

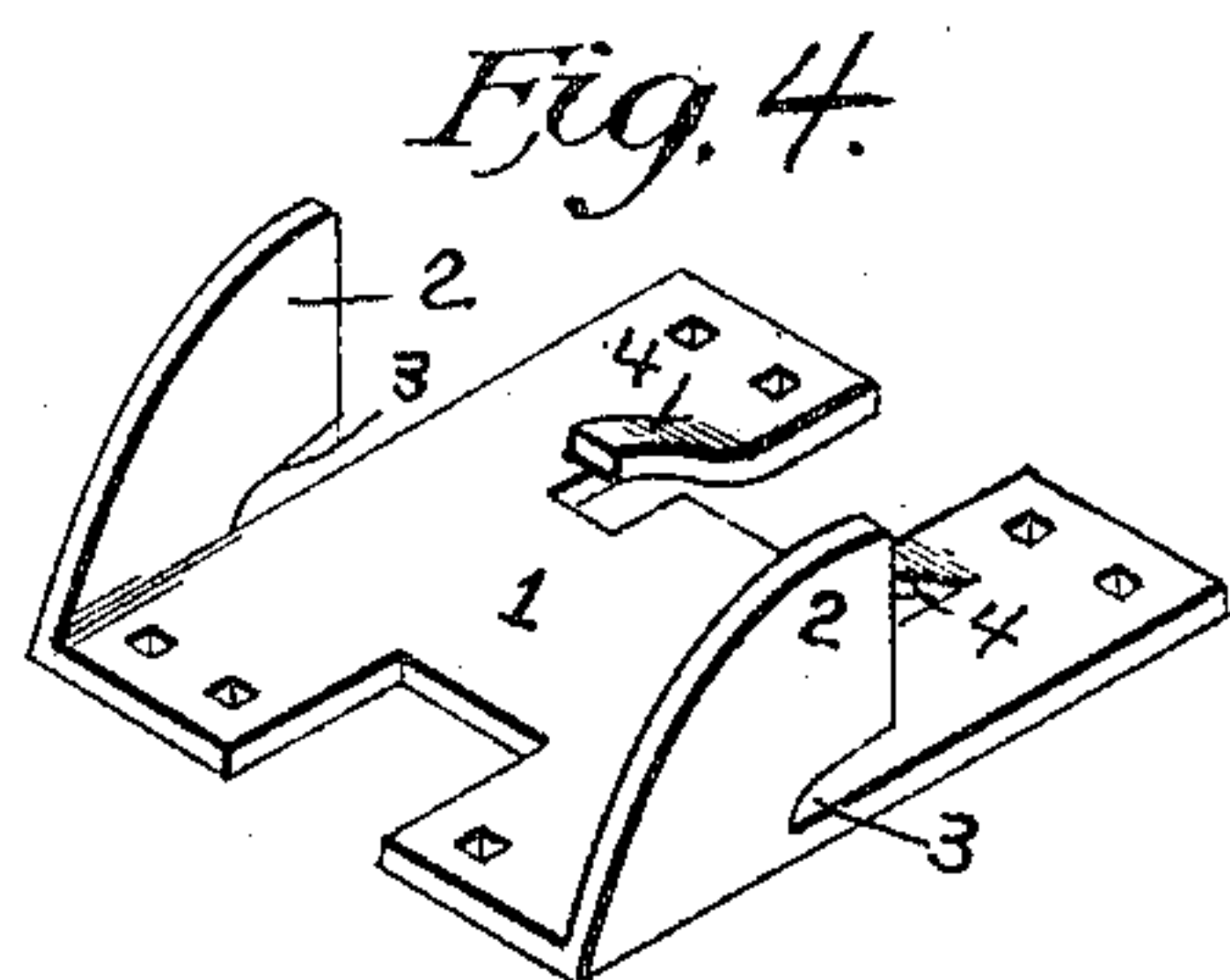
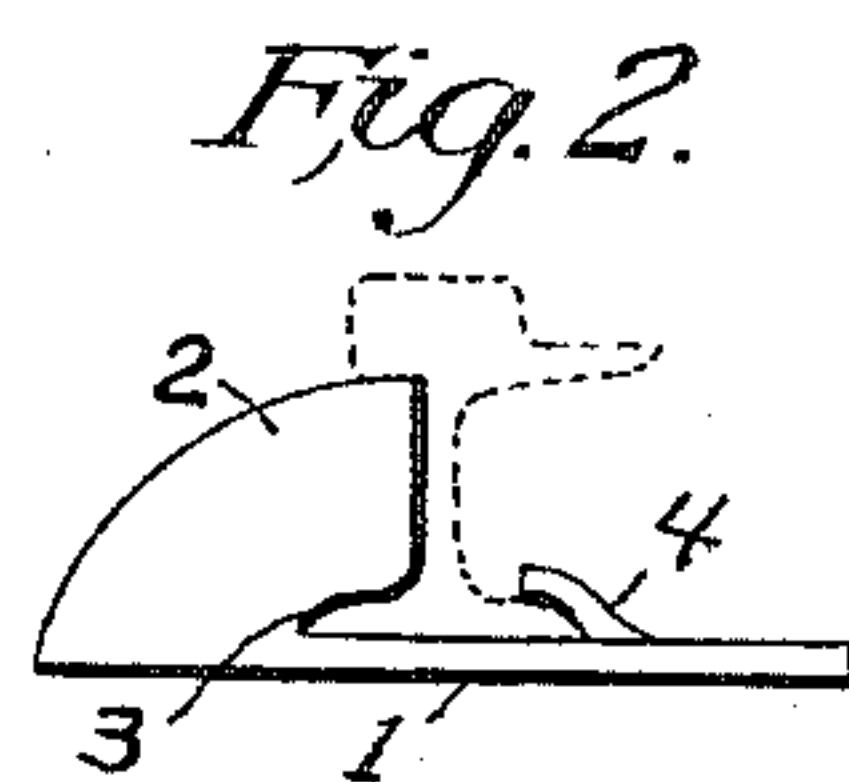
