

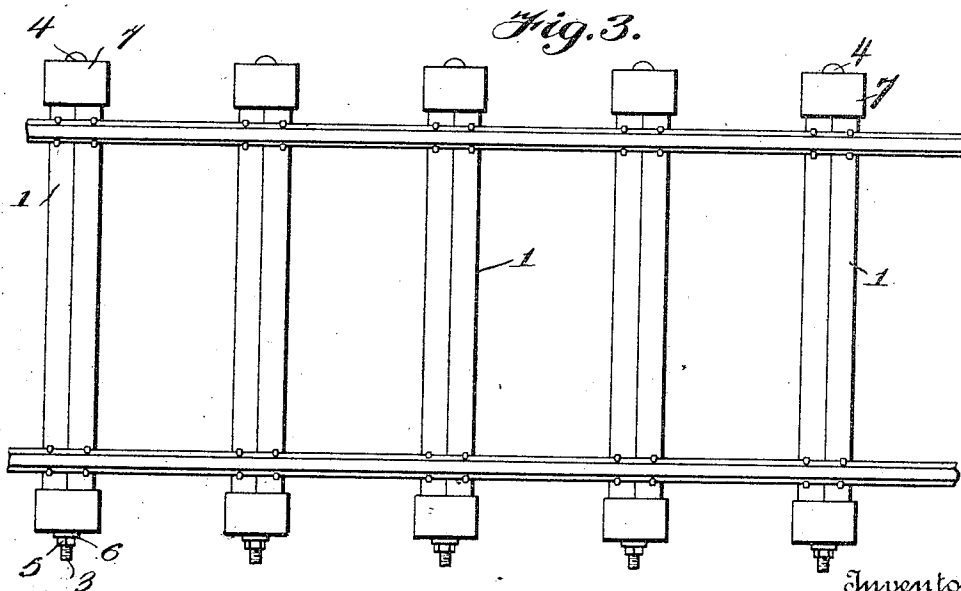
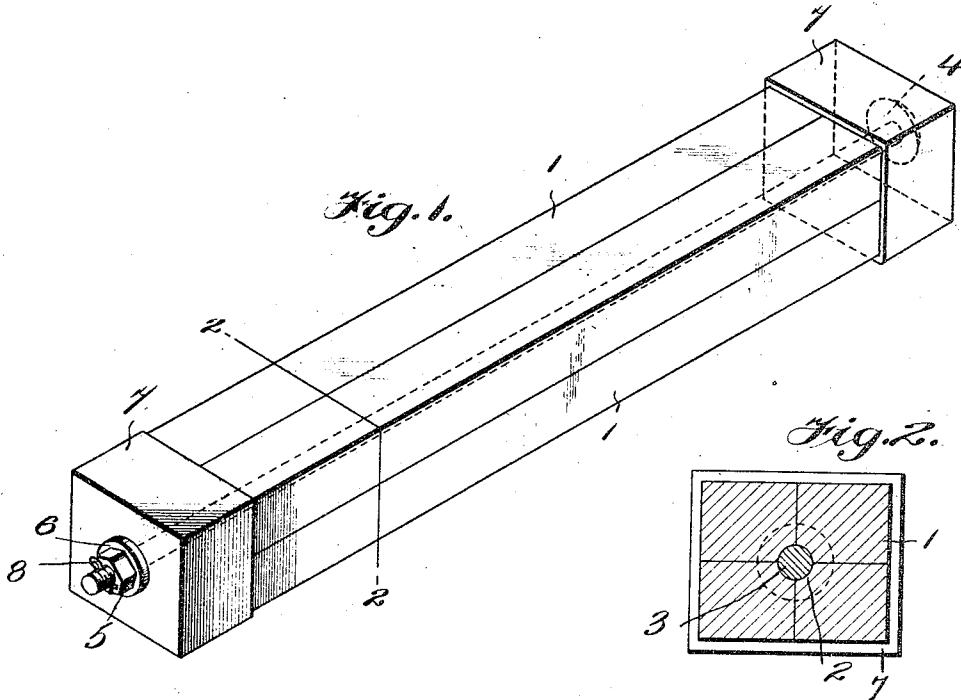
J. T. ANDREW.

CROSS TIE.

APPLICATION FILED JAN. 11, 1912.

1,033,775.

Patented July 30, 1912.



Witnesses
Byron B. Collings.
Jas. E. Dodge.

Inventor
JAMES T. ANDREW,
By William Fisher &
Wichusson
Attorneys.

UNITED STATES PATENT OFFICE.

JAMES T. ANDREW, OF MONTGOMERY, ALABAMA.

