

No. 888,317.

PATENTED MAY 19, 1908.

S. H. DEIHL.
RAILROAD TIE.
APPLICATION FILED JUNE 28, 1907.

2 SHEETS—SHEET 1.

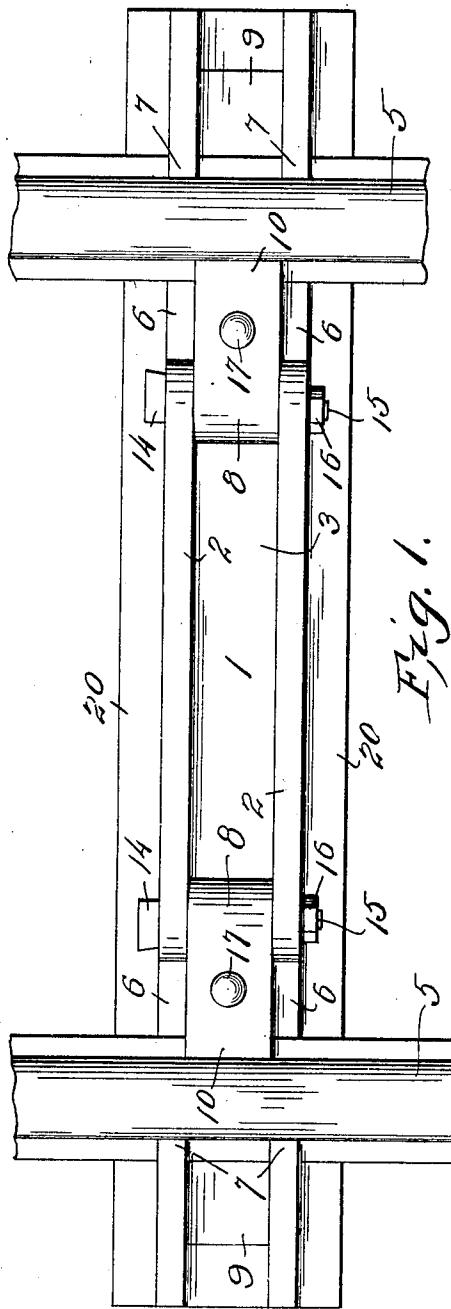


Fig. 1.

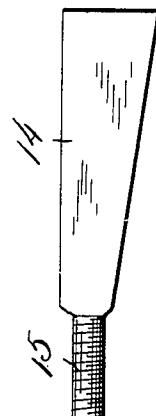


Fig. 6.

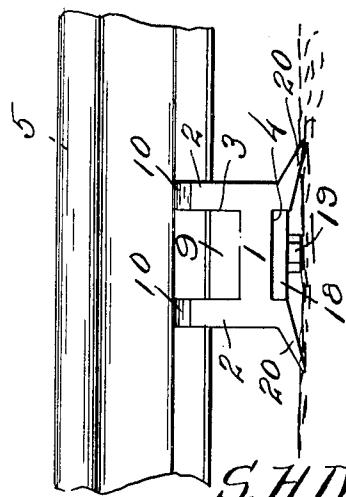


Fig. 2.

Inventor

S. H. Deihl.

Witnesses
J. S. Armstrong.

Johns Powre

~~By Charles F. Canfield~~

Attorneys

No. 888,317.

PATENTED MAY 19, 1908.

S. H. DEIHL.

RAILROAD TIE.

APPLICATION FILED JUNE 28, 1907.

2 SHEETS—SHEET 2.

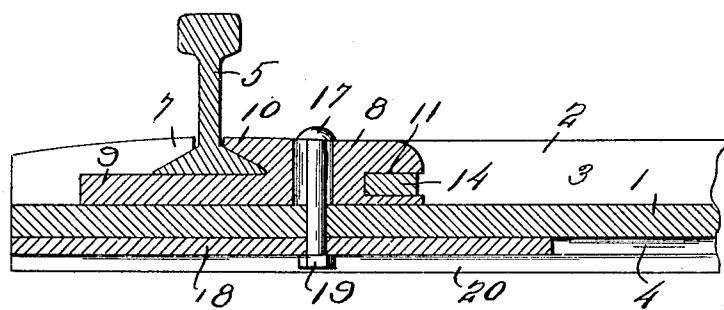


Fig. 3.

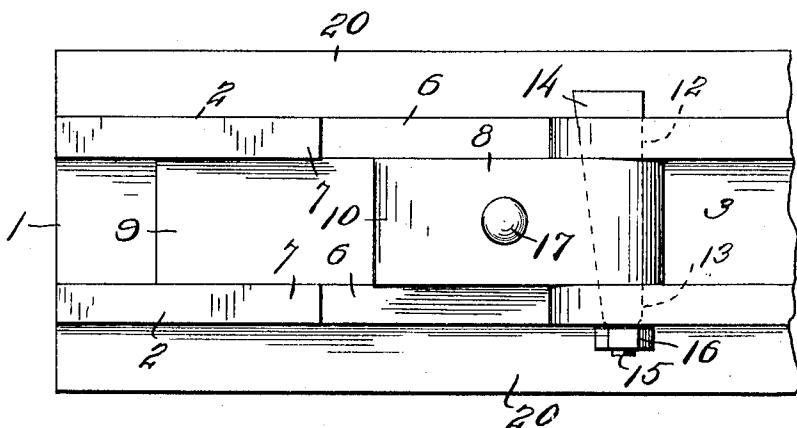


Fig. 4.

