

A. H. MOFFET.
RAIL FASTENING.
APPLICATION FILED APR. 12, 1911.

1,014,084.

Patented Jan. 9, 1912.

2 SHEETS—SHEET 1.

FIG. 1.

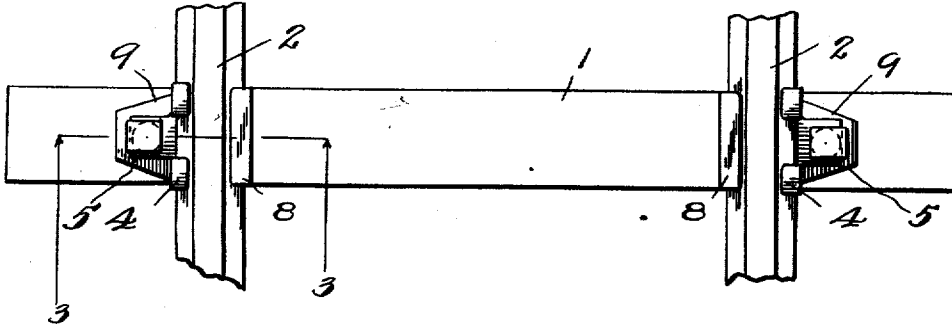


FIG. 2.

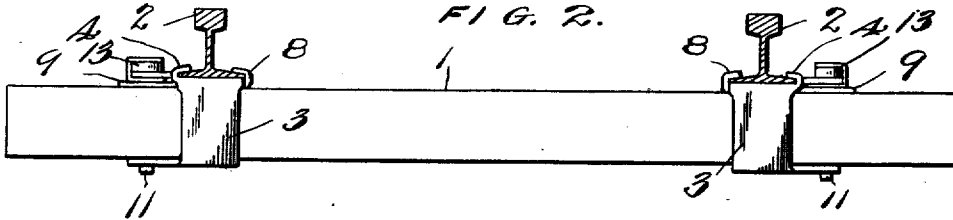
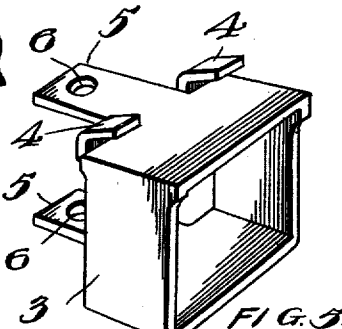
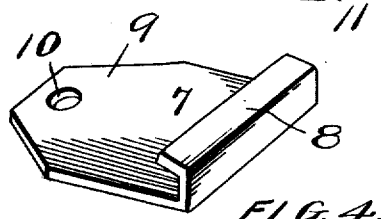
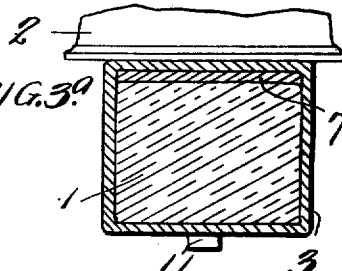
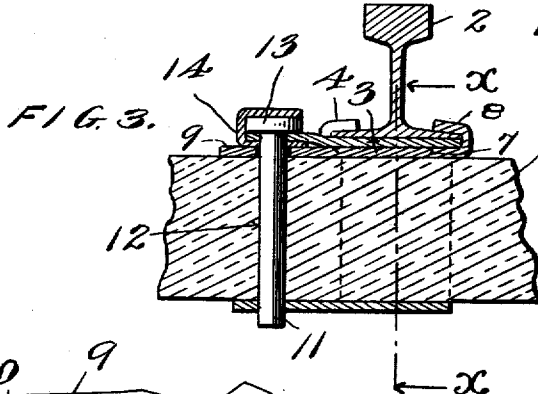


FIG. 3.



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2 SHEETS-SHEET 2.

FIG. 6.

