

W. SANFORD.
RAILWAY TRUCK GUARD.
APPLICATION FILED JAN. 24, 1907.

Fig. 1

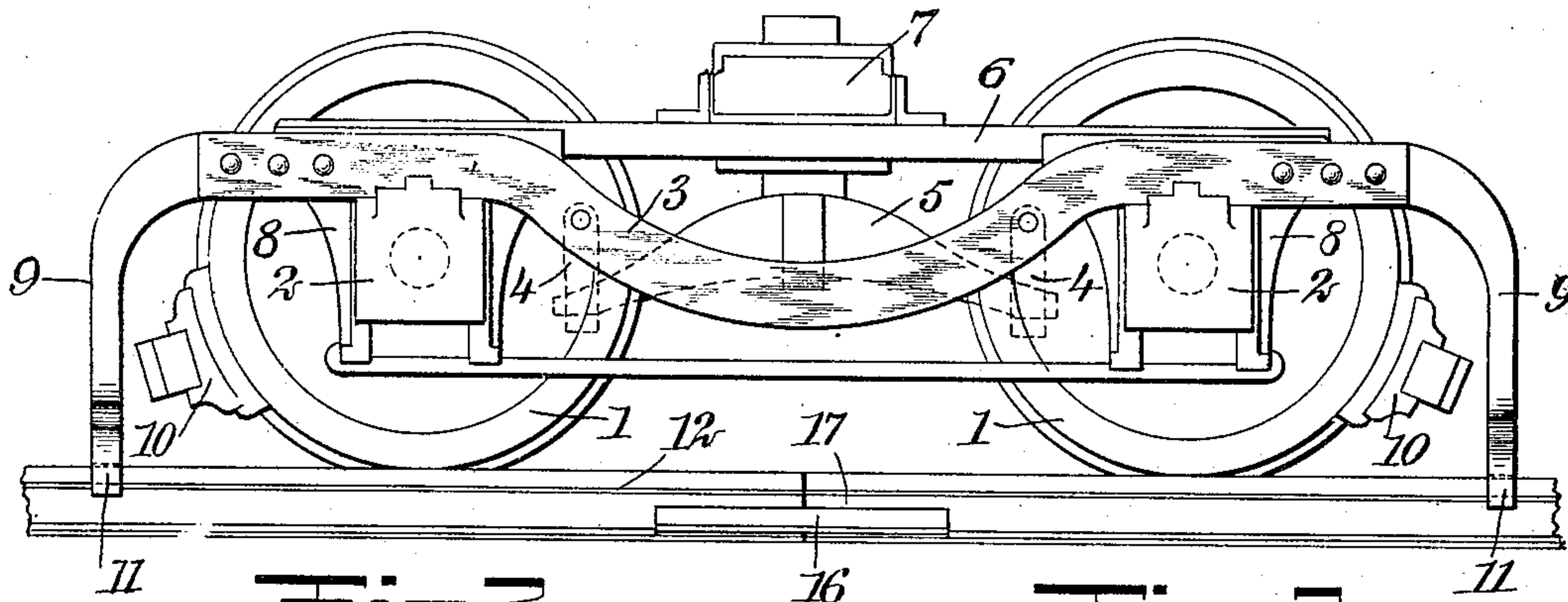


Fig. 2

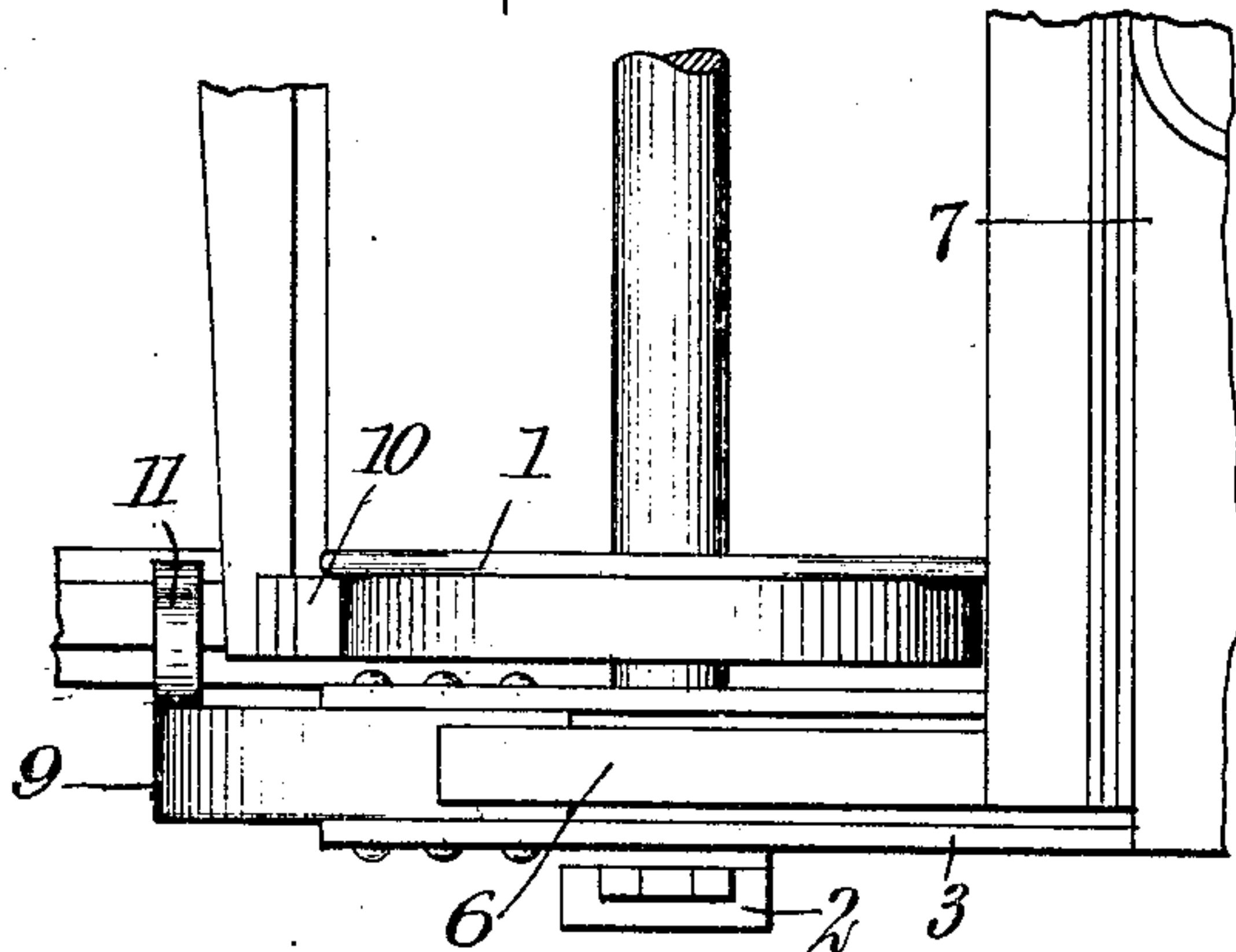


Fig. 3

