

No. 658,131.

Patented Sept. 18. 1900.

S. F. SWANSON.
METALLIC RAILROAD TIE.

(Application filed Mar. 23, 1900.)

(No Model.)

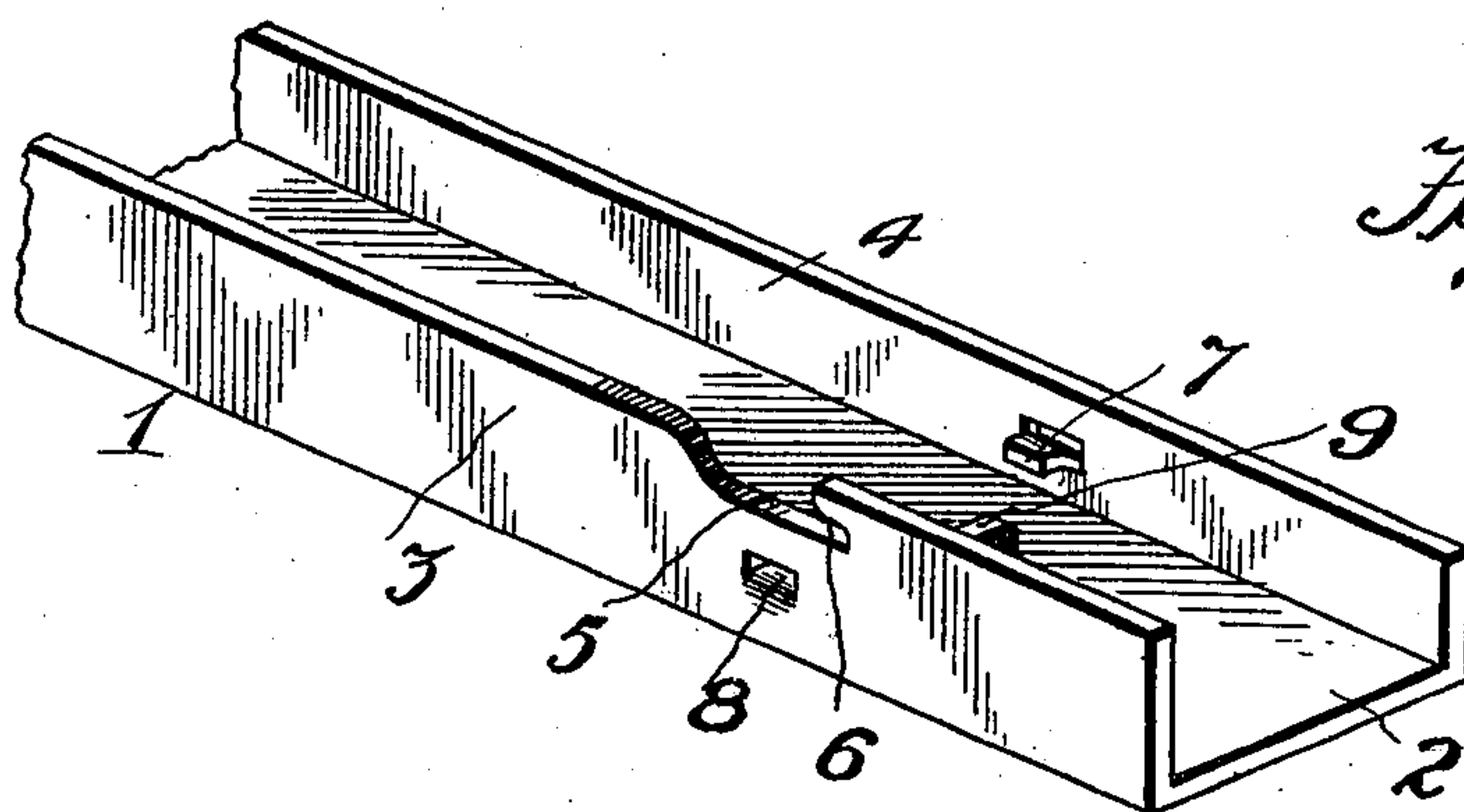
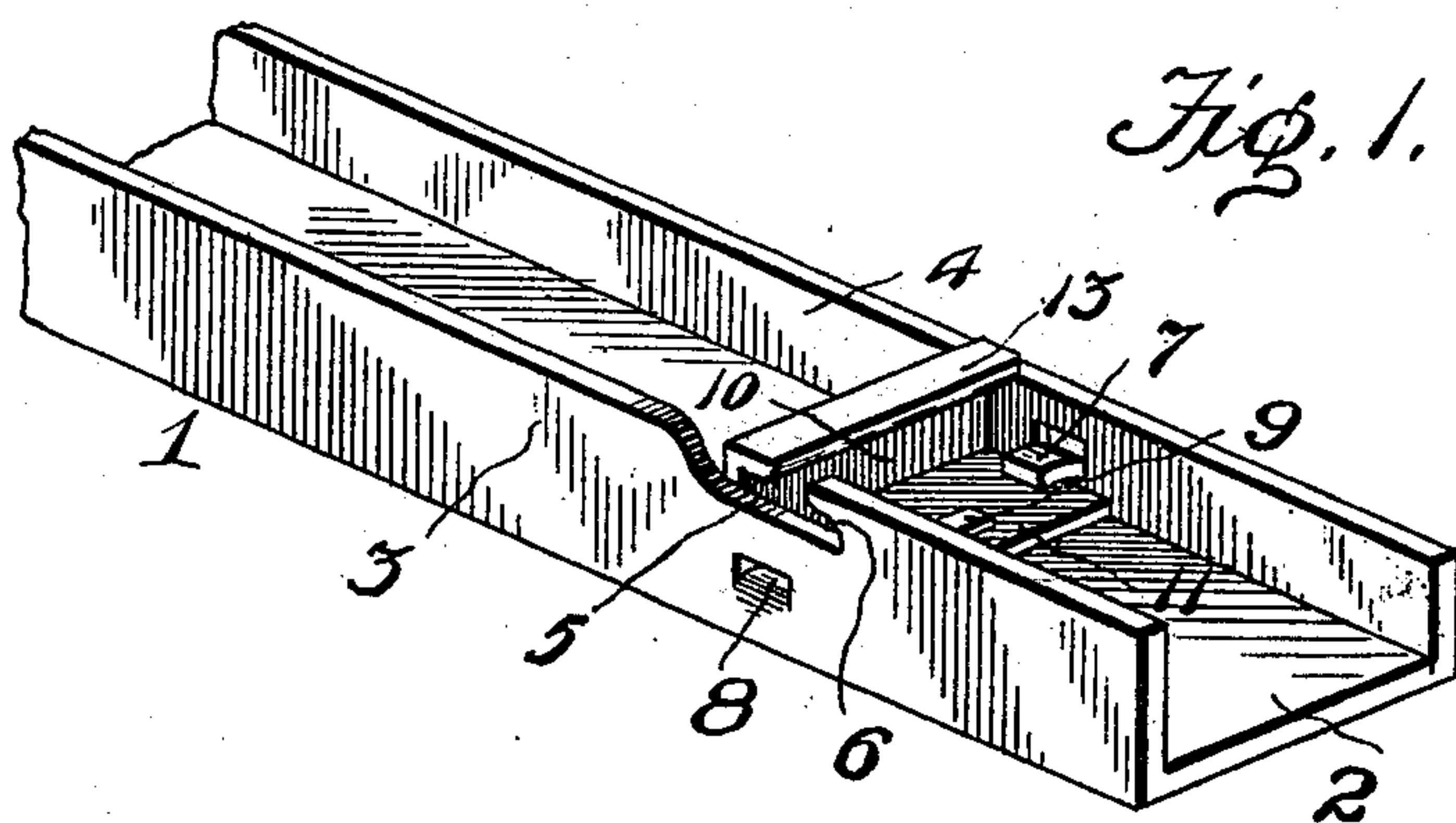


