

C. W. REINOEHL & B. L. WEAVER.
RAILWAY RAIL SUPPORT.
APPLICATION FILED JULY 20, 1908.

925,227.

Patented June 15, 1909.

Fig. 1.

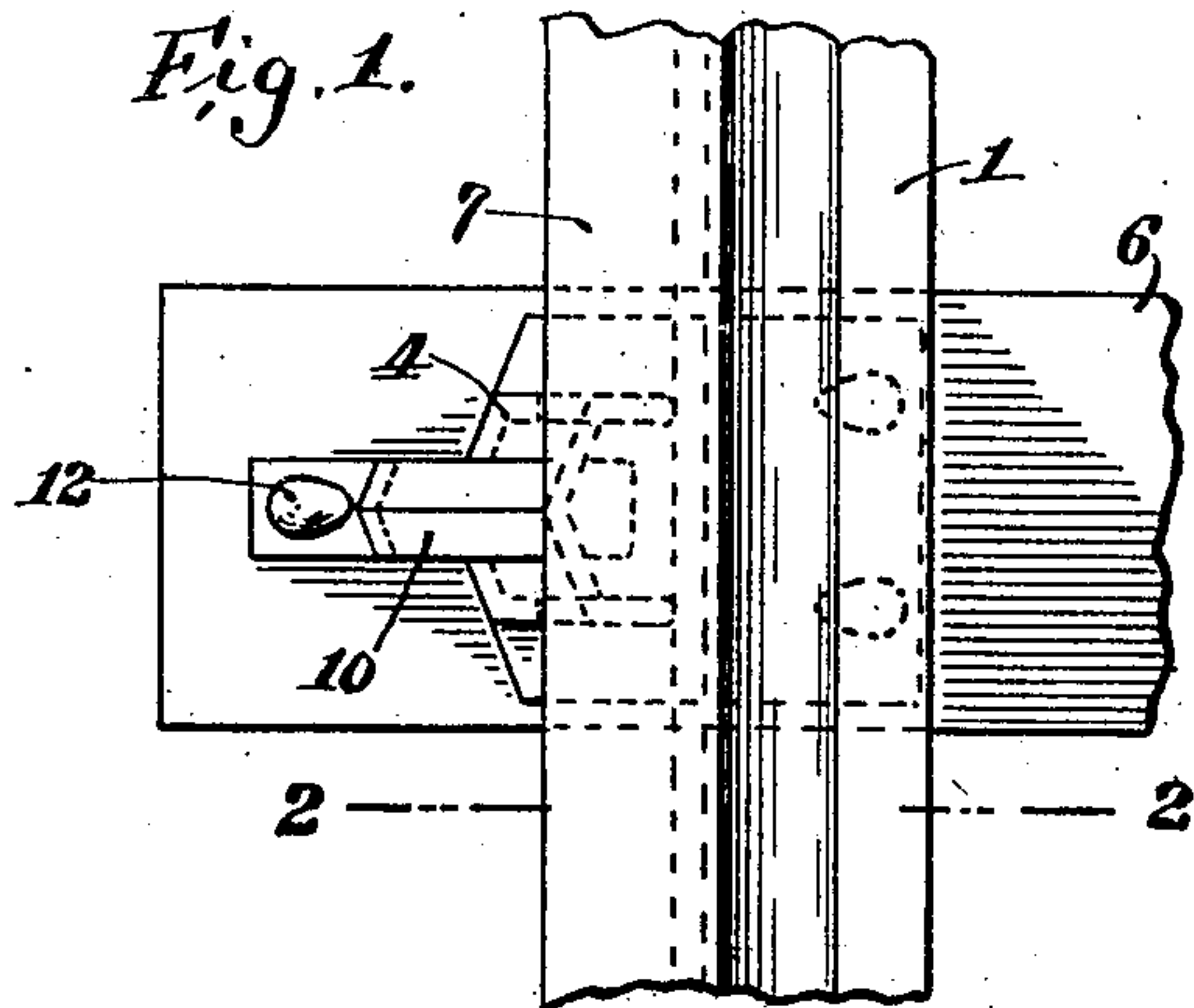


Fig. 3.

