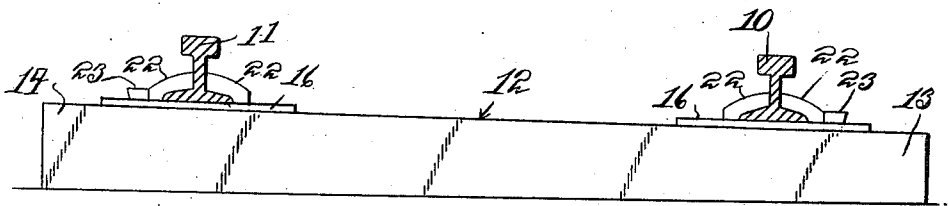
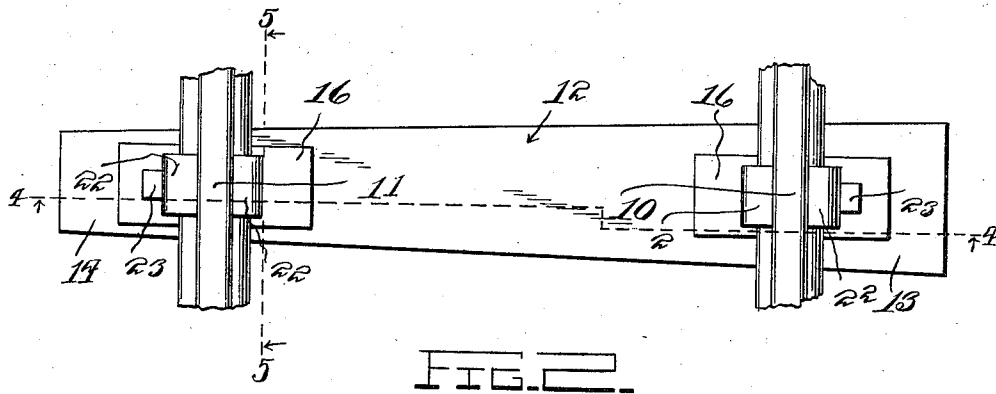
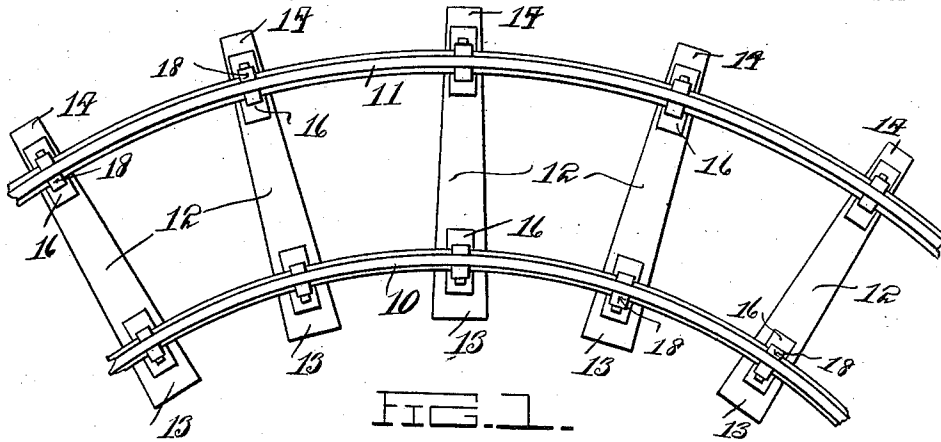


H. SANBORN.
RAILWAY TIE.
APPLICATION FILED JUNE 13, 1912.

1,059,639.

Patented Apr. 22, 1913.

2 SHEETS-SHEET 1.



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2 SHEETS—SHEET 2.

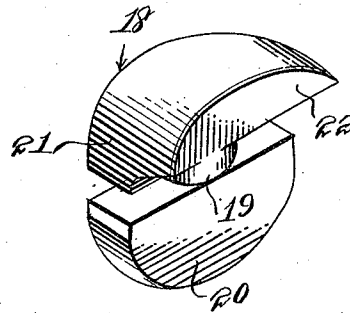
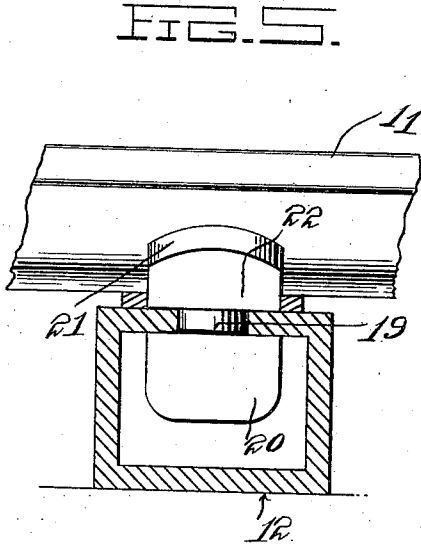
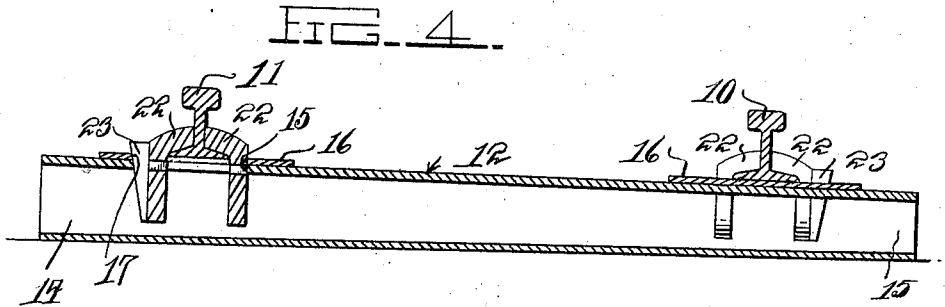


FIG. 6.