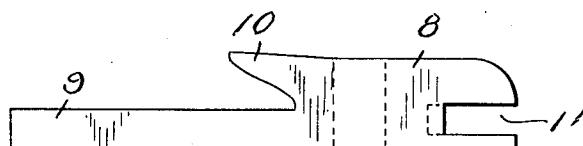


Fig. 5.

Inventor

S. H. Deihl,

Witnesses

J. D. Armstrong.

Johns P. Potts.

By *Franklin L. Lunde*

Attorneys

UNITED STATES PATENT OFFICE.

SYLVESTER H. DEIHL, OF ALTOONA, PENNSYLVANIA.

RAILROAD-TIE.

No. 888,317.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed June 28, 1907. Serial No. 381,310.

To all whom it may concern:

Be it known that I, SYLVESTER H. DEIHL, a citizen of the United States, residing at Altoona, in the county of Blair, State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Ties; 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 10 it appertains to make and use the same.

This invention relates to new and useful improvements in railroad ties and it has more particular reference to a combined metallic railroad tie and fastener, the object being 15 to provide a novel construction, combination and arrangement of parts.

The details of the invention will appear in the course of the following description, in which reference is had to the accompanying 20 drawings forming a part of this specification, like characters of reference designating similar parts, throughout the several views, wherein:

Figure 1 is a top plan view showing the 25 manner of use of a rail tie constructed in accordance with the present invention. Fig. 2 is an end elevation of such tie. Fig. 3 is a central longitudinal section thereof. Fig. 4 is a detailed view of the tie *per se*. Fig. 5 is a 30 detailed view of an adjustable clamp. Fig. 6 is a detailed view of a locking key.

Referring specifically to the accompanying drawings, the numeral 1 designates a tie which is formed with upwardly extending 35 portions 2 arranged in parallel relation and affording a longitudinal channel 3. In its lower face the tie is longitudinally grooved as at 4, for a purpose which will hereinafter appear.

The rail is designated by the numeral 5 and in the preferred embodiment of the invention 40 seats on the faces of recesses 6 cut into the portions 2. The said portions 2 adjacent the outer ends of the tie are formed with inwardly pointing lips 7 which overlie and grip the flanges of the rail. The adjustable clamping member above referred to is designated generally by the numeral 8 and is mounted 45 for adjustment longitudinally of the tie in the channel 3. The said member 8 is constructed with an extended base piece 9 which is disposed beneath the flange of the rail 5

and which is flush with the sides of the recesses 6. In addition to the base piece 9, the member 8 includes an extended lip 10 formed 55 to overlie the inner flange of the rail and said member at its inner end is formed with a recess 11. The portions 2 adjacent the recesses 6 are constructed with respective enlarged openings 12 and reduced openings 13 60 and a tapering key 14 is inserted through these openings and through the recess 11, the latter having a tapered side to correspond to the tapered face of the key. The key 14 has a reduced threaded end 15 upon which is carried a jam nut 16.

After the member 8 has been locked against displacement longitudinally of the tie by the key 14, a bolt 17 is passed therethrough, through the base of the tie, and 70 through a bearing plate 18 disposed in the groove 4, and a nut 19 is engaged upon the end of said bolt to hold the parts thus assembled from displacement. It is to be noted that the tie is constructed with diverging 75 flanges 20 which assure its firm seating on the road bed.

A rail tie constructed in accordance with the present invention is simple in its structural details, inexpensive to manufacture and 80 practical and efficient in use.

From the foregoing description it will be seen that simple and efficient means are provided for accomplishing the objects of the invention, but while the elements herein 85 shown and described are well adapted to serve the functions set forth, it is obvious that various minor changes may be made in the proportions, shape and arrangement of the several parts, without departing from 90 the spirit and scope of the invention as defined in the appended claims.

What is claimed is:

A rail tie formed with upwardly extending portions affording a channel longitudinally 95 thereof, said upwardly extending portions being formed adjacent the ends of said tie with recesses and with inwardly pointing lips overhanging said recesses, said portions being further formed adjacent said recesses 100 with registering openings, a clamping member constructed with an extended base portion flush with the faces of said recesses, with a lip overhanging said base portion, and

with a recess at its inner end, a key engaged through the openings in said upwardly extending portions and through the recess in said clamping portion and formed with a reduced projecting threaded end, and a jam nut provided upon the threaded end of said key.

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

SYLVESTER H. DEIHL.

Witnesses:

B. MANGES,
A. BRUMBAUGH.