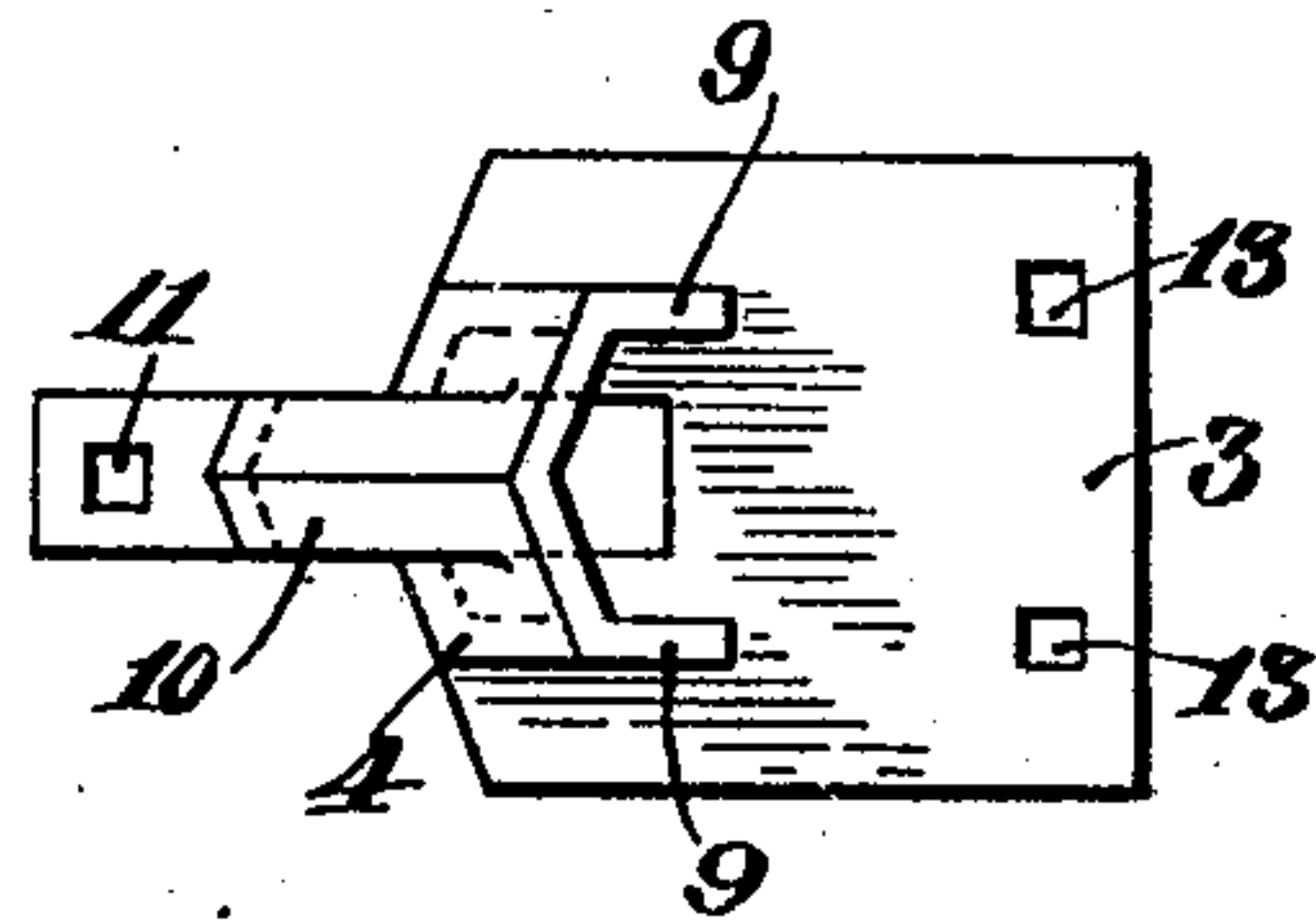


Fig. 4.

