

C. W. REINOEHL & B. L. WEAVER.
H. B. REINOEHL, EXECUTRIX OF C. W. REINOEHL, DEC'D.
ANTICREEPER FOR RAILROAD RAILS.
APPLICATION FILED JUNE 14, 1910.

1,020,370.

Patented Mar. 12, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

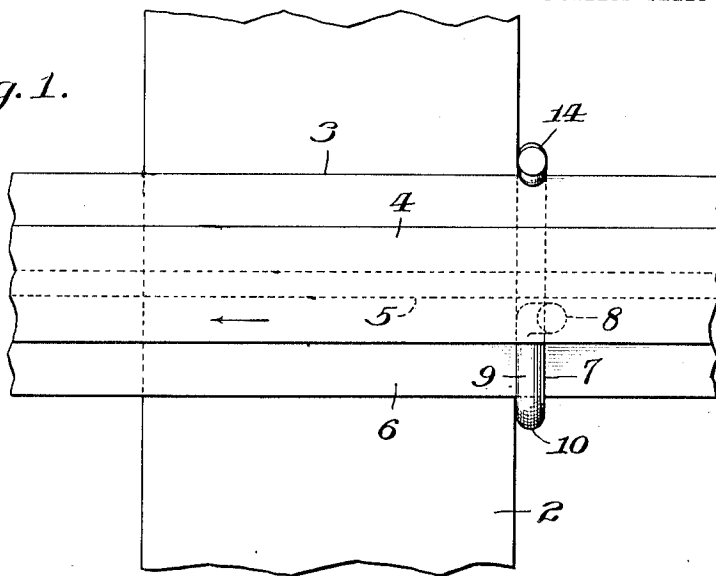


Fig. 2.

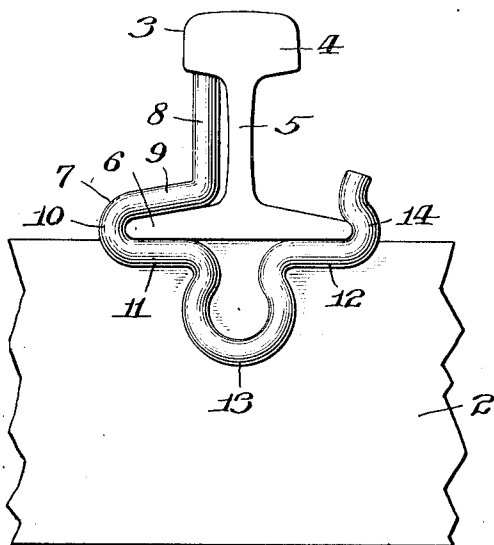
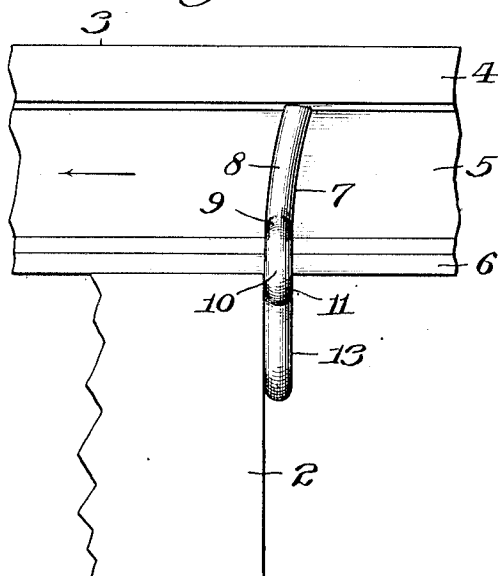


Fig. 3.



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2 SHEETS—SHEET 2.

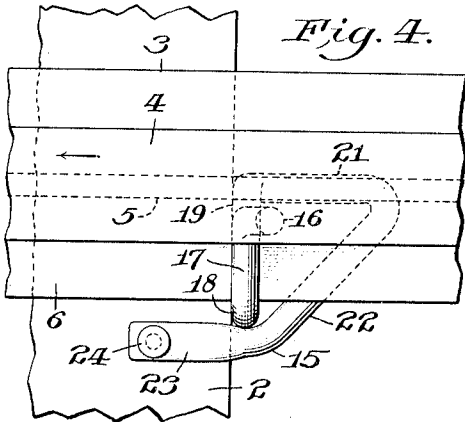


Fig. 4.

