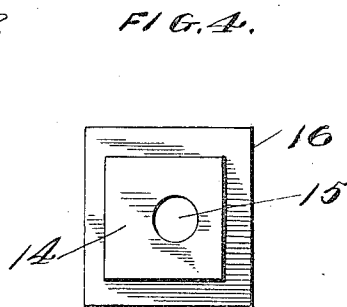
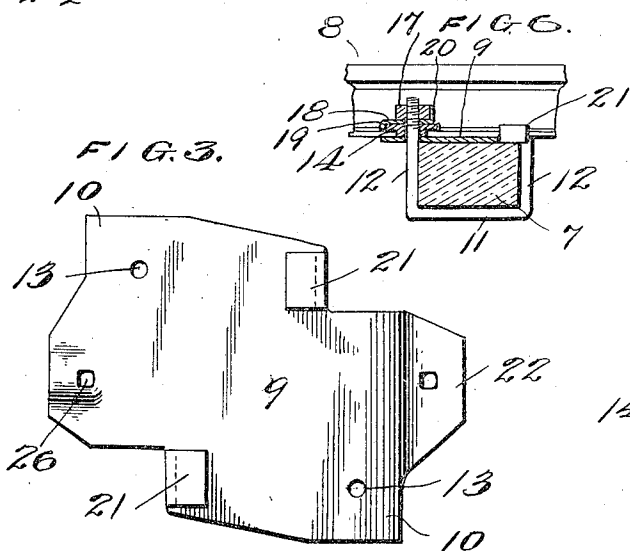
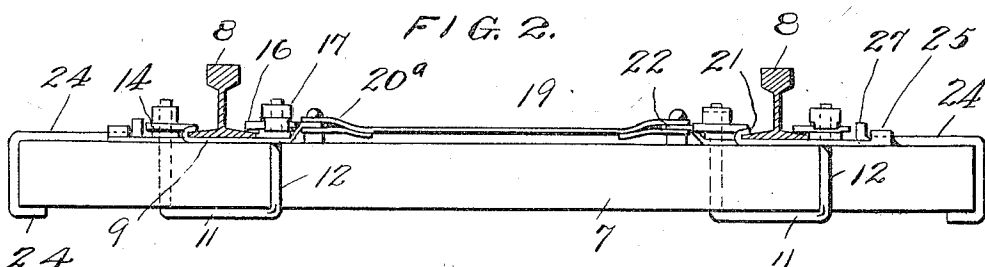
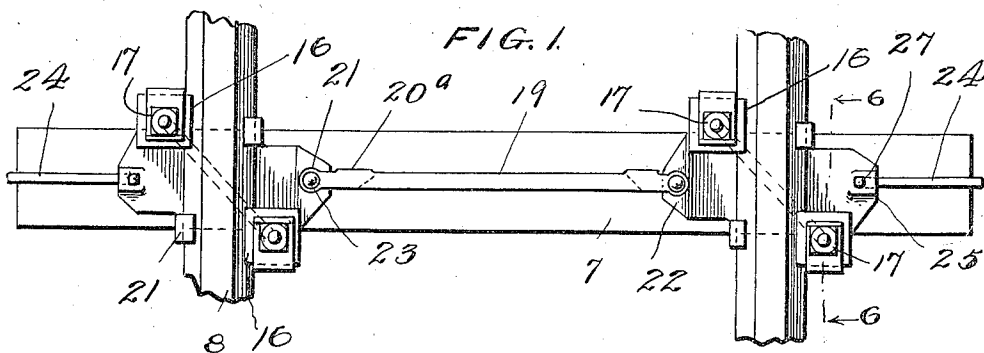


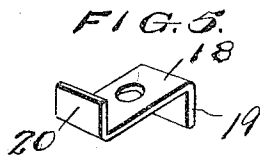
A. H. MOFFET.
U-SHAPED TRACK FASTENING.
APPLICATION FILED APR. 3, 1911.

1,014,083.

Patented Jan. 9, 1912.



WITNESSES
C. H. Davis
A. C. Welch.



A. H. Moffet.
by *[Signature]*
INVENTOR.
Attorney

UNITED STATES PATENT OFFICE.

ALVUS H. MOFFET, OF LARNED, KANSAS

U-SHAPED TRACK-FASTENING.

