W. T. BRISTER.

RAILWAY TIE.

APPLICATION FILED SEPT. 11, 1909.

945,215.

Patented Jan. 4, 1910.

Fig. 1.

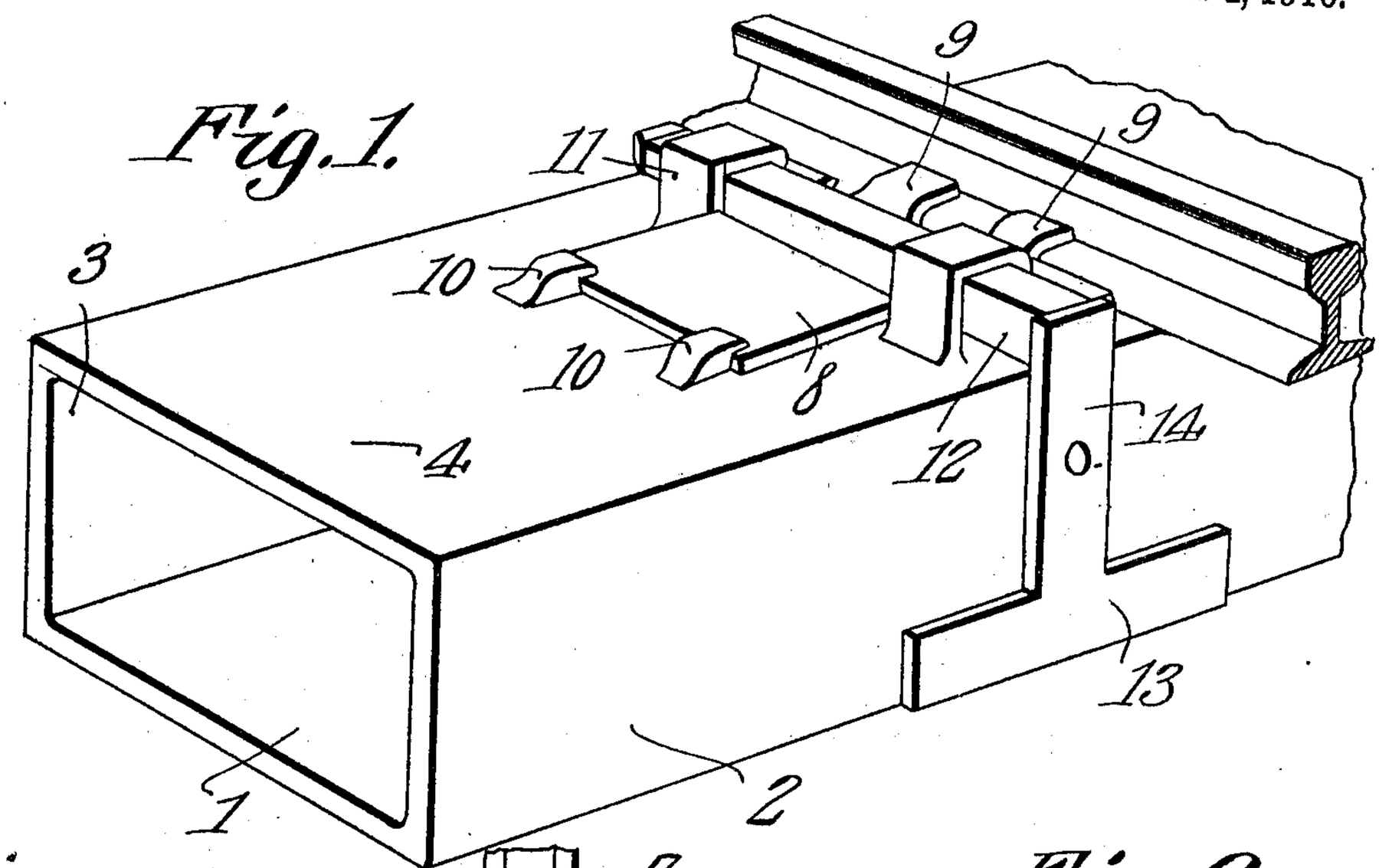


Fig. 2.

