Sept. 4, 1928. 1,683,013

C. L. ARNOLD

RAILROAD CROSSTIE

Filed Sept. 29, 1927

Fig. 1.

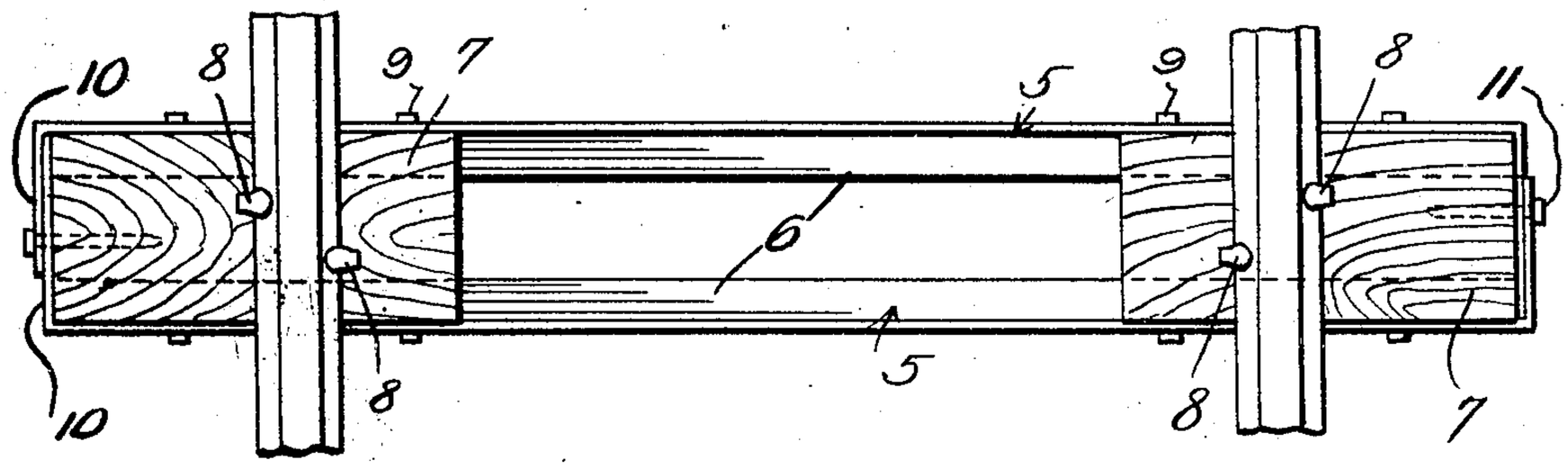


Fig. 2.

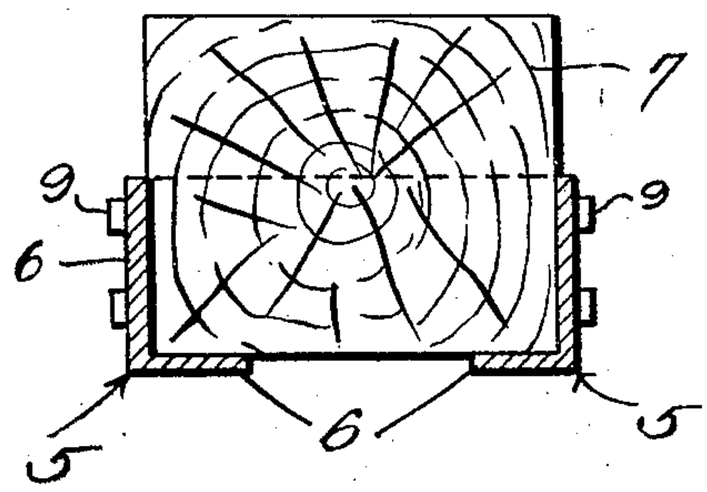
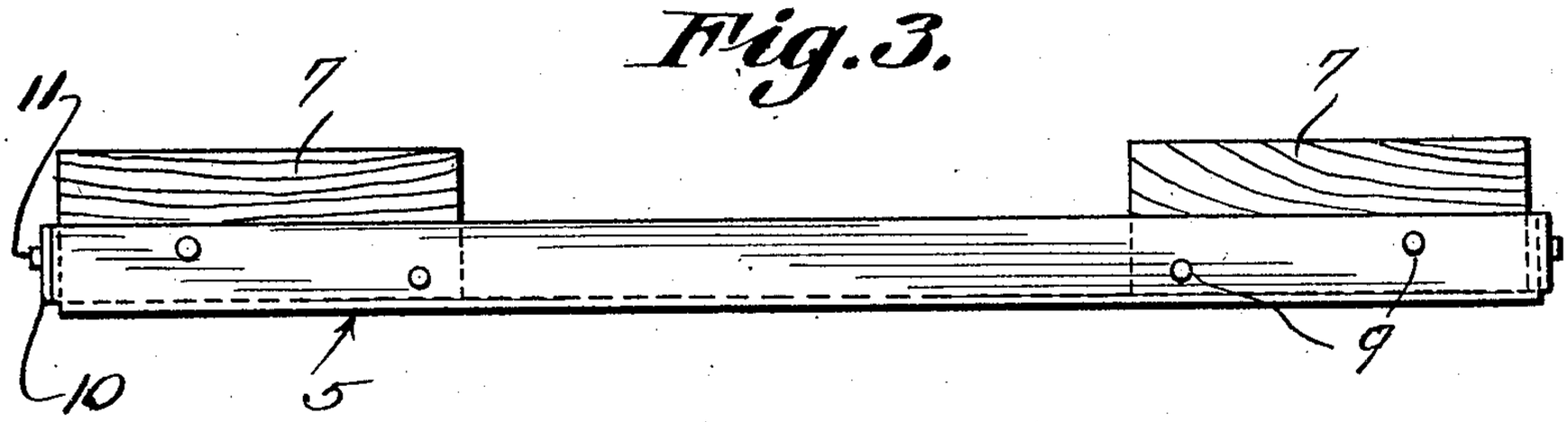