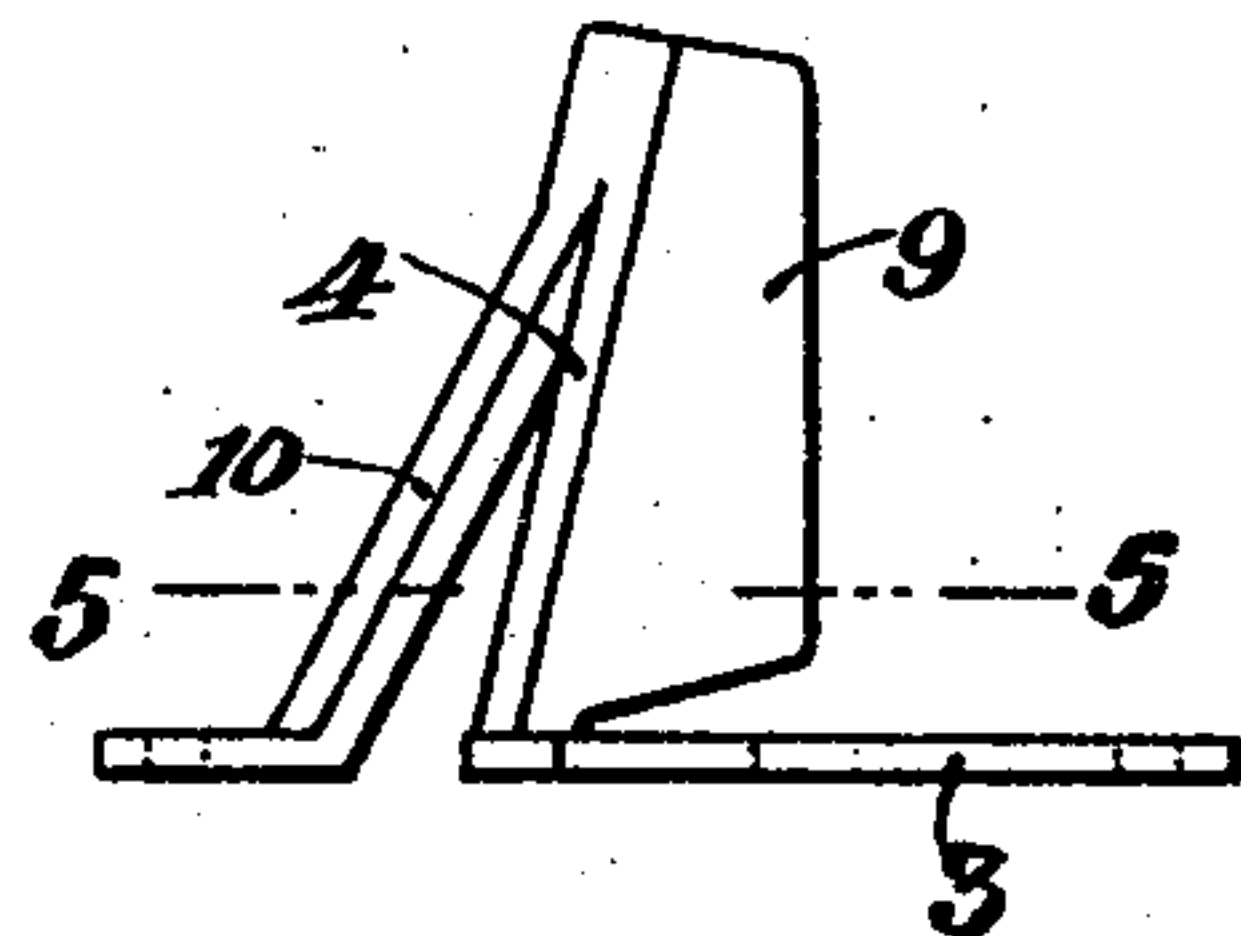


Fig. 2.