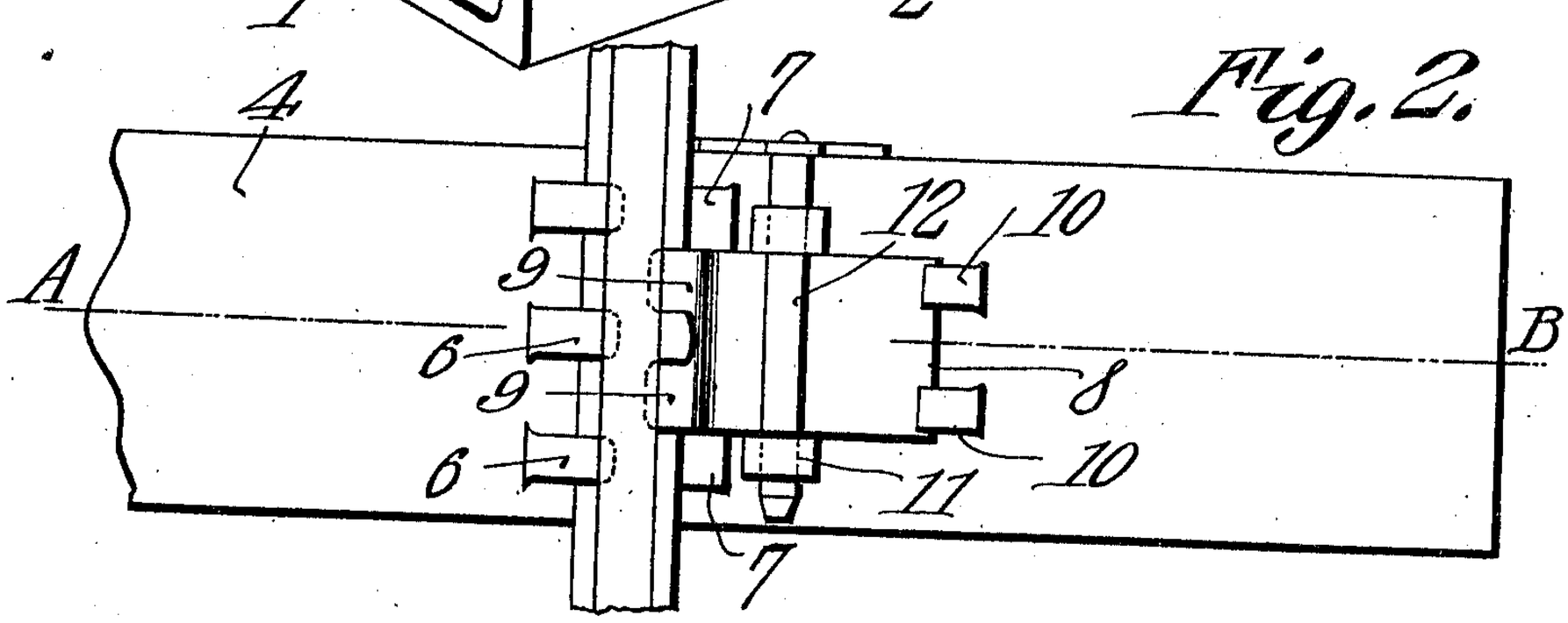
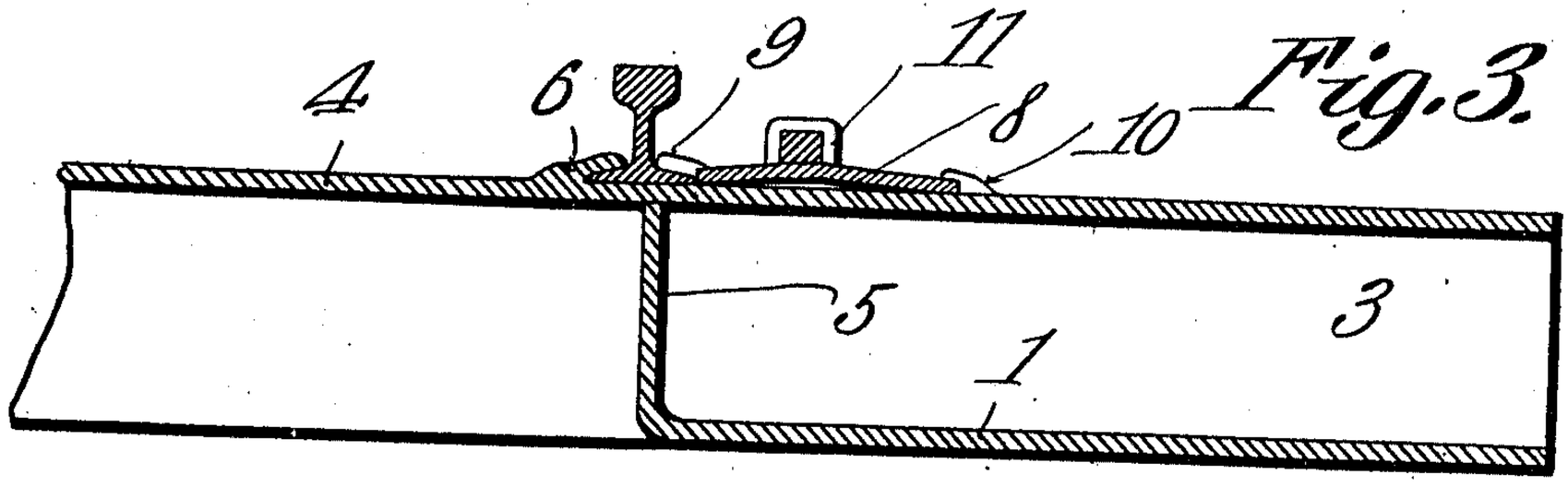