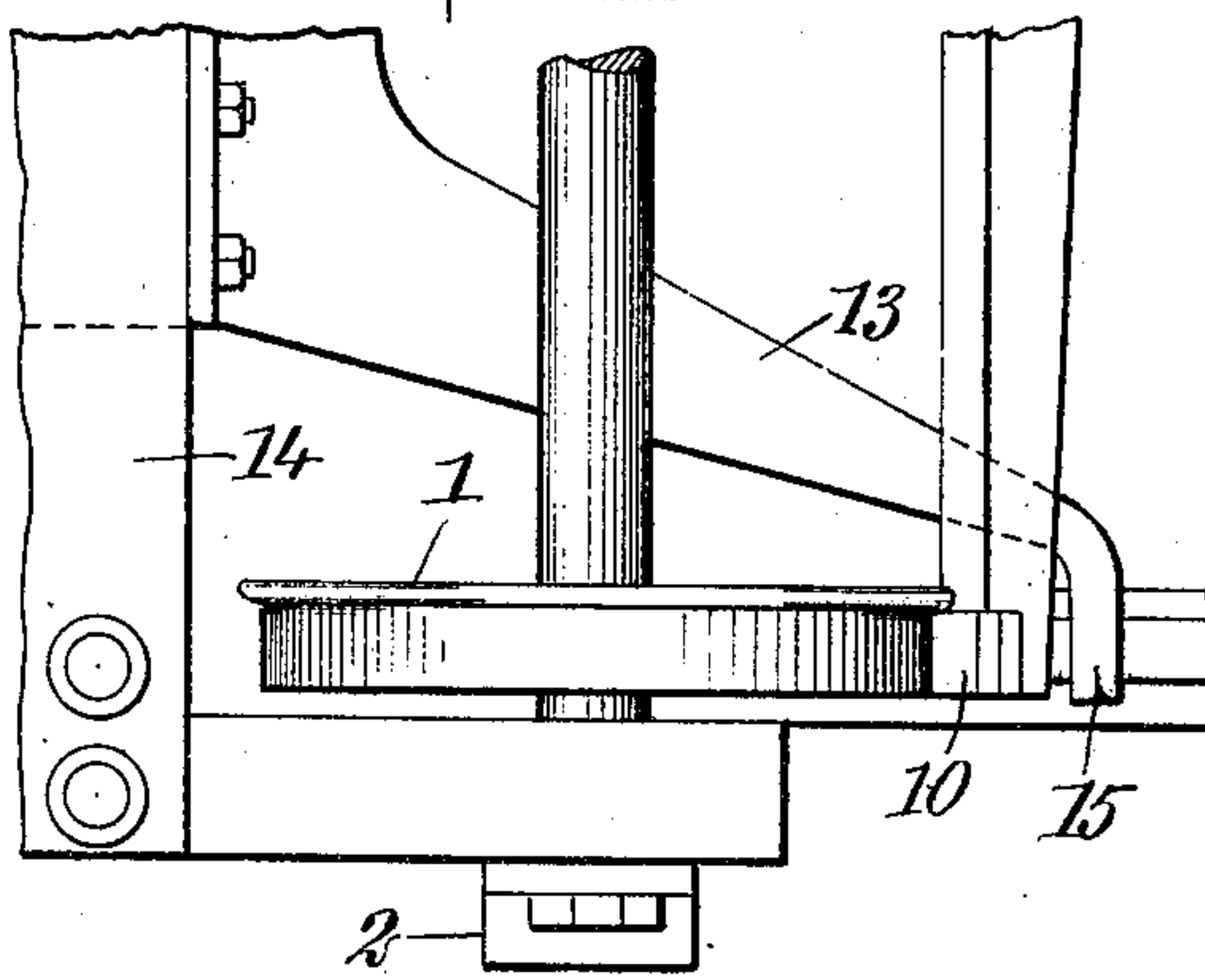
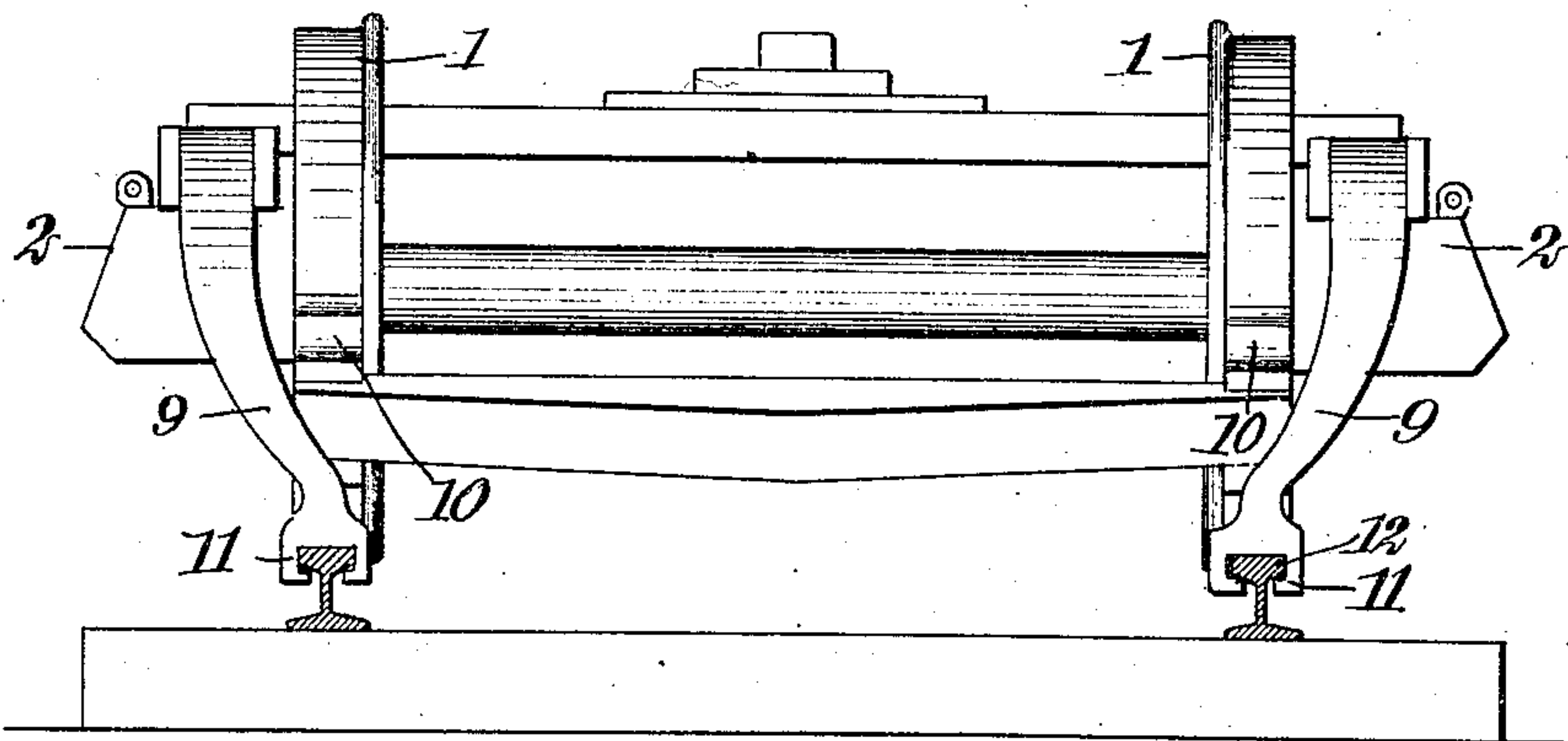


