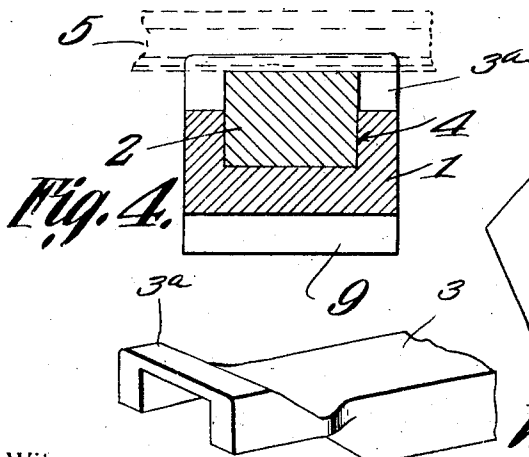
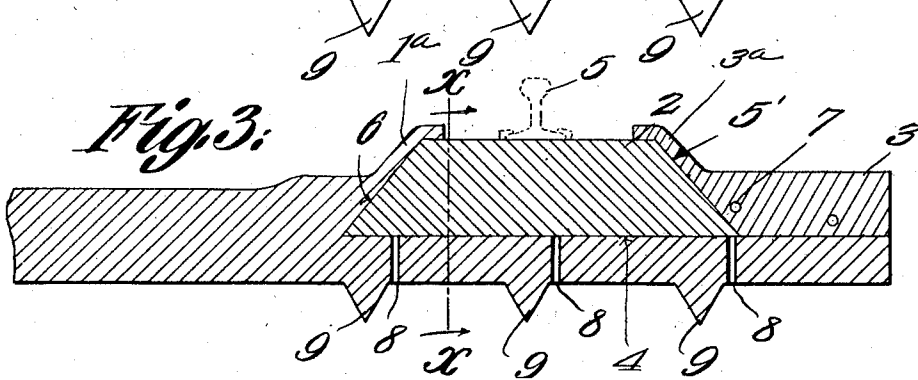
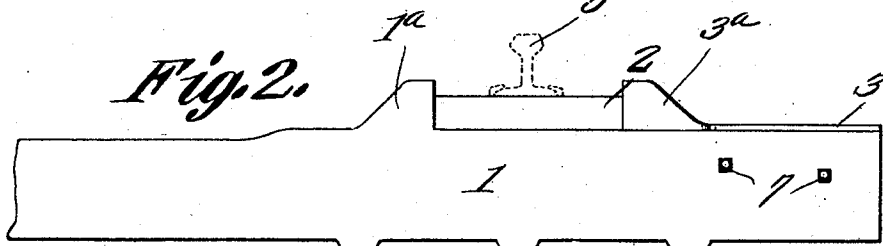
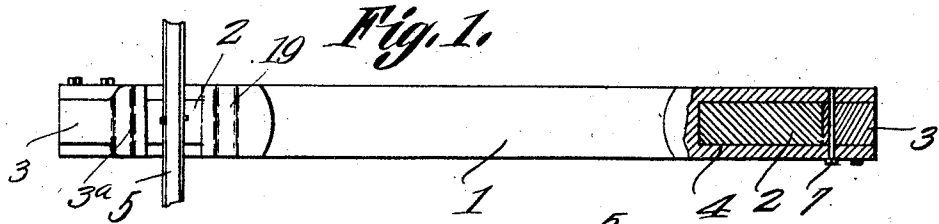


W. A. O. JONES.
RAILWAY TIE.
APPLICATION FILED JULY 31, 1911.

1,009,526.

Patented Nov. 21, 1911.



Witnesses
J. Jones
L. H. Wilson

W. A. O. Jones
Fig. 6 by *Ca Snow & Co.*

Inventor,
Attorneys.

UNITED STATES PATENT OFFICE.

WYATT A. O. JONES, OF BENTONVILLE, ARKANSAS, ASSIGNOR OF ONE-HALF TO
WILLIAM E. HILL, OF BENTONVILLE, ARKANSAS.

RAILWAY-TIE.

1,009,526.

Specification of Letters Patent.

Patented Nov. 21, 1911.

Application filed July 31, 1911. Serial No. 641,504.

To all whom it may concern:

Be it known that I, WYATT A. O. JONES, a citizen of the United States, residing at Bentonville, in the county of Benton and State of Arkansas, have invented a new and useful Railway-Tie, of which the following is a specification.

This invention pertains to improvements in railway ties, more particularly that class wherein the tie proper is of metal.

The invention has for its object to simplify the construction of the tie, the same providing for the seating of the tie upon preferably wooden cushion members retained in position against casual endwise and lateral displacement.

A further object is to provide for the ready removal of the rail-seating members or cushions when requiring renewal.

A still further object is to carry out the aforesaid ends in an inexpensive, simple and effective manner.

The invention consists of certain instrumentalities and features substantially as hereinafter fully disclosed and defined by the claims.

In the accompanying drawing illustrating the preferred embodiment of my invention, wherein it will be understood that various changes and modifications may be made as relates to the detailed construction and arrangement of the parts without departing from the spirit of my invention.

