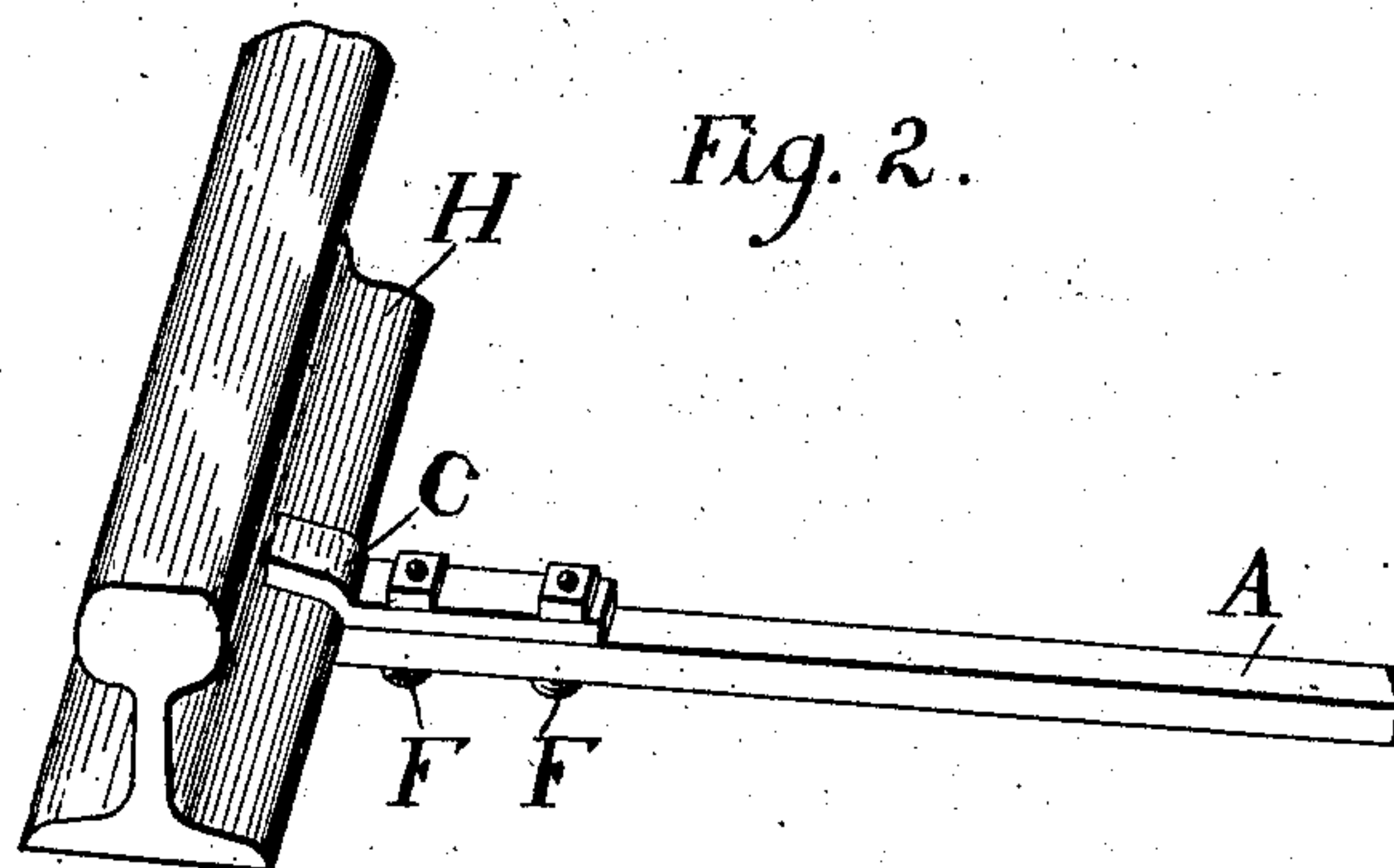
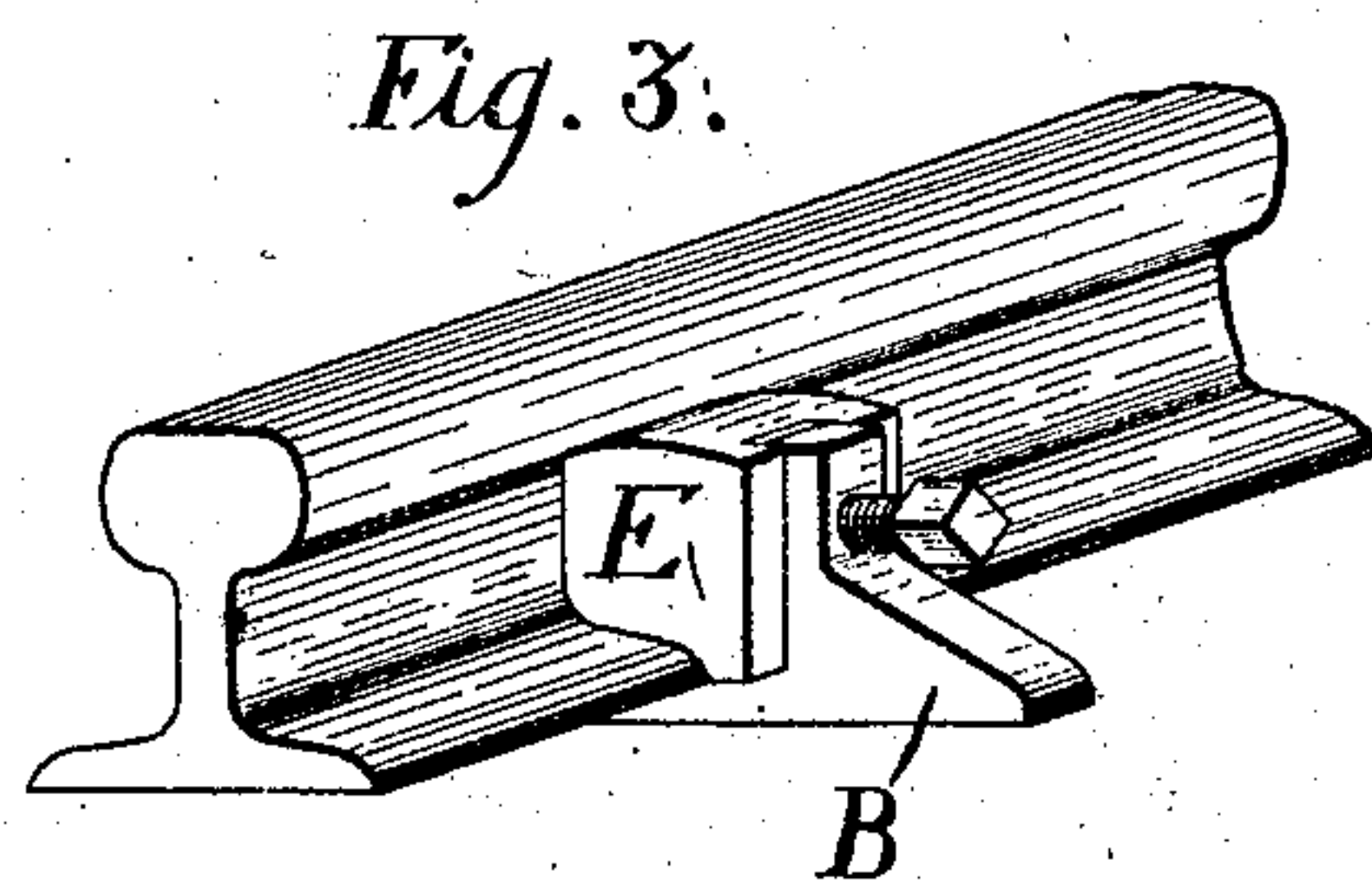