Fig. 4



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM SANFORD, OF VINELAND, NEW JERSEY.

RAILWAY-TRUCK GUARD.

No. 873,795.

Specification of Letters Patent.

Patented Dec. 17, 1907.

Application filed January 24, 1907. Serial No. 353,827.

To all whom it may concern:

Be it known that I, WILLIAM SANFORD, a citizen of the United States, and a resident of Vineland, in the county of Cumberland and State of New Jersey, have invented a new and Improved Railway-Truck Guard, of which the following is a full, clear, and exact description.

This invention has for its object to provide means adapted to be attached to a truck of a railway car of any desired construction, and to grip the railway track so as to remove all obstacles from said track and prevent the car wheels from becoming derailed, thereby guarding against accidents and enabling the cars to be run with safety at a greatly increased rate of speed. Such objects I accomplish by the means illustrated in the accompanying drawings, in which drawings like characters of reference indicate like parts throughout the views, and in which

Figure 1 is a side elevation of a car truck embodying my invention; Fig. 2 is a plan of a corner of a truck having my invention applied thereto; Fig. 3 is a plan of a corner of a truck showing a modification of my invention; and Fig. 4 is an end view of the device shown in Fig. 1.

As illustrated in the drawings, a car truck is provided with wheels 1 and bearing boxes 2 of ordinary construction, said boxes being mounted upon the wheel axles and attached to beams 3 extending longitudinally of the truck. Hangers or stirrup 4 are connected with the beams 3 and support the ends of leaf springs 5 upon which are mounted sills 6 having a truck bolster 7 attached thereto. Yokes 8 are attached to the sills 6 and provided with guides of ordinary construction, adapted to engage corresponding ways formed in the sides of the bearing boxes 2. By means of such construction, the beams 3 serve as trusses to support the springs 5 and sills mounted thereon. Attached to the ends of the truss beams 3 are hangers 9 arranged beyond the brake shoes 10 and off-set at their lower ends so as to extend in line with the wheels, while the main portion of the truss beams extend laterally thereof. The lower ends of the hangers 9 terminate in heads 11 having in-turned terminals forming shoes adapted to engage freely the head 12 of

a rail. The hangers when so constructed and arranged are held in constant relation with the truck and independent of spring action.

While in most instances I prefer to attach the guard hangers to the truss beams 3, such construction may be modified without departing from my invention, and in some instances I propose to use guards having outwardly extending hangers 13 attached to a car bolster 14 at one end, the opposite end of said hangers being formed with shoes adapted to straddle and engage the head of the rail in the manner already described.

In carrying out my invention, I prefer to use rails having a head 12 comprising lateral flanges extending outward from the web of the rail to a greater extent than the heads of the rails now commonly used, and to clamp said rails together by means of tie rods 16 bolted to the lower portion of the web and the foot of the rail, leaving a channel above the upper edge of said rods so as to enable the shoe of the guards to pass freely over the meeting ends of said rail.

By means of the construction herein shown and described, the guards are in operative relation to the rails at all times when in their normal position. In case the rails spread from any cause or sink below their normal level or become otherwise disarranged or inoperative, the heads 11 of the guards automatically clamp the heads of the rail, thereby holding the truck fixedly in position and preventing any accidents that would otherwise result from a continued movement of the car truck.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

A railway truck having truss-beams mounted upon the axles thereof independent of spring action, and provided with depending arms serving as fenders, and with shoes formed on the ends of said arms adapted to freely engage the head of a rail.

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

WILLIAM SANFORD.

Witnesses:

JNO. M. RITTER,
ROBERT W. HARDIE.