Fig. 3.

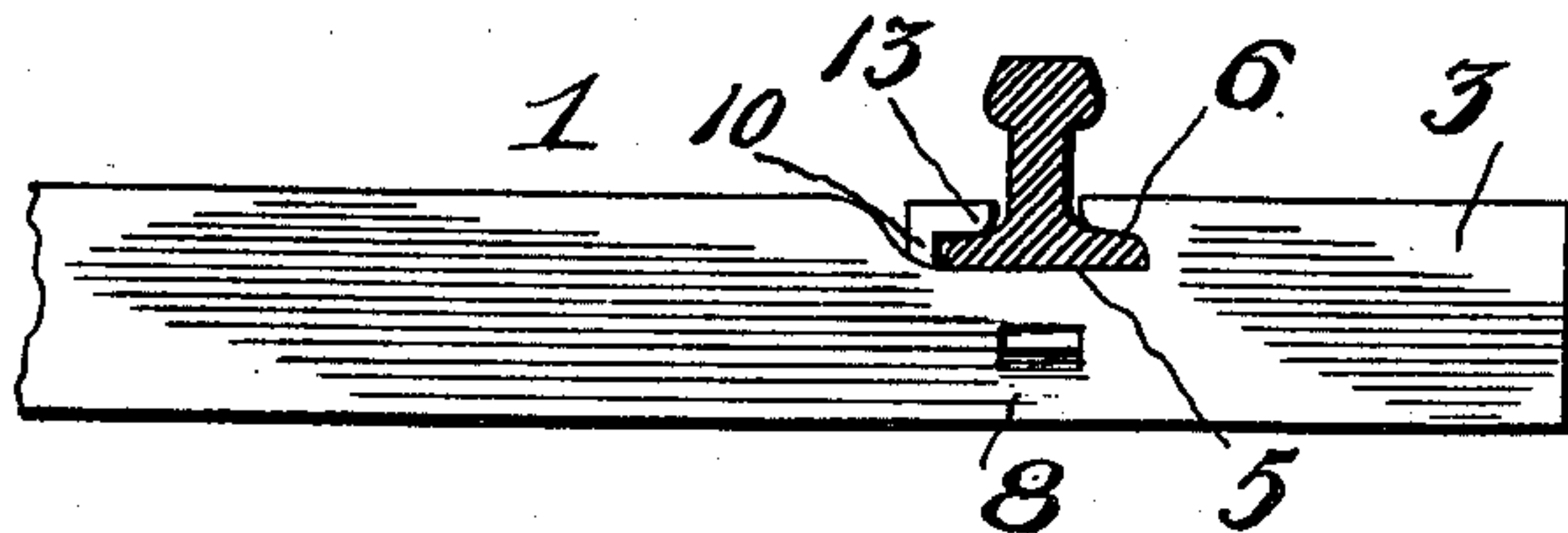
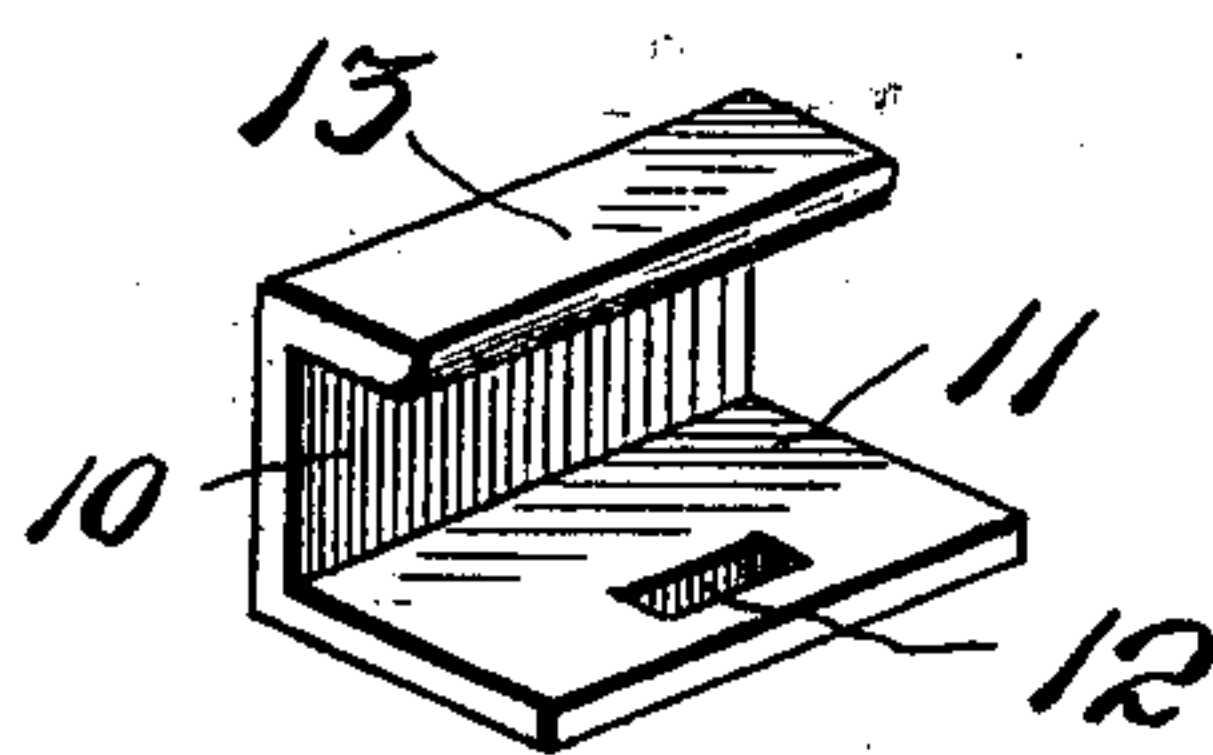


