

G. N. HODGDON.

RAIL JOINT.

No. 385,116.

Patented June 26, 1888.

Fig. 2.

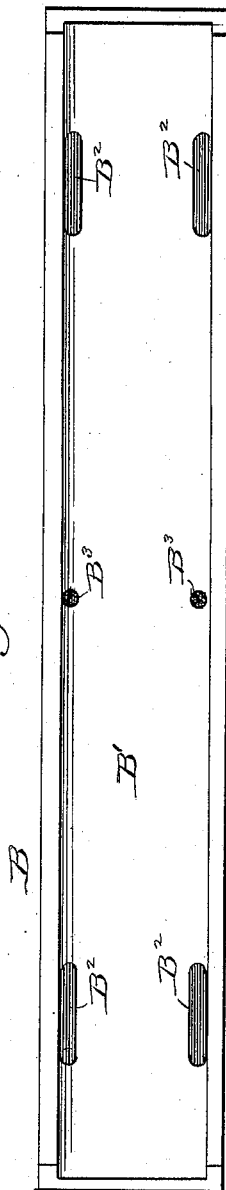


Fig. 1.

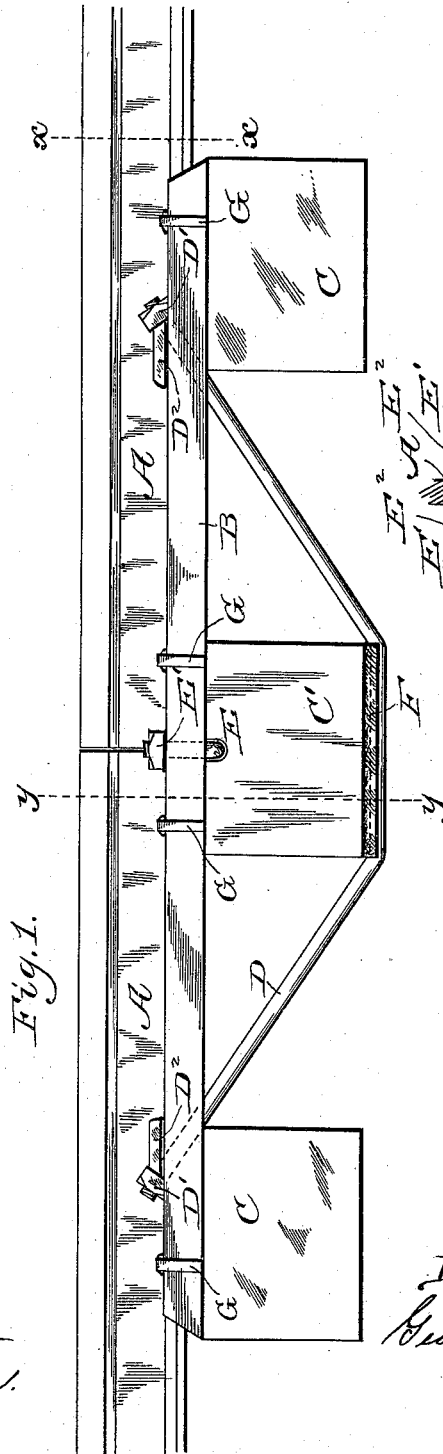
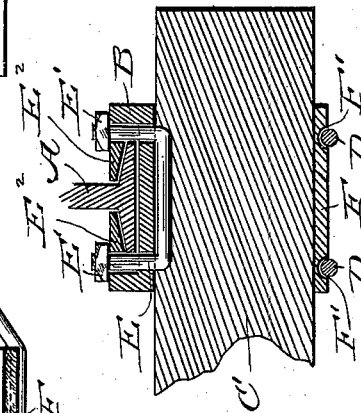


Fig. 3.



Witnesses:

Charles W. Roberts,
Cyrus K. K.

Inventor:

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Fig. 4.