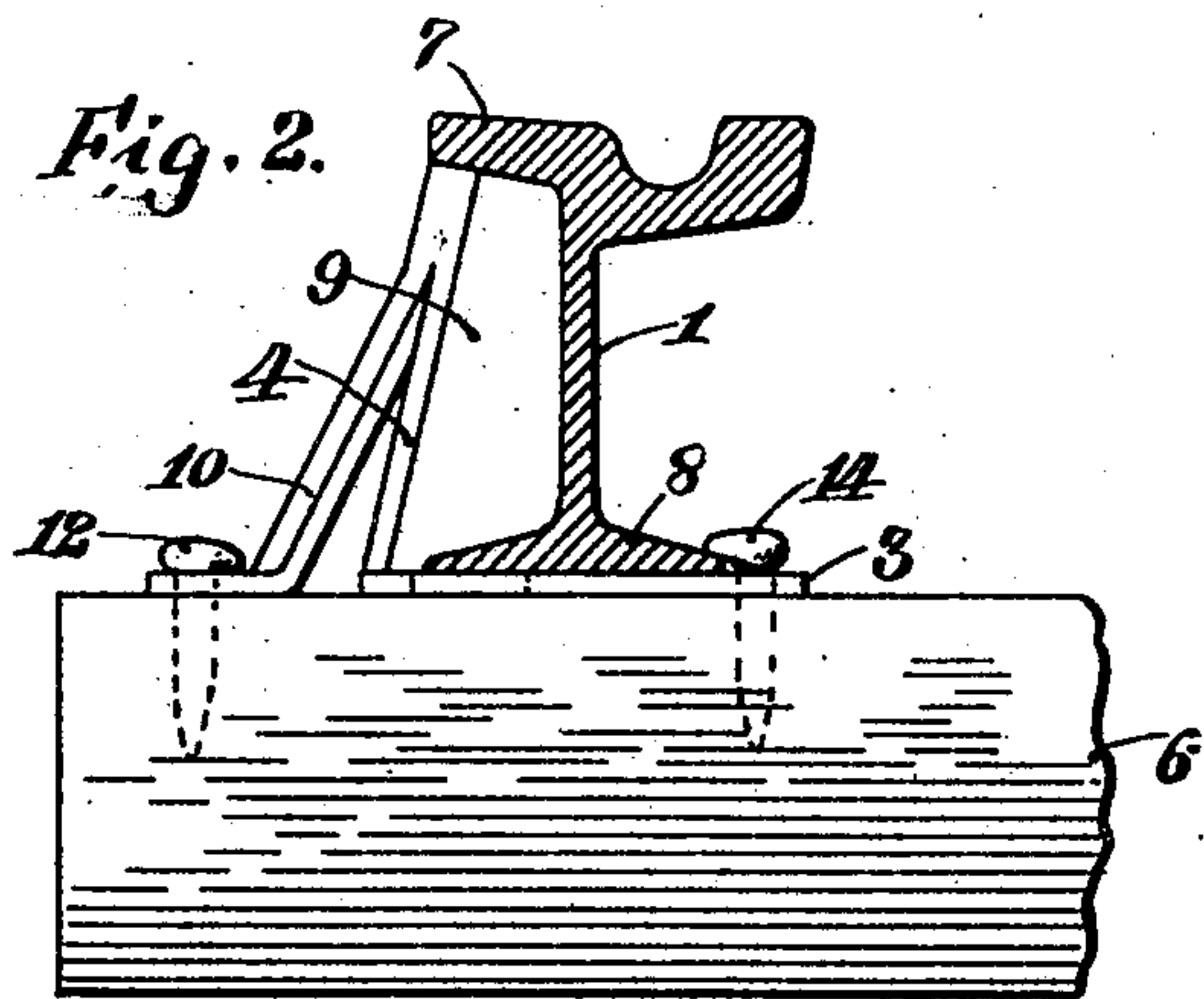


Fig. 5.

