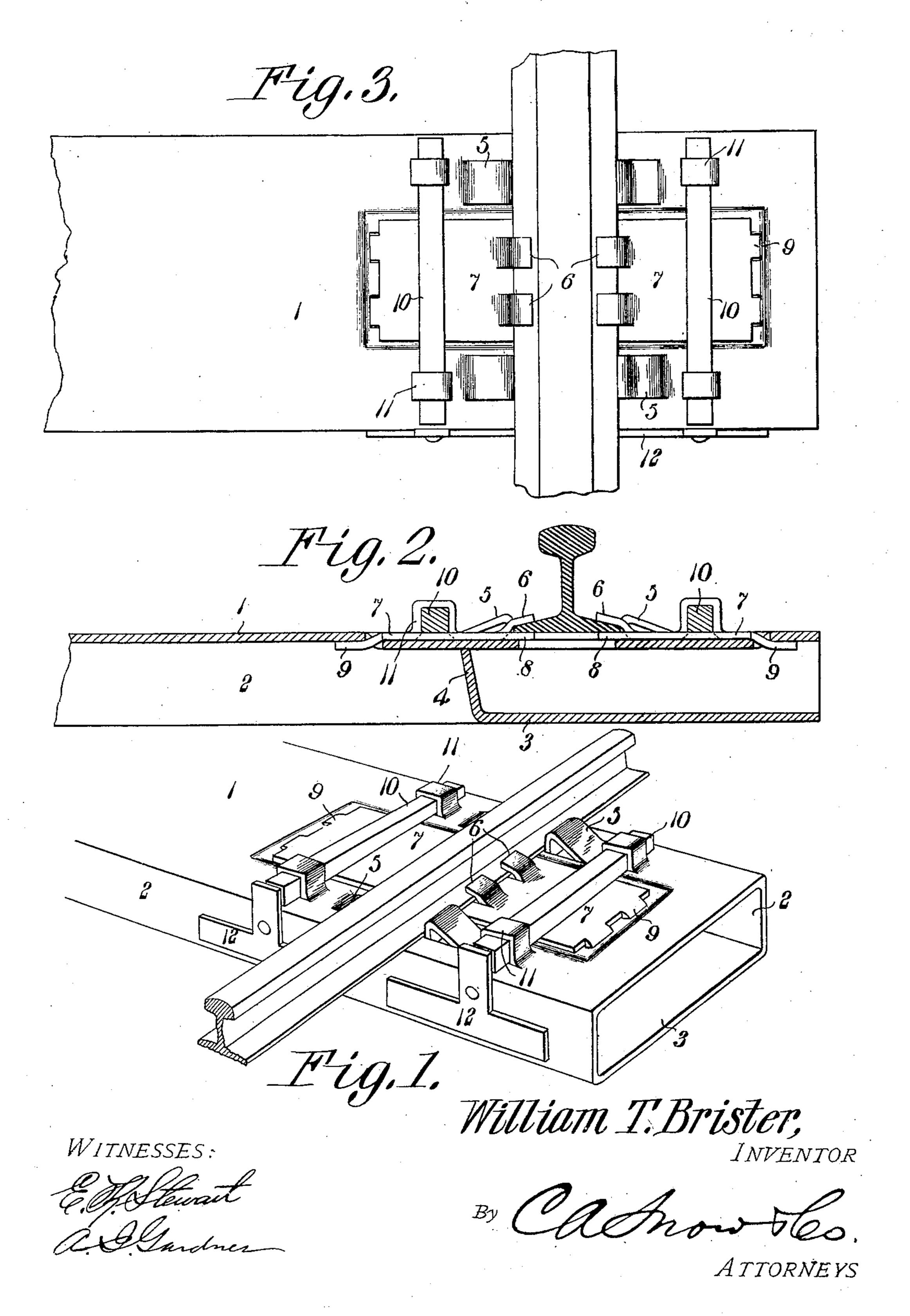
W. T. BRISTER.

RAILWAY TIE.

APPLICATION FILED DEC. 27, 1906.



UNITED STATES PATENT OFFICE.

