

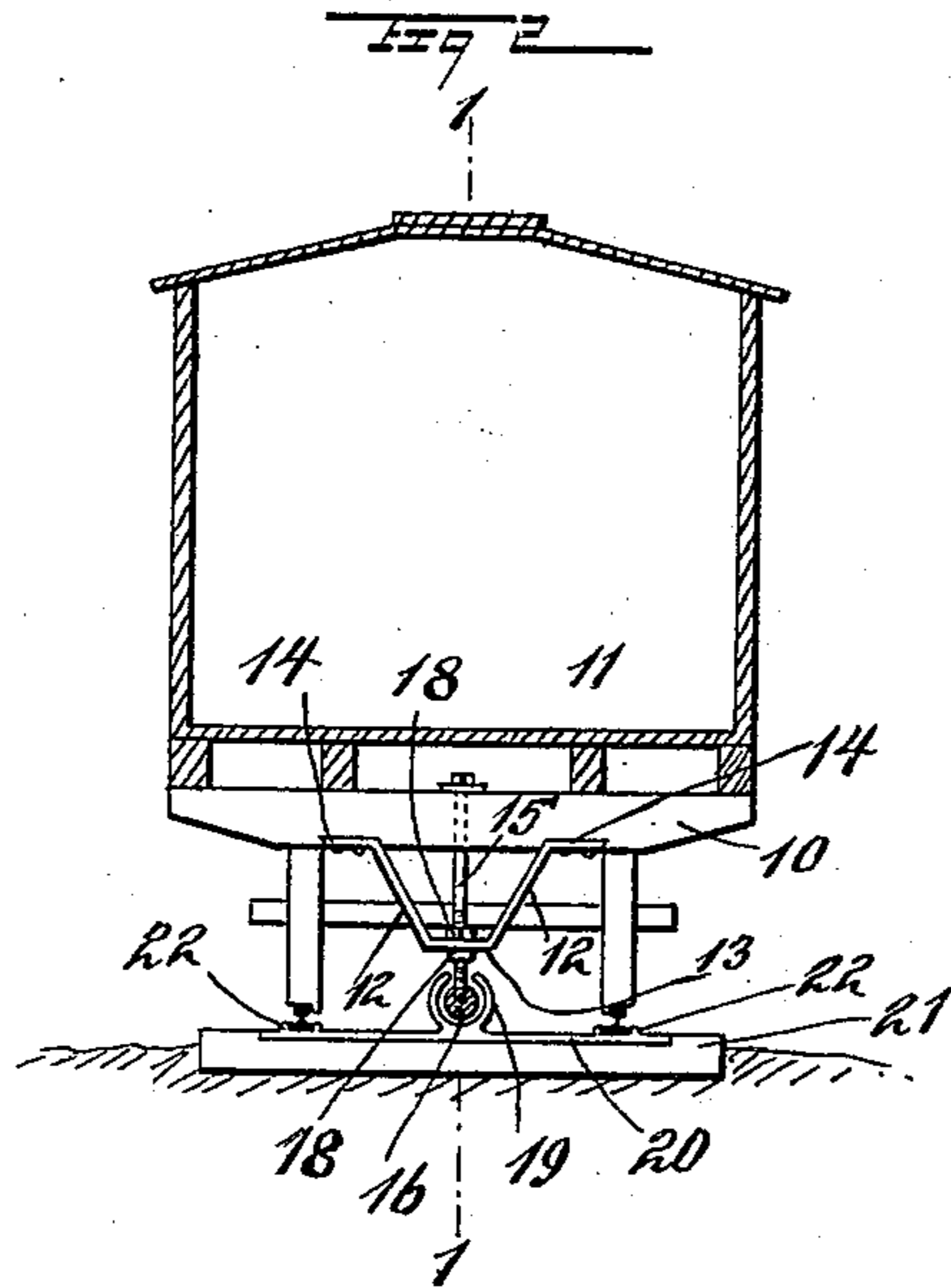