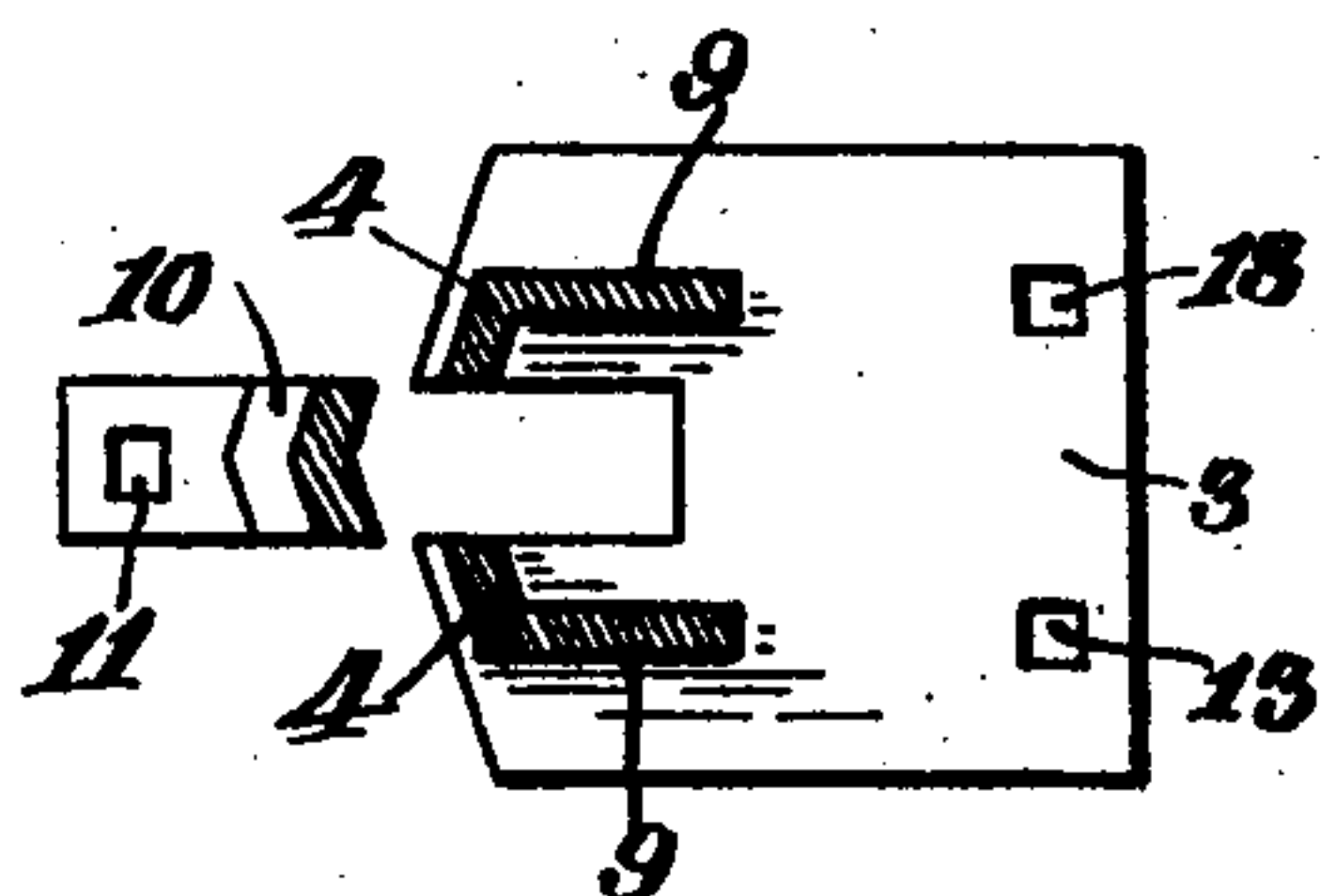
