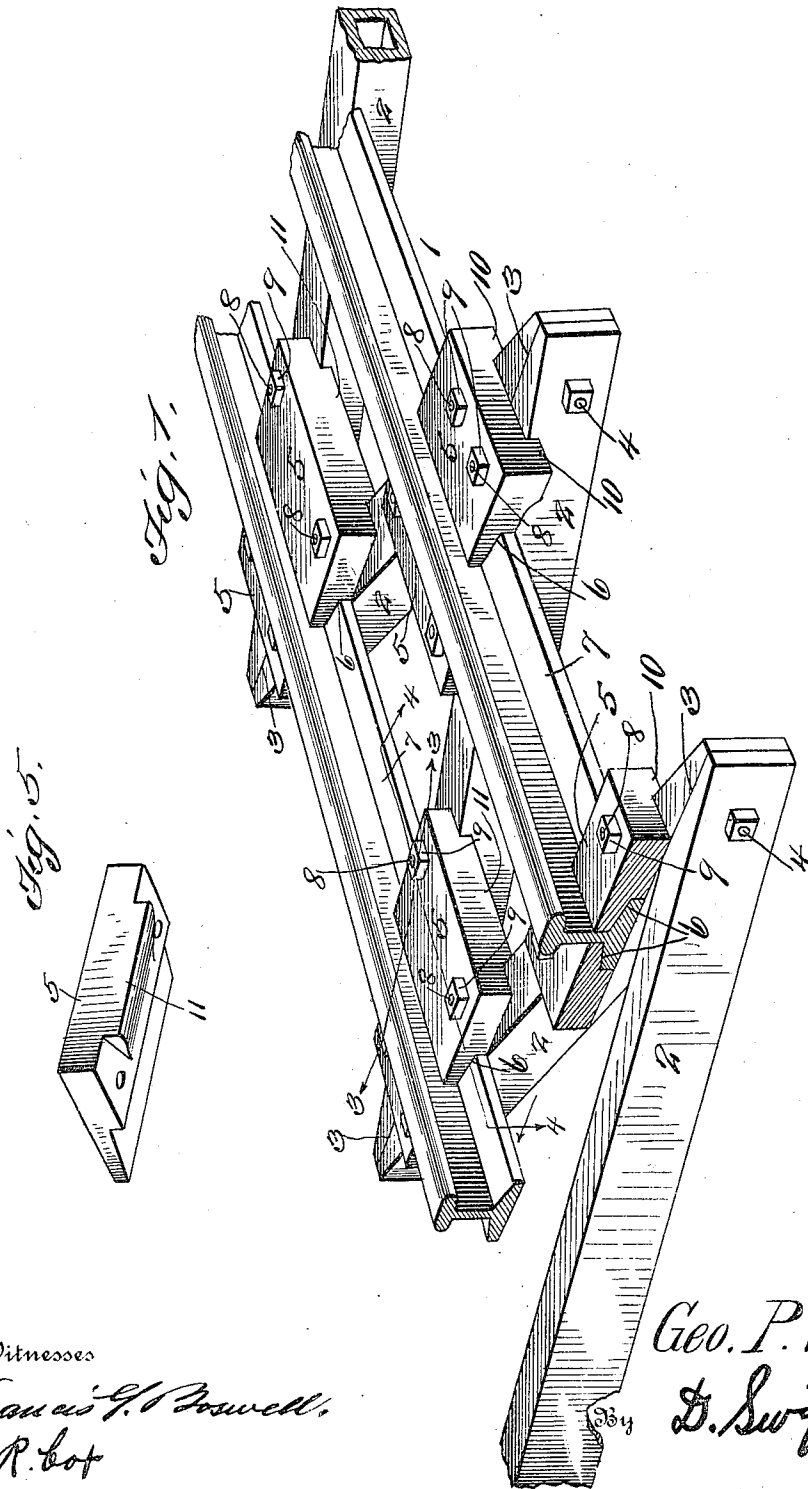


993,430.

