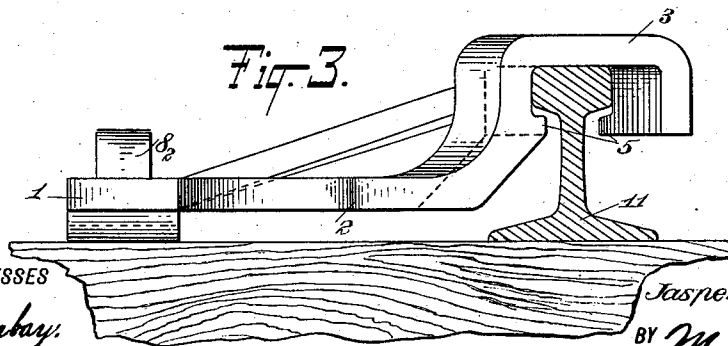
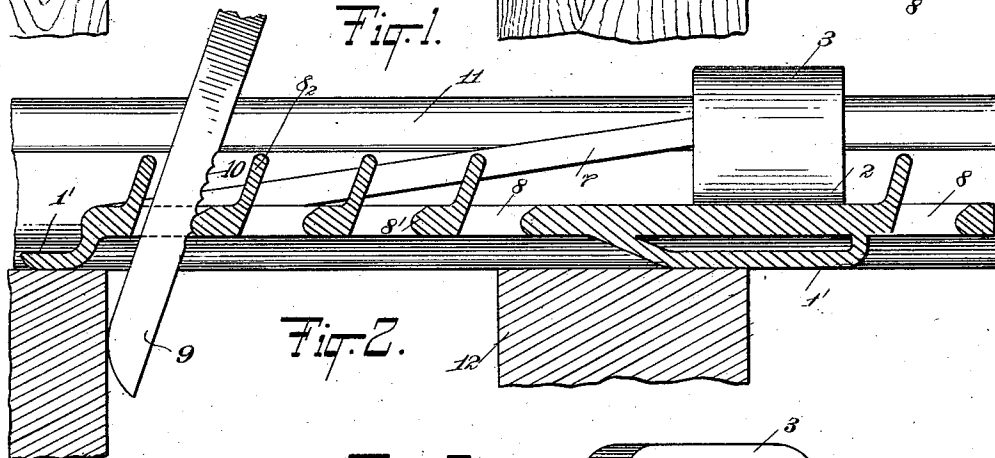
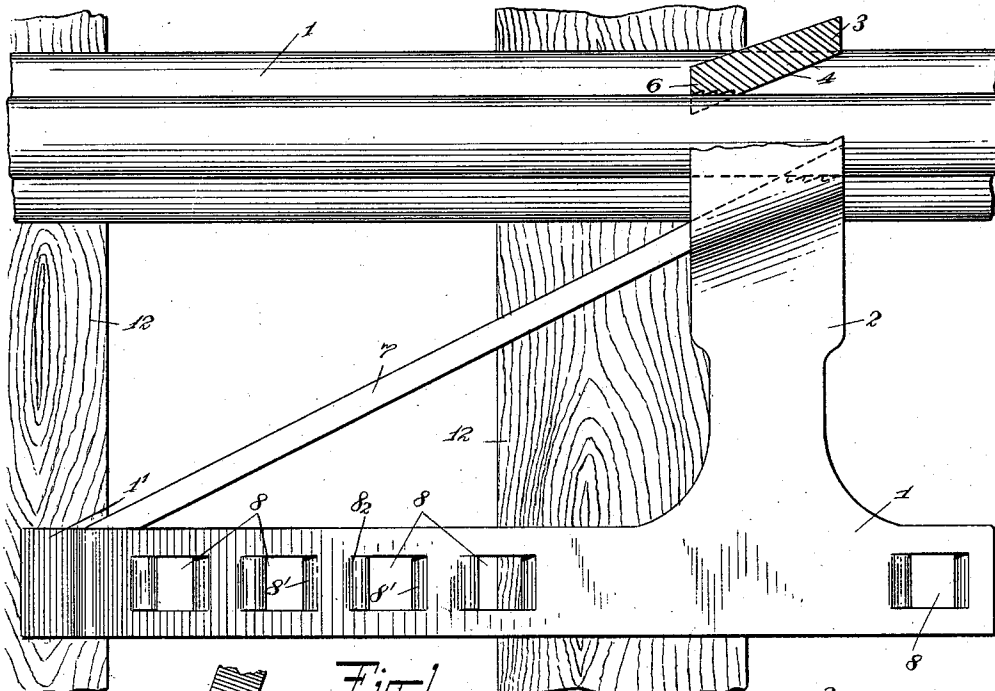


J. W. WOOD.
RAILROAD TIE SPACER.
APPLICATION FILED MAR. 14, 1911.

1,010,208.

Patented Nov. 28, 1911.



WITNESSES
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JASPER WILLIAM WOOD, OF NEEDLES, CALIFORNIA.

RAILROAD-TIE SPACER.

1,010,208.

Specification of Letters Patent. Patented Nov. 28, 1911.

Application filed March 14, 1911. Serial No. 614,312.

To all whom it may concern:

Be it known that I, JASPER WILLIAM WOOD, a citizen of the United States, and a resident of Needles, in the county of San Bernardino and State of California, have invented a new and Improved Railroad-Tie Spacer, of which the following is a full, clear, and exact description.