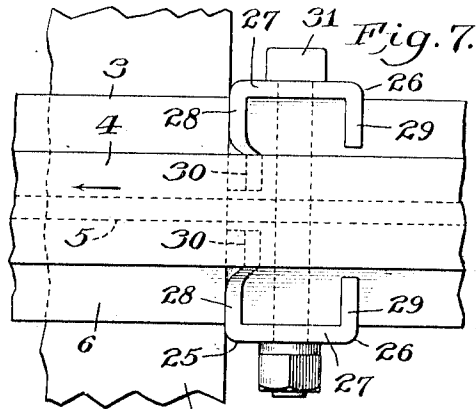


Fig. 7.

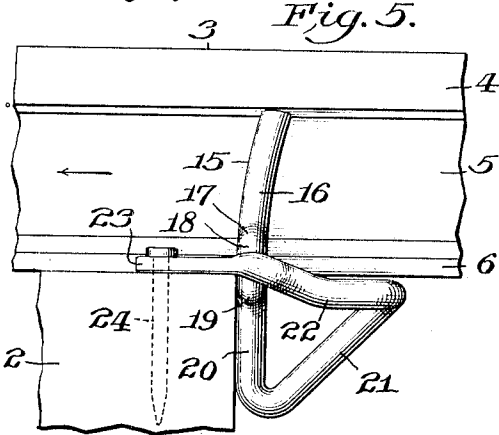


Fig. 5.

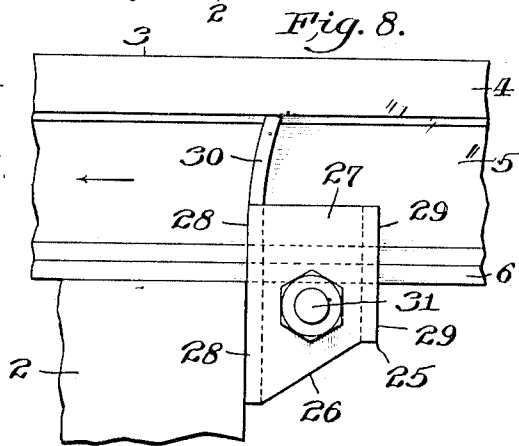


Fig. 8.

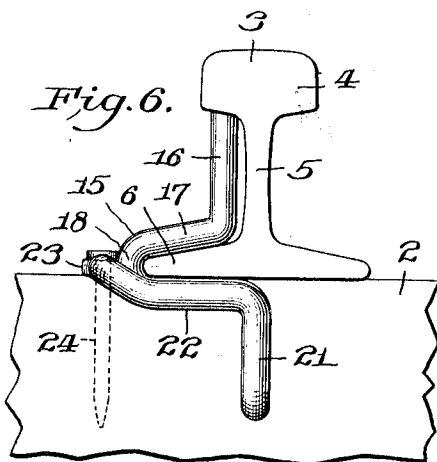


Fig. 6.

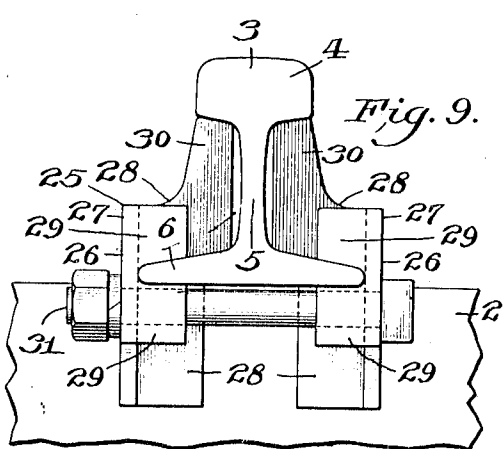


Fig. 9.

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UNITED STATES PATENT OFFICE.

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ANTICREEPER FOR RAILROAD-RAILS.

1,020,370.

Specification of Letters Patent.

Patented Mar. 12, 1912.

Application filed June 14, 1910. Serial No. 566,710.

To all whom it may concern:

Be it known that we, CHARLES W. REINOEHL, citizen of the United States, residing at Steelton, Dauphin county, State of Pennsylvania, and BENT L. WEAVER, citizen of the United States, residing at Middletown, Dauphin county, State of Pennsylvania, have invented certain new and useful Improvements in Anticreepers for Railroad-Rails, of which the following is a specification.