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UNITED STATES PATENT OFFICE.

HOLLIS SANBORN, OF WHITEFIELD, NEW HAMPSHIRE.

RAILWAY-TIE.

1,059,639.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed June 13, 1912. Serial No. 703,508.

To all whom it may concern:

Be it known that I, HOLLIS SANBORN, a citizen of the United States, residing at Whitefield, in the county of Coos and State of New Hampshire, have invented certain new and useful Improvements in Railway-Ties, of which the following is a specification.

My invention relates to new and useful improvements in metallic ties and rail fastening means therefor and the object of my invention is to improve the construction and increase the efficiency of devices of the above described character.

A further object of my invention is to provide a peculiarly formed tie especially adapted for use upon curved portions of a track. And a still further object of my invention is to provide a novel means for securing the rails to the tie without the employment of bolts and nuts.

With these and other objects in view, my invention will be more fully described illustrated in the accompanying drawings which show a preferred embodiment of my device and then specifically pointed out in the claim which is attached to and forms a part of this application.

In the drawings, Figure 1 is a top plan of a curved portion of track showing my improved tie in use. Fig. 2 is a top plan of one of the ties. Fig. 3 is a side elevation of the same. Fig. 4 is a longitudinal section on the line 4—4 of Fig. 2. Fig. 5 is a transverse section on the line 5—5 of Fig. 2. Fig. 6 is a perspective of one of the locking members employed in securing the rails in place.

Referring more specifically to the drawings, in which similar reference numerals designate corresponding parts throughout, 10 and 11 designate the inner and outer rails respectively of the track and 12 my improved tie which, as best shown in Figs. 2 and 3 of the drawings, comprises a hollow metallic casing or shell substantially rectangular in cross section and preferably open at its ends.

The casing or tie as shown, tapers gradually in width from one end to the other and also in depth from one end to the other, the wider end here designated as 13 being thinner than the narrower end 14. The upper face of the tie is provided adjacent each end with a longitudinally extending slot 15 somewhat greater in length than the width

of a rail. In fastening the rails upon my improved tie I preferably employ bed plates 16 which are also provided with longitudinal slots 17 adapted to register with the slots of the tie when the bed plates are in position. As a means for securing the rails in place I employ locking members designated as a whole by the numeral 18 which are positioned one upon each side of the rail and which engage by their upper ends with the rail flanges and by their lower ends with the inner face of the top of the tie. Each of these locking members comprises a body member 19 provided at its lower end with the laterally directed terminals 20 and at its upper end with a laterally directed head 21 provided with an overhanging rail engaging lip 22. The body member and lower terminal 20 are so proportioned as to pass readily through the slots 15 and 17 when the terminal is extended longitudinally thereof and when the terminal has been so passed through the slots the locking member is turned to extend transversely of the tie with the lower terminal bearing against the inner face of the top of the tie and with the upper terminal bearing against the upper face. Two of these locking members are thus positioned in each slot with their overhanging lips directed toward each other and are then moved to opposite ends of the slot. The rail is then placed in position when the outer locking member is slipped inwardly until its lip engages with the outer flange of the rail and is secured in place by means of a wedge or key 23 which is driven into the outer end of the slot between said locking member and the tie thus firmly clamping the locking members in engagement with the rail.

As previously stated my improved rail is particularly adapted for use upon curved portions of a track and when so employed the wider end 13 of the rail is positioned upon the inside of the track thus bringing the thicker end of the tie upon the outside of the track. This greatly assists in giving the outer rail the elevation above the inner rail necessary in keeping the train upon the track when rounding a curve, thus permitting more level building of the road bed proper. The ties are of course, embedded in suitable ballast as crushed rock, and as the natural tendency of a train in rounding a curve is to force the track outwardly the wide inner ends of my improved tie are particularly

effective in anchoring the track against lateral displacement.

From the foregoing description it will be apparent that I have provided a simple form
5 of metallic tie and one which is particularly adapted for use in laying curved portions of tracks.

It will of course be understood that minor changes in the details of construction may
10 be made if desired without in the slightest degree departing from the spirit of my invention.

What I claim is:—

A hollow metallic tie rectangular in cross section said tie tapering in width from one
end to the other, said tie also tapering in
15 thickness from its narrower end to its wider end and means for securing a rail to said tie.

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

HOLLIS SANBORN.

Witnesses:

HARRY B. RUSSELL,

HELEN I. MCGORAY.

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