1,014,083.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed April 3, 1911. Serial No. 618,737

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 U-Shaped Track-Fasteners, of which the following is a specification.

The present invention relates to rail fasteners and is particularly intended for concrete or composite ties.

The principal object is to provide a secure fastening means for the rail that will not weaken or injure the tie.

A simple embodiment of the invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a plan view of a tie, showing the rails thereon secured by the improved means. Fig. 2 is a side elevation of the same. Fig. 3 is a plan view of the tie plate. Fig. 4 is a bottom plan view of one of the rail fasteners. Fig. 5 is a detail perspective view of the nut lock preferably employed. Fig. 6 is a sectional view on the line 6—6 of Fig. 1.

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

The tie is designated by the reference numeral 7, and may be of any desired construction and material, though preferably a concrete or composite tie. Located thereover, are the usual rails 8, and interposed between these rails and the tie, are tie plates 9, preferably of sheet metal. Each tie plate has its diagonally opposite corners 10 projecting beyond the tie on opposite sides of the rail and a continuous U-shaped bolt 11 that diagonally embraces the tie has upstanding end portions 12 passing through openings 13 in said projecting corners. Located on the upstanding ends are the track or rail fasteners that are in the form of heads 14 provided with eccentrically disposed openings 15 that receive said ends of the U-bolt. The said heads have overhanging flanges 16 that engage over the base flange of the rail. By having the opening 15 eccentrically disposed, it will be evident that the flanges on the different sides will be disposed at different distances from the end of the U-bolt on which the head is mounted, and therefore an adjustment can be secured which will insure a proper coaction between

the head and the flange of the rail, it being only necessary to rotate the head until the side is brought into position that properly coacts with the rail flange. These fasteners are secured in position preferably by nuts 17 threaded on to the ends 12 of the U-bolt. The nuts in turn are held against accidental displacement by locking strips 18 that are interposed between the nuts and heads, one end of each lock being downturned, as shown at 19 against one side of the head, while the other end 20 is turned alongside the nut. A positive lock is thus secured. Each tie plate 9 is furthermore preferably provided directly opposite the fasteners with integral rail engaging hooks 21 that are disposed directly opposite the fastener 14, as will be clear by reference to Figs. 1 and 3.

In order to positively prevent the spreading of the rails, the tie plates may, if desired, be connected by a bar 19 having its ends double, as shown at 20^a, to embrace the offset inner sides 22 of the tie plates. Bolts or rivets 23 secure the end of the bar 19 to said portions 22. Furthermore in order to prevent the movement of the entire track longitudinally of the tie, hooks 24 may be employed, which as shown, engage over the ends of the tie, and have their inner ends engaged beneath the outer sides of the tie plates, as illustrated at 25, the said inner terminals of these hooks being passed through openings 26 in the tie plates and upturned, as illustrated at 27.

With this structure, it will be noted that while the rails are effectively fastened to the tie and are held against displacement, the tie itself is a continuous body unweakened by openings or reduced portions.

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, and it will be understood that various changes in the size, shape, proportion and minor details of construction 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 structure of the character set forth, the combination of a tie, of a rail lo-

cated thereover, a tie plate interposed between the tie and rail and having diagonally opposite integral hooks that engage the opposite sides of the rail, and detachable rail engaging fastening means engaged with the rail and tie plate directly opposite the hooks, said fastening means embracing the tie.

2. In a structure of the character set forth, the combination with a tie, of a rail located thereover, a tie plate interposed between the tie and rail and having diagonally opposite integral hooks that engage the opposite sides of the rail, a diagonally disposed substantially U-shaped bolt embracing the tie and having its ends passing through the tie plate on opposite sides of the rail and directly opposite the hooks, and

rail engaging devices detachably mounted on the ends of the bolt. 20

3. In a structure of the character set forth, the combination with a tie, of tie plates located thereon, rails mounted on the tie plates, U-bolts embracing the tie, rail fasteners connected to the U-bolts, a connection between the tie plates, and hooks connected to the tie plates and engaging over the ends of the tie. 25

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 30

ALVUS H. MOFFET.

Witnesses:

ALICE TICKELL,
H. G. HOFMANN.