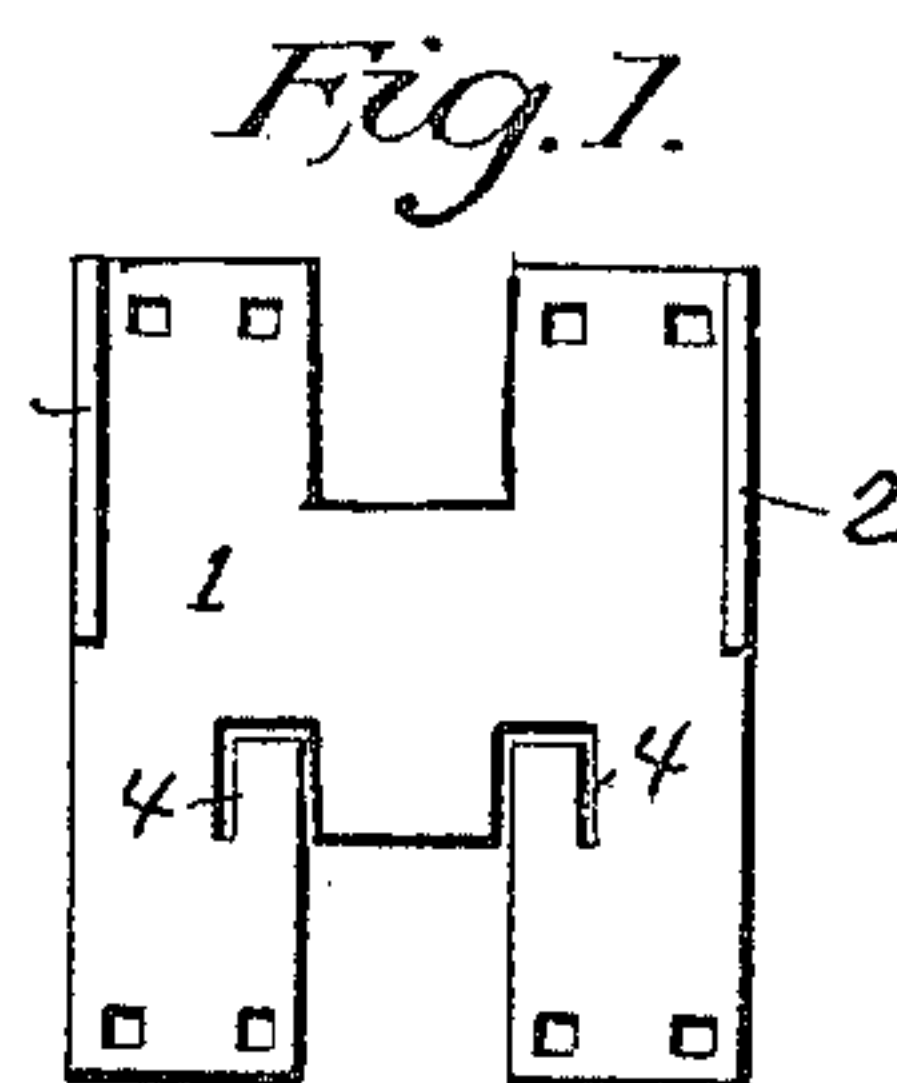
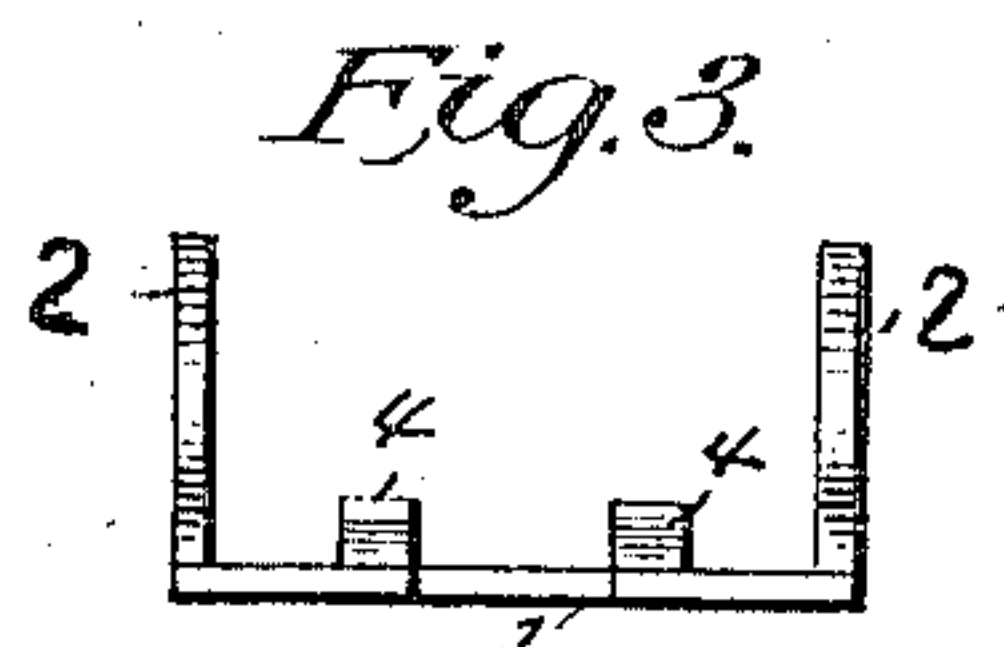
No. 688,852.

