

(No Model.)

W. J. KENNEY.
RAILWAY.

No. 402,164.

Patented Apr. 30, 1889.

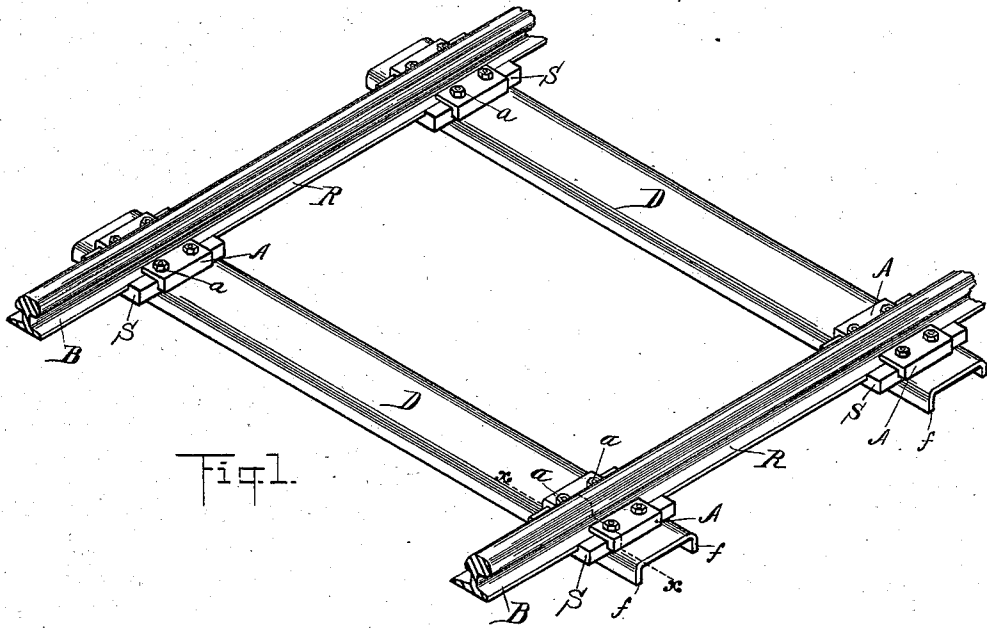


Fig. 1.

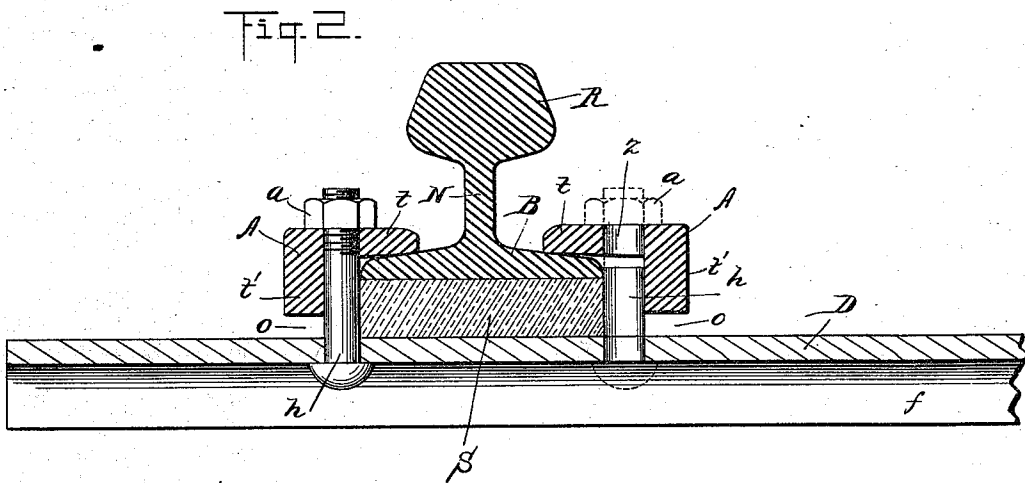
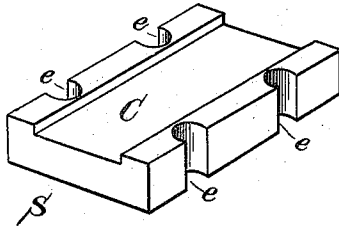


Fig. 2.