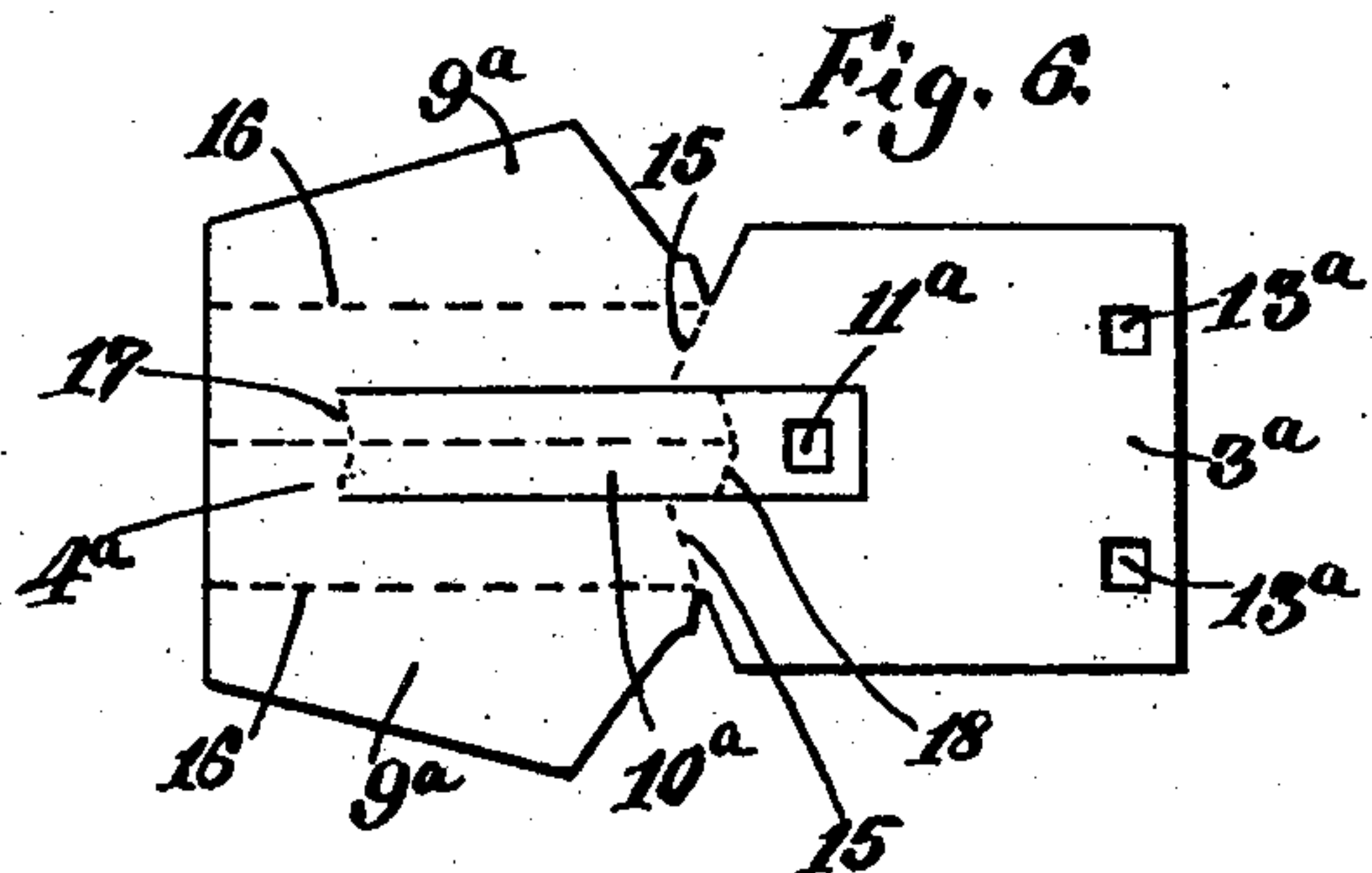