WILLIAM T. BRISTER, OF LIBERTY HILL, TEXAS, ASSIGNOR OF ONE-HALF TO LEROY STIPP, OF LIBERTY HILL, TEXAS.

RAILWAY-TIE.

No. 865,354.

Specification of Letters Patent.

Patented Sept. 10, 1907.

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To all whom it may concern:

Be it known that I, William T. Brister, a citizen of the United States, residing at Liberty Hill, in the county of Williamson and State of Texas, have invented a new and useful Railway-Tie, of which the following is a specification.

This invention relates to improvements in metallic railway ties.

The object of the invention is to provide a railway tie that may be cheaply constructed in its main parts of sheet or cast metal; and the invention consists in the special construction and combination of the parts, as will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification:—Figure 1 is a perspective view of a railway tie constructed in accordance with this invention; Fig. 2 is a longitudinal section of the same; and Fig. 3 is a plan of the tie.

Referring to the drawing, the tie comprises the horizontally-disposed top plate 1, the vertically-disposed side plates 2-2, and the bottom plates 3-3 which extend between the lower edges of the sides at the opposite ends thereof. The inner ends of the bottom 25 plates are extended vertically upward to the under surface of the top plate, forming transverse partition plates 4—4. The central portion of the tie is thus left open on its under side and has the form of a rectangular box with the lower side removed, and when the tie is 30 embedded in an earth foundation the earth extends within the box and holds the tie from slipping either laterally or longitudinally. These top, bottom and side plates may be formed integrally from a single sheet of metal or by casting. The rail rests upon the 35 surface of the top plate and is secured in position laterally by the lugs 5—5 which may be formed of

leable metal is used, or when the tie is formed of cast metal the lugs may be cast integral with the tie. The 40 rail is further secured laterally and also vertically by additional lugs 6—6 which grip the edges of the rail and are carried by the auxiliary plates 7—7 secured to the top plate of the tie upon each side of the rail. The inner ends 8—8 of these auxiliary plates extend over an aperture in the top plate of the tie beneath the

upturned portions cut from the top plate when mal-

rail and engage with the under surface of the rail base; their outer ends are provided with extending lugs or tongues 9—9 engaging in recesses provided therefor in the top plate; these auxiliary plates are held in position upon the rail tie by the tapering pins 10—10 50 which extend over the plates and engage in suitable loops formed by metal straps 11—11 fastened to the top plate of the rail tie. The tapering pins are secured against end movement by means of the locking plates 12—12 riveted or bolted to the sides of the tie and 55 extending over the ends of the pins.

In the drawings only one end of the tie is shown, the other end being identical therewith in construction.

Having thus described the invention, what is claimed as novel and desired to be protected by Letters Patent 60 is:—

1. In a railway tie, the combination of a top plate, vertically-disposed side plates, bottom plates between the ends of said side plates and transverse partitions extending upwardly from the inner edges of said bottom plates, sub-65 stantially as described.

2. In a railway tie, the combination of a top plate, adapted to have a rail rest thereon, an auxiliary plate, means upon the auxiliary plate for holding the rail, loops secured to said top plate, and a pin passing through said 70 loops to hold the auxiliary plate in position.

3. In a railway tie, the combination of a top plate, adapted to have a rail rest thereon, an auxiliary plate, inwardly-extending studs upon said auxiliary plate for holding the rail, loops secured to said top plate, and a tapering pin passing through said loops and securing said plates in position.

4. The combination with a railway tie having a top plate, a rail resting upon said tie, studs upon said top plate to secure the rail against lateral movement, an auxiliary plate having an inner end engaging in an aperture, and an outer end engaging in another aperture provided therefor in said top plate, loops secured to said top plate upon opposite sides of said auxiliary plate, a tapering pin engaging in said loops to hold said auxiliary plate in position, means to lock said pin in said loops, and means upon said auxiliary plate to retain said rail against vertical or lateral movement.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two 90 witnesses.

WILLIAM T. BRISTER.

Witnesses:

LANG THORNTON,

A. B. DUCKETT.