

H. J. ELLENBERGER.
STEEL TIE CLAMP.
APPLICATION FILED NOV. 8, 1912.

1,063,343.

Patented June 3, 1913.

Fig. 1.

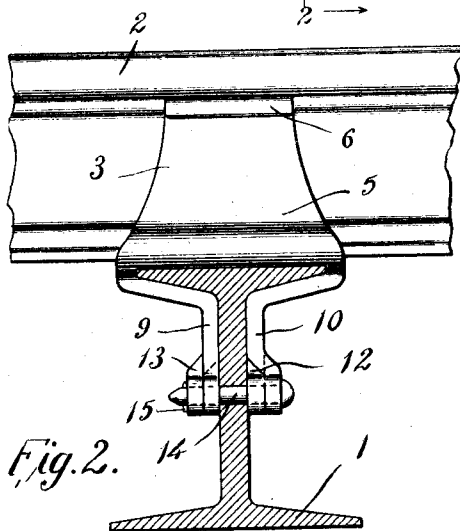
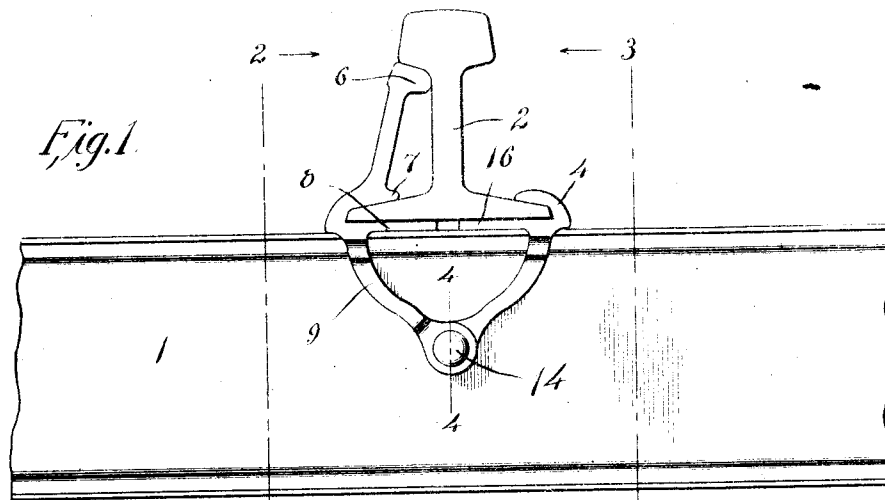


Fig. 2.

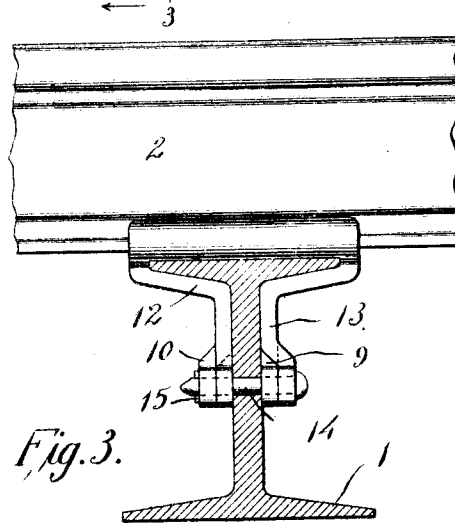


Fig. 3.

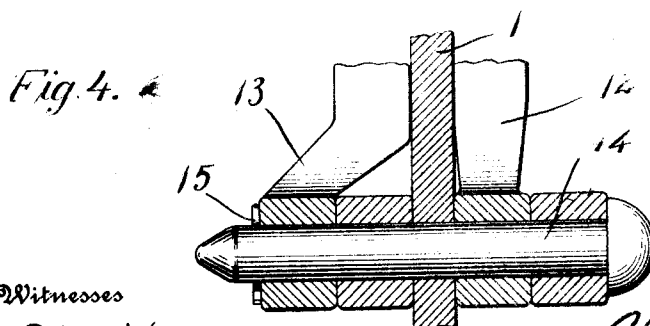


Fig. 4.

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STEEL-TIE CLAMP.

1,063,343.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY J. ELLENBERGER, a subject of the King of Great Britain, residing at Sault Ste. Marie, in the Province of Ontario and Dominion of Canada, have invented new and useful Improvements in Steel-Tie Clamps, of which the following is a specification.

