(No Model.)

P. OLSON.

ADJUSTABLE GAGE BAR FOR RAILWAYS.

No. 589,268. Patented Aug. 31, 1897.

Fig. 1.

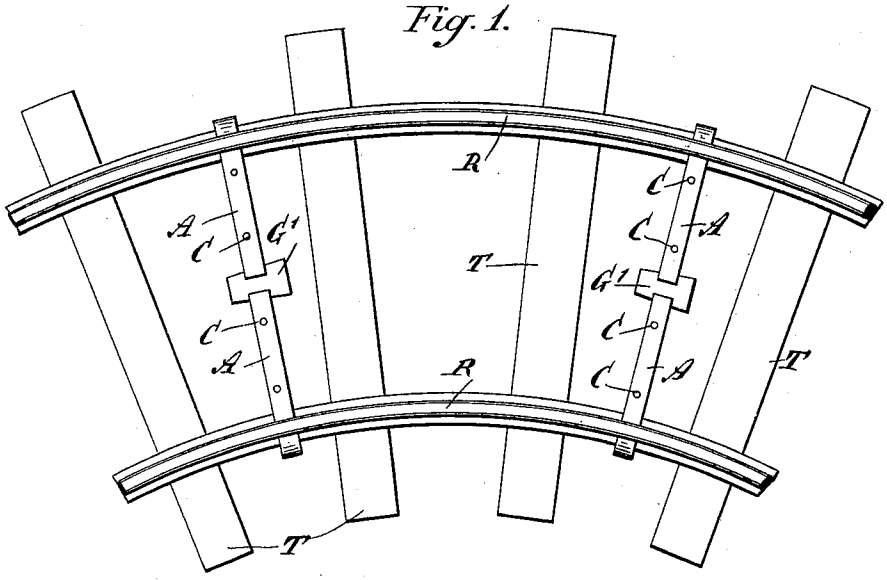


Fig. 2.

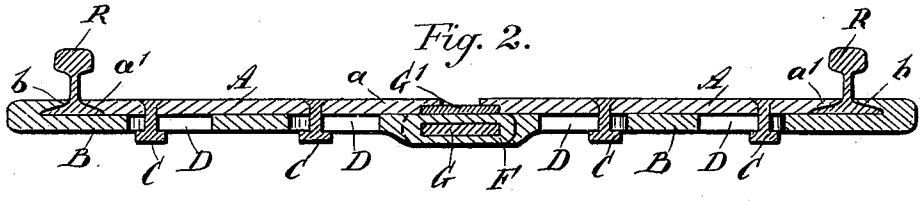


Fig. 3.

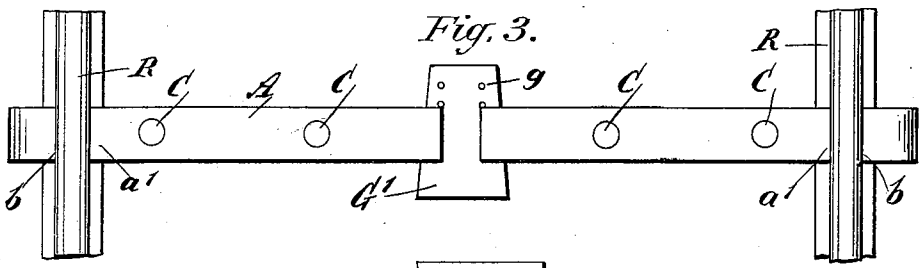
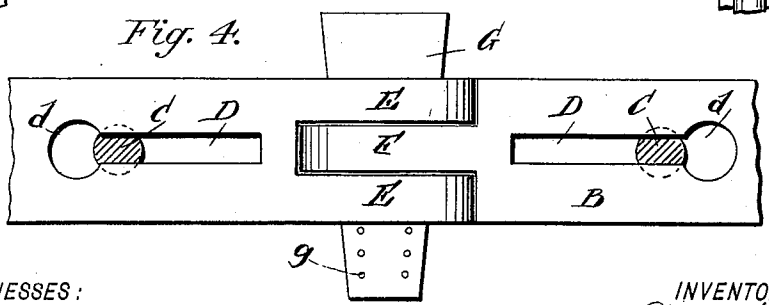


Fig. 4.



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ADJUSTABLE GAGE-BAR FOR RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 589,268, dated August 31, 1897.

Application filed June 4, 1897. Serial No. 639,389. (No model.)

To all whom it may concern:

Be it known that I, PETER OLSON, of Field, in the Province of British Columbia, Dominion of Canada, have invented a new and Improved Adjustable Gage-Bar for Railways, of which the following is a full, clear, and exact description.

My invention is an improved gage-bar or tie-rod for connecting the rails of a railway-track.

