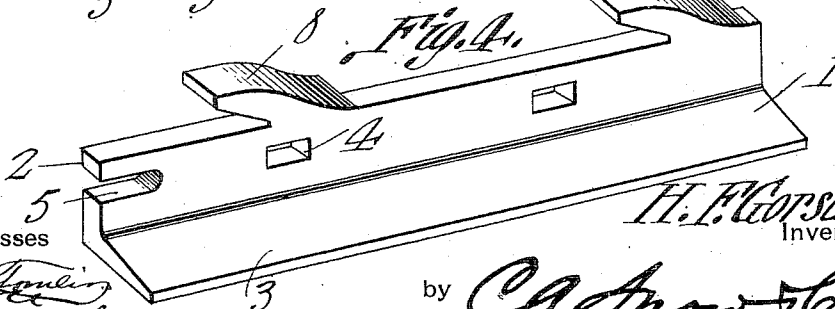
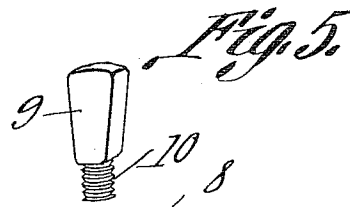
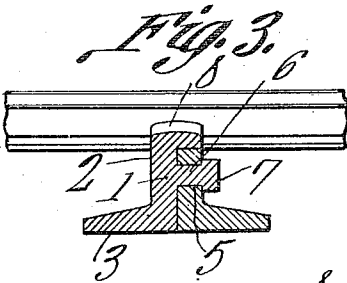
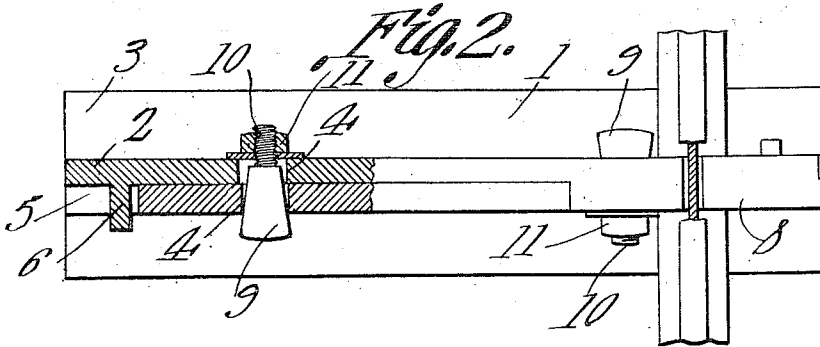
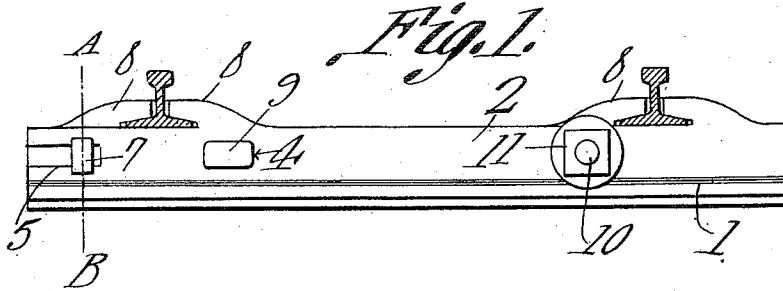


H. F. GORSUCH.
RAILROAD TIE.
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995,452.

Patented June 20, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

HOWARD FORREST GORSUCH, OF SUNBURY, OHIO.

RAILROAD-TIE.

995,452.

Specification of Letters Patent. Patented June 20, 1911.

Application filed March 7, 1911. Serial No. 612,751.

To all whom it may concern:

Be it known that I, HOWARD F. GORSUCH, a citizen of the United States, residing at Sunbury, in the county of Delaware and State of Ohio, have invented a new and useful Railroad-Tie, of which the following is a specification.

This invention relates to metallic railway ties and its object is to provide a tie of this type which is cheap to manufacture and the parts of which can be readily assembled, the rail engaging portions being integral with the tie and said tie being made up of two similar sections oppositely disposed and adjustable relative to each other so as to bring the rail engaging portions in proper relation to the rails supported by the tie.

With the foregoing and other objects in view the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings, the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a side elevation of a tie constructed in accordance with the present invention, rails thereon being shown in section. Fig. 2 is a view partly in plan and partly in section of the structure shown in Fig. 1. Fig. 3 is a section on line A—B Fig. 1. Fig. 4 is a perspective view of one of the tie sections. Fig. 5 is a detail view of one of the fastening wedges.

Referring to the figures by characters of reference 1 designates a substantially L-shaped tie section formed in a single length of metal made up of an upstanding or web portion and a base portion indicated at 2 and 3 respectively. Slots 4 are formed within the web portion at intermediate points and another slot 5 is formed within one end of the web portion. A stud 6 projects laterally from the other end portion of the web and has a head 7, said stud being so proportioned as to snugly fit within the slot 5 formed within a corresponding tie section, the head being sufficiently large to prevent the stud from being withdrawn longitudinally from the slot. Formed upon the upper edge portion of the web 1 of the tie section are similar rail engaging jaws 8 inclined upwardly in the direction of the slotted end

of the web and each of these jaws being twice the width of the web on which it is formed so as to project laterally beyond one face of the web.

As has heretofore been stated the tie is made up of two sections both of which are of the same construction. In using the tie, the two sections are reversed so that the flanges 3 thereof will project in opposite directions and the slots 5 will be in position to receive studs 6. Said sections are then shifted longitudinally in opposite directions so as to cause the studs to enter the slots 5. The laterally projecting portions of the jaws will lap and bear downwardly on the upper edges of the adjacent tie section and the jaws on one section will extend oppositely to the jaws on the other section. Obviously, therefore, rails can be placed on the upper edges of the sections and by then shifting the two sections relative to each other the jaws thereon can be caused to bind upon opposite sides of the rails with sufficient force to hold the rails securely in place. Wedge shaped keys 9 can then be inserted through the registering openings 4 of the tie sections and each of these keys has a threaded stem 10 adapted to be engaged by a nut 11. It will be obvious that by tightening the nuts on these stems, the wedges will operate to shift the two sections relative to each other so as to cause the jaws to tightly bind upon the rails between them.

It will be apparent that by constructing the tie in the manner described, it becomes unnecessary to utilize supplemental rail engaging devices and it also becomes unnecessary to manufacture "rights" and "lefts", as both sections of the tie are of the same construction and it is merely necessary to reverse the position of one relative to the other in order to bring the two sections in proper relation. The keys 9 and the parts cooperating therewith serve not only to hold the sections together, but also to maintain the jaws constantly in engagement with the rails.

What is claimed is:—

A metallic railway tie consisting of similar oppositely disposed sections, each section consisting of a base and an upstanding web, said web having a longitudinal slot in one end portion thereof, jaws upstanding from and integral with the web and inclined toward the slotted end of the web, each jaw being extended laterally to lap and bear downwardly upon the web of the other tie

section, a headed stud projecting from one end
portion of the web of each section and shift-
able into the slotted end portion of the other
section, said sections having registering
5 openings in the webs thereof, keys insertible
into the openings, and means for tightening
said keys to shift the sections in opposite
directions relative to each other.

In testimony that I claim the foregoing
as my own, I have hereto affixed my signa- 10
ture in the presence of two witnesses.

HOWARD FORREST GORSUCH.

Witnesses:

CLAY GAYLORD,
HENRY A. STILZER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
