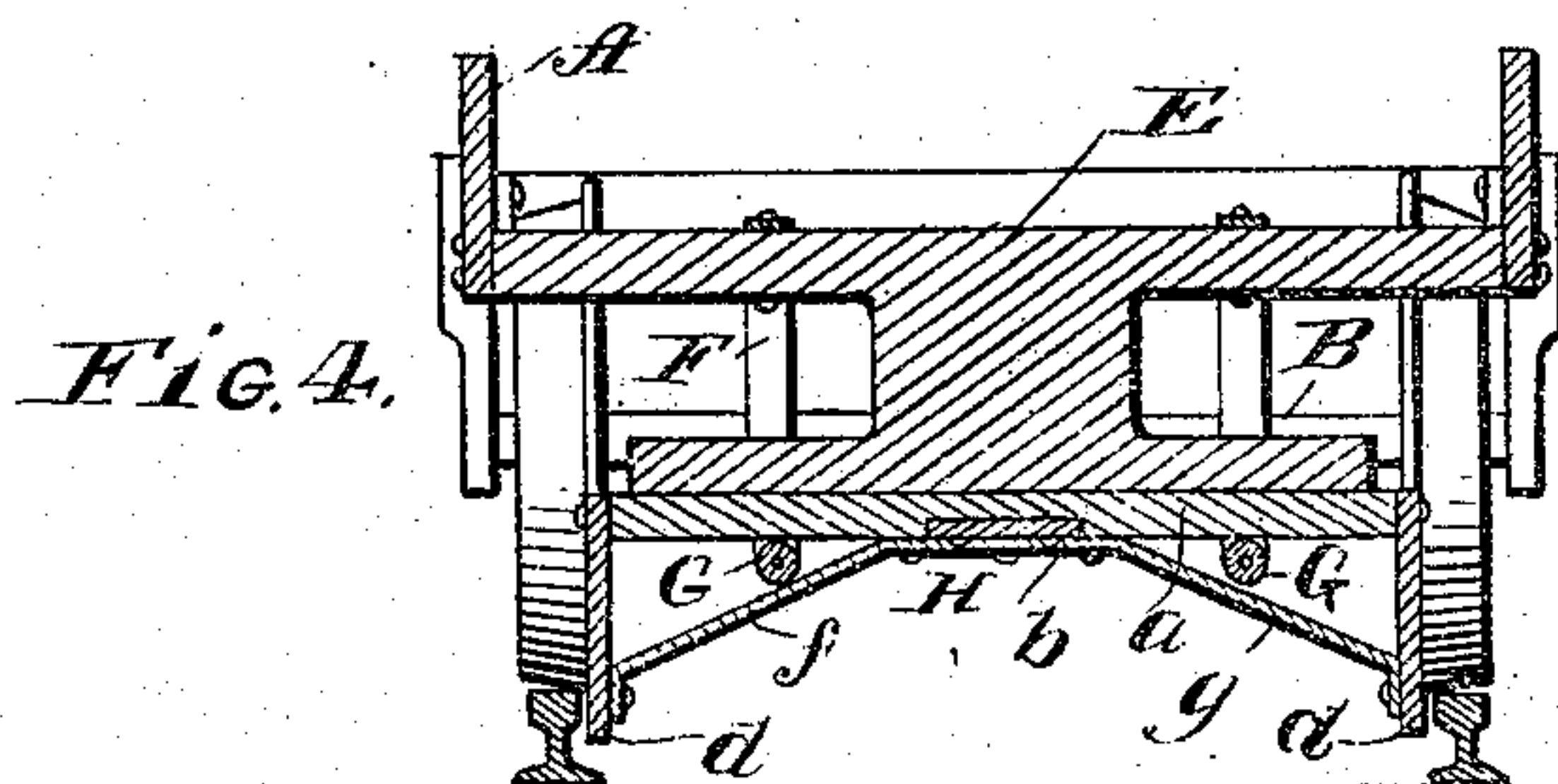
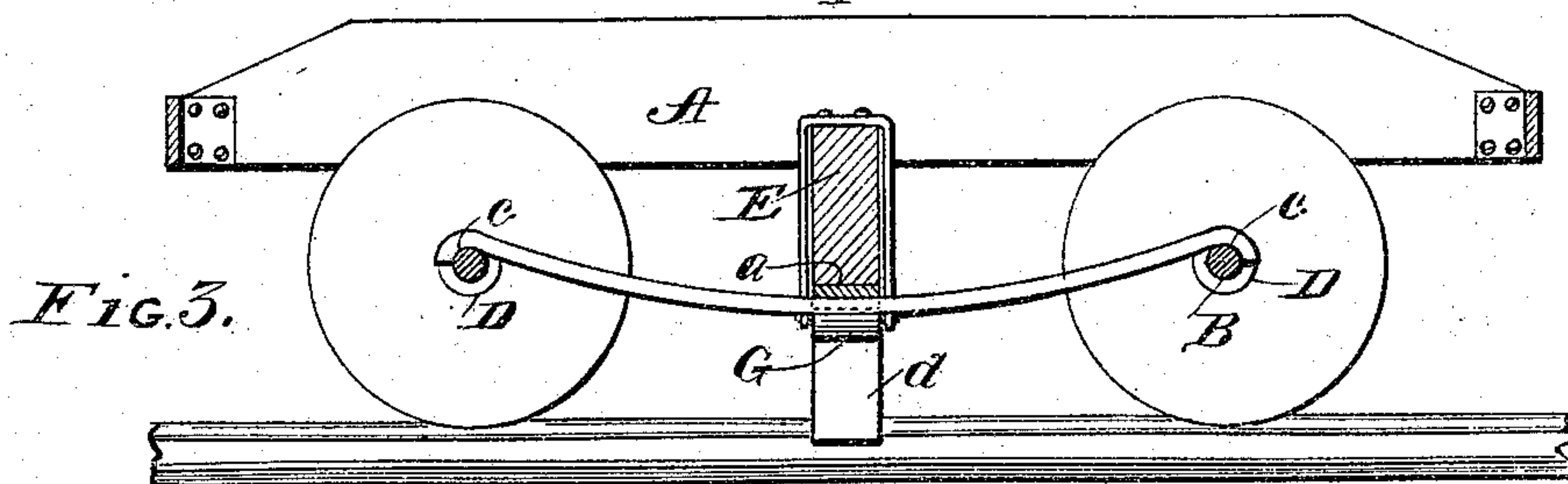
