

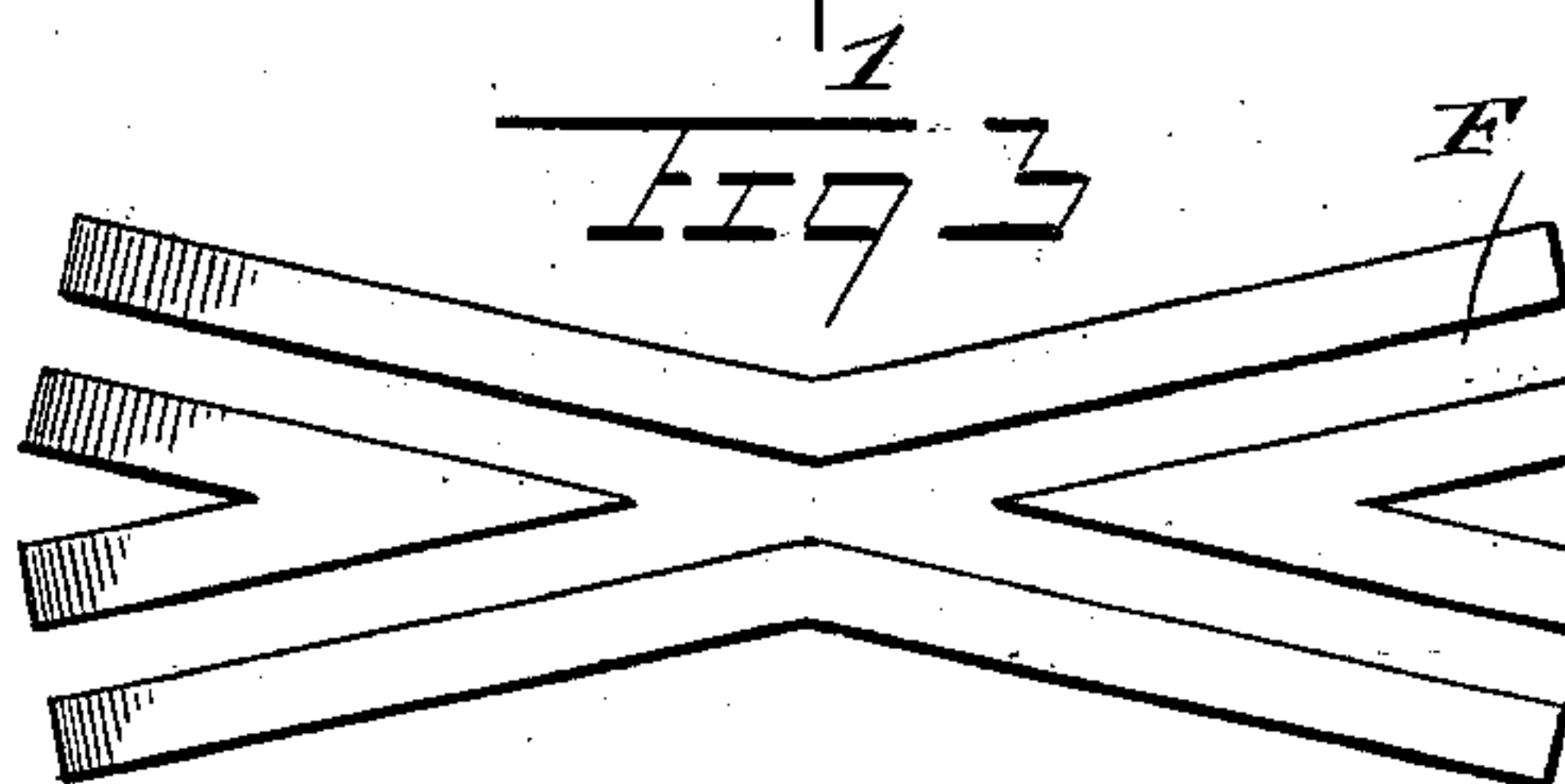