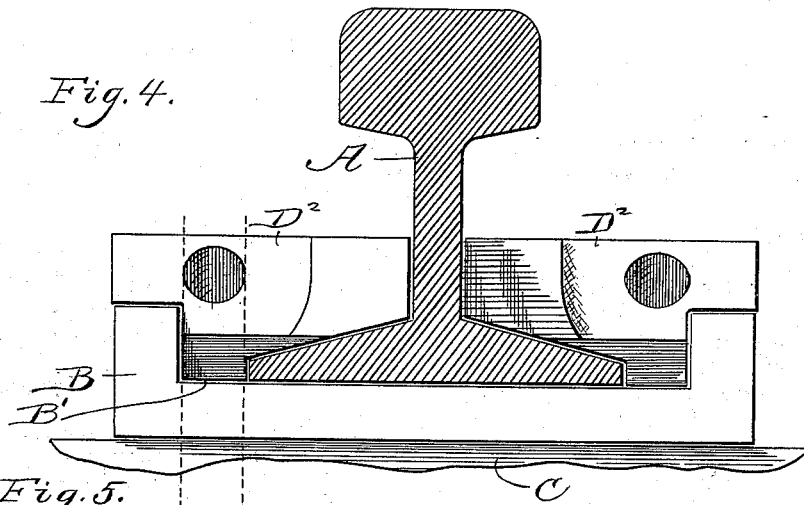
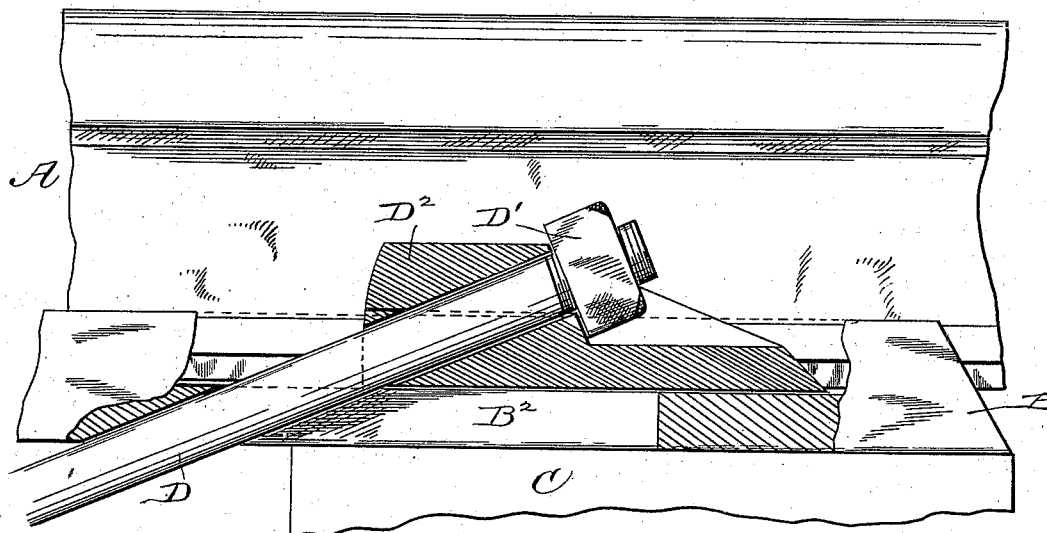


Fig. 5.



Witnesses:

Charles H. Roberts.

Cyrus A. W.

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UNITED STATES PATENT OFFICE.

GEORGE N. HODGDON, OF NASHUA, NEW HAMPSHIRE.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 385,116, dated June 26, 1888.

Application filed November 21, 1887. Serial No. 255,631. (No model.)

To all whom it may concern:

Be it known that I, GEORGE N. HODGDON, a citizen of the United States, residing at Nashua, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Rail-Joints; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to a modification of the devices described in Letters Patent of the United States No. 266,626, granted to me October 31, 1882, for improvements in rail-joints, the object being to apply a truss directly beneath the meeting ends of the rails.

In the accompanying drawings, Figure 1 is a side elevation of the modified joint. Fig. 2 is a plan of the channeled plate forming the upper chord of the truss. Fig. 3 is a cross-section in line *yy* of Fig. 1. Fig. 4 is a cross-section in line *xx* of Fig. 1. Fig. 5 is a detail side view.

A A are the rails.

B is a plate resting on the ties C C' C, and having a channel, B', on its upper side sufficiently wide to receive the foot of the rails and leave a space at each side of the latter for slots B² and holes B³. The middle of said plate B rests on the joint-tie C', while its ends rest on the adjacent ties C C, and the ends of the rails A rest upon the middle of said plate and over the tie C'.

D D are rods forming the lower chord of the truss. Said rods pass beneath the joint-tie C', and their ends extend upwardly through the slots B², where they receive nuts D', which may rest on the plate B and foot of the rails A; but it is preferable to interpose a leveling-block, D², between the nuts D' and the plate B and foot of the rail A.

E is a U-bolt, having its arms extending upwardly from below through the holes B³, and provided with nuts E', resting on the meet-

ing ends of the foot of the rails. Leveling-blocks E² may be interposed between the nuts E' and the foot of the rails and the plate B. Said U-bolt serves to bind said rails to said plate B. More than one such bolt may be used, if so desired.

F is a plate, which may be placed between the rods D and the joint-tie C' to prevent said rods from sinking into the tie.

F' F' are grooves in the lower surface of the plate F, in which the rods D lie. Said plate F need be used only when the ties are of wood or other relatively soft material.

The plate B aids directly in supporting the ends of the rails, while the rods D support the joint-tie, as described in my Letters Patent aforesaid.

The plate B may be a plain slab; but if it is channeled greater strength may be acquired with a given amount of material. Said plate is to be secured to the ties in any suitable way—as, for example, by spikes G, Fig. 1.

I claim as my invention—

1. The combination, with the rails A A and ties C C' C, of a plate, B, interposed between said ties and rails, and rods D, having their ends secured to said plate B and passing beneath the tie C', substantially as shown and described.

2. The combination, with the rails A A and ties C C' C, of a channeled plate, B, interposed between said ties and rails, and rods D, having their ends secured to said plate B and passing beneath the joint-tie C', substantially as shown and described.

3. The combination, with the rails A A and ties C C' C, of a plate, B, rods D, nuts D', and leveling-blocks D², substantially as shown and described.

4. The combination, with the rails A A and ties C C' C, of a plate, B, rods D, and U-bolt E, substantially as shown and described.

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

GEORGE N. HODGDON.

Witnesses:

CYRUS KEHR,
CHARLES H. ROBERTS.