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES L. ARNOLD, OF BARDSTOWN, KENTUCKY.

RAILROAD CROSSTIE.

Application filed September 29, 1927. Serial No. 222,858.

This invention relates to railway ties and more particularly railway ties constructed of metal and wood, the metal portion of the tie constituting the base or body of the tie, while the wooden sections thereof constitute the supports for the rails and lend resiliency to the tie.

An important object of the invention is to provide a tie of this character which may be readily and easily secured against creeping by the positioning of ballast between the sections of the tie.

A still further object of the invention is to provide a tie embodying a metallic base which will not bend or buckle under the weight of heavy trains passing thereover, the wooden supporting blocks being secured to the base to insure against movement of the blocks with respect to the base.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is a plan view of a tie constructed in accordance with the invention.

Figure 2 is a transverse sectional view therethrough.

Figure 3 is a side elevational view thereof.

Referring to the drawing in detail, the body portion of the tie is constructed of metal and embodies a pair of angle bars arranged in parallel relation with each other, one of the right angled flanges of each bar, extending upwardly as clearly shown by the drawing.

These bars are indicated by the numeral 5, and as shown, the inner flanges 6 thereof are disposed in spaced relation with each other so that the usual ballast employed in the construction of the road bed may find its way between the flanges to anchor the tie against creeping.

Supported within the tie and arranged between the upstanding flanges thereof, are blocks 7 which are of widths to fit between the upstanding flanges, the upper surfaces of the blocks extending above the upper edges of the flanges to provide supports for the rails which are positioned thereon.

The upstanding flanges are provided with openings to receive spikes 9 whereby the blocks may be spiked to the angle bars forming the body portion of the tie. These blocks 7 provide means whereby the spikes such as indicated at 8 may be secured to the tie, the spikes acting in the usual capacity to engage the bases of rails positioned on the blocks to secure the rails in position.

These flanges terminate in spaced relation with the ends of the bars, so that the ends of the bars which are indicated by the reference character 10, may be bent laterally at right angles as shown by Figure 1.

The right angled end 9 at one end of each bar is longer than the right angled end at the opposite end thereof, so that when the bars 5 are moved into parallel relation with each other in the formation of a tie, the right angled ends 10 will overlap.

Registering openings are formed in the right angled ends of the bars to receive the spikes 11 that pass through the blocks 7 to further secure the blocks in position.

I claim:

A railway tie including angle bars of equal lengths arranged in parallel spaced relation with each other, the ends of the angle bars extending inwardly at right angles and overlapping each other, the overlapping ends having registering openings, wooden blocks fitted within the angle bars and contacting with the inturned ends, spikes extending through the registering openings and imbedded in the ends of the blocks, and the wooden blocks extending appreciable distances above the upper edges of the angle bars to receive railway rails.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

CHARLES L. ARNOLD.