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

Figure 1 is a plan view of a section of track, showing two of the bars in place. Fig. 2 is a cross-sectional elevation taken through the center of one of the bars. Fig. 3 is a top plan view of one of the bars; and Fig. 4 is a bottom plan view, on an enlarged scale, of the central joint between the bars.

The object of my invention is to produce a tie-rod or gage-bar which shall be of adjustable length to accommodate it to the different gages used on curves.

In adjusting railway-tracks which have curves it is common to place the rails a little farther apart than where the track is straight, the amount of variation depending upon the degree of curvature. It is therefore impossible to put in such places tie-rods which are designed for use in straight tracks and are of fixed length.

In use the rails on curves have a tendency to spread, and it is often necessary to adjust the position of the rails, which is accomplished by drawing the spikes and redriving them. This often results in cutting up the tie so badly by the frequent driving of the spikes that the tie must be discarded before it is decayed. This results in the consumption of more ties than would otherwise be necessary and is an item of considerable expense, as is also the cost of the labor required for the work.

My device consists of two sets of bars, two in each set, made adjustable upon each other and so that the base of the rails may be clamped thereby. The lower bars B are flat and provided on their outer ends with an upward hook *b*, which curves back upon the body of the bar and is adapted to engage the outer flange of the base of the rail.

One of the bars B is provided with two eyes E at its inner end and the other with a single eye F, which lies between the two eyes E. These eyes are adapted to receive the wedge G, which when driven therein draws the two bars together, so as to shorten their length. The bars B are also provided with longitudinal slots D, and the flat bars A, which lie above the bars B, have pins C, extending through said slots. The pins C are provided with heads on their under ends, which prevent disengagement of the bars while in use. The slots D may be provided with a circular enlarged end *d*, through which the heads of the bolts or pins C may be withdrawn when it is desired to separate the bars.

The outer ends of the bars A are shaped so as to fit over the inner flange of the base of the rail, as shown at *a'*. The inner ends of said bars are either offset or provided with notches *a* on the under side, adapted to form a recess to receive a wedge G', and when this wedge is driven into place the two bars A will be forced outward, tending to spread the rails R.

The wedges G and G' are provided with holes *g*, through which pins may be placed to prevent the wedges from being withdrawn. Driving the wedge G draws the rails together, thus making a narrower gage, while driving the wedge G' forces the rails apart, thus making a broader gage. In this way the rails may be securely clamped in my device and the width of gage accurately adjusted. It will therefore be unnecessary to frequently draw the spikes on the curves and move the rails inward, as is frequently required by the ordinary practice at curves, the tendency at such points being to spread the rails. Unless frequently attended to the rails are liable to become spread to such an extent that the cars are likely to run off the track. With my device this tendency to spread may be quickly and easily corrected and without drawing the spikes from the ties, and therefore the ties will last longer than where the spikes are frequently withdrawn and replaced.

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

1. An adjustable gage-bar for railways, comprising two bars having hooks adapted to

engage the outer edge of the rail-base, means for drawing the bars inward, bars sliding upon the first-named bars and engageable with the inner edges of the rail-base, and means for forcing said sliding bars outward, substantially as described.

2. An adjustable track-bar for railways, comprising a set of bars having hooks upon one end adapted to engage the outer edge of the rail-base, and also having overlapping eyes upon their inner ends, a wedge fitting said eyes, a second set of bars slidable upon the first-named set of bars, and engageable at their outer ends with the inner side of the rail, and a wedge engageable with the inner ends of said bars to force them outward, substantially as described.

3. An adjustable track-bar for railways, comprising a set of bars having hooks upon one end adapted to engage the outer edges of the rail-base, also having overlapping eyes upon their inner ends, a wedge between said eyes, a second set of bars slidable upon the first-named set of bars by means of slots in one set and pins in the other, the outer ends of the second set of bars being engageable with the inner side of the rail and the inner ends of said bars being turned up to form a socket, and a wedge fitting said socket, substantially as described.

4. An adjustable track-bar for railways, comprising a set of two bars having hooks upon one end adapted to engage the outer edge of the rail-base, and overlapping eyes upon their inner ends, a wedge fitting said eyes, a second set of bars slidable upon the aforesaid bars by means of slots in one set and pins upon the other, the outer ends of the second set being engageable with the inner side of the rail, a wedge engageable with their inner ends to force them outward, and means for locking said wedges in place, substantially as described.

5. An adjustable track-bar for railways, comprising a set of two bars having hooks upon one end adapted to engage the outer edge of the rail-base, and overlapping eyes upon their inner ends, a wedge fitting said eyes, a second set of bars slidable upon the aforesaid bars by means of slots in one set and pins upon the other, the outer ends of the second set being engageable with the inner side of the rail, a wedge engageable with their inner ends to force them outward, said wedge having locking-holes, and pins fitting said holes and preventing withdrawal of the wedges, substantially as described.

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