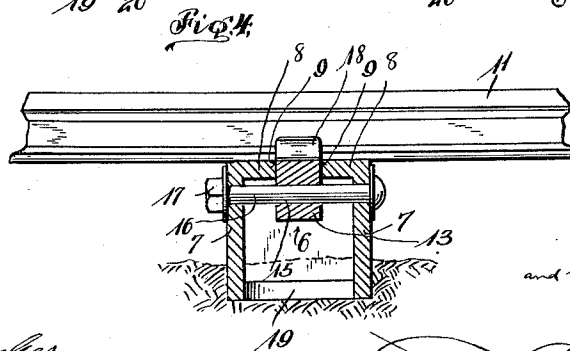
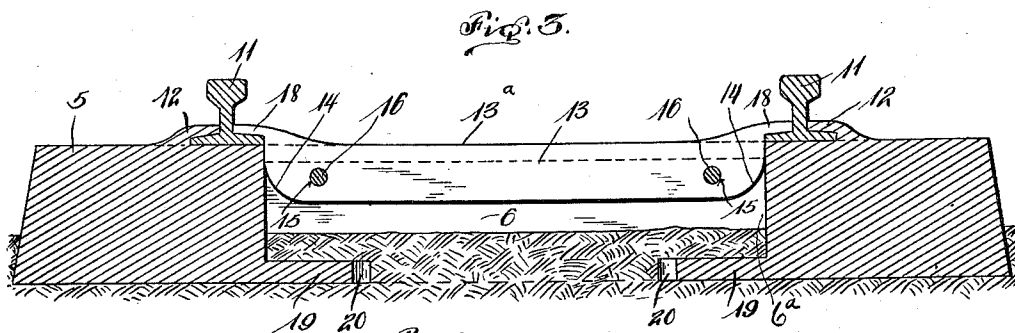
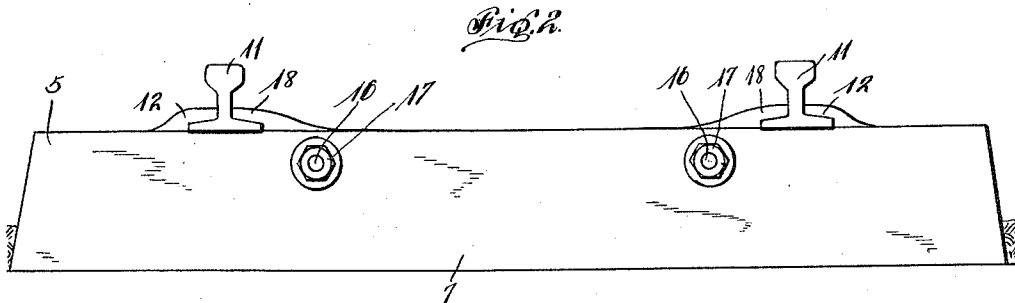
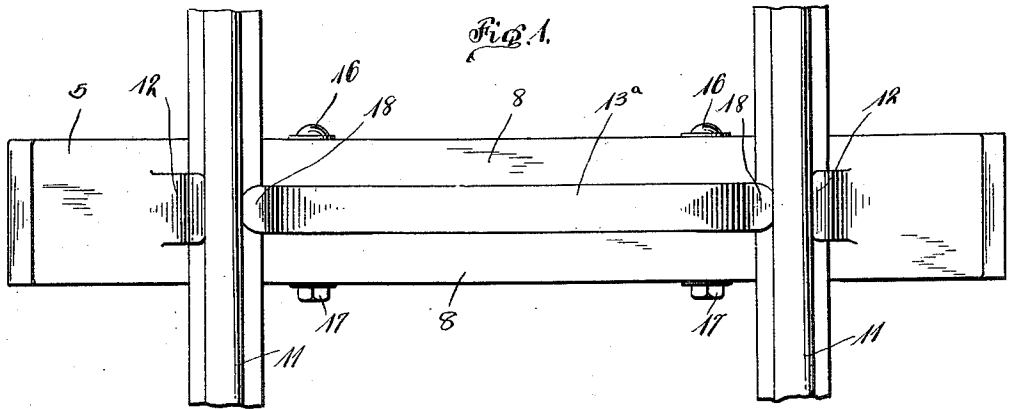


R. C. HASKELL & E. J. DART.
METALLIC CROSS TIE AND RAIL FASTENER.
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1,006,208.

Patented Oct. 17, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

ROBERT C. HASKELL AND ELMER J. DART, OF NEODESHA, KANSAS.