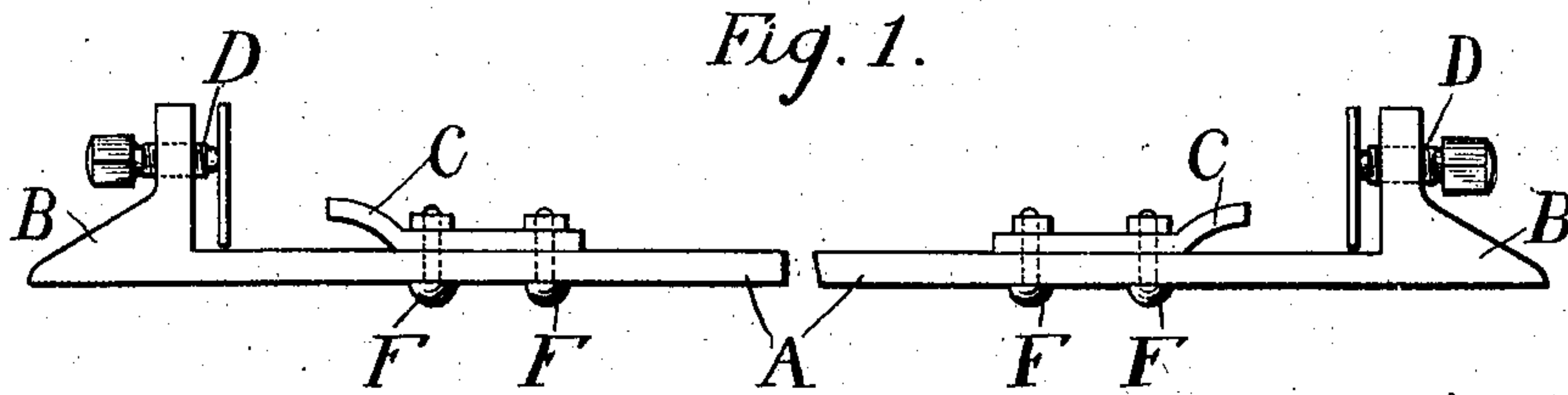


