C. W. REINOEHL & W. M. HENDERSON.

H. B. REINOEHL, ADMINISTRATRIX OF C. W. REINOEHL, DEC'D.

CAR DERAILING DEVICE.

APPLICATION FILED NOV. 15, 1909.

987,401. Patented Mar. 21, 1911.

Fig. 1.

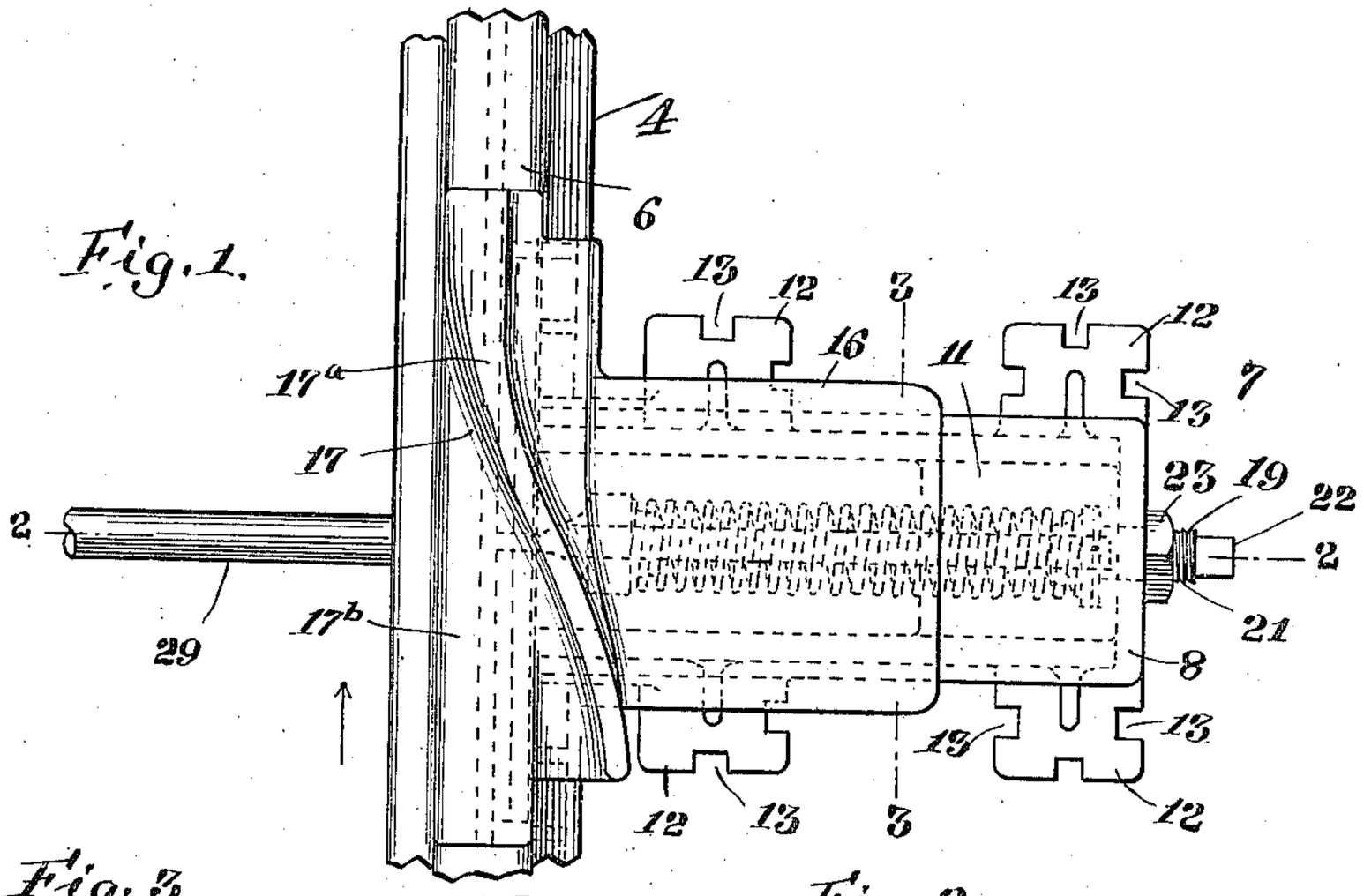


Fig. 3.