Fig. 6.



WITNESSES:

E. M. Ware
D. H. Gamble

INVENTORS
Charles W. Reinöehl
and Bert L. Weaver.
BY

Walter C. Pusey
ATTORNEY.

UNITED STATES PATENT OFFICE.

CHARLES W. REINOEHL AND BENT L. WEAVER, OF STEELTON, PENNSYLVANIA.

RAILWAY-RAIL SUPPORT.

No. 925,227.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed July 20, 1908. Serial No. 444,530.

To all whom it may concern:

Be it known that we, CHARLES W. REINOEHL and BENT L. WEAVER, citizens of the United States, and residents of Steelton, Dauphin county, State of Pennsylvania, have invented certain new and useful Improvements in Railway-Rail Supports, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

Our invention relates to railway rail supports, the object being to provide a simple, durable and efficient rail support by means of which a railway rail may be supported upon and secured to an underlying cross-tie in a manner to prevent displacement of the rail, as will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a plan view of a portion of a cross-tie and a portion of a railway rail having our improved rail support applied thereto. Fig. 2 is a vertical section, as on the line 2—2 of Fig. 1. Fig. 3 is a plan view of the rail support removed from the rail and cross-tie. Fig. 4 is a side elevation of the rail support removed from the rail and cross-tie. Fig. 5 is a horizontal section as on the line 5—5 of Fig. 4. Fig. 6 is a plan view of the blank of plate metal from which the rail support is formed.

1 designates a portion of a railway rail, and 6, a portion of a cross-tie beneath the rail 1.

Resting upon the cross-tie 6 is our improved rail-support, which is of the following construction. 3 designates a base plate seated upon the cross-tie 6, and supporting the base or foot flange 8 of the rail 1. Rising from the outer portion of the base plate 3 is a brace member 4, which extends into engagement with the under side of the outer portion of the head 7 of the rail 1. Extending inwardly from the member 4, are laterally disposed wing portions 9 which extend to the vertical web of the rail 1, and into engagement with the top of the rail base 8 and the under side of the rail head 7, as shown. Extending downwardly and outwardly from the member 4, is a brace 10, the lower end of which is made parallel to the upper surface of the cross-tie 6, and is provided with a spike hole 11 therein for the reception of a spike 12 which is driven into the underlying cross-tie 6. The inner portion of the base plate 3 extends inwardly of the rail base 8, and is provided with suitable spike holes 13 for the

reception of spikes 14 which are driven into the underlying cross-tie 6, the heads of the spikes engaging the rail base 8.

From the foregoing description it will be seen that the rail 1 is held in place and that the outer portion thereof is braced against outward movement by the brace member 4, the wing portions 9, and the additional brace 10, and that the spikes 14 serve to secure the rail, the rail-support, and the cross-tie together.

We preferably form our improved rail support from a single piece or blank of plate metal, as shown in Fig. 6 of the drawings. In this figure, 3^a designates the portion which forms the base plate 3; 4^a, the portion which forms the brace member 4; 9^a, 9^a the portions which form the lateral wing portions 9, 9 of the rail support; and 10^a, the portion which forms the brace 10. The spike holes 11 and 13, 13, are indicated at 11^a and 13^a, 13^a, respectively in the blank. It will be observed that the portion 10^a of the blank 10 is cut from the portions 3^a and 4^a of the blank which form the base plate 3, and the brace member 4, respectively. In forming our rail support from this blank, the portion 4^a is bent upwardly on the dotted lines 15, 15 to form the brace member 4; the portions 9^a, 9^a are bent inwardly on the dotted lines 16, 16, to form the lateral wing portions 9, 9 of the rail support; the portion 10^a is bent outwardly on the dotted line 17 to form the brace 10; and the portion 10^a is also bent on the dotted line 17 to bring the lower end of the brace 10 parallel to the upper surface of the cross-tie.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:—

1. The combination with a railway rail and a cross-tie of a rail support comprising a base plate resting upon the cross-tie and supporting the rail base, a member rising from the outer portion of the plate to the under side of the outer portion of the rail head in spaced relation to the rail web, a brace extending downwardly and outwardly from the upper portion of said member, and a spike securing said support to the cross-tie, substantially as described.