Fig. 3.



Attest.
John C. Miles.
Edgar S. Wheeler

Inventor:
W. J. Kenney
By
Roscoe B. Wheeler
att'y

UNITED STATES PATENT OFFICE.

WILLIAM J. KENNEY, OF CHICAGO, ILLINOIS.

RAILWAY.

SPECIFICATION forming part of Letters Patent No. 402,164, dated April 30, 1889.

Application filed June 30, 1888. Serial No. 278,708. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. KENNEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Railways; and I 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 same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 This invention relates to the construction of railways wherein a metallic tie is employed; and the invention consists in the combination of the elements employed for securing the T-rail to the metal tie.

20 The object of this invention is to construct a cheap and durable railway-track, whereby the rails may be attached to the ties by means of bolts, which bolts do not pass through the rails, thereby allowing the rails to freely expand or contract by the action of heat or cold. The construction is such that the angle-irons or clamping-plates securely bind the base of the rails to the ties, having an interposed layer of wood or like flexible agent, which flexible agent has a bearing on the tie and supports the T-rail. The angle-irons are firmly held in position by means of the bolts, which pass through them and the metal tie.

35 In the accompanying drawings, forming a part of this specification, Figure 1 is an isometric of a section of railway containing my invention. Fig. 2 is an enlarged cross-section taken on dotted line *xx* of Fig. 1. Fig. 3 is an elevation showing the flexible or wooden agent.

40 In the drawings, D represents the metallic tie, which has side flanges, *ff*. Said flanges form anchors in the road-bed, thereby keeping the tie in position. This form of tie, however, is not new.

R represents the T-rails, which are of the usual form.

50 S represents a wooden block or like flexible agent, having in its upper face the channel C, which channel receives the base of the rail R, as shown in Fig. 1. This block or flexible agent crosses the tie, as shown in Fig. 1, and has holes or channels *e* along

each edge, as shown in Fig. 3. Through said channels the bolts *h* pass, being first passed up through the tie; or the bolts may be screwed into the tie, thereby dispensing with the nuts *a*.

A represents angle-irons or clamping-plates, which are L-shaped in cross-section. These are located on each side of the rail at the point of attachment to the tie. The horizontal wings or portion *t* of each angle-iron A is provided with holes *z*, through which the bolts *h* pass. Said holes register with the holes in the tie and the notches *e* of the bearing-plate S. The vertical wings *t* of the plates A on their inner face press against the bolts *h*, as shown in Fig. 2, thereby preventing the clamping-plates from careening or tipping as the nuts *a* are tightened, forcing the wings *t* into the base B of the rail R, whereby the rail is firmly bound to the flexible support S, said support or flexible agent being firmly bound to the tie. By this construction the rail is firmly secured to the flexible agent and metal tie without passing the bolts through the web N of the rails, as is the common practice.

The wooden or flexible agent S gives to the track an elastic or yielding support, and has a tendency to deaden the sound of the rolling wheels.

To remove the rail R for repairs, the nuts *a* along one side of the rail are slightly loosened, the nuts *a* on the opposite side of the rail are removed from the bolts *h*, and the clamping-plates are then removed on that side, when the rail R may be lifted out.

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

In combination with the metal tie having the flanges *f*, the rail, the interposed wooden block having the channel in its upper face, the angle-irons L-shaped in cross-section, the bolts passing through the tie, the wooden agent, and angle-irons, having nuts on their upper ends for binding said parts together, substantially as and for the purposes specified.

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

WILLIAM J. KENNEY.

Witnesses:

GEO. W. RICHARDS,
GEO. K. EDWARDS.