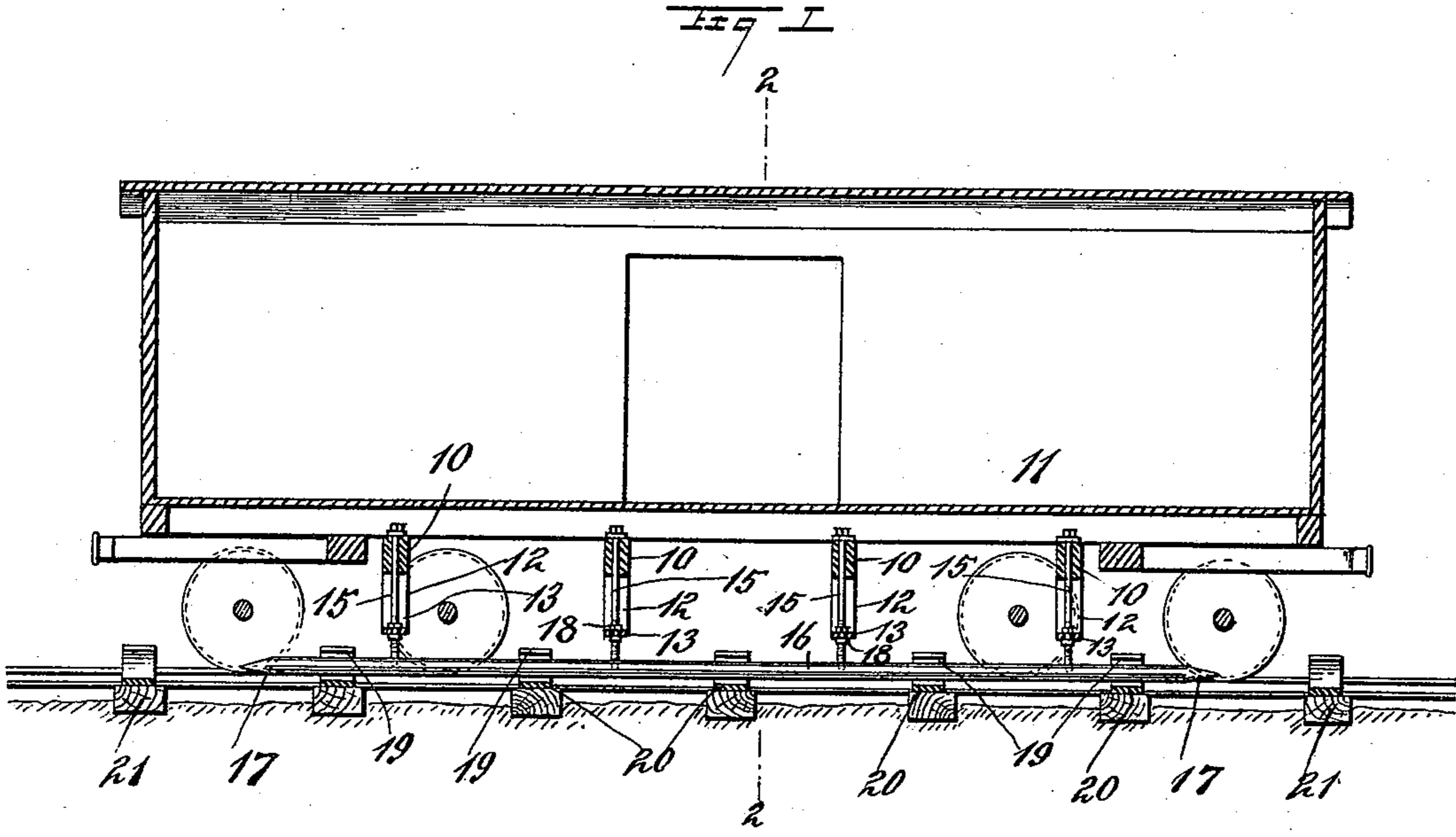
(No Model.)

