S. ENGLISH.

TRACK GAGE RETAINER AND ADJUSTER.

APPLICATION FILED OCT. 5, 1920.

1,363,100.

Patented Dec. 21, 1920.

2 SHEETS—SHEET 1.

Fig. 1.

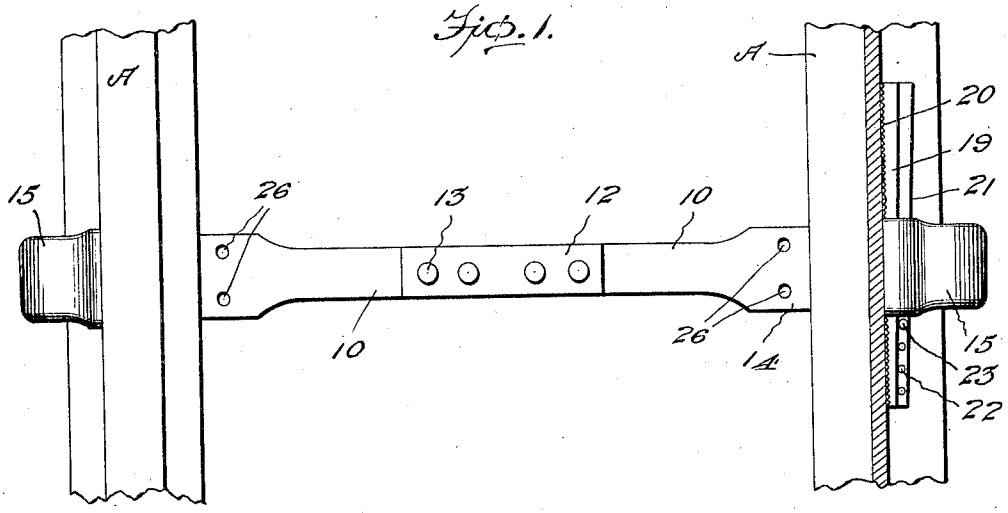



Fig. 2.

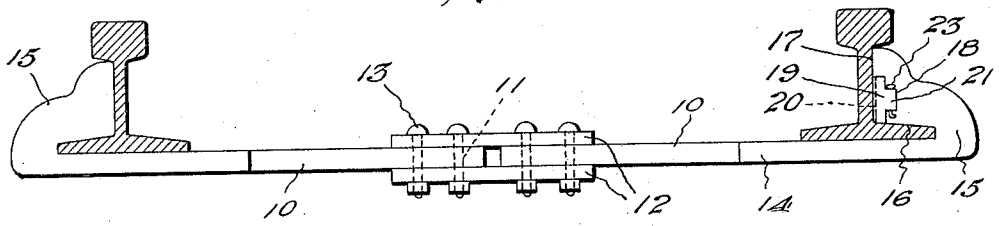
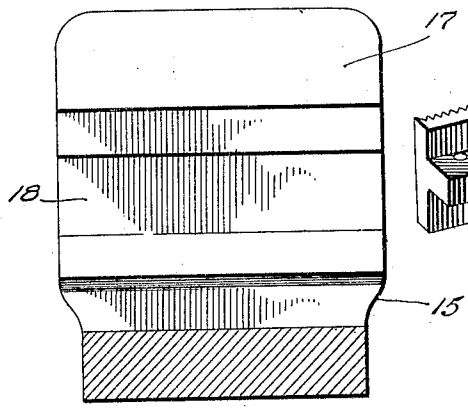



Fig. 3.



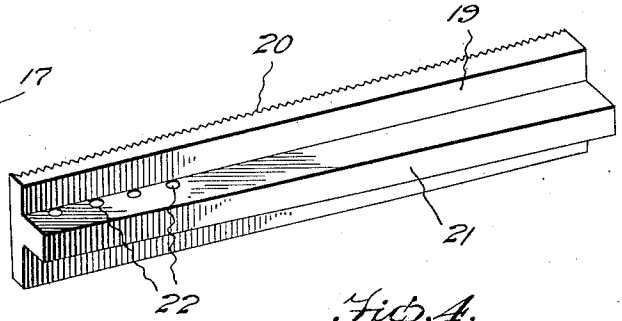




Fig. 4.

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2 SHEETS—SHEET 2.

Fig. 5.