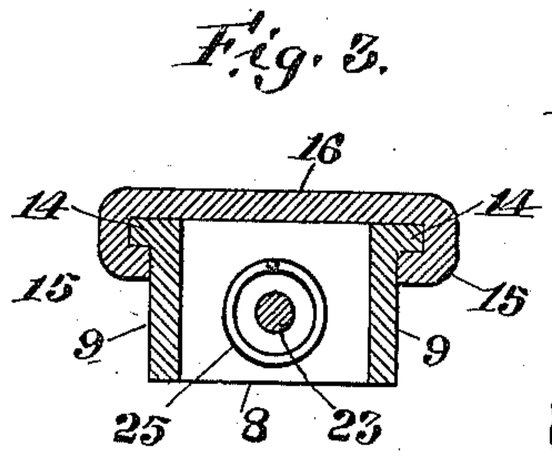


Fig. 2.

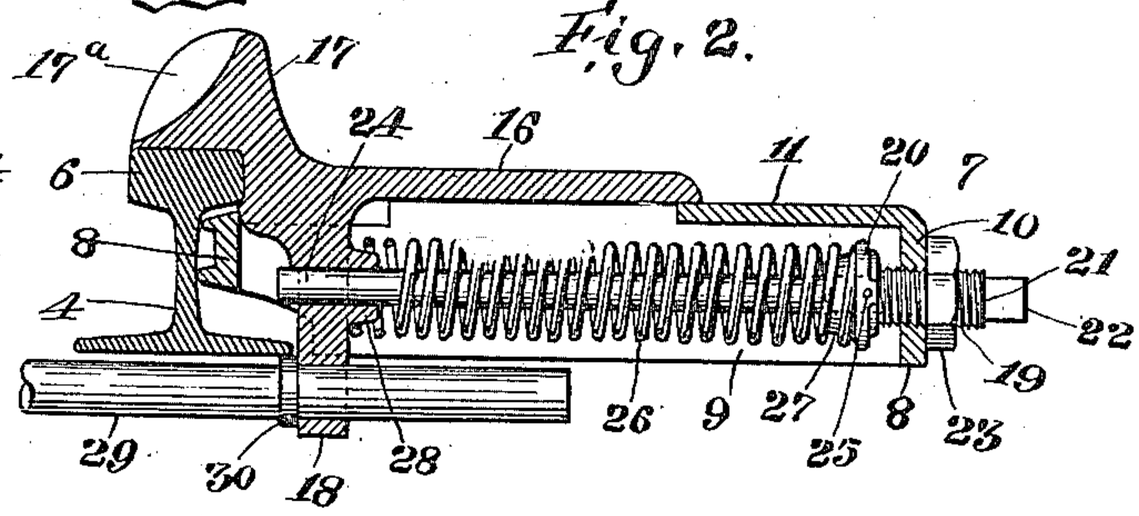


Fig. 4.

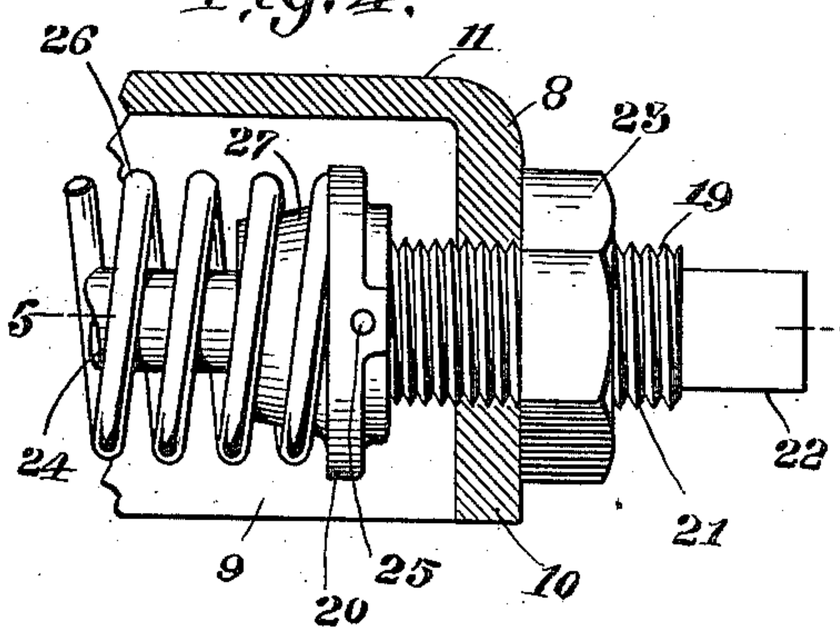
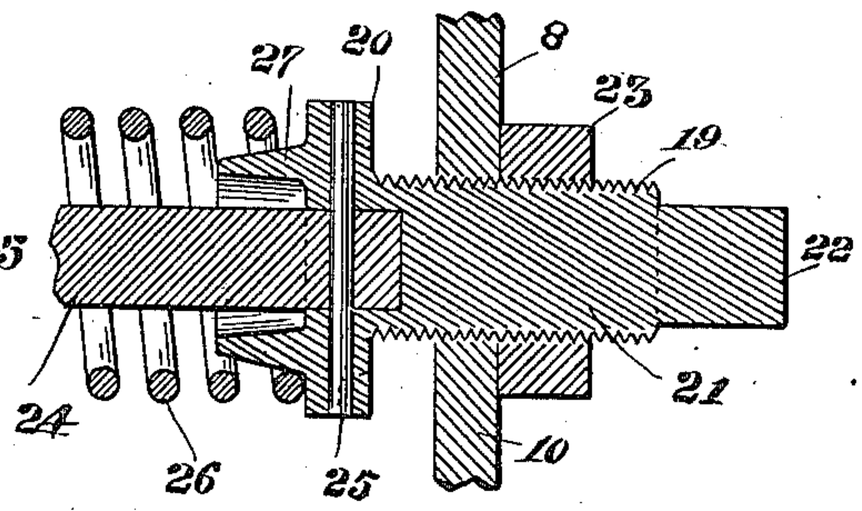