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM T. BRISTER, OF OAKALLA, TEXAS, ASSIGNOR OF ONE-FOURTH TO WILLIAM T. WHITIS AND ONE-FOURTH TO JAMES J. BELL, BOTH OF OAKALLA, TEXAS.

RAILWAY-TIE.

945,215. Specification of Letters Patent. Patented Jan. 4, 1910.

Application filed September 11, 1909. Serial No. 517,216.

To all whom it may concern:

Be it known that I, WILLIAM T. BRISTER, a citizen of the United States, residing at Oakalla, in the county of Burnet and State of Texas, have invented a new and useful Railway-Tie, of which the following is a specification.

My invention relates to railway ties of that general class described in United States Letters Patent issued to me on the 10th day of September, 1907, under Number 865,354.

The object of my present invention is to generally improve and simplify the construction of the rail securing device by the provision of a clamping plate terminating at one end in a pair of spaced brackets that extend over the base flange of the rail, the said clamping plate being held in engagement with the base flange of the rail by a pair of spaced lugs formed with the top plate of the tie and which bear against the rear end of the clamping plate.

A further object is to give greater strength and stability to the tie proper by seating the rail flange directly upon the top plate of the tie instead of upon the clamping plates, as in my former invention.

With the above advantages and other objects in view which will appear as the nature of my invention is better understood, my invention embraces the novel details of construction and combination of parts illustrated in the accompanying drawing, described in the following specification and set forth in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a tie and rail fastenings constructed in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is a longitudinal sectional view taken on the line A—B of Fig. 2.

Like characters of reference designate similar parts in the views shown.

Referring to the drawing, 1 designates a bottom plate from the longitudinal edges of which rise the vertical side walls 2 and 3, the top edges of which are connected by a top plate 4. Vertical partitions 5 are formed integral with the bottom plate and extend to the top plate, as shown, so as to reinforce the tie at the point of contact with the rail. The intermediate portions of the bottom plate are preferably open so that the soil of the road bed may enter between the vertical side walls and prevent the creeping of the tie.

In order to reduce the cost of manufacture, the bottom plate may be dispensed with altogether in which case the transverse bracing partitions may be disposed as illustrated or positioned at each end of the tie so as to provide a tie substantially in the form of a rectangular opened bottomed box which may be embedded into the earth until the top plate is flush with the surface of the ground, the sides forming anchoring wings which positively prevent the creeping of the tie.

