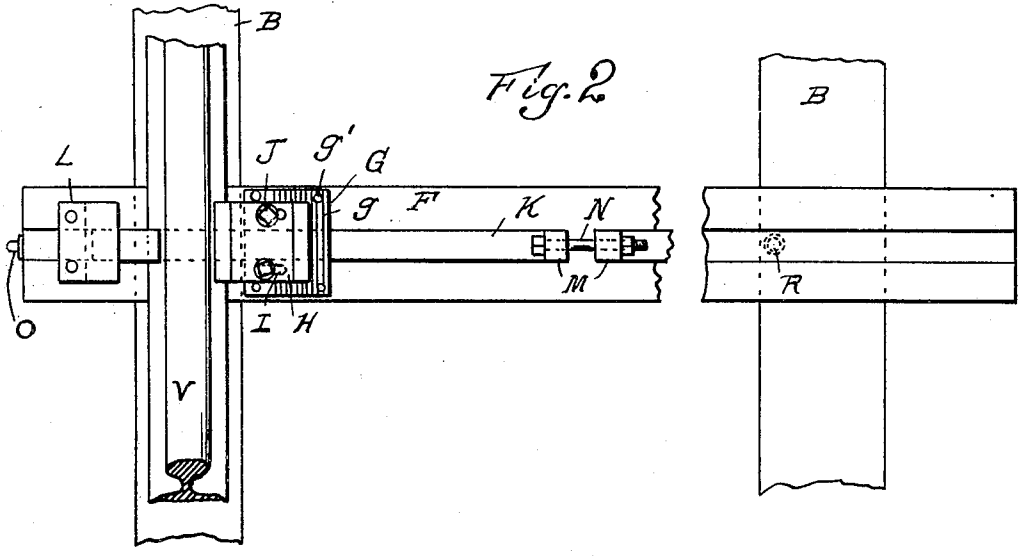


Fig. 2.



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RAIL AND TIE FASTENER.

No. 809,555. Specification of Letters Patent. Patented Jan. 9, 1906.

Application filed September 5, 1905. Serial No. 277,093.

To all whom it may concern:

Be it known that I, ALFRED S. DREIBELBIS, a citizen of the United States, residing in the city of Reading, in the county of Berks, State of Pennsylvania, have invented certain new and useful Improvements in Railway-Ties and Rail-Fasteners; 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 improvements in or connected with railway ties or sleepers and means for connecting rails thereto, the principal object of the invention being to provide a tie that will be permanent after being properly placed in position.

The invention consists, primarily, of a two-part metallic casing containing coiled springs to produce resiliency, and it is intended particularly as an improvement on United States Letters Patent No. 746,304, issued to me under date of December 8, 1903.

The invention is fully described in the following specification and clearly illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view, and Fig. 2 is a plan view showing my invention.

A designates a base of concrete or like substance.

B B represent the metal beams, which in my construction I have embedded in the concrete so that their top surfaces are flush with the upper surface of the concrete bed A.

The tie is composed of two portions—a bottom portion C and a cover F. This lower portion C is formed with two depending lugs P and R, one of which, P, has a right-angled head. These lugs engage the edge of the beams B and prevent dislocation of the ties.

D designates a coiled spring, one of which is located at either end of each tie beneath the rail. These springs are seated in cup-like receptacles E, formed on the bottom of the tie C.

The cover F of the tie fits snugly over the bottom C and is provided with springs T on its inside near either end, adapted to bear against the outer walls of the portion C to prevent rattling.

O designates a handle on the end of the cover C.

V designates the rail.

K designates a bar, two of which are arranged to lie on the top of each tie. These bars are formed with a hook K′ near their outer ends adapted to engage the base of the rail on the outside. Their inner ends are formed each with a lug M. A bolt N passes through these lugs and is used to draw them toward each other.

G designates a plate which is secured to the top of the tie by means of rivets g', and this plate has its upper surface g serrated.

H designates a movable clamping-plate, and this plate has a serrated under surface h, identical with the surface g, and two elongated slots I, through which tap-bolts J pass. These tap-bolts pass through both plates G and H and into the tie.

The outer ends of the bars K are held in position against the tie by means of plates L, which are riveted to the tie.

When the ties are placed in position and the rail placed in position thereon, the plates H are moved into the proper position so that they engage the base of the rail. The bolts J are then drawn up, and the serrated meeting faces h and g insure a secure clamp. The bars K, which have previously been placed in position beneath the rails with their outer ends under the plates L, are now drawn together by means of the bolt and nut N, which passes through the lugs M on their inner ends. The ease with which the rails may be accurately placed is evident.

The beams B are formed with suitable indentations along their inner top edges to receive the depending lugs P and R of the tie. This permits the easy placing of the ties, as the angled lug P is first inserted under the edge of the beam, and the other end of the tie is then laid in position, and the lug R enters its registering opening in the edge of the opposite beam.

It is evident that the construction herein shown will insure a practical and permanent solid road-bed, while at the same time one that will insure ease and comfort and overcome much of the noise necessary to the operation of railways.

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

The combination of a railway-tie comprising an approximately rectangular box, a cover capable of vertical movement, springs interposed between the vertical walls of said box and cover, a cup-like receptacle formed in the base of said box near either end, a coiled spring located in each of said recepta

cles, a clamping device formed of two plates, one of which is permanently secured to the tie and the other movably secured to the top of said permanent plate, said plates having serrated meeting faces, bars passing under said clamping-plates and under the rail and formed with a hook at their outer ends adapted to engage the base of the rail and lugs formed on their inner ends, a bolt passing through the lugs on the two oppositely-disposed bars and adapted to draw them together, with metal I-shaped beams on which the ties rest and to which they are removably secured, and a bed of concrete in which said beams are completely embedded, leaving only their upper surfaces exposed.

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

ALFRED S. DREIBELBIS.

Witnesses:

GEO. M. MILLER,

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