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES W. REINOEHL AND WILLIAM M. HENDERSON, OF STEELTON, PENNSYLVANIA; HELEN B. REINOEHL, OF STEELTON, PENNSYLVANIA, ADMINISTRATRIX OF SAID CHARLES W. REINOEHL, DECEASED.

CAR-DERAILING DEVICE.

987,401. Specification of Letters Patent. Patented Mar. 21, 1911.

Application filed November 15, 1909. Serial No. 528,032.

To all whom it may concern:

Be it known that we, CHARLES W. REINOEHL and WILLIAM M. HENDERSON, citizens of the United States, residing at Steelton, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Car-Derailing Devices, of which the following is a specification.

This invention relates to that class of car-derailing devices for railroad rails wherein are employed a support, a derailing member thereon and movable toward and from the adjacent rail, and a spring tending to move the derailing member into operative relation to the rail.

The object of the invention is to provide, in a car-derailing device of this character, a novel, simple and efficient mounting for the spring having provision whereby the spring may be adjusted to vary its pressure against the derailing member to meet varying requirements.

To this end the invention consists in the novel construction and combinations of parts, which will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a plan view of a portion of a railroad rail showing our improved car-derailing device applied thereto. Fig. 2 is a vertical section on line 2—2 of Fig. 1. Fig. 3 is a vertical section on line 3—3 of Fig. 1. Fig. 4 is a detail, enlarged, of the spring-adjusting means and adjuncts shown at the right hand of Fig. 2. Fig. 5 is a section on line 5—5 of Fig. 4.

4 designates a portion of a railroad rail of well known form, including the head or tread portion 6; and 7 designates our improved car-derailing device which is applied to the rail 4, and is of the following construction.

Arranged adjacent the rail 4 is a hollow support 8, comprising side walls 9, 9, a rear wall 10, and a top or cover 11. The support 8 is provided with lateral extensions 12 having spike holes 13 therein by means of which the support may be secured to the usual underlying cross-ties (not shown), which support the rail, to hold said support in proper relation to the rail.

Extending outwardly from the top of the side walls 9, 9 are flanges 14 forming horizontal guideways, to which are fitted the downwardly and inwardly projecting flanges 15 of a carriage 16 resting upon the support 8, in a manner to permit said carriage to be moved toward and from the rail 4.

Formed on the carriage 16 is a car derailing member 17 comprising a floor portion 17^b adapted to occupy a position on the rail head 6 and a flange 17^a extending from a point beyond the inner side of the rail head 6 to and over the rail head 6 and over the floor portion 17^b to the outer side of the rail head, whereby car wheels may be derailed by rolling upon the floor portion 17^b and engaging the flange 17^a. The derailing member 17 is adapted to occupy the operative position shown in the drawings, wherein said member extends over the head 6 of the rail in a manner to insure the derailment of a car approaching in the direction of the arrow in Fig. 1; and the carriage 15 is adapted to be moved on its horizontal guideways 14 to move the derailing member 17 away from the rail 4 to an inoperative position and back again to the operative position shown.

