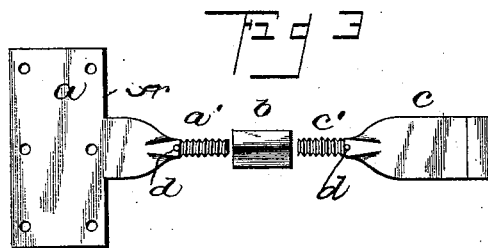
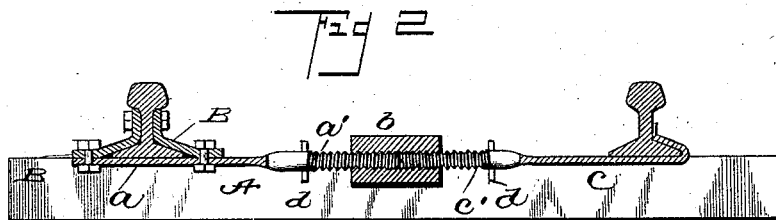
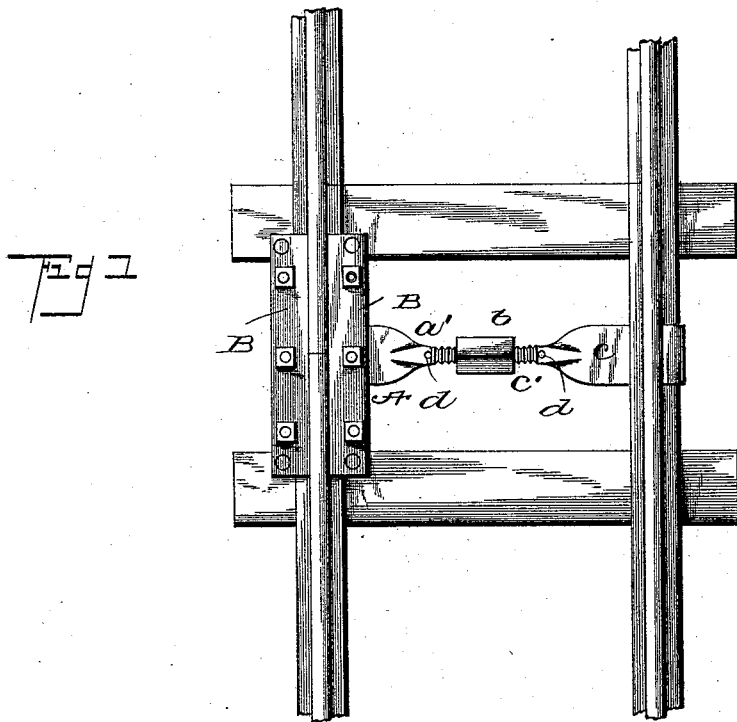


(No Model.)

L. S. WIDMEYER & J. F. FIELDS.
RAILWAY.

No. 490,868.

Patented Jan. 31, 1893.



Witnesses

John H. H. H.
J. F. Fields

Inventors

L. S. Widmeyer
J. F. Fields.

By their Attorney

J. H. H. H.

UNITED STATES PATENT OFFICE.

LEMUEL S. WIDMEYER AND JACOB F. FIELDS, OF HANCOCK, MARYLAND;
SAID FIELDS ASSIGNOR TO SAID WIDMEYER.

RAILWAY.

SPECIFICATION forming part of Letters Patent No. 490,868, dated January 31, 1893.

Application filed March 19, 1892. Serial No. 425,636. (No model.)

To all whom it may concern:

Be it known that we, LEMUEL S. WIDMEYER and JACOB F. FIELDS, citizens of the United States, residing at Hancock, in the county of Washington and State of Maryland, have invented certain new and useful Improvements in Railways; and we do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in railways, more especially the fish-plates, chairs and tie bars, and it has for its object to prevent the spreading of the rails and the consequent derailment of the cars, and to these ends the invention consists in the detailed construction, combination and arrangement of the parts substantially as hereinafter more fully disclosed and pointed out in the claims.

In the accompanying drawings—Figure 1 is a plan view of our invention. Fig. 2 is a cross section thereof. Fig. 3 is a detached plan view of the tie-bar or casting.

In the embodiment of our invention, we employ a T shaped tie-bar A, the cross or head portion *a* of which is placed underneath one of the rails of the track; and bolted to, or upon, this cross piece or head are angle plates or castings B B. The plates B B, as their name indicates, fit down upon the flanges of the rail aforesaid, and hug its web-portion and are bolted therethrough, said plates lapping the joints between rail-sections, thus serving also as fish-plates.

The stem or central portion *a'* of the T-shaped connecting or tie bar A has upon it a screw-thread and is coupled by a sleeve or coupling nut *b* with the screw-threaded end of a lateral extension *c'* of a rail-chair *c*, within which is seated the opposite rail-section, said coupling nut or sleeve being adapted to engage or work upon opposite or right and

left handed screw-threads of said stem and extension, respectively.

The coupling nut or sleeve *b* is limited in its movement or rotation, as it is turned by a suitable wrench in the hand of the operator from accidental disengagement from the stem *a'* and extension *c'* of the sections, thus formed of the tie or connecting bar A, by means of cross pins *d*, in event the enlargements beyond the screw-threads are omitted, or the sections of the connecting bar are the same diameter throughout, or are of less diameter beyond the screw threads, inserted through transverse apertures in said sections so as to fit tightly therein to prevent them falling out. This arrangement permits the tightening up of the sections of the tie or connecting bar, thus holding the rail-sections against spreading, as well as compensating any subsequent spreading to the slightest degree, consequently preventing the possible derailment of the cars from that cause. The tie-bar is also thus adapted to accommodate any slight or other variations or differences of width between different tracks, in applying the same for use.

Having thus fully described our invention what we claim and desire to secure by Letters Patent is—

1. The tie or connecting bar for railway tracks comprising the T-shaped bar and chair-plates bolted or secured thereon and the opposite rail chair connected to said T bar, substantially as specified.

2. The combination with the T-shaped bar having bolted to its cross or head portion chair-plates, of the opposite rail-chair and the coupling nut or sleeve having right and left handed screw-threaded connection with said T-shaped bar and rail chair, substantially as specified.

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

LEMUEL S. WIDMEYER.
J. F. FIELDS.

Witnesses:

G. W. WIDMEYER,
JOSEPH HARRISON.