The object of our invention is to provide a novel, simple and efficient anticreeping device for railroad rails, which, when applied to the rail will prevent longitudinal displacement or creeping thereof.

To this end the invention consists in providing an anticreeper having means for engaging the bottom of the head and top of the base flange of the rail and the cross-tie in such manner that any tendency of the rail to creep will force parts of the anticreeper into firmer engagement with the rail and prevent the creeping thereof; and the invention consists further in constructing the anticreeper in such manner that one or more of its parts may be pressed into engagement with the rail by the spring action of one or more parts of the anticreeper, thus holding it firmly in engagement with the rail and in constant readiness for action under all conditions, as will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a plan view of a portion of a railroad cross-tie, a railroad rail thereon and one form of an anticreeper embodying our invention applied thereto. Fig. 2 is an end elevation of the parts shown in Fig. 1. Fig. 3 is a side elevation of the parts shown in Fig. 1. Fig. 4 is a plan view of a portion of a railroad cross-tie, a railroad rail thereon and another form of an anticreeper embodying our invention applied thereto. Fig. 5 is a side elevation of the parts shown in Fig. 4. Fig. 6 is an end elevation of the parts shown in Fig. 4. Fig. 7 is a plan view of a portion of a railroad cross-tie, a railroad rail thereon and another form of an anticreeper embodying our invention applied thereto. Fig. 8 is a side elevation of the parts shown in Fig. 7. Fig. 9 is an end elevation of the parts shown in Fig. 7.

Referring first to Figs. 1, 2 and 3, 2 designates a cross-tie and 3 a railroad rail supported thereon. The rail 3 is of usual construction comprising a head or tread portion 4, a vertical web 5 and a base flange 6. Engaged with the cross-tie 2 and rail 3, is an anticreeper 7, the same being one form of embodiment of our invention and of the following construction:—Located on one side of the rail 3 is a part 8, which extends between and is engaged with the bottom of the rail head 4 and the top of the base flange 6. Extending outwardly from the lower portion of the part 8 and over the top of the base flange 6, is a part 9, which is connected by a loop 10 to a part 11 extending beneath the base flange 6 and also beneath the part 9, the parts 9, 10 and 11 embracing one side of the base flange 6. The part 11 is connected to a part 12 by a centrally-arranged loop 13, the part 12 being located in line with the part 11 and directly beneath the opposite side of the base flange 6. The outer end of the part 12 is provided with a hook or loop 14, which embraces the side of the base flange 6 opposite to the side embraced by the loop 10, thus holding the anticreeper in place upon the rail and preventing the part 8 from being displaced laterally from its position between the rail head 4 and base flange 6. In applying the anticreeper 7 to the rail 3, the parts 8, 9, 10 and 11 are first applied to one side of the rail whereupon the hook or loop 14 may be sprung outwardly owing to the central loop 13 and then engaged with the base flange 6, after which it will be held in firm engagement therewith by the spring action of the loop 13. When the anticreeper 7 is engaged with the rail 3, as shown in the drawings, the lower end of the part 8 is engaged with the top of the base flange 6 in advance of the engagement of the upper end of the part 8 with the bottom of the rail head 4 and the forward faces of the parts 11, 12 and 13 beneath the rail 3 are engaged with the side of a cross-tie. It will thus be seen that should the rail 3 attempt to creep forwardly, or in the direction of the arrows shown in Figs. 1 and 3, the lower end of the part 8 will be prevented from moving by the parts of the anticreeper engaged with the cross-tie 2. It therefore follows that the instant the rail attempts to

creep forwardly, it will tend to bring the part 8 into vertical position and cause the upper end thereof to bind against the rail head 4 and the lower end thereof to bind against the base flange 6, and thus cause the anticreeper to firmly grip the rail and prevent it from creeping. The length of the part 8 is greater than the distance between the rail head 4 and base flange 6; and, normally, or before the anticreeper 7 is applied to the rail, the part 8 is substantially in vertical position or in the same plane with the remaining parts of the anticreeper. When the anticreeper is applied to the rail, the upper portion of the part 8 is sprung rearwardly to permit it to be inserted between the rail head 4 and base flange 6, after which the upper end of the part 8 exerts a forward pressure against the rail head 4, and a downward pressure against the base flange 6.

By the construction just described, it will be seen that the anticreeper 7 is firmly held in engagement with the rail 3 by the spring action of parts of the anticreeper, and that the spring action of said parts will compensate for any expansion and contraction of the metal and hold the anticreeper in gripping position and in constant readiness for action under all conditions.