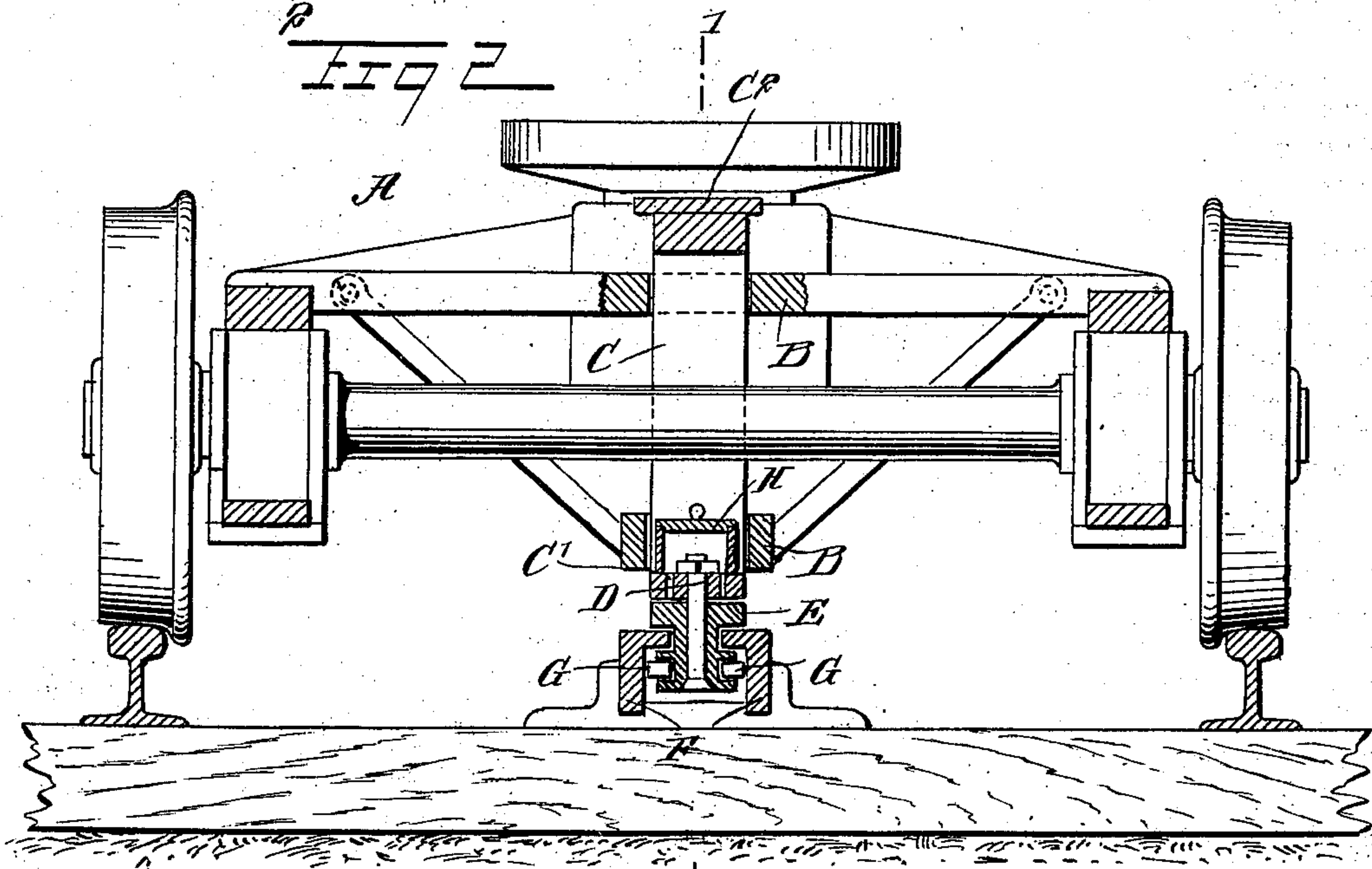
