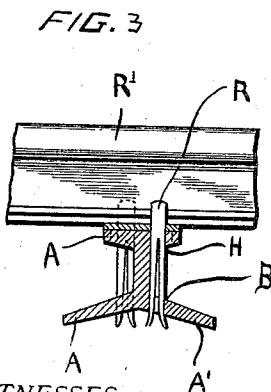
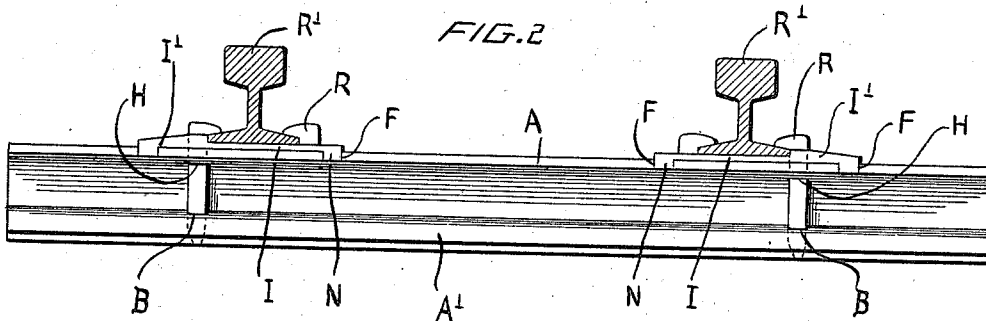


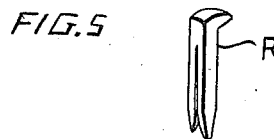
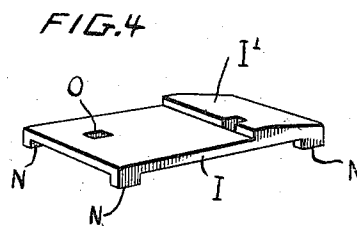
984,085.

FIG. 1



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD T. FORD, OF PIKEVILLE, AND WILLIAM H. MAUL, OF BRADFORD, OHIO.

RAILWAY-RAIL-FASTENING DEVICE.

984,085.

Specification of Letters Patent. Patented Feb. 14, 1911.

Application filed November 7, 1910. Serial No. 591,048.

To all whom it may concern:

Be it known that we, EDWARD T. FORD and WILLIAM H. MAUL, citizens of the United States, residing, respectively, at Pikeville, in the county of Darke, State of Ohio, and Bradford, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Railway-Rail-Fastening Devices; and we 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in means for fastening railway rails to ties and anchoring the latter securely to the ground.

The invention comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

We illustrate our invention in the accompanying drawings, in which:—

Figure 1 is a top plan view of our invention. Fig. 2 is a side view of the tie. Fig. 3 is a cross sectional view through the tie and plate upon which the rail rests. Fig. 4 is a detail perspective view of the plate upon which the rail rests, and Fig. 5 is a detail perspective view of the split spike.

Reference now being had to the details of the drawings by letters, A designates a metallic tie having a flanged top and inclined flanges A' projecting downward from the central web portion of the tie as shown and having apertures B therein for the reception of spikes. Said flange of the tie is provided with oppositely disposed recesses F and apertures H.

I designates a plate having a shouldered portion I' upon its upper face and lugs N projecting from the under surface and the corners thereof, which lugs N are adapted to seat in the recesses F to hold the plate from longitudinal or lateral movement. The plate

I is also provided with apertures O for the reception of the spikes R, each of which has a head of the usual type used in fastening rails to ties, but the shank portion of the spike is split, forming two portions which, when driven in to the material in which the tie is embedded or anchored, are adapted to spread and thereby securely hold the spike in place. A railway rail, designated by letter R', is provided with flanges engaged by said spikes R, one of which, when fastening means is applied thereto, is adapted to contact with said shoulder. Said spikes are passed through the registering apertures in the plate and flanges of the tie, the latter first being embedded with the inclined flanges thereof in the soil as shown in the drawings. As the spike is driven down into the material which anchors and holds the tie to the ground, the spreading of the ends of the spike will have a tendency to securely hold the latter in place.

What we claim to be new is:—

1. A fastening for railway rails comprising a tie having inclined flanges adapted to be embedded in the soil, a horizontally disposed top with recesses in the opposite edges thereof, a plate having a shoulder upon its upper face and lugs projecting from its opposite face adapted to engage the recesses in the opposite edges of the top of the tie, and spikes passing through registering apertures in the plate and tie and adapted to engage the flange of the railway rail.

2. A fastening for railway rails comprising a tie having inclined flanges adapted to be embedded in the soil, a horizontally disposed top with recesses in the opposite edges thereof, a plate having a shoulder upon its upper face and lugs projecting from its opposite face adapted to engage the recesses in the opposite edges of the top of the tie, spikes having split shank portions adapted to be passed through registering apertures in the plate and tie and spread by the material underneath the tie.

3. In combination with a tie having horizontally disposed and inclined flanges with registering apertures, the opposite edges of the horizontally disposed flanges of

the tie provided with recesses, a plate having lugs projecting from its under surface and engaging said recesses and apertured, headed spikes passing through registering apertures in the flanges of the tie and said plate.

In testimony whereof we hereunto affix

our signatures in the presence of two witnesses.

EDWARD T. FORD.
WILLIAM H. MAUL.

Witnesses:

FRANK DILL,
W. H. DILL.