

No. 756,248.

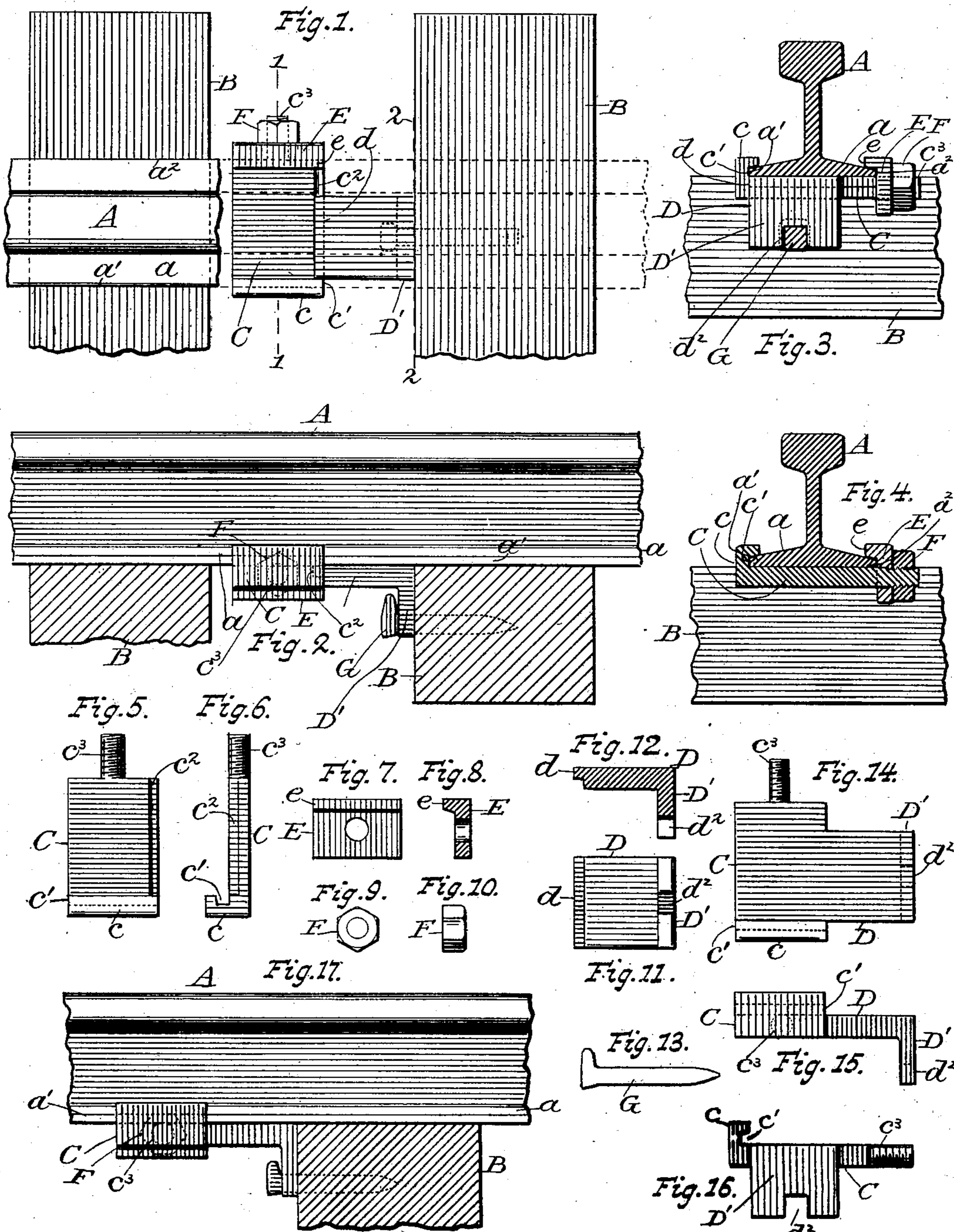
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MEANS FOR PREVENTING RAILS OF RAILWAY TRACKS FROM CREEPING.

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NO MODEL.



Witnesses.

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## MEANS FOR PREVENTING RAILS OF RAILWAY-TRACKS FROM CREEPING.

SPECIFICATION forming part of Letters Patent No. 756,248, dated April 5, 1904.

Application filed December 14, 1903. Serial No. 185,108. (No model.)

*To all whom it may concern:*

Be it known that I, JOSHUA D. LEGGE, a citizen of the United States, and a resident of Hancock, in the county of Delaware and State of New York, have invented new and Improved Means for Preventing Rails of Railway-Tracks from Creeping, of which the following is a specification.

This invention relates to improvements in means for preventing railway-rails from creeping on their ties; and it consists in the novel devices and elements and combinations and arrangements of devices and parts hereinafter described, and set forth in the claims.