The present invention relates to clamps for securing rails upon steel I beams, and resides in the construction, combination and arrangement of parts set forth in the following description, and falling within the scope of the appended claims.

In the drawings, Figure 1 is a side elevation illustrating the device in applied position. Fig. 2 is a sectional view taken through the tie approximately upon the line 2—2 thereof, and looking toward the arrows. Fig. 3 is a similar view upon the line 3—3 and also looking toward the arrows. Fig. 4 is a detail sectional view upon the line 4—4 of Fig. 1.

Referring now to the drawings in detail, the numeral 1 designates the ties which support the rails 2. The ties 1 are in the nature of I irons or beams, and, are, of course, arranged transversely of the rails 2.

The clamp comprises a pair of sections which are designated by the numerals 3 and 4, respectively. The clamp 3 is designed to be employed upon the outer face of the rail and includes an inclined body portion 5 which has its upper extremity provided with a longitudinally extending inturned lip 6 that is adapted to underlie and engage with the ball of the rail upon the outer face of the said rail. The body has its lower portion formed with an inturned lip 7, the same being shaped to correspond with the outer portion of the base flange of the rail with which it engages. The body 5 has integrally formed therewith, below the lip 7, a flat inwardly extending portion 8, which will hereinafter be referred to as the base plate of the clamp.

The numerals 9 and 10 designate the arms of the clamp. These arms are curved inwardly beneath the upper flanges of the tie 1, and are extended downwardly to engage snugly with the web of the said tie. The free extremity of each of the arms is disposed centrally of the rail 2, and also approximately centrally of the tie 1. The said free extremities are each provided with openings, while one of the said extremities

is offset, and spaced a distance from the web of the tie substantially equaling or slightly lesser than the end 11 of one of the arms 12 formed upon the clamp 4. The second arm 13 of the said clamp 4, which is disposed upon the opposite face of the tie is bent outwardly and overlaps the end of the arm 8, as clearly shown in the drawings. The arms 12 and 13 are provided with openings which register with the openings in the arms 9 and 10, and passing through these openings as well as through an opening in the web of the tie is a headed member 14 which has its shank formed with an elongated opening for the reception of a cotter pin 15. The arms 12 and 13 of the clamp member 4 are bent or formed in a similar manner to the arms 9 and 10 of the clamp 3, and the upper or connecting member of the clamp 4 is in the form of a lip similar to the lip 7, and is adapted to engage with the base flange of the rail upon its inner face. The clamp 4 is provided with an inturned horizontally straight base 16 which is disposed below its lip and which is adapted to lie between the base flange of the rail and upon the upper face of the tie 1.

From the above description, taken in connection with the accompanying drawings, the simplicity of the device, as well as the advantages thereof, will, it is thought, be perfectly apparent to those skilled in the art to which such inventions appertain without further detailed description.

Having thus described the invention, what I claim is:—

1. In means for sustaining rails upon transversely arranged ties, a pair of clamping members each including rail engaging lips, and each provided with base plates which are adapted to lie upon the tie below the base flange of the rail, and each of the said clamps being provided with downwardly extending inclined arms, and a connecting element for securing the arms upon the tie.

2. A clamp for securing a rail upon an I beam tie, comprising a pair of clamping members, each formed with rail flange engaging lips, and each being provided with inturned plates which are disposed between the rail and the upper face of tie, each of the said members having oppositely arranged inturned arms which are formed to correspond with the shape of the upper portion of the opposite sides of the tie, the said

arms terminating in overlapping portions having registering openings and a securing element passing through the openings and through the tie.

5 3. A clamp for the purpose set forth, embodying rail engaging members each of which including an inwardly extending base plate and oppositely arranged arms which terminate in eyes, and a pivoted member
10 connecting the eyes.

4. As a means for retaining a rail upon a transversely arranged tie embodying an I beam, a pair of elements each provided with a lip which engages with the opposite base
15 flanges of the rail, each of said elements being provided with inturned plates which are arranged between the rail and the tie, each

of said elements being provided with spaced arms which conform to the shape of the opposite faces of the tie, and which have their
20 extremities provided with overlapping eyes, a member passing through the eyes and through the tie to secure the elements upon the tie, and one of the said elements being
25 formed with an upwardly inclined body portion which has its extremity formed with an inturned lip that engages the ball of the rail upon one of its sides.

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

HENRY J. ELLENBERGER.

Witnesses:

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RHEA KAUPP.