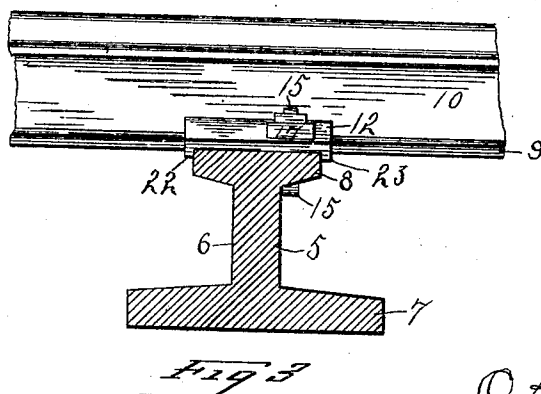
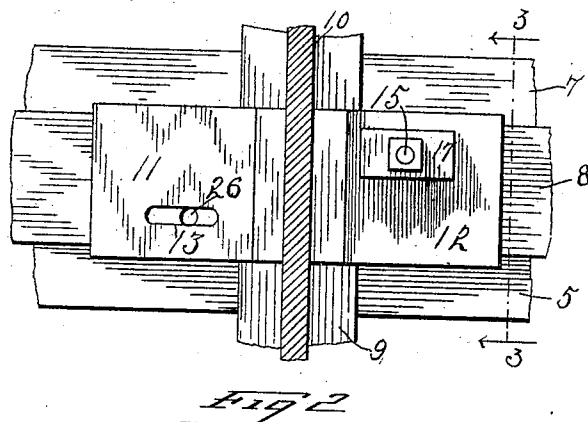
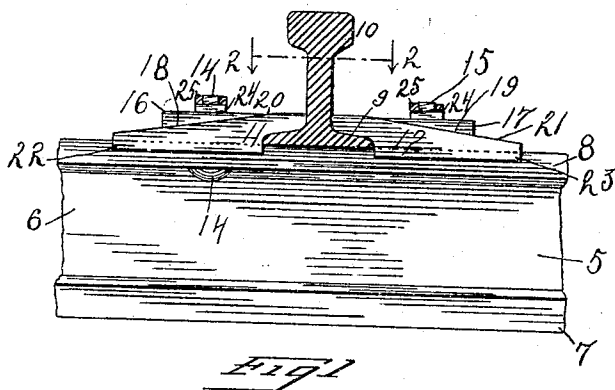


No. 813,584.

PATENTED FEB. 27, 1906.

O. H. PRINDLE.
IRON RAILROAD TIE.
APPLICATION FILED NOV. 8, 1906.



Witnesses
C. Lewis.
B. H. Gardner.

Inventor
O. H. Prindle.
by Shepherd Parker
Attorney

UNITED STATES PATENT OFFICE.

OTIS H. PRINDLE, OF COLLINWOOD, OHIO.

IRON RAILROAD-TIE.

No. 813,584.

Specification of Letters Patent.

Patented Feb. 27, 1906.

Application filed November 8, 1905. Serial No. 286,361.

To all whom it may concern:

Be it known that I, OTIS H. PRINDLE, a citizen of the United States, residing at Collinwood, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Iron Railroad-Ties, of which the following is a specification.

My invention relates to a metal railway-tie, and has for its object the provision of a device of this character provided with means for securely clamping the rails comprising a railroad-track to said tie in such a manner that the vibration of the parts caused by passing trains will not cause the fastening devices to work loose.

A further object of the invention is the provision of a metal railroad-tie having improved and adjustable means for locking rails to said tie, whereby rails having base-flanges of varying sizes may be used in conjunction with said tie.

Further objects and advantages of the invention will be set forth in the detailed description which now follows.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a metal railroad-tie constructed in accordance with the invention and illustrating one of the rails comprising the railroad-track in cross-section. Fig. 2 is a horizontal section upon line 2 2 of Fig. 1 looking in the direction indicated by the arrows; and Fig. 3 is a transverse section of the improved tie, taken upon line 3 3 of Fig. 2 and looking in the direction indicated by the arrows.

Like reference-numerals designate corresponding parts in all the figures of the drawings.

Referring to the drawings, the numeral 5 designates my improved railway-tie, which may be constructed of steel, iron, or any other suitable metal. This tie comprises a web portion 6, a base-flange 7, and a rail-bearing flange 8. As is clearly illustrated in Fig. 1, the base-flanges 9 of the rails 10 rest directly upon the rail-supporting flange 8 and are held securely in position thereon by clamping members 11 and 12. These clamping members are provided with slotted openings 13. Bolts 14 and 15 pass through the rail-bearing flanges 8, through the slotted openings 13, and through wedges 16 and 17, the lower and inclined faces 18 and 19 of said wedges bearing upon the inclined faces 20 and 21 of the clamping members 11 and 12. To prevent twisting of clamping members 11

and 12 with relation to the tie, flanges 22 and 23 are formed upon the lower faces of said member and engage the side walls of rail-bearing flanges 8, as is clearly illustrated in Fig. 3. Binding-nuts 24 and locking-nuts 25 serve to hold the above-described members securely in position. To prevent the bolts 14 and 15 from turning, the holes 26, formed in the rail-bearing flange 8 and through which said bolts pass, are formed upon such a line that the heads 14 and 15 of said bolts, which are flattened upon the sides thereof which lie adjacent the web 6, will bear against said web and be held against movement thereby, as is clearly illustrated in Fig. 3.

From the foregoing description it will be seen that by providing the members 11 and 12 with the elongated slots 13 said members are permitted a limited longitudinal movement with relation to the tie, whereby rails having base-flanges of varying sizes may be secured to said tie. It will also be seen that the bolts which bind the parts together are positively held against movement, while the provision of the wedges 16 and 17 and the inclined faces 20 and 21 of clamping members 11 and 12 constitute cooperating faces between said wedges and said clamping members, whereby any tendency of the clamping members to move away from the base-flange 9 of rails 10 will tighten all the clamping members by causing the wedges to ride up the inclined faces of said clamping members 11 and 12.

While the elements herein shown and described are well adapted to serve the purpose for which they are intended, it is to be understood that my invention is not limited to the precise construction set forth, for changes within the scope of the appended claims may be resorted to without departure from said invention.

Having described my invention, what I claim is—

1. The combination with a railroad-tie having a base-flange and a rail-bearing flange, of a clamping member mounted upon said rail-bearing flange, said clamping member having a flange engaging the rail and a plurality of flanges engaging opposite sides of said rail-bearing flange, and a wedge engaging the upper face of said clamping member.

2. The combination with a railroad-tie having a base-flange and a rail-bearing flange, of a clamping member mounted upon said rail-bearing flange, said clamping member

having a flange engaging the rail and a plurality of flanges engaging opposite sides of said rail-bearing flange, a wedge engaging the upper face of said clamping member, a bolt
5 passing through said wedge, said clamping member and said rail-bearing flange and means for holding said bolt against turning.

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

OTIS H. PRINDLE.

Witnesses:

CHAS. M. COLLIS,
HARRY KELLY.