The object of this invention is to provide with a railway-rail and one or more ties a rail-gripping device for gripping the base of a rail and an angular brace suitably connected with the rail-gripping device for bearing against the side of a tie toward which the rail is liable to creep or move. This object is effected by the means shown in the drawings, forming a part of this specification, in which—

Figure 1 is a top view of a rail and a tie with parts broken away for showing a plan of the devices in this invention. Fig. 2 is a side elevation with parts in section. Fig. 3 is a view taken at line 1 in Fig. 1 of parts embodying the invention when assembled and applied to the base of a rail. Fig. 4 is a section taken at line 2 in Fig. 1. Fig. 5 is a plan of the main base-clamping plate. Fig. 6 is a front edge view of the same. Fig. 7 is a plan of off-side base-clamping plate. Fig. 8 is a section of the same. Fig. 9 is an end view of the binding-nut. Fig. 10 is a section of the same. Fig. 11 is a plan of the angular brace. Fig. 12 is a section of the same. Fig. 13 is a view of the retaining-spike. Fig. 14 is a plan illustrating a modification showing the main base-clamping plate and an angular brace integrally connected in a single piece. Fig. 15 is a front view of the same. Fig. 16 is a side view of the same, and Fig. 17 is a view of this modification applied to the base of a rail and bearing against a tie.

Similar letters of reference refer to similar parts throughout the several views.

In the drawings, A is a railway-rail to which this invention is applied. *a* is the base of the rail, and B is a tie, preferably of wood, on which rail A is laid and secured as practiced.

C is the main base-clamping plate, which is applied to the lower side of the base *a* of the rail, which plate is provided with the angular flange *c*, having in it groove *c'* for receiving an edge margin *a'* of the base *a* of the rail, as shown in Figs. 3 and 4, and is provided in its forward edge with a recess *c''*, a portion of which receives the tongue *d* of the rear end of the angular brace D, (shown in Fig. 12,) and it is also provided with the screw-threaded stem *c'''* for receiving the off-side clamping-plate E, in which is provided the flange for engaging the top of the off-side edge margin of the base *a* of the rail. This off-side clamping-plate E is perforated for reception of screw-threaded stem *c'''* of plate C. Nut F is screwed on said screw-threaded stem *c'''* and tight on plate E, so as to bind the latter tight on the edge margin *a''* of the base of the rail and draw the edge margin *a'* into the groove *c'* in the angular flange *c* of plate C, so that this latter plate will be made to tightly clamp the base of the rail by its opposite edge margins *a'* *a''* and its lower side, as shown in Figs. 3 and 4.

D, Figs. 11 and 12, is the angular brace, provided, preferably on its rear end, with tongue *d* for seating in the recess *c''* and in portion thereof nearest to angular flange *c* made integral with plate C, as shown in Figs. 5 and 6. Its front end is provided with the downturned portion D', which is made with a front bearing-surface *d'* for bearing against the outer side of a suitable tie B, as shown in Fig. 2. I preferably provide in the lower edge of portion D' of the angular brace D notch *d''* for reception of spike G, Fig. 13, which latter is driven in tie B from its side toward which angular brace D is extended from plate C, as shown in Figs. 2, 3, and 4. The said spike operates to support the portion D' of said brace and retain the same in place from shifting sidewise.

In modification of this device as shown in

Figs. 14, 15, 16, and 17 the angular brace D is shown to be so connected with the main base-clamping plate C as to be integral with it and constitutes a single piece, which obviates the use of recess  $c^2$  in plate C and the tongue  $d$  in piece D. In this modification I employ the off-side clamping-plate E and nut F, screwed on screw-threaded stem  $c^3$ , provided on plate C for coaction with the grooved flange  $c$  of said plate C for tightly securing this plate and its connected angular brace in place on the base of the rail with the latter in bearing against the tie, as shown in Fig. 17. If preferred, a key-seat may be provided in stem  $c^3$  for reception of a key for forcing clamping-plate E toward the grooved angular flange  $c$  of plate C for forcing the said plate E into coaction with said grooved angular flange for tightly clamping the base of the rail. This substitute for a screw being a well-known device is not shown.

When the above-described parts are applied to the base of a railway-rail at one or more places thereof, as above described and shown in Figs. 1, 2, 3, 4, and 17, with the angular brace having bearing against the tie, as shown, the rail A will be securely held from being gradually though slowly moved forward in direction toward tie B by the action of the wheels of locomotives running on the rail and revolving in direction from the side of the tie against which the angular brace D' has bearing.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In means for preventing railway-rails from creeping on their ties by action of the wheels of locomotives, a device consisting of a main base-clamping plate for application to the under side of the base of a rail and provided with an angular flange for receiving an edge margin, an off-side clamping-plate for clamping the opposite edge margin of the rail, means for holding said off-side clamping-plate and the grooved angular flange of the main base-clamping plate drawn toward each other so as to tightly clamp the opposite edges of the base of the rail, and an angular brace suitably connected with said main base-clamping plate for bearing against the side of a tie.

2. In a means for preventing railway-rails from being moved on the ties supporting said rail, the combination with a railway-rail and a tie supporting the same, of the main base-clamping plate having with one end a grooved angular flange and at the opposite end a stem adapted to receive an off-side grooved clamping-plate and means for crowding the latter plate toward the grooved angular flange of said main base-clamping plate, of an angular brace suitably connected with the latter plate and supported from the same, with the downturned portion of said brace bearing against the side of the tie, and a means connected with said tie and operating to support the said downturned portion of said brace.

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Witnesses:

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