Fig. 4.



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UNITED STATES PATENT OFFICE.

SWAN F. SWANSON, OF PUEBLO, COLORADO.

METALLIC RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 658,131, dated September 18, 1900.

Application filed March 23, 1900. Serial No. 9,919. (No model.)

To all whom it may concern:

Be it known that I, SWAN F. SWANSON, a citizen of the United States, residing at Pueblo, in the county of Pueblo and State of Colorado, have invented certain new and useful Improvements in Metallic Railroad-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.

The invention relates to metallic railroad-ties.

The object of the invention is to provide a simple, strong, inexpensive, and indestructible tie of this character which will securely hold the rail in place and the parts of which may be quickly assembled.

With this object in view the invention consists in certain features of construction and combination of parts, which will be herein-after fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of my improved railroad-tie, showing the angle-plate in position. Fig. 2 is a detail perspective view of the tie after the angle-plate has been removed. Fig. 3 is a side elevation of the tie, showing the rail in position; and Fig. 4 is a detail perspective view of the angle-plate.

In the drawings the same reference characters indicate the same parts of the invention.

Referring to said drawings, 1 denotes a metallic tie, which consists of a base 2, having vertical marginal flanges 3 and 4, the former of which projects vertically a greater distance than the latter. The flange 3 is provided near each end and on its upper edge with a recess 5, one wall of which is undercut, as shown at 6. The base of the recess is on a horizontal line with the top edge of the flange 4 and is adapted to receive the base of a rail which when placed in the recess will have one of its edges slipped under the undercut portion, thereby steadying the tie and preventing its upward movement. Arranged at diametrically-opposite points are two lugs or catches 7 and 8, struck up from the sides of the flanges 3 and 4 and projecting inwardly. The base of the tie is also provided with an upwardly-projecting lug or catch 9.

10 denotes an angle-plate, the base 11 of which is provided with a hole 12, which is adapted to be engaged by the lug or catch 9 and is provided with an overhanging arm 13,

which is adapted to engage or hook over the base of the rail and hold it in position. After the angle-plate has been placed in engagement with the lug 9 the lugs 7 and 8 are bent inwardly over the base of the angle-plate and serve to prevent said plate moving vertically, while the lug 9 serves to prevent it from moving lengthwise of the tie.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my improved metallic railroad-tie will be readily apparent without requiring an extended explanation. It will be seen that the device is simple of construction, that said construction permits of its manufacture at small cost, and that it is exceedingly well adapted for the purpose for which it is designed.

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 fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination with a metallic tie provided with two vertical flanges on a horizontal base, of lugs projecting inwardly from said flanges, a lug projecting upwardly from said base, an angle-plate having an aperture to engage a lug in the base of said tie to prevent movement of the angle-plate longitudinally of the tie, the lugs in the flanges of said tie engaging said angle-plate and preventing vertical movement of the same, substantially as set forth.

2. The combination with a metallic tie provided with side flanges, one of which projects upwardly a greater distance than the other and is provided with a rail seat or recess, of lugs projecting inwardly from the flanges of said tie and a lug projecting upwardly from the base of the tie, an angle-plate having an aperture to engage the base-lug, and an overhanging or hooked end to engage the rail, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

SWAN F. SWANSON.

Witnesses:

H. P. VORIES,
H. C. BAKER.