T. E. W. FAY.

GUIDE ATTACHMENT FOR RAILWAY ROLLING STOCK.

No. 494,418.

Patented Mar. 28. 1893.



WITNESSES:

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GUIDE ATTACHMENT FOR RAILWAY ROLLING-STOCK.

SPECIFICATION forming part of Letters Patent No. 494,418, dated March 28, 1893.

Application filed October 11, 1892. Serial No. 448,541. (No model.)

To all whom it may concern:

Be it known that I, THORNTON EUGENE WEBSTER FAY, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and Improved Guide Attachments for Railway Rolling-Stock, of which the following is a full, clear, and exact description.

My invention relates to improvements in rolling stock and railways, and the object of my invention is to produce a simple device which may be applied to any ordinary rolling stock and to any railroad track, so as to effectually prevent the rolling stock from jumping the track.

The invention is especially adapted to be used upon curves and grades where such jumping is most likely to take place.

A further object of the invention is to construct the apparatus in such a way that it is extremely cheap and strong, and may be very easily applied to the track and rolling stock, and also to construct and arrange the apparatus so that it cannot well get out of order, and will be therefore always sure to work.

To this end, my invention consists in certain improved guide attachments for railway rolling stock, which will be hereinafter described and claimed.

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

Figure 1 is a vertical longitudinal section through a railway freight car and track, showing my improvements applied to both, the section being taken on the line 1—1 in Fig. 2; and Fig. 2 is a cross section on the line 2—2 in Fig. 1.

In carrying out my invention, I use strong cross timbers 10, which are secured to the under side of a car 11, or other rolling stock, and the timbers are provided on the under side and near the center with strong depending braces or brackets 12, which are preferably made flat at the bottom, as shown at 13, and the opposite members of which diverge and terminate in flanges 14, which are adapted to be firmly bolted to the timbers 10, and are preferably countersunk in the timbers, as shown in Fig. 2.

Extending vertically through each timber and its brace or bracket, is a screw-bolt 15, which at its lower end is secured to a longitudinal guide rod 16, which is carried a little above the roadbed, and is arranged parallel with the longitudinal line of the car and preferably beneath the center of the car. This guide rod has pointed ends 17, to enable it to easily enter the guide sockets on the track, as hereinafter described, and the rod is preferably circular in cross section, although it may be of any other shape desired. The guide rod may be adjusted vertically by means of the bolts 15, which are provided with suitable nuts 18, adapted to accomplish the adjusting.

The guide rod 16 is adapted to enter nearly cylindrical sockets 19, which are supported on the track bed and which are preferably made integral with the tie plates 20, which are secured to the sleepers 21, and may be provided with chairs or flanges 22 which support the track rails. The sockets 19 may be struck up from the metal of the tie plate, or they may be made in any convenient way and fastened to the sleepers. The sockets are open at the top so as to permit the free passage through them of the supporting bolts 15, and they are somewhat larger in cross section than the rod 16, so as to permit the latter to pass freely through them and also so as to permit the necessary swaying and vibration of the train. These sockets are adapted to be placed upon sleepers as described, preferably opposite a curve or dangerous place in the road, and any necessary number of them may be used, but there should be a sufficient number to cause at least two of them to always be in engagement with the guide rod of the car or locomotive which passes over them.

It will be seen that the car may have all the necessary sidewise swaying motion required, but if the wheels are lifted high enough to jump the rail, the guide rod 16 strikes the walls of the sockets 19 and the car is held in place.

It will be observed that the attachments described are of the simplest and strongest nature, and may be very easily attached to both the car and the truck.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. In a guide attachment the tie plate 20 having rail chairs 22 at its ends and a short
5 tubular open top socket 19 on its upper side between its ends, substantially as set forth.
2. In a guide device of the character described a long rod provided with hangers for
10 and short open top sockets for attachment to the sleepers and through which the rod is adapted to pass, substantially as set forth.
3. A guide device of the character described comprising a long rod provided with bolts for
15 suspending it longitudinally under a car,

brackets through which the bolts pass, jam nuts on the bolts at opposite sides of the brackets for adjusting the bolts vertically and the short open-top sockets 19 for the sleepers, substantially as set forth. 20

4. A guide device of the character described, the long rod having tapered ends, means for suspending the rod longitudinally under a car and the sockets 19 each formed in a single
25 piece with its attaching plate or base, substantially as set forth.

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Witnesses:

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