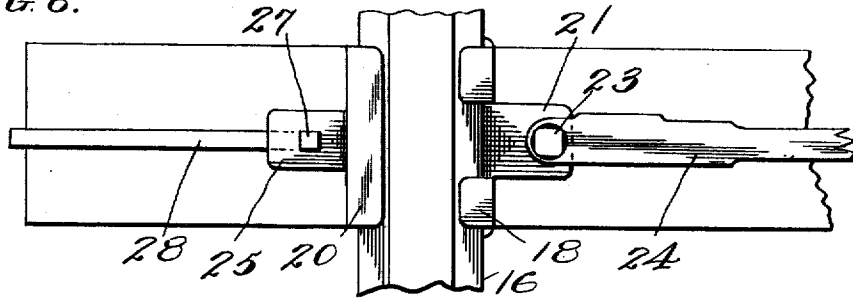


FIG. 7.

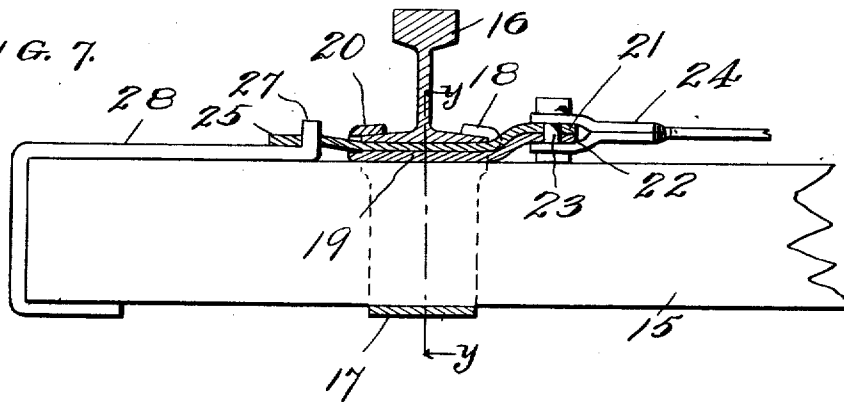


FIG. 8.

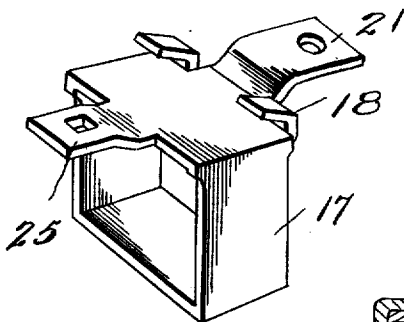


FIG. 9.

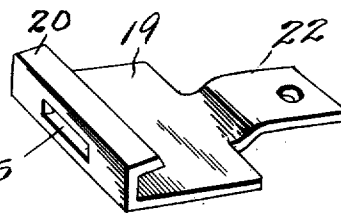
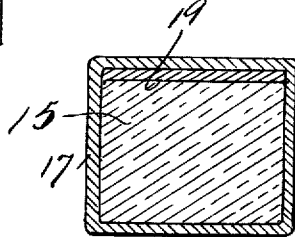


FIG. 7A



WITNESSES

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RAIL-FASTENING.

1,014,084.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed April 12, 1911. Serial No. 620,627.

To all whom it may concern:

Be it known that I, ALVUS H. MOFFET, a citizen of the United States, residing at Larned, in the county of Pawnee and State of Kansas, have invented new and useful Improvements in Rail-Fastenings, of which the following is a specification.

The present invention relates to rail fastenings, and the primary object is to provide a simple and practical structure that will effectively hold the rails in position on the ties without weakening the latter, thus making the structure peculiarly useful in connection with concrete or composite ties, though of course it may be employed with others, if desired.

Two embodiments of the invention are illustrated in the accompanying drawings, wherein,

Figure 1 is a plan view of a tie with the rails thereon, the latter being secured by one form of the invention. Fig. 2 is a side elevation of the same. Fig. 3 is a detail cross sectional view on an enlarged scale. Fig. 3^a is a sectional view on the line X—X of Fig. 3. Figs. 4 and 5 are respectively detail perspective views of the tie plate members. Fig. 6 is a plan view of a modified form of construction. Fig. 7 is a sectional view therethrough. Fig. 7^a is a sectional view on the line Y—Y of Fig. 7. Fig. 8 is a perspective view of one of the tie plate members. Fig. 9 is a perspective view of the other tie plate member.