My invention is a spacer for railroad ties, and it comprises a device which can be readily placed in position to grip the top of a rail, and which acts as a fulcrum for the spacing bar which is used to force the ties into proper position.

Reference is to be had to the accompanying drawings forming a part of this specification, in which the same characters of reference indicate the same parts in all the views.

Figure 1 is a top plan of my improved tie spacer in the position which it occupies when in use; Fig. 2 is a longitudinal sectional view of the tie spacer; and Fig. 3 is an end elevation thereof, showing the manner in which the tie rests upon the rail, the latter being shown in cross-section.

My tie spacer comprises an elongated base 1 having supports 1', which hold the base 1 spaced a certain distance above the tops of the ties which are to be moved. From one side of this base 1 projects a lateral arm 2, this arm being curved upward near its outer end to form a gripping attachment 3, which fits the top or ball of the rail to hold the tie spacer firmly in operative position. This gripping attachment has a diagonal groove 4 in the under side thereof, the sides of this groove being provided with longitudinal flanges 5. Above the flanges 5 are arranged teeth 6, which grip the sides of the top or ball of the rail and prevent the spacer from sliding thereon. A brace bar 7 connects the outer end of the arm 2 with the opposite end of the base 1.

The base 1 is provided with a series of longitudinally-arranged openings 8, the rear edges of these openings being rounded off, as shown at 8', to fit corresponding transverse notches 10 in one edge of the spacer bar 9. The rail is shown at 11; and the ties on which the spacer is to be used are indicated by the numeral 12. The front edges of the openings 8 have upstanding lugs 8.

To utilize the spacer, the gripping attachment 3 is fitted over the top or ball of the rail, and on account of the large groove 4

therein it will serve for rails of almost any size or weight. This groove 4, together with the brace bar 7, will of course be held parallel to the rail when the spacer is put on, and after the flanges 5 pass below the top or ball of the rail 11, the outer end of the base 1 is moved away from the rail until the base 1 and the rail 11 are parallel with respect to each other. The ends of the flanges 5 will thus pass under the lower sides of the ball of the rail and prevent the gripping attachment 3 from getting displaced. In this position, the teeth 6 will also grip the sides of the ball of the rail and keep the spacer from sliding when it is subjected to end thrust, due to the brace-bar 9.

To move a tie, the bar 9 is passed through one of the openings 8 until one of the notches rests against the rear of one of these openings. The bar is thus fulcrumed in the base 1, and by pulling on the upper end of the bar, the lower end of the bar will force the tie forward to the required extent.

The supports 1' may be omitted if desired, to allow the spacer to rest directly on the ties.

In order to move the spacer along the rail from one tie to another, the end of the bar is simply thrust into the ground, and the upper end moved forward. This causes the bar to engage against the front edges of the lugs 8, and pull the spacer along, the front end of the base 1 being of course swung toward the rail to a slight extent in order to release the teeth 6.

This spacer is especially useful on railroad track work to space ties that are moved out of their true position on account of the contraction of the steel rails, and other causes.

Obviously, I may make certain changes in the shape and size of the parts, which fairly fall within the scope and nature of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A spacer for railroad ties, comprising a base, and means attached to said base for securing the same to a rail, and a spacer bar for engaging the ties and shifting the same, said base having means for giving fulcrum engagement to the spacer bar.

2. A spacer for railroad ties, comprising a base, and an arm projecting from one side of said base, having means at its outer end

for gripping a rail and preventing the base from sliding with respect to said rail, and a spacer bar for engaging the ties and shifting the same, said base having means for giving fulcrum engagement to the spacer bar.

3. A spacer for railroad ties, comprising a base, an arm projecting from said base, a diagonal groove in the lower side of said arm adjacent its outer end, to engage a rail, and means on the sides of said groove for gripping the rail and preventing the same from sliding, said base having means for giving fulcrum engagement to a spacer bar.

4. A spacer for railroad ties, comprising a base, an arm projecting laterally therefrom, said arm having a diagonal groove in its under side adjacent the outer end thereof, to engage a rail and prevent the spacer from sliding on the said rail, and a pair of flanges along the edges of the groove, said flanges engaging the under side of the top or ball of the rail, said base having means for giving fulcrum engagement to a spacer bar.

5. A spacer for railroad ties, comprising a base, an arm projecting laterally from said base, said arm having a diagonal groove in its under side adjacent its outer end, said groove having teeth to grip the sides of the rail to prevent the tie spacer from sliding thereon, and having longitudinal flanges along its edges to pass beneath the top or ball of the rail and prevent displacement of

the spacer, and a brace bar connecting said arm and said base, said base having one or more longitudinally-arranged holes passing therethrough to give fulcrum engagement to a spacer bar.

6. A spacer for railroad ties, comprising a base, and an arm projecting from one side of the base, said arm having means at its outer end for gripping a rail, and preventing the base from sliding with respect to said rail, said base having a plurality of longitudinally-arranged openings therethrough, the rear edges of said openings giving fulcrum engagement to the spacer bar in order to move the tie, and the forward edges of said openings having upstanding lugs to give fulcrum engagement to the spacer bar, in order to move the spacer along the track, from one working position to another.

7. In a spacer for railroad ties, the combination of a base having means for attachment to a rail and a spacer bar to have fulcrum engagement with said base and with a tie at its end, to move the ties supporting the rail by means of the leverage afforded by such engagement.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JASPER WILLIAM WOOD.

Witnesses:

W. H. WELLMAN,
L. H. CLARK.