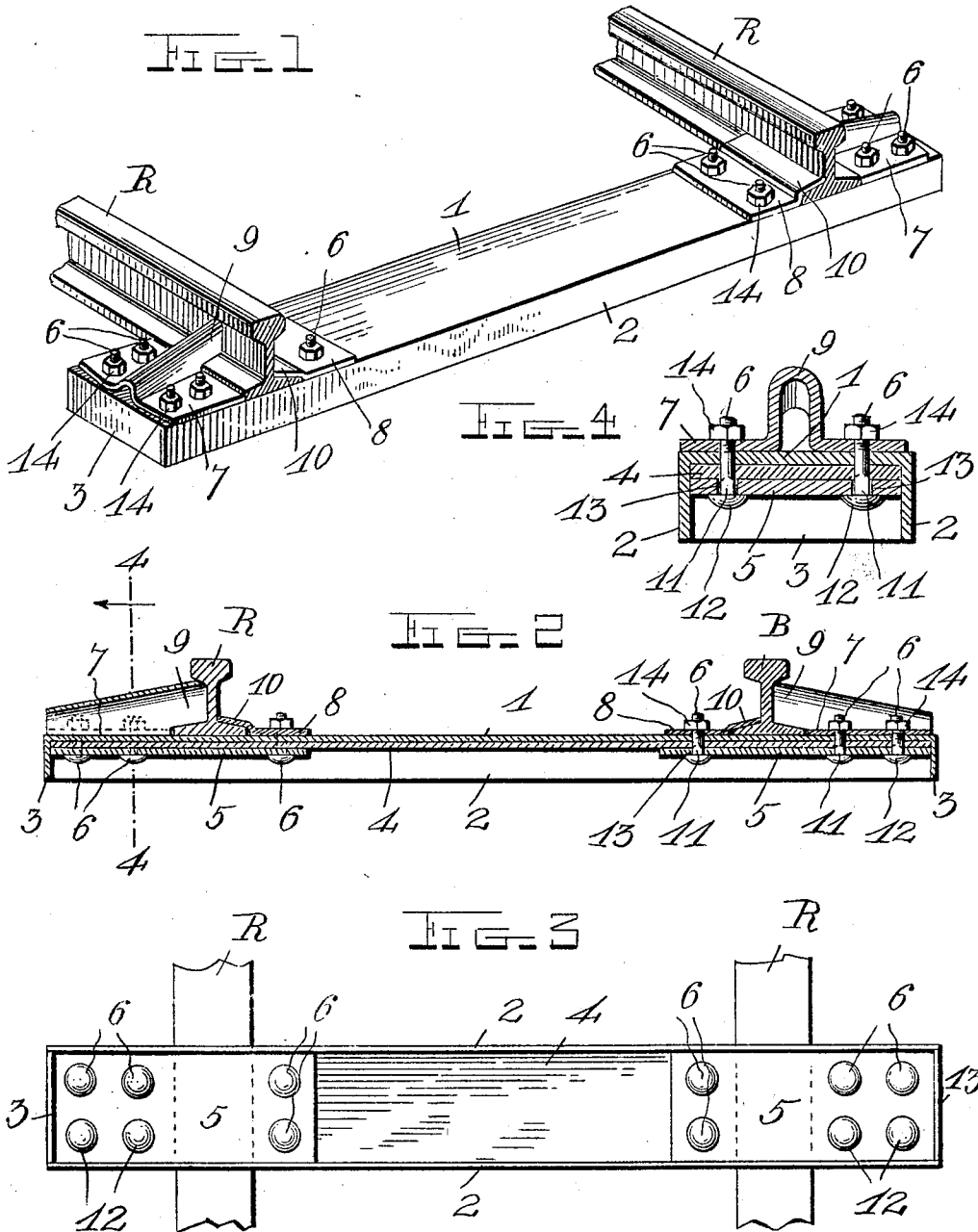


No. 813,611.