2. The combination with a railway rail and a cross-tie of a rail support comprising a base plate resting upon the cross-tie and supporting the rail base, a member rising from the outer portion of the plate to the under

side of the outer portion of the rail head in spaced relation to the rail web, laterally disposed wing portions extending inwardly from said member toward the rail web and engaging the top of the rail base and the under side of the rail head, a brace extending downwardly and outwardly from said member and in spaced relation thereto, and a spike securing said support to the cross-tie, substantially as described.

3. The combination with a railway rail and a cross-tie of a rail support comprising a base plate resting upon the cross-tie and supporting the rail base, a member rising from the outer portion of the plate to the under side of the outer portion of the rail head, laterally disposed wing portions extending inwardly from said member and engaging the top of the rail base and the under side of the rail head, a brace extending downwardly and outwardly from said member and having its lower end engaged with the cross-tie, a spike securing the lower end of the brace to the cross-tie, and a spike securing said support to the cross-tie, substantially as described.

4. The combination with a railway rail and a cross-tie of a rail support formed from a single piece of plate metal and comprising a base plate resting upon the cross-tie and supporting the rail base, a member bent upwardly from the outer edge of said base plate and extending to the under side of the outer portion of the rail head and having the upper edge of the plate metal forming the member engaged with the under side of the rail head, wing portions bent inwardly from the lateral edges of said member and engaging the top of the rail base and the under side of the rail head, the upper and lower edges of the plate metal forming said wing portions being engaged with the rail head and the base plate respectively, and a spike securing said support to the cross-tie, substantially as described.

5. The combination with a railway rail and a cross-tie of a rail support formed from a single piece of plate metal and comprising a base plate resting upon the cross-tie and supporting the rail base, a member bent upwardly from the outer edge of said base plate and extending to the under side of the outer portion of the rail head, wing portions bent inwardly from the lateral edges of said member and engaging the top of the rail base and the under side of the rail head, a brace cut from the metal forming said member and said base plate, said brace being bent to

extend downwardly and outwardly from said member; and a spike securing said support to the cross-tie, substantially as described.

6. The combination with a railway rail and a cross-tie of a rail support formed from a single piece of plate metal and comprising a base plate resting upon the cross-tie and supporting the said base, a member bent upwardly from the outer edge of said base plate and extending to the under side of the outer portion of the rail head a brace cut from the metal forming said member and said base plate, said brace being bent to extend downwardly and outwardly from said member, and a spike securing said support to the cross-tie, substantially as described.

7. The combination with a railway rail and a cross-tie of a rail support formed from a single piece of plate metal and comprising a base plate resting upon the cross-tie and supporting the rail base, a member bent upwardly from the outer edge of said base plate and extending to the under side of the outer portion of the rail head, wing portions bent inwardly from the lateral edges of said member and engaging the top of the rail base and the under side of the rail head, a brace cut from the metal forming said member and said base plate, said brace being bent to extend downwardly and outwardly and to engage the cross-tie, a spike securing the lower end of the brace to the cross-tie, and a spike securing said support to the cross-tie, substantially as described.

8. The combination with a railway rail and a cross-tie of a rail support formed from a single piece of plate metal and comprising a base plate resting upon the cross-tie and supporting the rail base, a member bent upwardly from the outer edge of said base plate and extending to the under side of the outer portion of the rail head, a brace cut from the metal forming said member and said base plate, said brace being bent to extend downwardly and outwardly and to engage the cross-tie, a spike securing the lower end of the brace to the cross-tie, and a spike securing said support to the cross-tie, substantially as described.

In testimony whereof, we have hereunto affixed our signatures.

CHARLES W. REINOEHL.
BENT L. WEAVER.

Witnesses:

B. A. HANKIN,
WM. R. MILLER.