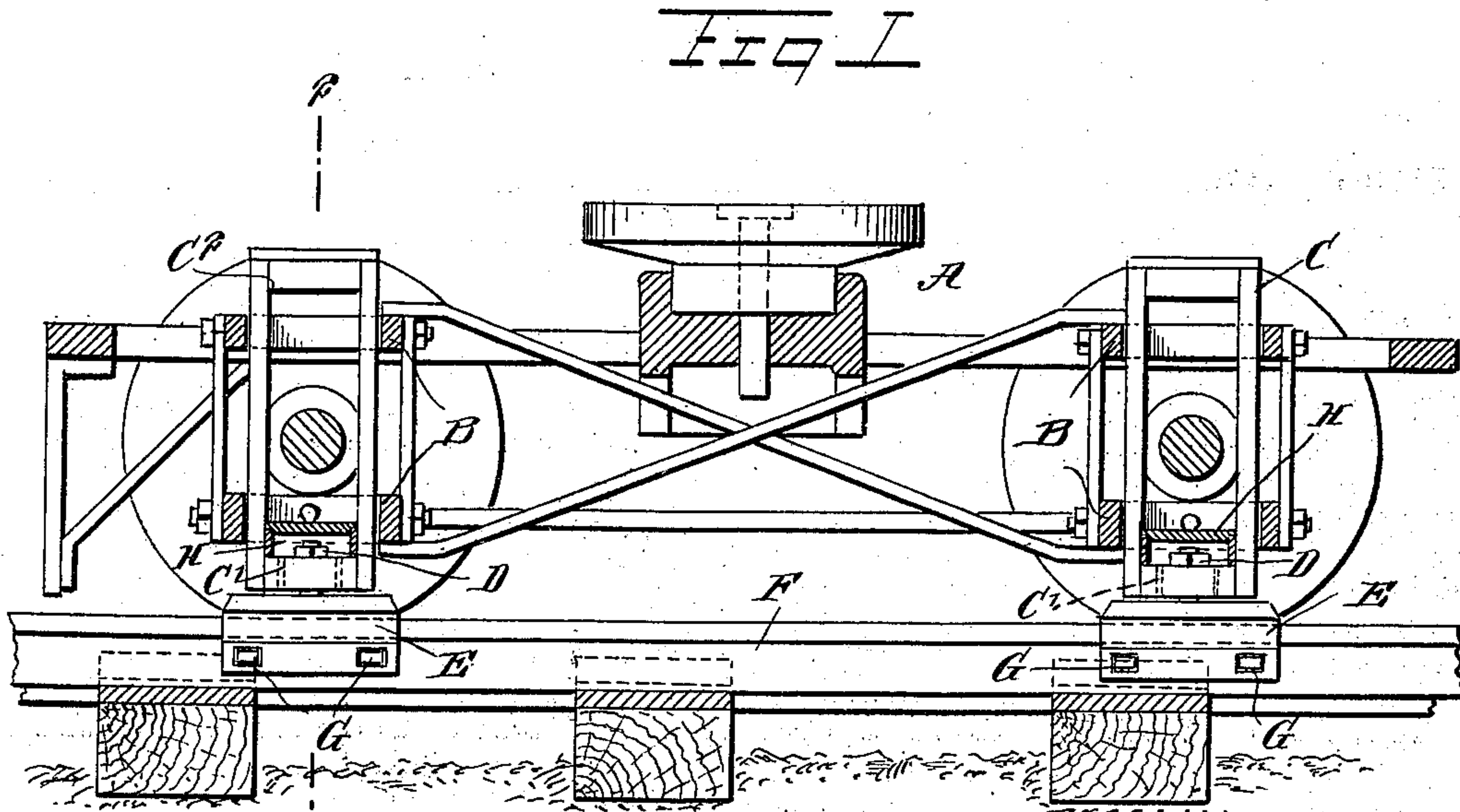
No. 687,089.