PATENTED FEB. 27, 1906.

A. W. BASCOM.
METALLIC RAILWAY TIE.
APPLICATION FILED NOV. 27, 1905.



Witnesses
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METALLIC RAILWAY-TIE.

No. 813,611.

Specification of Letters Patent.

Patented Feb. 27, 1906.

Application filed November 27, 1905. Serial No. 289,288.

To all whom it may concern:

Be it known that I, ALMON W. BASCOM, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Metallic Railway-Ties; and I do 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.

My invention relates to improvements in metallic railway-ties; and it consists of the novel construction, combination, and arrangement of parts hereinafter described and claimed.

The object of the invention is to provide a simple, inexpensive, durable, and efficient metallic railway-tie which will not shift or creep after it has been tamped in place upon a suitable foundation:

The above and other objects, which will appear as the nature of my invention is better understood, are accomplished by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a metallic cross-tie constructed in accordance with my invention. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a bottom plan view, and Fig. 4 is a vertical transverse sectional view taken on the line 4 4 in Fig. 2.

Referring to the drawings by letter and numeral, 1 denotes the body of my improved metallic cross-tie, which is of rectangular form and is preferably formed from a single sheet of metal by bending the sides and ends of the same downwardly at right angles to form flanges 2 3. If desired, the latter may have their ends soldered or otherwise secured together. In the hollow tie or body thus formed I provide a cushion 4 in the form of a piece of lumber, which is of the same width and length as the under side of the tie, but of less thickness or depth than the latter. Upon the under side of the cushion 4 at each of its ends are metallic plates 5, which are secured in position by bolts or similar fastenings 6, which secure the cushion in the tie, and the rail engaging or clamping plates 7 8 upon the top of the tie. These plates 7 8, which hold the rails R upon the top of the tie, may be of any suitable form and construction; but the former, which are placed at the ends of the ties, are preferably formed by bending sheets

of metal at their centers to form projecting tongues 9, which engage the webs and outer base-flanges of the rails, and the latter, 8, which are secured upon the inner portions of the ties, are bent to form lips 10, which engage the inner base-flanges of the rails. The bolts 6 are of ordinary form and pass through alining openings formed in the plates 5, the cushion 4, the top of the tie 1, and the clamping-plates 7 8. Square or polygonal-shaped shoulders 11 are formed adjacent to the heads 12 of said bolts and engage square or similarly-shaped openings 13, formed in the plates 5, so that said bolts will not slip or turn when their nuts 14 are tightened upon their upper screw-threaded ends.

The construction, use, and advantages of the invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings. It will be seen that a tie constructed in this manner will be exceedingly strong, durable, and inexpensive and when tamped in place will not be liable to slip or shift out of its proper position.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A railway-tie comprising a rectangular body formed by bending the sides and ends of a sheet of metal downwardly to form a surrounding flange, a lumber cushion in said body of less thickness than its surrounding flange, metal plates upon the under side of said cushion adjacent to its ends, rail-clamping plates upon the upper face of said tie, and fastening devices passed through alining openings in said metal plates, said cushion, said tie and said clamping-plates, substantially as described.

2. A railway-tie comprising a rectangular body formed by bending the sides and ends of a sheet of metal downwardly to form a surrounding flange, a lumber cushion in said body of less thickness than its surrounding flange, metal plates upon the under side of said cushion adjacent to its ends, said plates being formed with polygonal-shaped openings, rail-clamping plates upon the top of said tie, and bolts passed through openings

in said plates and alining openings in said
cushion, tie and clamping-plates, said bolts
having polygonal-shaped shoulders adjacent
to their heads adapted to engage the simi-
5 larly-shaped openings in said metal plates,
substantially as described.

In testimony whereof I have hereunto set

my hand in presence of two subscribing wit-
nesses.

ALMON W. BASCOM.

Witnesses:

A. M. CRAVEN,

A. G. BUTLER.