Similar reference numerals designate corresponding parts in all the figures of the drawings.

Referring first to the embodiment disclosed in Figs. 1-5 inclusive, the tie, which is of substantially the usual form, is designated 1, and the rails thereon are indicated at 2. A tie plate, in the form of a band 3, encircles the tie beneath each rail, and therefore has its upper portion interposed between the rail and tie. This band is provided with a pair of spaced integral rail-engaging hooks 4, and also has upper and lower outwardly projecting tongues 5 provided with alined openings 6. A second tie plate 7 is interposed between the tie and the band 3 directly beneath the rail. This tie plate has a hook 8 that engages over the opposite side of the rail to the hooks 4, passing upwardly across the inner edge of the band 3, as will be clear by reference to Fig. 3. This tie

plate 8 furthermore has an outwardly projecting tongue portion 9 provided with an opening 10 that alines with the openings 6 in the tongues 5. A holding pin 11 is passed downwardly through the openings 6 and 10, and through an opening 12 formed in the tie. The opening 12, it will be observed is located outside the rail, and therefore does not weaken the tie between the two rails. The pin 11 is preferably provided with a head 13 that limits its downward movement, and a retaining strip 14 having one end interposed between the tongues 5 and 9 and engaged by the pin, has its other end bent over the top of the head, thus preventing the accidental detachment of the pin. It will be evident that this combined fastener and tie plate will effectively secure the rail in position and is held against movement longitudinally of the tie. At the same time, it does not in any manner weaken the tie between the rails.

In the modified form of construction, illustrated in Figs. 6-9 inclusive, the tie is designated 15, and the rail is shown at 16. The tie plate, in the form of a band encircling the tie, is shown at 17, and is provided with hooks 18 that engage the inner side of the rail. Another tie plate 19 is located beneath the rail, and is interposed between the first mentioned tie plate and the tie. This tie plate 19 has a hook 20 that engages over the outer side of the rail. The two tie plates furthermore have inwardly extending tongues 21 and 22 engaged by a holding pin 23 in the form of a bolt that thus secures the two tie plates against relative movement, and also affords fastening means for a bar 24 that connects the two fastenings of the tie to prevent the spreading of the rails. In this form of construction, it will also be noted that the plate 17 has an outwardly extending tongue 25 that passes through a slot 26 in the plate 19, and is engaged by the upturned end 27 of a hook 28 that embraces the end of the tie. It will be noted that this structure has all the advantages of the first described and in addition it entirely eliminates the necessity for a hole in the tie itself.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion and minor details of con-

struction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a track fastening, the combination with a tie, of a rail thereon, a tie plate comprising a band embracing the tie and having a portion interposed between the tie and rail, another tie plate interposed between the tie and rail, and a rail-engaging element carried by each of the tie plates.

2. In a track fastening, the combination with a tie, of a rail thereon, a tie plate comprising a band embracing the tie and having a portion interposed between the tie and rail, and another tie plate interposed between the tie and rail, said tie plates having rail-engaging hooks.

3. In a track fastening, the combination with a tie, of a rail thereon, a tie plate comprising a band embracing the tie and having a portion interposed between the tie and rail, another tie plate interposed between the tie and first tie plate, means connecting the tie plates, and rail engaging elements carried by the tie plates.

4. In a track fastening, the combination with a tie, of a rail thereon, a tie plate comprising a band embracing the tie and having a portion interposed between the tie and rail, another tie plate interposed between the tie and first tie plate, means connecting the tie plates, and rail-engaging hooks carried by the tie plates and engaging opposite sides of the rail.

5. In a track fastening, the combination with a tie, and a rail thereon, of a tie plate comprising a band encircling the rail and having its upper portion interposed between the rail and tie, said portion having a rail engaging hook, another tie plate interposed between the first mentioned tie plate and tie and having a hook that engages over the opposite side of the rail, said tie plates having projecting tongue portions, and a holding pin passing through said portions.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALVUS H. MOFFET.

Witnesses:

H. G. HOFMANN,
N. HEATON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."