

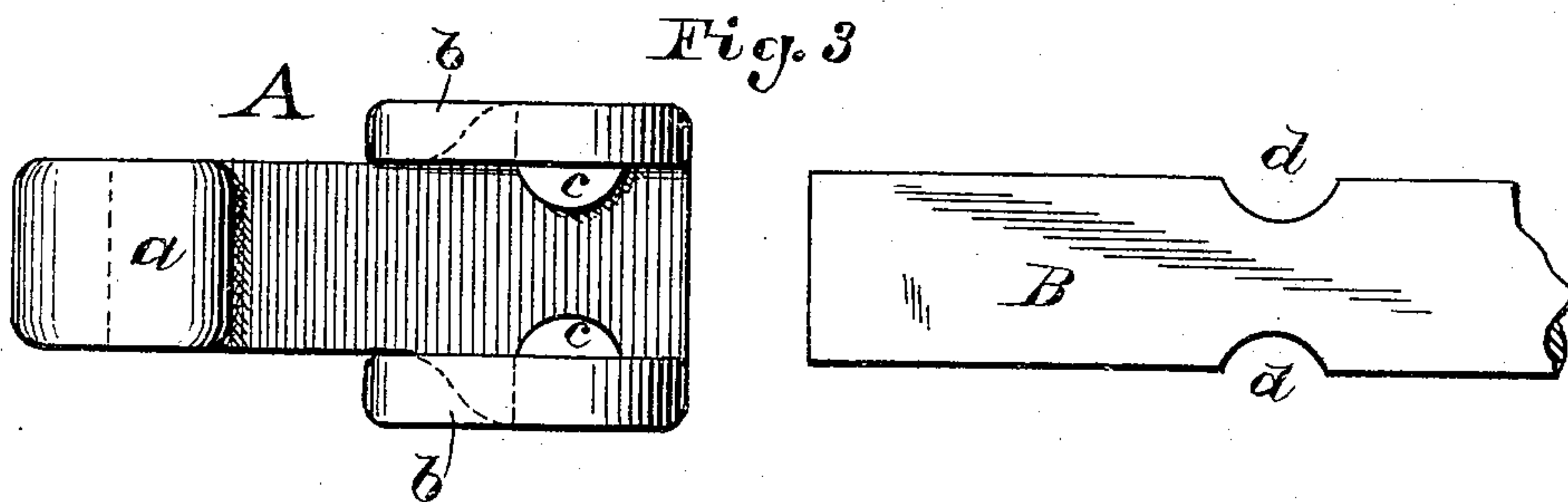
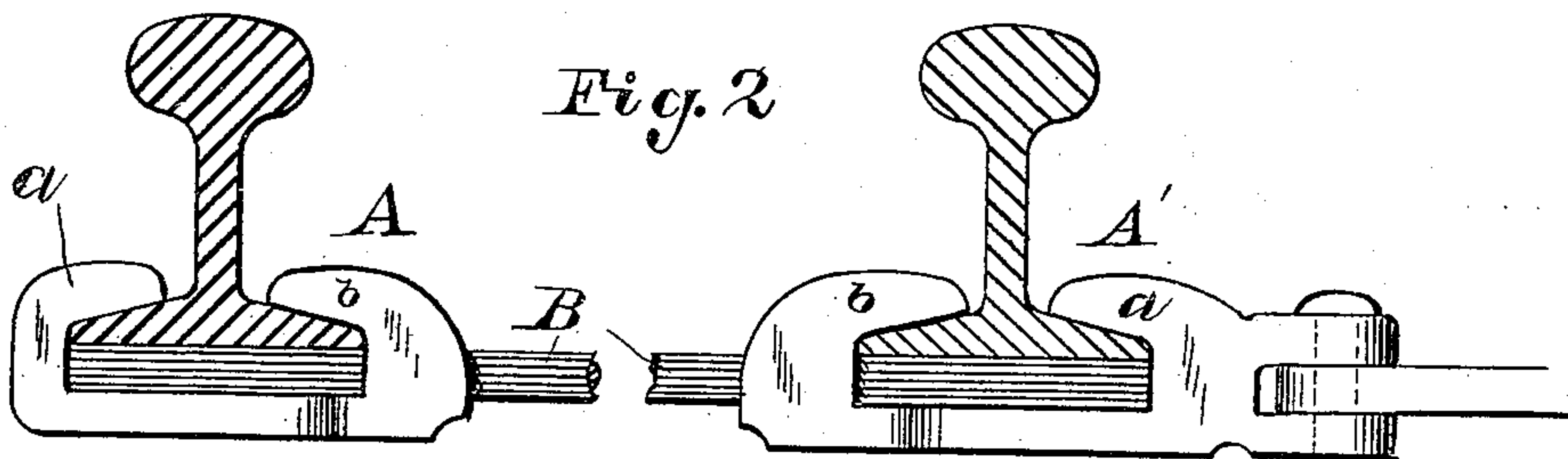