METALLIC CROSS-TIE AND RAIL-FASTENER.

1,006,208.

Specification of Letters Patent.

Patented Oct. 17, 1911.

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To all whom it may concern:

Be it known that we, ROBERT C. HASKELL and ELMER J. DART, citizens of the United States, residing at Neodesha, in the county of Wilson, State of Kansas, have invented certain new and useful Improvements in Metallic Cross-Ties and Rail-Fasteners; 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.

This invention relates to an improved metallic cross-tie and rail fastener, and has for its principal object to provide a device of the character described which will prevent lateral movement of the rails.

Another object of the invention is to provide a device for the purpose described, which is composed of a minimum number of parts, is therefore simple in construction, is durable in use, and is cheap to manufacture.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing Figure 1 is a top plan view of the invention showing rails associated therewith, Fig. 2 is a side elevation thereof, Fig. 3 is a longitudinal sectional view through the same, and Fig. 4 is a transverse sectional view of the structure shown in Fig. 1.

Like reference numerals designate corresponding parts in all the figures of the drawing.

Referring to the drawing, 5 designates the body of a tie formed of metal, and is provided with an elongated and vertically disposed central cavity 6 forming consequent side walls 7—7. Extending inwardly from the side wall 7 above the cavity 6 are top flanges 8—8, the inner edges 9—9 thereof being disposed in spaced relation to form a longitudinal slot, said slot extending in either direction from the end walls 6^a of the cavity. Rails 11—11 are seated upon the upper face of the tie and at either end there-

of, and are held against outward movement by braces 12—12, which extend from and are cast integral with the body 5 of the tie.

Disposed within the slot 10 is a rail-holding dog 13, the end portions 14—14 thereof being undercut in order to permit of said dog being readily inserted between the end walls 6^a. This dog extends within the cavity 6 for a considerable distance below the flanges 8—8 of the tie, and is formed at either end with openings 15—15 which respectively receive locking bolts 16—16. These bolts 16 pass through suitable aligned openings formed in the side walls 7—7, and are secured in place by means of nuts 17. The upper edge 13^a of the dog is arranged flush with the upper surface of the tie, and the ends of said dog respectively project upwardly and forwardly to form rail-engaging ends 18—18.

The tie is furthermore provided with inwardly projecting bottom flanges 19—19, the forward edges 20—20 being spaced apart to form a bottom opening.

In operation, the ties are set into the ground, as indicated in Fig. 3 of the drawing. Dirt, gravel, cement, or the like can then be inserted into the cavity 6 through the slot of the tie. This material will be positioned within the bottom opening of the tie and upon the bottom flanges 19. As a result, the tie will be securely retained in position against movement in any direction. The rails can then be positioned upon the top surface of the tie and engaged with the respective braces 12. The dog 13 is then inserted within the slot and the rail-engaging ends 18 thereof are positioned against the inner flanges of the rails 11. The bolts 16 are then passed through the aligned openings of the walls 7 of the tie and the openings 15 of the dog. It will thus be evident that the rails are prevented from lateral movement, and that the dog 13 not only forms an intermediate brace for both rails, but secures both of the rails at the same time.

What is claimed is:

1. A metallic cross-tie comprising a body having a centrally disposed vertical cavity forming consequent end and side walls, and bottom flanges extending into the cavity from the end walls and spaced from each other to form an opening communicating with the cavity.

2. A metallic cross-tie and rail fastener

comprising in combination, a body having integral rail-engaging braces projecting from either end thereof, said body being further provided with a centrally disposed vertical cavity communicating with the top of the tie and forming consequent side walls, longitudinal flanges projecting inwardly from said side walls to form a slot, a single dog disposed within the slot and provided at its ends with rail-engaging projections, said dog extending into the cavity below the flanges, and means carried by the side walls for locking said dog to the tie.

3. A metallic cross-tie and rail fastener comprising in combination, a body having a centrally disposed vertical cavity forming consequent end and side walls, bottom flanges inwardly extending into the cavity from the

end walls and spaced from each other to form an opening communicating with the cavity, said body being provided at its ends with integral rail-engaging braces, longitudinal flanges projecting inwardly from said side walls to form a slot, a single dog disposed within the slot and provided at its ends with rail-engaging projections, said dog extending into the cavity below the flanges, and means carried by the side walls for locking said dog to the tie.

In testimony whereof, we affix our signatures in presence of two witnesses.

ROBERT C. HASKELL.
ELMER J. DART.

Witnesses:

W. G. COOLEY,
J. I. KIMBALL.

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