Patented Nov. 19, 1901.

J. V. VELASCO.  
SAFETY APPLIANCE FOR TRAINS.

(Application filed July 27, 1901.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JACINTO V. VELASCO, OF KEYWEST, FLORIDA.

## SAFETY APPLIANCE FOR TRAINS.

SPECIFICATION forming part of Letters Patent No. 687,089, dated November 19, 1901.

Application filed July 27, 1901. Serial No. 69,905. (No model.)

*To all whom it may concern:*

Be it known that I, JACINTO V. VELASCO, a citizen of the United States, and a resident of Keywest, in the county of Monroe and State of Florida, have invented a new and Improved Safety Appliance for Trains, of which the following is a specification.

The object of the invention is to provide a new and improved safety appliance for trains to prevent a train from running off a track, especially when going around curves or over switches, the appliance being simple and durable in construction and readily applied.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a longitudinal sectional elevation of the improvement as applied to a car-truck, the section being on the line 1 1 in Fig. 2.

Fig. 2 is an enlarged transverse section of the same on the line 2 2 in Fig. 1, and Fig. 3 is a plan view of the guideway at the crossing.

On a car-truck A of usual construction are arranged bearings B, in each of which is mounted to slide vertically a support C, carrying at its lower end a pivot D, on which is mounted to turn a shoe E, engaging a guideway F, arranged between the track-rails, as is plainly illustrated in Fig. 2. The guideway F consists, preferably, of spaced L-rails for forming a slot for the shoe E, the latter being provided on opposite sides with friction-rollers G, adapted to travel on the webs of the L-rails.

By the arrangement described the shoe E by traveling in the guideway F prevents derailling of the car-truck, as the wheels thereof cannot move off their rails, and the support C, carrying the shoe, holds the truck in a central position on the track, and thereby prevents the wheels from leaving the track-rails.

Each support C is provided with an oil-cup H for supplying lubricant to the shoe E by way of an opening C', leading from the oil-cup through the bottom of the support C to the top of the shoe E. It is understood that the shoe E has longitudinally-extending side grooves, which fit onto the horizontal members of the L-rails and prevent the shoes from jumping out of the guideway F. The upper end of each support is provided with a head C<sup>2</sup>, adapted to rest on the top of the bearing B when the shoe E moves out of its guideway to prevent the support C from dropping out of the bearing B.

By having two L-shaped rails forming the guideway F the opening thereof at a crossing is comparatively small, (see Fig. 3,) whereby the shoe is prevented from leaving its guideway at the crossing.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A safety appliance for cars and other vehicles, comprising a central track-guideway, a shoe arranged in said guideway and adapted to travel therein, and a support mounted to slide vertically in a bearing on the car-truck, said shoe being mounted to turn at the lower end of said support, as set forth.

2. The combination with a car-truck having guideways, of supports mounted to slide in said guideways, shoes swiveled on said supports and each having friction-rollers on its sides, and a guideway formed by L-rails and located between the track-rails on the track, said guideways being engaged by said shoes, as set forth.

3. A safety appliance for trains, comprising a support mounted to slide freely in bearings on the car-truck, a pivot held on the lower end of said support, a shoe mounted to turn freely on said pivot and having longitudinal grooves and friction-rollers on the sides of the shoe, and a guideway formed by L-rails and arranged between the track-rails, said guideway being engaged by said shoe, as set forth.

4. A safety appliance for cars and other vehicles, comprising a guideway arranged between the track-rails, a shoe arranged to travel

in said guideway, a support mounted to slide  
in a bearing on the car-truck, a pivot carried  
at the lower end of the support and on which  
the shoe is mounted to turn, and means for  
5 supplying lubricant to the shoe, the said sup-  
port being provided at its upper end with a  
head, for the purpose set forth.

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

JACINTO V. VELASCO.

Witnesses:

E. W. RUSSELL,  
WM. C. HARRIS.