No. 831,597. PATENTED SEPT. 25, 1906.

L. F. BOWMAN.

COMBINED RAIL GAGE AND BRACE.

APPLICATION FILED MAY 3, 1906.

Fig. 1.

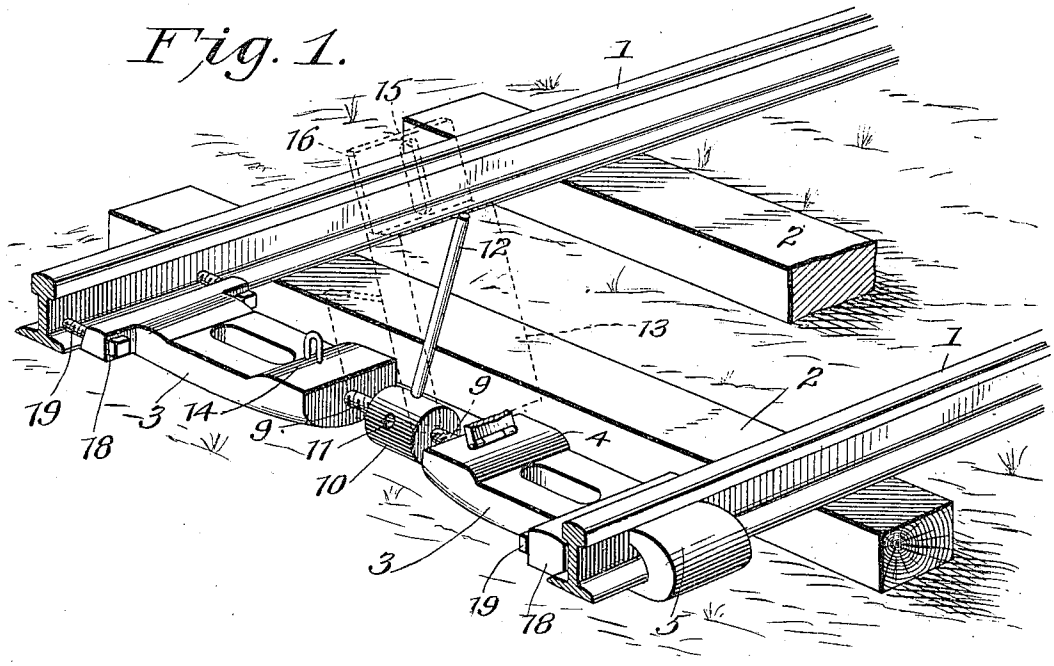


Fig. 2.

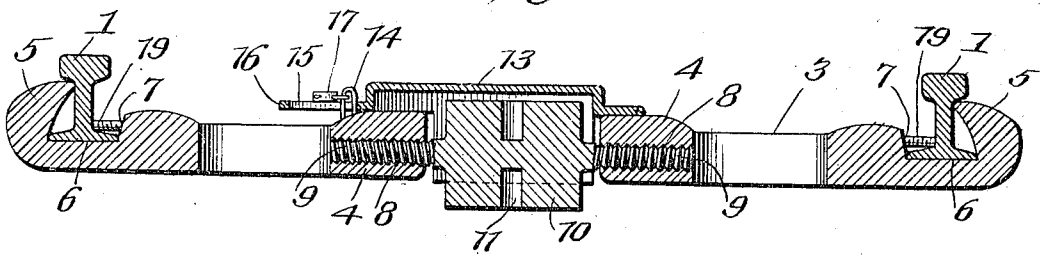
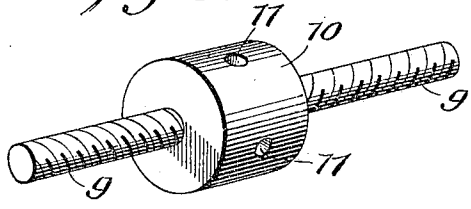


Fig. 3.



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COMBINED RAIL-GAGE AND BRACE.

No. 831,597. Specification of Letters Patent. Patented Sep. 25, 1906.

Application filed May 3, 1906. Serial No. 315,051.

To all whom it may concern:

Be it known that I, LEWIS FREMONT BOWMAN, a citizen of the United States, residing at Ankenytown, in the county of Knox and State of Ohio, have invented certain new and useful Improvements in a Combined Rail-Gage and Brace; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in combined rail-gages and braces for railway-tracks, and is adapted to be used particularly in connection with trackways where heavy curves are encountered.

My object is to provide a structure of this class which can be readily attached to the rails and rigidly secured thereto after the rails are placed in position upon the ties.

A further object is to provide means for adjusting the rails to or from each other.

A still further object is to provide means for covering the adjusting mechanism whereby said mechanism will be secured against access thereto except to railway-track attendants.