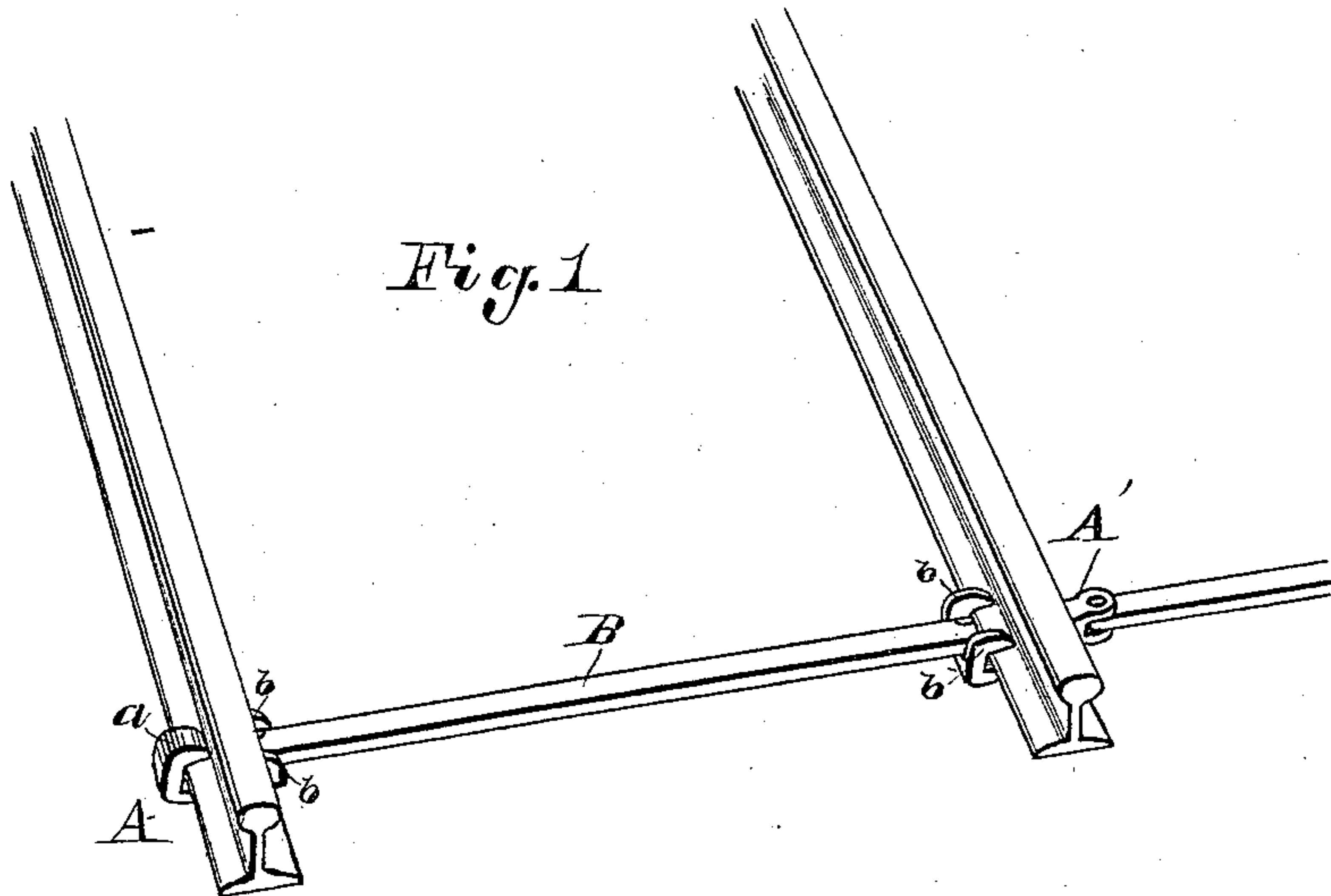
(No Model.)