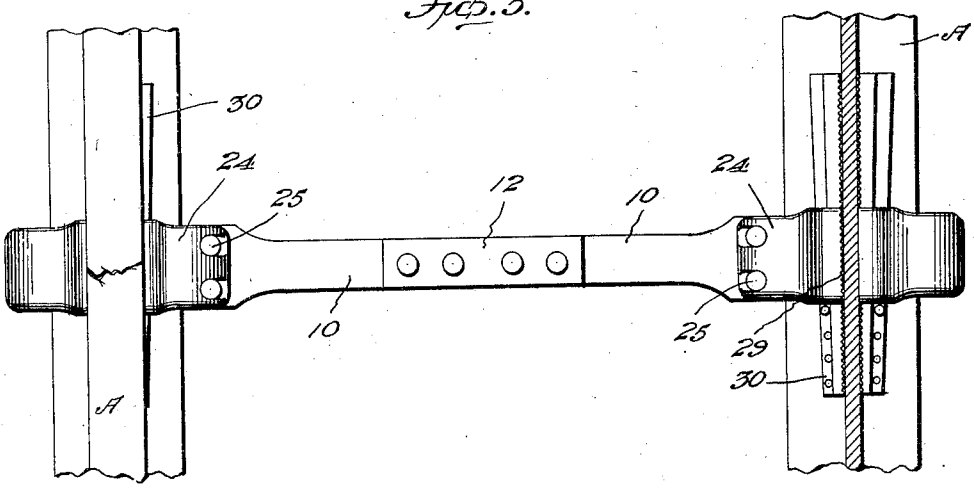



Fig. 6.

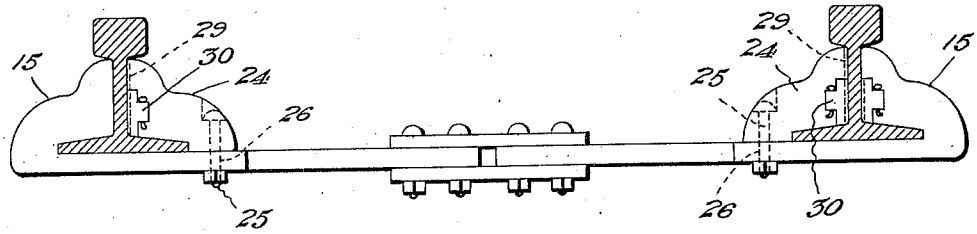
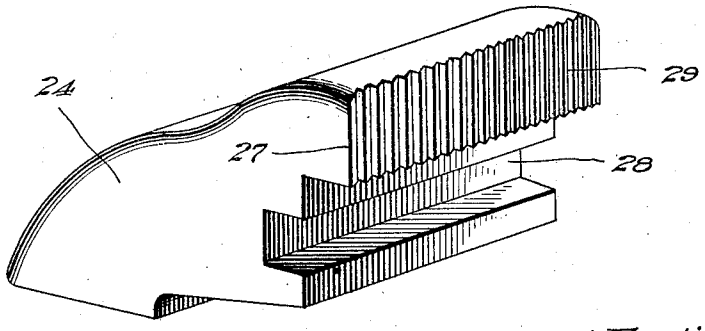



Fig. 7.




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# UNITED STATES PATENT OFFICE.

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## TRACK-GAGE RETAINER AND ADJUSTER.

1,363,100. Specification of Letters Patent. Patented Dec. 21, 1920.

Application filed October 5, 1920. Serial No. 414,734.

*To all whom it may concern:*

Be it known that I, SAMUEL ENGLISH, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Track-Gage Retainers and Adjusters, of which the following is a specification.

This invention relates to railways and has for its object the provision of gage retaining means comprising bar members suitably connected and carrying at their ends members engaging against the outer sides of the webs of the rails of the trackway whereby to prevent spreading of the rails, one of these rail engaging members having associated therewith a wedge adapted to be driven in whereby to correct or adjust the gage of the track, the wedge member being serrated to prevent slipping thereof.

An important object is the provision of a device of this character which may have associated therewith other members engaging against the inner sides of the rail webs and provided with wedge members, these inner members being designed to prevent twisting of the rails or inward buckling of the trackway for any reason.

An additional object is the provision of a structure of this character which will be simple and inexpensive in manufacture and installation, which will be highly efficient for the purpose specified, which may also be used as a temporary repair for a broken rail, and which will be a general improvement in the art.

With the above and other objects and advantages in view, the invention consists in the details of construction to be hereinafter more fully described and claimed, and illustrated in the accompanying drawings in which—

Figure 1 is a plan view of my device associated with rails and used simply for preventing spreading of the rails, one of the rails being shown in horizontal section,

Fig. 2 is a cross sectional view through the rails showing my device in side elevation,

Fig. 3 is an enlarged face view of the outer rail engaging member,

Fig. 4 is a detail view of the wedge member,

Fig. 5 is a view similar to Fig. 1 showing the device arranged for preventing inward buckling as well as spreading of the rails,

Fig. 6 is a cross sectional view through the rails showing a side elevation of the device in this form, and

Fig. 7 is a detail perspective view of one of the removable members engaging against the inner sides of the rails.