Other objects and advantages will be hereinafter made clearly apparent in the specification and pointed out in the claims.

In the accompanying drawings I have shown the preferred form of my invention.

In said drawings, Figure 1 is a perspective view of a section of trackway, showing one of my improved devices secured thereto and showing the adjusting mechanism in position to be operated. Fig. 2 is a central sectional view through the track-adjuster and brace, showing track-rails seated therein; and Fig. 3 is a perspective view of the adjusting mechanism removed.

Referring to the figures by numerals of reference, 1 indicates track-rails which may be of the usual or well-known structure, said track-rails being mounted upon ties 2. Disposed from one rail to the other and between the ties is my improved rail-brace and gage, said device comprising rail-engaging members 3, said rail-engaging members having heads 4 at their inner ends, while the extreme outer ends thereof are provided with shoulders 5, said shoulders being so constructed that they will engage the face of the rail and form a brace for the same. The rail-engaging members are also provided with ways 6 to provide seats for the rails 1, the shoulders 5 forming one wall of said ways, said walls being directed inwardly, while the opposite walls 7 are directed outwardly and substantially at the same angle as the walls on the opposite side of the ways, by which means the rail-engaging members may be placed upon the rails after said rails are secured in position upon the ties. The heads 4 are each provided with threaded bores 8, said bores extending through said heads from end to end and are adapted to receive threaded bolts 9, carried by the adjusting-head 10, said adjusting-head having a plurality of sockets 11 therein, in which is seated one end of a bar 12 when it is desired to rotate said adjusting-head. One of the bolts 9 is provided with right-hand threads, while the opposite bolt is provided with left-hand threads, so that when the adjusting-head 10 is rotated both of the rail-engaging members will be simultaneously moved toward or away from each other.

To prevent the adjusting-head 10 from being tampered with or rotated by any one other than the regular attendant, I have provided a housing 13, said housing being pivotally mounted upon one of the heads 4 and extending over the adjusting-head 10 and secured to the opposite head 4. To provide a suitable locking mechanism for the housing, I have provided a staple 14 on one of the heads 4, said staple entering a longitudinal slot 15 in a projection 16, formed on the free end of the housing. Referring more particularly to Fig. 2 of the drawings, it will be seen that the housing 13 is considerably longer than the adjusting-head 10 and that the projection 16 is of sufficient length to admit of the rail-engaging members 3 being disposed away from the adjusting-head 10. After the parts of my device have been properly adjusted the housing 13 is disposed in position over the adjusting-head and the staple 14 projected through the slot 15, after which a padlock 17 may be secured through the staple, and the housing thus securely locked in place. Each of the rail-engaging members is provided with shoulders 18, said shoulders being in juxtaposition to the ways, each of said shoulders being provided with threaded openings through which take binding-screws 19, said screws engaging the inner faces of the rails, thereby rigidly securing the rails in the ways 6.

In placing my improved device in operation upon the rails the rail-engaging members are disposed outwardly on the bolts 9

sufficiently to permit the rails to enter the ways 6, when the rail-engaging members are again disposed inwardly through the medium of the adjusting-head 10 until the rails are properly spaced apart, when the binding-screws 19 are passed through the shoulders 18 and into engagement with the rails. The housing 13 is then disposed over the adjusting-head 10 and locked thereover. If at any time the rails should become separated by expansion or similar causes, they can be readily adjusted by slightly turning the adjusting-head 10. It will now be seen that I have provided a device which can be readily adjusted to the rails and one that will be positive in its operation and is designed to be used more particularly upon portions of the trackway where heavy curves are encountered to reinforce the rails at this point and prevent them from spreading.

What I claim is—

1. A rail engaging and securing device comprising the combination with rail-engaging members having ways therein, shoulders at each end of said members, means to secure rails in the ways, heads at the opposite ends of said members having longitudinal bores therethrough; of threaded bolts adapted to take into said bores, a head carrying said bolts, said head having a plurality of sockets therein, and means carried by said members and extending over the operating-head to prevent access thereto.

2. A rail securing and supporting device comprising securing members having ways therein at their outer ends, brace members forming one wall of said ways, shoulders on said members, means extended through said shoulders adapted to engage the rails and hold the same in said ways, heads at the inner ends of said members having threaded sockets therein, threaded bolts adapted to take into said sockets, an adjusting-head carrying said bolts, said head having sockets therein adapted to receive an operating-bar, a housing pivotally secured to one of said heads, a projection at the opposite end of said housing having an elongated slot therein, and a staple adapted to extend through said slot and be secured therein.

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

LEWIS FREMONT BOWMAN.

Witnesses:
H. B. WELKER,
L. B. ACKERMAN.