Referring now to Figs. 4, 5 and 6, showing a modification of our invention, 2 designates a cross-tie and 3 a rail, the same as shown in Figs. 1, 2 and 3; and 15 designates a modified form of anticreeper, which is of the following construction:—Located on one side of the rail 3 is a part 16, which extends between and is engaged with the bottom of the rail head 4 and the top of the base flange 6. Extending outwardly from the lower portion of the part 16 and over the top of the base flange 6, is a part 17, which is connected by a loop 18 with a part 19 extending beneath the base flange 6 and also the part 17; the parts 17, 18 and 19 embracing one side of the base flange 6, and the parts 16, 17, 18 and 19 corresponding with the parts 8, 9, 10 and 11, respectively, of the parts of the construction shown in Figs. 1, 2 and 3. The inner end of the part 19 is connected to a downwardly extending part 20, the lower end of which is connected to an upwardly and rearwardly extending part 21. The rearward end of this part 21 is connected to an outwardly and forwardly inclined part 22, the forward end of which terminates in a forwardly extending part or arm 23. This part or arm 23 is engaged with the outer face of the loop 18 and also with the top of the cross-tie 2, and is provided with a hole therein through which a nail or spike 24 is driven into the underlying cross-tie 2. The nail or spike 24 serves to prevent the lateral displacement of the part 16 from its position between the rail head 4 and base

flange 6, and holds the anticreeper 15 in place. When the anticreeper 15 is engaged with the rail 3, as shown in the drawings, the lower end of the part 16 is engaged with the top of the base flange 6 in advance of the engagement of the upper end of the part 16 with the bottom of the rail head 4 and the forward faces of the parts 19 and 20 are engaged with the side of the cross-tie 2. It will thus be seen that should the rail 3 attempt to creep forwardly or in the direction of the arrows shown in Figs. 4 and 5, it will be prevented from so creeping by the part 16 of the anticreeper 15 precisely as it is prevented by the part 8 of the anticreeper 7. The length of the part 16 is greater than the distance between the rail head 4 and base flange 6; and, normally, or before the anticreeper 15 is applied to the rail, the part 8 is substantially in vertical position or in the same plane with the parts 17, 18, 19 and 20. When the anticreeper 15 is applied to the rail, the upper portion of the part 16 is sprung rearwardly and inserted between the rail head 4 and base flange 6, after which the upper end of the part 8 exerts a forward pressure against the rail head 4 and a downward pressure against the base flange 6. Before the nail or spike 24 is driven into the cross-tie 2, the arm 23 is a slight distance above the top of the cross-tie, so that when the nail is driven into the tie, the arm 23 will be forced down upon the tie and held thereon by the nail, thus increasing the spring action of the anticreeper in forcing the part 16 into engagement with the rail head 4 and base flange 6.

Referring now to Figs. 7, 8 and 9, showing a further modification of our invention, 3 designates a rail and 4 a rail head, the same as shown in Figs. 1, 2 and 3; and 25 designates a further modified form of anticreeper, which is of the following construction:—Located on each side of the rail 3 are two members 26, 26, both of which are formed from blanks of sheet steel and which are identical in construction, excepting that one is oppositely disposed with relation to the other, as shown in the drawings, and therefore the following description of one will suffice for both:—27 is a body portion parallel to and engaged with one side of the base flange 6. Extending toward the plane of the rail web 5 from the forward and rearward ends of the body portion 27 are parts 28 and 29, respectively, which embrace and are fitted to the upper and lower faces of the base flange 6. The upper portion of the part 28 is provided with an inward and upward extension or arm 30, which extends between and is engaged with the bottom of the rail head 4 and the top of the base flange 6, the engagement of the part 30 with the top of the base flange 6 being in advance of the engagement of the part 30 with the bot-