Referring more particularly to the drawings, the letter A designates rails of a railway. In carrying out my invention I provide a pair of bars 10 provided at their inner ends with holes 11 and adapted to be connected by plates 12 carrying bolts 13 passing through the holes 11. At their outer ends these bars 10 are widened, as shown at 14, and their extremities are formed with upward extensions 15 which are curved upwardly and which have their side edges also curved. These extensions 15 are undercut, as shown at 16, for the reception of the bases of the rails, as clearly shown in Fig. 2. These extensions 16 are of a height to fit snugly between the base and ball of the rails in abutting engagement with the web. The face 17 which abuts the web is formed with a T-shaped recess 18.

In order that the gage of the track may be adjusted, I provide a wedge member 19 which is T-shaped in cross section and which is slidable within the recess or groove 18 and this wedge member has its side toward the rail serrated, as shown at 20, whereby to prevent retrograde slipping. The outer rib 21 of the wedge is formed with a plurality of holes 22 through any one of which may be inserted a pin 23 whereby to prevent retrograde movement of the wedge after it is driven into position, it being understood that this pin must be placed within the hole nearest the far side of the extension 15. When the device is used simply as a gage retainer and anti-spreading device, it is apparent that only one of the extensions 15 need be provided with a recess 18 and wedge member 19. When the wedge member is driven in to contract the gage, the rail is moved out of engagement with the surface 17 and is engaged only by the wedge.

When it is desired to use the device for preventing buckling or twisting of the rails as well as spreading, I make use of rail engaging block members 24, as shown in Figs. 5, 6 and 7. Each of these block members is

similar to the extension 15 and is secured upon the widened portion 14 of the bar 10 by means of suitable bolts 25 which pass through the block member and through holes 26 in the bar. Each of these members 24 is formed on its face 27 toward the rail web with a T-shaped recess 28 corresponding to the recess 18 and is also provided with teeth 29.

When the device is used for preventing inward buckling as well as spreading of the rails, I provide a wedge member 30 within each of the recesses 28, this wedge member 30 being identical with the wedge member 19 and being held in position by a pin passing through selected holes in the same manner.

In the event that a rail is broken, it is apparent that my device may be used as a temporary repair. In such use I employ my device and dispose it so that the break in the rail is disposed between the extension 15 and the block 24 and in this way it will be seen that the broken ends may be held together until the proper repair may be made or until the rail is replaced.

While I have shown and described the preferred embodiment of my invention, it is of course to be understood that I reserve the right to make such changes in the form, construction, and arrangement of parts as will not depart from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A device of the character described comprising a pair of bars secured in end to end relation and disposable transversely of the trackway beneath track rails, an upward extension formed at the outer end of each bar and having an undercut recess for the reception of the base of a rail and having a flat face disposable against the outer side of the rail web, the flat face of one of said extensions being formed with a recess T-shaped in cross section, and a wedge member slidable within said recess and having its face engaging the rail web serrated, and means for maintaining the wedge in adjusted position.

2. A device of the character described comprising a pair of bars secured in end to end relation and disposable transversely of a trackway beneath track rails, an upward extension formed at the outer end of each bar and having an undercut recess for the reception of the base of a rail and having a flat face disposable against the outer side of the rail web, the flat face of one of said extensions being formed with a recess T-shaped in cross section, a wedge member slidable within said recess and having its face engaging the rail web serrated, and means for maintaining the wedge in adjusted positions, said means comprising a pin disposable through a selected one of a series of holes formed in the wedge member.

3. A device of the character described comprising a pair of members secured in end to end relation and disposable transversely of a trackway beneath track rails, an upward extension formed at the outer end of each member and having an undercut recess for the reception of the base of a rail and having a flat face disposable against the outer side of the rail web, the flat face of one of said extensions being formed with a recess T-shaped in cross section, a wedge member slidable within said recess and having its face engaging the rail web serrated, means for maintaining the wedge in adjusted position, and block members similar in formation to said extensions and detachably disposed upon said bars and having flat faces adapted for engagement against the inner faces of the rail webs, the flat faces of said block members being formed with recesses, and a wedge member disposed within each of said last named recesses and adapted to clampingly engage the rail web.

In testimony whereof I affix my signature.

SAMUEL ENGLISH.