The derailing member 17 is moved to the operative position shown and held therein by the following means. The top 11 of the support 8 is provided with an opening therein covered by the carriage 16, and extending downwardly through said opening is a spring-engaging part or lug 18 formed on the under side of the carriage 16 adjacent the rail 4 and arranged opposite the rear wall 10 of the support 8. Extending freely through an opening in the lug 18 is one end of a rod 24, the other end of which is connected to a spring-engaging member 19. The member 19 comprises a head 20 arranged within the support 8 and having a screw-threaded shank 21 screwed into an opening in the rear wall 10 of the support and provided at its outer end with a square head 22 by means of which it may be turned to adjust the member 19 toward and from the spring-engaging lug 18. A lock-nut 23 is screwed on to the shank 21 against the outer face of the wall 10 to lock the spring-engaging member 19 to the wall 10 in the desired position of adjustment. Encircling the rod 24 is a spring 26. One end of this spring extends around and is supported by an extension 27 projecting inwardly from the head 20 of the member 19; and the

other end of the spring encircles and is supported by an extension 28 projecting from the face of the lug 18 opposite the rear wall 10. The purpose of the rod 24 is to prevent accidental displacement of the spring 26 from proper relation to the other parts of the device. In the construction just described it will thus be seen that the action of the spring 26 against the part 18 forces the movable carriage 16 and therewith the derailing member 17 toward the rail 4 and holds the derailing member normally in the operative position shown in the drawings, from which it may be moved to an inoperative position away from the rail and against the action of the spring 26. When it is desired to vary the pressure of the spring 26, the nut 23 may be unscrewed from engagement with the wall 10, and a suitable tool applied to the square head 22 of the member 19 to turn the shank 21 to adjust it either toward the lug 18 to increase the pressure of the spring, or away from the lug 18 to decrease the pressure of the spring. After the member 19 has been adjusted to provide the required pressure of the spring 26, the locknut 23 may be tightened against the wall 10 to lock the member 19 in place. The movement of the derailing member 19 out of the operative position against the action of the spring 18 is usually effected by the operation of a rod 29 extending through an opening in the lug 18 and provided with a collar 30 adapted to engage the lug 18.

We claim:—

1. The combination of a rail, a support adjacent the rail, a carriage fitted to said support and movable thereon toward and away from the rail, said carriage being provided with a derailing member movable therewith into and out of operative relation to said rail, and said carriage being also provided with a spring-engaging part having an opening therein, a spring-engaging member provided with means for adjustably engaging it with said support, a rod having one end secured to said spring-engaging member and the other end extended into said opening, and a spring encircling said rod and acting upon said spring-engaging part and said spring-engaging member and forcing said carriage toward said rail.

2. The combination of a rail, a support adjacent the rail, a carriage fitted to said support and movable thereon toward and away from the rail, said carriage being provided with a derailing member movable therewith into and out of operative relation to said rail, said carriage being also provided with a spring engaging part having an opening therein, and said support having a screw-threaded opening therein alined with the opening in said part, a screw screwed into and through said screw-threaded opening and having a spring engaging head on the inner end thereof, a rod having one end secured to said head and the other end extended into the opening in said part, and a spring encircling said rod and acting on said part and said head and forcing said carriage toward said rail.

3. The combination of a rail, a support adjacent the rail, a carriage fitted to said support and movable thereon toward and away from the rail, said carriage being provided with a derailing member movable therewith into and out of operative relation to said rail, said carriage being also provided with a spring engaging part having an opening therein, and said support having a screw-threaded opening therein alined with the opening in said part, a screw screwed into and through said screw-threaded opening and having a spring engaging head on the inner end thereof, said head having an axial opening therein, a rod having one end slidably fitted to the opening in said part and the other end extended into the opening in said head, a transverse pin extending through said head and said rod and securing them together, and a spring encircling said rod and acting on said part and said head and forcing said carriage toward said rail.

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

CHARLES W. REINOEHL.
WILLIAM M. HENDERSON.

Witnesses:
WM. HARRISON SMITH,
E. M. WARE.

Correction in Letters Patent No. 987,401.

It is hereby certified that in Letters Patent No. 987,401, granted March 21, 1911, upon the application of Charles W. Reinoehl and William M. Henderson, of Steelton, Pennsylvania, for an improvement in "Car-Derailing Devices," an error appears requiring correction as follows: In the grant and in the heading to the printed specification Helen B. Reinoehl is erroneously described as "Administratrix of said Charles W. Reinoehl, deceased," whereas she should have been described as *Executrix* of said Reinoehl; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 13th day of June, A. D. 1911.

[SEAL.]

C. C. BILLINGS,

Acting Commissioner of Patents.