tom of the rail head 4, when the parts are in the positions shown in the drawings. The length of each part 30 is greater than the distance between the rail head 4 and base flange 6; and, normally, or before the members 26 are applied to the rail, the parts 30 are substantially in vertical position or in the same plane with the parts 28. When the members 26 are applied to the rail, the upper portions of the parts 30 are sprung rearwardly to permit them to be inserted between the rail head and base flange 6, after which the upper ends of the parts 30 exert a forward pressure against the rail head and a downward pressure against the base flange 6. The members 26 are held in position upon the rail by a suitable bolt 31 extending therethrough, as clearly shown in the drawings, and when the anticreeper 25 is in position, the parts 28 of the members 26 below the rail 3 are engaged with the cross-tie 2. It will therefore be seen that should the rail 3 attempt to creep forwardly or in the direction of the arrows shown in Figs. 7 and 8, the lower ends of the parts 30 will be prevented from moving by the parts 28. It therefore follows that the instant the rail attempts to creep forwardly, it will tend to bring the part 30 into vertical position, and cause it to grip the rail and prevent the creeping thereof similarly to the action of the part 8 of the anticreeper 7 shown in Figs. 1, 2 and 3.

We desire it to be understood that the constructions herein shown and described may be still further modified without departing from our invention.

One of the important features of our invention to which we broadly lay claim, is the employment of a part engaging the bottom of the rail head and the upper face of the base flange in advance of its engagement with the rail head and having its lower part prevented from moving forwardly by the cross-tie; also this part being held in position against the rail head by the spring action of one of the parts of the anticreeper.

We claim:—

1. The combination with a cross-tie, and a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange in advance of its engagement with the rail head, and means engaged with the tie and preventing forward movement of the lower portion of said part whereby the tendency of the rail to creep will cause said part to bind against the rail head and base flange.

2. The combination with a cross-tie, and a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange, and means engaged with the tie and preventing

forward movement of said part, said part being pressed into engagement with the rail by the spring action of one of the parts of the anticreeper.

3. The combination with a cross-tie, and a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange in advance of its engagement with the rail head, and means engaged with the tie and preventing forward movement of the lower portion of said part, said part being pressed forwardly against the rail head by the spring action of one of the parts of the anticreeper.

4. The combination with a cross-tie, and a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange in advance of its engagement with the rail head, means engaged with the tie and preventing forward movement of the lower portion of said part whereby the tendency of the rail to creep will cause said part to bind against the rail head and base flange, and means preventing displacement of said part laterally from the rail.

5. The combination with a cross-tie, and a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange, means engaged with the tie and preventing forward movement of said part, said part being pressed into engagement with the rail by the spring action of one of the parts of the anticreeper, and means preventing displacement of said part laterally from the rail.

6. The combination with a cross-tie, and a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange in advance of its engagement with the rail head, means engaged with the tie and preventing forward movement of the lower portion of said part, said part being pressed forwardly against the rail head by the spring action of one of the parts of the anticreeper, and means preventing displacement of said part laterally from the rail.

7. The combination with a cross-tie, and a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange in advance of its engagement with the rail head, a second part projecting from the first named part and embracing one side of the rail flange and engaging the tie beneath the rail, and means preventing displacement of said parts laterally from the rail, the first

named part being pressed forwardly against the rail head by the spring action of one of the parts of the anticreeper.

8. The combination with a cross-tie, and
 5 a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange in advance of its engagement with the
 10 rail head, a second part projecting from the first named part and embracing one side of the rail flange and engaging the tie beneath the rail, and means engaging the other side of the rail flange and preventing displacement of said parts laterally from the rail,
 15 the first named part being pressed forwardly against the rail head by the spring action of one of the parts of the anticreeper.
9. The combination with a cross-tie, and
 20 a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange in advance of its engagement with the
 25 rail head, a second part projecting from the first named part and embracing one side of the rail flange and engaging the tie beneath the rail, and means engaging the other side of the rail flange and preventing displacement of said parts laterally from the rail,
 30 the first named part being pressed forwardly

wardly against the rail head by the spring action of one of the parts of the anticreeper, and said means being pressed against the base flange by the spring action of one of the parts of the anticreeper. 35

10. The combination with a cross-tie, and a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange, and a second part projecting from the first named part and embracing both sides of the base flange and engaged with the cross-tie. 40

11. The combination with a cross-tie, and a railroad rail having a head, a vertical web and a base flange, of an anticreeper provided with a part engaged with the bottom of the rail head and the top of the base flange, and a second part projecting from the first named part and having a loop formed therein below the rail and embracing both sides of the base flange and engaged with the cross-tie. 45

In testimony whereof we affix our signatures in the presence of two witnesses. 55

CHARLES W. REINOEHL.
 BENT L. WEAVER.

Witnesses:

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 S. I. HARPER.