Figure 1 is a general plan, partly in horizontal section, of the tie. Fig. 2 is a broken elevational view thereof. Fig. 3 is a broken longitudinal section of the same. Fig. 4 is a sectional view produced upon the line *x—x* of Fig. 3, viewing in the direction indicated by the arrows. Fig. 5 is a detached perspective of the rail-seating block or cushion. Fig. 6 is a detached perspective of a key or wedge for aiding in effecting the retention of the rail cushioning member in the tie-member.

In carrying out my invention, I suitably provide, in connection with a metallic tie member proper 1, suitable rail-seating wooden blocks or cushions 2 and wedging or key members 3, which, however, are also of metal.

The tie member proper 1 is grooved or recessed as at 4, from each end inwardly a suitable distance and to a suitable depth. the recesses or grooves thus formed opening

through the upper surface of the tie as also through the ends thereof, for the reception of the blocks or cushions 2 to which are secured the rails 5 in the usual way.

The wooden blocks, preferably used, because of their relatively resilient or cushioning action, in lieu of seating the rails upon the metallic tie, are beveled or inclined upon their upper surfaces at the ends, downwardly as at 5', grooves or recesses 4 being formed at the inner end of the tie-member with downwardly inclined undercut walls 6, thus forming sockets at those ends or points to conform to, and receive the corresponding inclined or beveled ends of said blocks or cushions for the retention of said blocks or cushions in effective position at said ends unaided by other or additional means of fastening.

The metallic keys or retaining end members 3, which are inserted into the recesses or grooves 4, at their outer ends are also inclined or slanted at their inner ends downwardly to conform to and overlie the inclination of the opposed beveled or slanted ends of the rail supporting blocks or cushions 2, for thus aiding in securing the latter in effective position in said grooves or recesses in the tie-member.

Both the tie-member 1, at the inner ends of the recesses or grooves 4 therein, and the keys 3, at their inner ends are provided with upstanding or upraised sockets 1^a and 3^a respectively, the same forming hoods at those points, adapted to embrace or receive those end-portions of the rail supporting blocks or cushions 2, extending above or beyond the tie-member, for the more effective retention of said blocks or cushions in position as against both endwise or longitudinal and upward casual displacement.

The keys or retaining members 3 are themselves suitably retained in place by means of removable pins 7 inserted through apertures in the lateral walls of the tie and in the key or retaining members 3 as seen particularly in Figs. 1 and 3.

It will be observed that by means of the foregoing arrangement of parts, when it may be required to displace or remove a cushion or block, which may have seen its day of usefulness, such removal or displacement may be readily effected by simply withdrawing the rail securing spikes, and suitably or slightly raising the required rail

and then removing the pins 7, the required key member 3 now being free to be moved out of engagement with the impaired rail supporting block or cushion, and the latter to be replaced by an unimpaired block, all which may be accomplished in the minimum time and with but little labor.

In the bottom portions of the recesses or grooves 4 are provided suitable draining passages or openings 8 for the escape of water entering said recesses or grooves, and with the bottom surface of the tie member are suitably cast or formed, sharpened or pointed depending ledges or projections 9, penetrating the ground or the road-bed as the tie is out into position or embedded in the latter, said projections or ledges extending clear across the bottom surface of the tie.

It is believed that the advantages and benefits of my invention have all been fully disclosed from the foregoing description taken in connection with the accompanying illustration or drawing, it being only necessary to emphasize the fact, possibly that it is characterized for extreme simplicity, the same involving but few or minimum parts, consequently being inexpensive of manufacture, while it may be readily embodied in any of the railway ties of this class now of standard use.

What is claimed is:—

1. A railway tie having a longitudinal groove opening through its end, said groove having an inclined wall, said tie having its upper surface, in continuation of said wall, extending upwardly and horizontally so as to overhang said groove, said upwardly and horizontally extended portions being also extended downwardly, and a key received within said groove and having an upwardly inclined inner end, said end of the key being extended upwardly in continuation of its inclined surface, and horizontally so as to

also overhang said groove, and retaining means for said key.

2. A railway tie having a longitudinal groove, said groove having an inclined wall, said tie having its upper surface, in continuation of said wall, extending upwardly and horizontally so as to overhang said groove, said upwardly and horizontally extended portions being extended downwardly, and a key received within said groove and having an upwardly inclined inner end, said end of the key being extended upwardly in continuation of its inclined surface, and horizontally so as to overhang said groove, said upwardly extended portion of said key being also extended laterally, said laterally extended portion being also extended downwardly, and retaining means for said key.

3. A railway tie having a longitudinal groove, said groove having an inclined wall, said tie having its upper surface, in continuation of said wall, extending upwardly and horizontally so as to overhang said groove, said upwardly and horizontally extended portions being also extended downwardly, and a key received within said groove and having an upwardly inclined inner end, said end of the key being extended upwardly in continuation of its inclined surface, and horizontally so as to also overhang said groove, said upwardly extended portion of said key being also extended laterally, said laterally extended portion being also extended downwardly, a block also received by said groove and having upwardly inclined ends, and retaining means for said key.

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

WYATT A. O. JONES.

Witnesses:

GEORGE WOOLSEY,
W. L. MARLEY.