CROSS-TIE.

1,033,775.

Specification of Letters Patent.

Patented July 30, 1912.

Application filed January 11, 1912. Serial No. 670,618.

To all whom it may concern:

Be it known that I, JAMES T. ANDREW, a citizen of the United States, residing at Montgomery, in the county of Montgomery and State of Alabama, have invented certain new and useful Improvements in Cross-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 it appertains to make and use the same.

This invention relates to railroad ties, and has for its object to produce a tie made from a plurality of individual pieces, which will be less expensive to construct and more efficient in action than those heretofore proposed.

The present invention constitutes an improvement over the tie disclosed in my former Patent #1,001,333 issued August 22, 1911, and with the above objects in view, consists in the novel details of construction and combinations of parts more fully hereinafter disclosed and particularly pointed out in the claims.

Referring to the accompanying drawings forming a part of this specification in which like numerals designate like parts in all the views:—Figure 1 is a perspective view of a tie made in accordance with my invention; Fig. 2 is a sectional view on the line 2—2 of Fig. 1; and, Fig. 3 is a plan view showing a plurality of ties in use.

1 indicates a plurality of individual timbers which may be conveniently obtained from the half grown timber covering large areas of this country, and yet which is too small to supply sufficiently large pieces out of which a single piece tie may be constructed. That is to say, it is a well known fact that timber of sufficient size to produce single piece ties is very scarce in this country, while timber of a size sufficiently large to produce ties of two or more pieces, is quite abundant. Accordingly, I may produce the individual members 1 of my tie, by suitably shaping pieces obtained from the half grown timber, so as to make them fit together as illustrated, and I then combine said pieces firmly together to constitute a single tie in the manner now to be disclosed.

The individual pieces 1 are preferably shaped, as shown, their abutting inner edges 2 are next cut away to form a suitable hole running longitudinally of the finished tie,

and through this hole I pass a rod 3 or other fastening member, as shown. The said rod may be conveniently provided with a head 4 at one end, and a thread and nut 5 or other fastening, at its other end. A washer 6 may also be conveniently employed in connection with the fastening 5. The ends of the built up tie thus formed, are suitably tapered to fit perforated metal caps 7 or like fastenings which slip over said ends, and when the said caps are in place, the end 3 is passed through the center of the built up tie, as shown, and when the fastening 5 is securely in place, the parts are firmly held together. The said fastening 5 may be provided with any suitable nut lock, as for example, a cotter pin or other means 8, to prevent the parts from working loose.

The advantages of a tie made in accordance with my invention will be obvious when it is remembered that it is a well known fact that many ties are discarded when they have deteriorated only at some particular spot, although the larger portion of the tie itself is in good condition. In a tie built in accordance with the above invention, should any of the members 1 become decayed or otherwise injured, it is a comparatively easy matter to either replace the member by a new piece, or in many cases, should only the outside of the member be injured, the member could be taken out, turned through an angle of 180°, and replaced, whereupon it would have a life of considerable usefulness still left. A further advantage of a tie of this nature resides in the fact that the individual members are more easily penetrated by a creosoting solution than would be the case if the tie were made from a single piece. The members 7 can be conveniently cast or dropped forged while the rod 3 can be made by any suitable mechanism.

It is obvious that a greater or a less number of pieces may be employed than that illustrated, but I prefer to use four individual members 1 as disclosed.

What I claim is:—

1. In a cross tie, the combination of a plurality of independent pieces fitted together to form the body of the tie, said pieces being cut away at their meeting surfaces to form a hole extending through the tie body from end to end; metal caps fitting and covering the ends of said body; and a rod pro-

vided with fastenings passing through said caps and hole and binding the parts firmly together, substantially as described.

2. In a cross tie, the combination of a plurality of independent pieces fitted together to form the body of the tie, said pieces being cut away at their meeting surfaces to form a hole extending through the tie body from end to end; metal caps having holes registering with said first mentioned hole fitting and covering the ends of said body; and a rod provided with fastenings at each end passing through said caps and hole and binding the parts firmly together, substantially as described.

3. In a cross tie, the combination of independent pieces rectangular in cross section

fitted together to form the body of the tie and having their contiguous corners cut away to form a hole extending from end to end of the tie; metal caps covering and fitting the ends of said body portion and having holes registering with said first mentioned hole; a rod having a head at one end and a removable fastening comprising a nut lock at its other end passing through said holes and firmly binding the parts together, substantially as described.

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

JAMES T. ANDREW.

Witnesses:

T. A. WITHERSPOON,
N. CURTIS LAMMOND.