2 SHEETS—SHEET 1.



Francis G. Poswell.
R. Lot

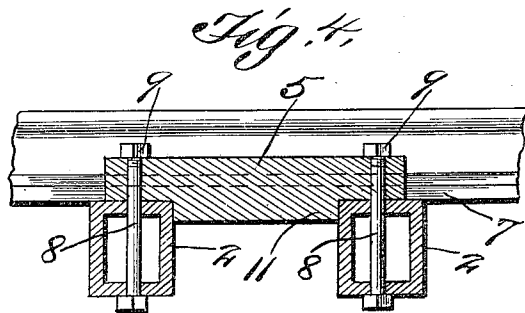
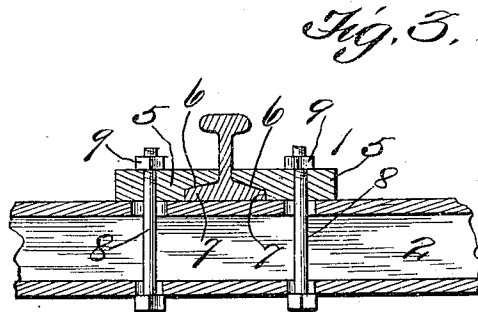
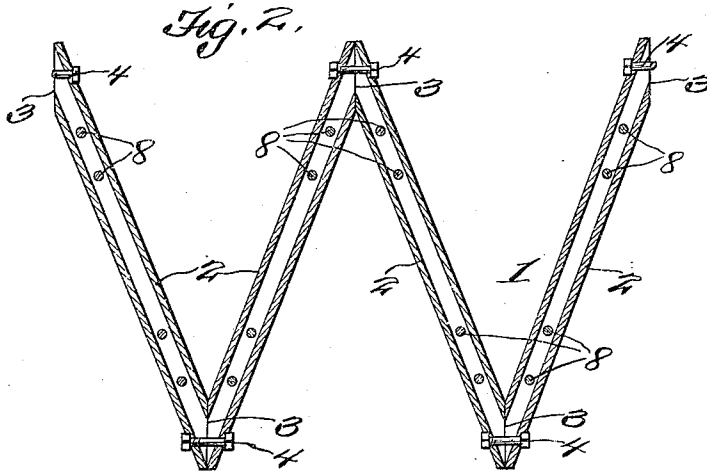
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RAILROAD TIE.
APPLICATION FILED MAR. 13, 1911.

993,430.

Patented May 30, 1911.

2 SHEETS-SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE P. WINSALL, OF BURLINGTON, WISCONSIN.

RAILROAD-TIE.

993,430.

Specification of Letters Patent.

Patented May 30, 1911.

Application filed March 13, 1911. Serial No. 614,104.

To all whom it may concern:

Be it known that I, GEORGE P. WINSALL, a citizen of the United States, residing at Burlington, in the county of Racine and State of Wisconsin, have invented a new and useful Railroad-Tie; 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 a new and useful improved railroad tie construction.

The main object of the invention is to provide a plurality of hollow ties provided with beveled ends engageable with one another and laid in zig-zag relation, in order to provide a substantial foundation for the rails.

Another object of the invention is to provide plates having longitudinal recesses to engage opposite sides of the base of the rails for holding them in place. The plates are provided with means to engage the ties, so as to prevent movement of the plates.

In the drawings, however, there is only disclosed one form of the invention, but in practical fields this form may require alterations, to which the applicant is entitled, provided the alterations are comprehended by the appended claims.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings, and claimed.

In the drawings:—Figure 1 is a view in perspective, showing a railroad constructed in accordance with the invention. Fig. 2 is a sectional view of a portion of the railroad, illustrating the fact that the ties thereof are hollow, with their beveled engaging ends bolted together. Fig. 3 is a sectional view on line 3—3 of Fig. 1, showing the plates with their recesses for holding the rails in place. Fig. 4 is a sectional view on line 4—4 of Fig. 1. Fig. 5 is a detail perspective view of one of the ties removed from the road.

Referring more especially to the drawings in detail, the numeral 1 designates a section of a railroad, which is composed of a plurality of hollow ties. These ties may be

made of any suitable material, for instance, steel, wood or the like. The ties 2 are beveled on their ends, on opposite sides thereof, as shown at 3, so as to engage one another as shown in the drawings. The beveled ends of the ties are bolted together by the bolts 4, as shown in Fig. 2.

Elongated metal plates 5 are provided which are formed with elongated recesses 6, to receive the opposite sides 7 of the base of the rails, in order to anchor the rails in place. These plates are secured in position by means of the bolt 8 which penetrate the ties. Nuts 9 are threaded on the bolts to hold them in place, and furthermore to prevent movement of the plates. To assist further in preventing movement of the plates, the plates are provided with means 10 and 11, to engage the ties, as shown in Fig. 4. The zig-zag relation of the ties in conjunction with the means 10 and 11 also assists in preventing movements of the plates.

From the foregoing, it will be observed that there has been devised a simple, efficient and practical railroad construction, and one which will provide a substantial foundation for the rails of the road. The means 10 and 11 also constitute means to prevent displacement of the zig-zag relation of the ties longitudinally of the rails.

The invention having been set forth, what is claimed as new and useful, is:

1. In combination, a plurality of hollow ties, the adjacent ends of the ties having engaging beveled faces, bolts for securing the beveled ends of the ties together, rails resting on the ties, plates bolted to the ties on each side of the rails and provided with elongated recesses to receive the opposite sides of the bases of the rails, said plates having means to engage the ties, to prevent displacement of the plates and rails.

2. In combination, a plurality of hollow ties arranged in zig-zag relation, means for securing the adjacent ends of the ties together, rails resting on the ties, plates arranged on each side of the rails and provided with elongated recesses to engage the opposite sides of the base of the rails, bolts penetrating the plates and the hollow ties

for securing them in position, the plates
having means to engage the ties between
them for preventing movement of the plates
and the rails, the last named means consti-
5 tuting means to prevent displacement of the
zig-zag relation of the ties longitudinally of
the rails.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

GEORGE P. WINSALL.

Witnesses:

A. MEINHARDT,
H. A. MOUSSA.

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