Patented Dec. 17, 1901.

J. N. HAYES.
TIE PLATE.

(Application filed Apr. 15, 1901.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES N. HAYES, OF ST. LOUIS, MISSOURI, ASSIGNOR OF SEVEN-TWENTIETHS
TO ROBERT A. YOUNG, CHARLES DITTMAR, EUSTACH TRITTERMANN,
AND THOMAS J. WHELEN, OF ST. LOUIS, MISSOURI.

TIE-PLATE.

SPECIFICATION forming part of Letters Patent No. 688,852, dated December 17, 1901.

Application filed April 15, 1901. Serial No. 55,913. (No model.)

To all whom it may concern:

Be it known that I, JAMES N. HAYES, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Tie-Plates, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to tie-plates; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

The object of this invention is to provide an improved tie-plate of a simplified construction by the use of which cross-ties, fish-plates, and welding and a large number of bolts and nuts required to connect the rails in an ordinary track are dispensed with.

Figure 1 is a plan view of my improved tie-plate. Fig. 2 is a view showing the tie-plate in operative position, the rail being shown in dotted lines. Fig. 3 is an edge view of the tie-plate. Fig. 4 is a perspective view.

My improved tie-plate, which may be used either with longitudinal stringers or with the ordinary cross-ties, consists of the portion 1, adapted to rest upon the stringers or ties underneath the rails and to be attached thereto by any desirable fastening devices. The vertical wings 2 are integral with the ends of the tie-plates 1 and are adapted to engage over the foot or base of the rail and bear against and strengthen the webs thereof and to assist in holding the rails in position. A notch 3, which separates the wings 2 from the base 1, receives the outside of the foot or base of the rail. On the opposite side of the part 1 of the base-plate are formed tongues 4, which are adapted to engage over the inner side of

the foot or base of the rail to assist in holding the same in place. These tie-plates may be used to connect the ends of the rails, one-half of the tie-plate being clasped or engaged over the end of one rail, while the other one-half of the plate clasps the end of the adjacent rail, thereby permitting expansion and contraction and avoiding the necessity of welding and using fish-plates, bolts, and nuts and dispensing with the use of connecting-wires to connect the joints of the rails.

I claim—

1. The improved tie-plate consisting of a plate adapted to be secured to the ties or stringers, and having vertical wings to clasp over the foot or base of the rails and to bear against and strengthen the web of the rail, and suitable tongues to clasp over the opposite side of the foot or base of the rails, substantially as specified.

2. The improved tie-plate, consisting of a foot or base portion adapted to be secured on the ties or stringers at the ends of the rails and being of sufficient length to extend a suitable distance under the ends of the adjacent rails and having vertical wings integral with its outer side to clasp over the foot or base of the different rails, and tongues integral with the inner side to clasp over the inner side of the foot or base of the different rails and thereby form a connection, dispensing with the usual connecting devices and wire.

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

JAMES N. HAYES.

Witnesses:

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