Formed integral with the top plate 4 are a plurality of brackets 6 which extend over the base flange of the rail, as shown. Formed with and projecting from the top plate are a pair of lugs 7 which bear against the lateral edge of the opposite side of the base flange. To secure the rail in operative position, one side of the base flange may be engaged in the brackets 6 when the rail may readily be dropped in position so that the lugs 7 will bear against the lateral edge of the opposite side of the base flange. It is thus seen that the rail is held against lateral movement without the use of spikes or similar connections and further that the rail is not positively held at any point so that the rail may expand and contract without danger of snapping off the securing devices.

For holding the rail against turning over a clamping plate 8 is provided. The clamping plate 8 is supported upon the top face of the top plate 4 and is provided at one end with a pair of spaced brackets 9 which extend over the base flange of the rail. The clamping plate is of sufficient size to slidingly fit between the spaced lugs 7 which latter prevent any lateral or creeping movement of the clamping plate. A pair of lugs 10 projecting upwardly from the top plate bear against the rear face of the clamping plate whereby to hold the brackets upon the opposite end of the clamping plate in engagement with the base flange of the rail.

Formed integrally with the top plate and arranged on opposite sides of the clamping plate are loops 11 through which wedges 12 are engaged and bear against the top surface of the clamping plate whereby to hold the latter in operative position.

Pivoted on the vertical wall 2 is a T shaped locking member 13, the shank 14 of

which bears against the head portion of the wedges and prevents the accidental disengagement of the same from the loops.

From the foregoing description, taken in connection with the accompanying drawing, it is thought that the construction and operation of my device will be easily understood without a more extended explanation, it being understood that various changes in the form, proportion and minor details of construction may be made without sacrificing any of the advantages or departing from the spirit of the invention.

What is claimed is:

1. The combination with a railway tie having a bottom plate, vertical side plates rising from the longitudinal edges of said bottom plate, a top plate connecting the top edges of said side plate, and transverse partitions extending upward from said bottom plate, of a plurality of brackets projecting upwardly from said top plate and adapted to extend over one side of the base flange of a rail, a pair of spaced lugs projecting from said top plate and adapted to bear against the lateral edge of the opposite side of said base flange, a clamping plate having one end engaged over said rail base, a pair of integral lugs bearing against the opposite end of said clamping plate and adapted to hold the same in engagement with said base flange, loops secured to the top plate on opposite sides of said locking plate and a wedge engaging said loops and adapted to engage the top face of said clamping face whereby to retain the same in operative position.

2. The combination of a railway tie having a bottom plate, vertical walls rising from the lateral edges of said bottom plate, a top plate connecting the top edges of said vertical walls, a plurality of transverse vertical partitions extending upwardly from said bottom plate to said top plate, a plurality of brackets extending upwardly from said top plate and adapted to extend over one side of the base flange of a rail, a pair of spaced lugs formed integral with said top plate and adapted to bear against the lateral edges of the opposite side of said base flange, a clamping plate supported by said top plate and adapted to loosely engage the opposed faces of said lugs, said clamping plate having at one end a pair of brackets adapted to extend over the base flange of the rail, lugs formed integral with said top plate and adapted to bear against the opposite end of said clamping plate whereby to hold the brackets thereof in engagement with said base flange, a pair of loops arranged on opposite sides of said clamping plate, and a wedge engaged through said loops and adapted to bear against said clamp plate whereby to hold the same in operative position, substantially as described.

3. The combination with a railway tie having a top plate, vertical side plates depending from said top plate, transverse bracing partitions connecting said sides and top, of a plurality of brackets integral with said top plate and adapted to extend over one side of the base flange of a rail, a pair of spaced lugs projecting from said top plate and adapted to bear against the opposite longitudinal edge of the base flange of said rail, a clamping plate supported upon the top plate and having at one end a pair of spaced brackets adapted to extend over the base flange of a rail on the same side thereof as said lugs, a second pair of lugs formed integral with said top plate and adapted to extend over the rear end face of said clamping plate, a pair of loops arranged on opposite sides of said clamping plate and adapted to loosely engage the lateral faces thereof, and a wedge insertible into said loops and adapted to bear against the top face of the clamping plate whereby to hold the same in operative position and a locking member swiveled on the side wall of said tie and having a portion adapted to engage the head of said wedge whereby to hold the same engaged in said loops substantially as described.

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

WILLIAM T. BRISTER.

Witnesses:
D. E. STEWART,
A. M. SMITH.