W. J. MORDEN.

TIE BAR FOR RAILROAD SWITCHES.

No. 267,566.

Patented Nov. 14, 1882.



Attest

R. A. Staley
Trans. Johnson

Inventor

William J. Morden

BY

H. Harrison

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM J. MORDEN, OF CHICAGO, ILLINOIS.

TIE-BAR FOR RAILROAD-SWITCHES.

SPECIFICATION forming part of Letters Patent No. 267,566, dated November 14, 1882.

Application filed April 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. MORDEN, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tie-Bars for Railroad-Switches, of which the following is a specification.

My invention relates to tie-bars for railway-switches, &c.

The object of my invention is to provide a tie-bar in which the jaws which hold the bottom flange of the rail are made detachable and portable, and so arranged in relation to the bar or rod that they are held firmly in place on the ends of said rods or bars when in place on the rail without the aid of bolts or rivets.

To this end my invention consists in providing one of the parts with a projection or projections, which fit in corresponding recesses in the other, and are held firmly in their places by the rail.

In the accompanying drawings, which form a part of this specification, Figure 1 is a perspective view of my improved tie-rod as applied to the rails. Fig. 2, a side elevation of the jaws enlarged. Fig. 3 is a plan view of the jaw, showing the end of the bar removed.

Similar parts are represented by similar letters of reference throughout the several views.

In the drawings, A and A' represent the removable jaws, and B the bar which connects them. The jaws A and A' are to be of steel or iron, cast, swaged, forged, or rolled, or of any suitable material, and are provided at one end with a hook or claw, *a*, and at the other with two similar ones, *b b*, as desired, these being arranged at each side of the jaw proper, with space enough between for the ends of the bar B.

c c are lugs cast onto the sides of the claws *b b*, and are of sufficient height to come flush with the bar B, when in position. In the bar B, a short distance from the end, are notches or recesses, *d d*, which fit over the lugs *c c*, referred to above. In applying the tie-bar to the rails, the end of the bar B is slipped between the claws or hooks *b b* and under the

hook or claw *a*, the recesses *d d* coming down over lugs *c c*. The claws *a* and *b* are so constructed that when the end of the bar B is in place, as just-described, the space between the said claws and the top of the bar B corresponds to the shape of the bottom flanges of the rail, which is slipped therein, as shown in Fig. 2, thus holding the whole firmly together, as will be readily understood by reference to the drawings. It is obvious that the same result might be accomplished by having a projection or projections on the bar which would fit in corresponding recesses in the jaw. I do not therefore wish to be confined to this particular construction.

To one familiar with the bars as heretofore constructed the advantages of this bar will be apparent at a glance. The jaws may be cast of steel, iron, or any suitable material, avoiding the labor and expense of forging, as is the case when made in one piece. In case of breakage of any part, it is only necessary to slip the tie-bar from the rails and replace the broken part with a duplicate, and put it back in its place, while with the ordinary bar, should any part become broken, a whole new bar must be substituted or the broken part taken to the shop to be repaired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the rail and the tie-bar B, of the jaw A, having the claw *a* and the claws *b b*, disconnected above the tie-bar, and devices to engage said jaw with the said tie-bar, the rail resting directly upon the tie-bar, substantially as and for the purpose described.

2. A tie-bar composed of the removable jaws A A', having claws *a* and *b b*, the latter provided with lugs *c c*, and the connecting-bar B, secured between the claws *b b*, and having notches *d d* adapted to fit over the lugs *c c*, substantially as shown and described.

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

WILLIAM J. MORDEN.

Witnesses:

P. A. STALEY,
FRANK JOHNSON.