No. 791,371.

PATENTED MAY 30, 1905.

B. SARGENT.
RAILROAD SAFETY ROD.
APPLICATION FILED AUG. 9, 1904.



Witnesses:

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UNITED STATES PATENT OFFICE.

BENJAMIN SARGENT, OF ROCK ISLAND, ILLINOIS.

RAILROAD SAFETY-ROD.

SPECIFICATION forming part of Letters Patent No. 791,371, dated May 30, 1905.

Application filed August 9, 1904. Serial No. 220,095.

To all whom it may concern:

Be it known that I, BENJAMIN SARGENT, a citizen of the United States, residing at Rock Island, in the county of Rock Island and State of Illinois, have made certain new and useful Improvements in Tie-Rods for Railroad-Rails, of which the following is a specification.

My invention is an improvement in that class of bridles, ties, or couplings employed for preventing rails from spreading and which may be utilized independently of the ordinary ties upon which the rails are laid and spiked.

The details of construction, arrangement, and combination of parts are as hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a side view of my improved coupling or tie-bar. Fig. 2 is a perspective view including a section of a railroad-rail and a portion of my tie-bar applied thereto. Fig. 3 is a perspective view also including a rail-section and the outer or end portion of my improved tie-bar.

The tie-bar A is straight and made of greater length than the distance between the outer sides of the rails which it is intended to couple or tie together. Each end of the tie-bar is provided with an enlarged head B, the same consisting of a vertical projection or shoulder and a supporting-brace. A screw D is arranged transversely in said shoulders, and their inner ends bear against braces or blocks E, which are arranged between the shoulders and the side of the adjacent rails. These blocks are constructed of hardwood provided with a groove adapted to receive the adjacent face of the shoulder, while their opposite sides conform to the shape of the web or body of the rail and the base-flange thereof. A narrow metal plate (shown in Fig. 1) is placed in the groove and serves as a bearing for the point of the screw D. On the opposite or inner sides of the rails are arranged clamps or flanges C, that embrace the base of the rails and are secured to the tie-bar proper by means of screw-bolts F. The parts C are

fixed in position at the exact distance between the rails, while it is apparent that by means of the screws D the braces or blocks E may be adjusted to any required degree of pressure so as to hold the rails firmly and with absolute security.

Wooden blocks have been extensively used as parts of clamping mechanism for holding railroad-rails; but they have ordinarily been secured by friction alone. It is obvious that in the present case they are held both from endwise and vertical movement, so that accidental dislodgment is impossible.

By the construction and combination of parts described I provide a most efficient means for preventing rails from spreading, whereby perfect safety in this regard is obtained, and the sleepers or ordinary ties supporting the rails are relieved of strain and wear incident to the usual means of fastening the rails thereto.

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

1. The combination, with railroad-rails, of a tie-bar having enlarged ends provided with vertical reinforced shoulders, wooden blocks interposed between such shoulders and the rails and provided with a vertical groove adapted to receive the said shoulders, a set-screw passing through the latter and bearing upon the adjacent block, and fixed clamps secured to the tie-bar proper and engaging the base of the rails on the inner side, substantially as described.

2. The combination, with railroad-rails, of a tie-bar having enlarged heads provided with vertical shoulders, screw-bolts threaded in transverse holes in the said shoulders and adapted to bear upon blocks interposed between the rails and shoulders, and fixed flanges attached to the body of the tie-bar for engaging the inner sides of the rails, as shown and described.

3. The improved tie-bar for the purpose specified, comprising a straight body having enlarged heads forming shoulders which are

braced or reinforced as described, screw-bolts
passing transversely through the aforesaid
shoulders, wooden blocks provided with
grooves to receive the faces of the shoulders,
5 and fixed flanges secured to the body of the
tie-bar and adapted to engage the base of the
rails on the inner side.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

BENJAMIN SARGENT.

Witnesses:

HATTIE C. NEUERT,
LEONARD E. TELLEN.