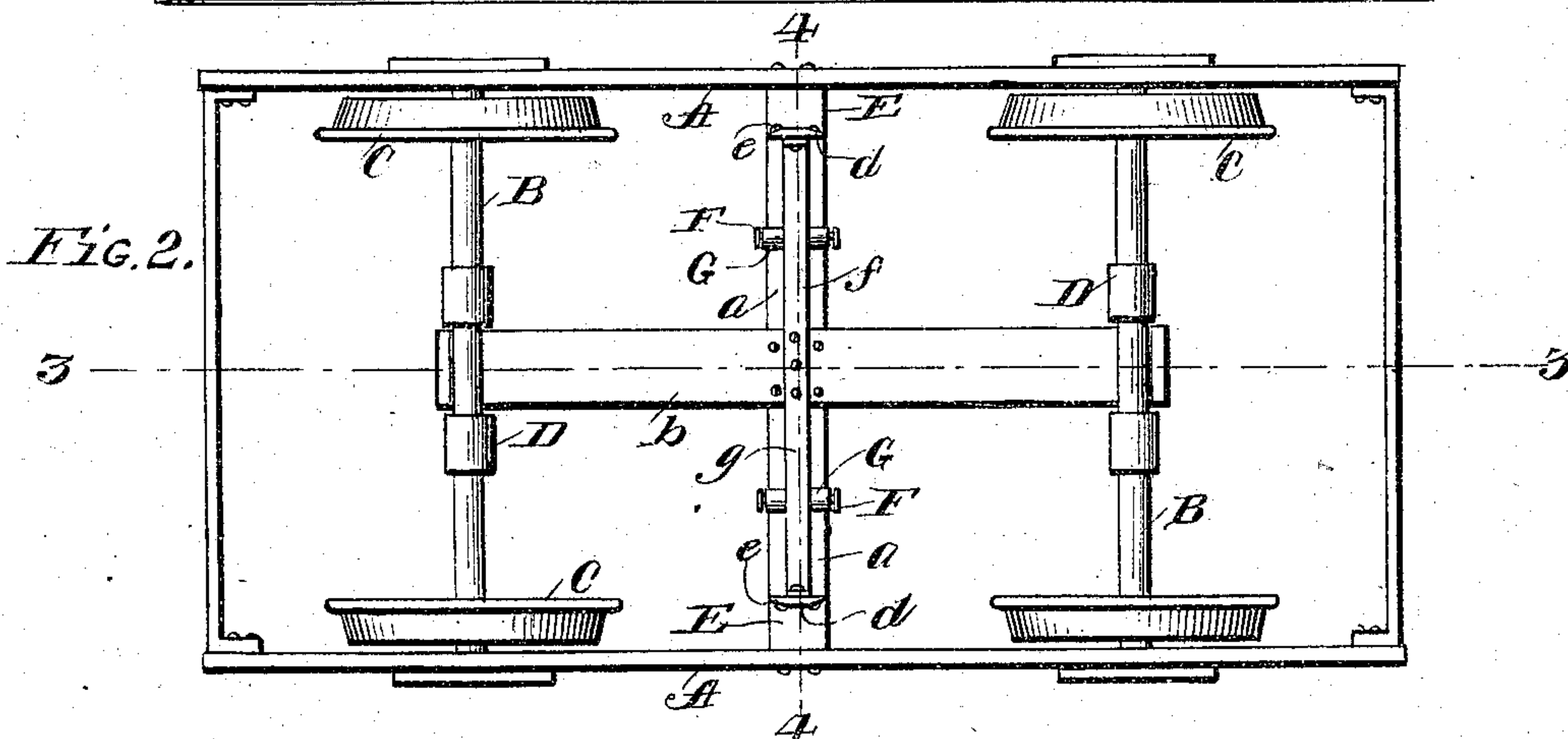
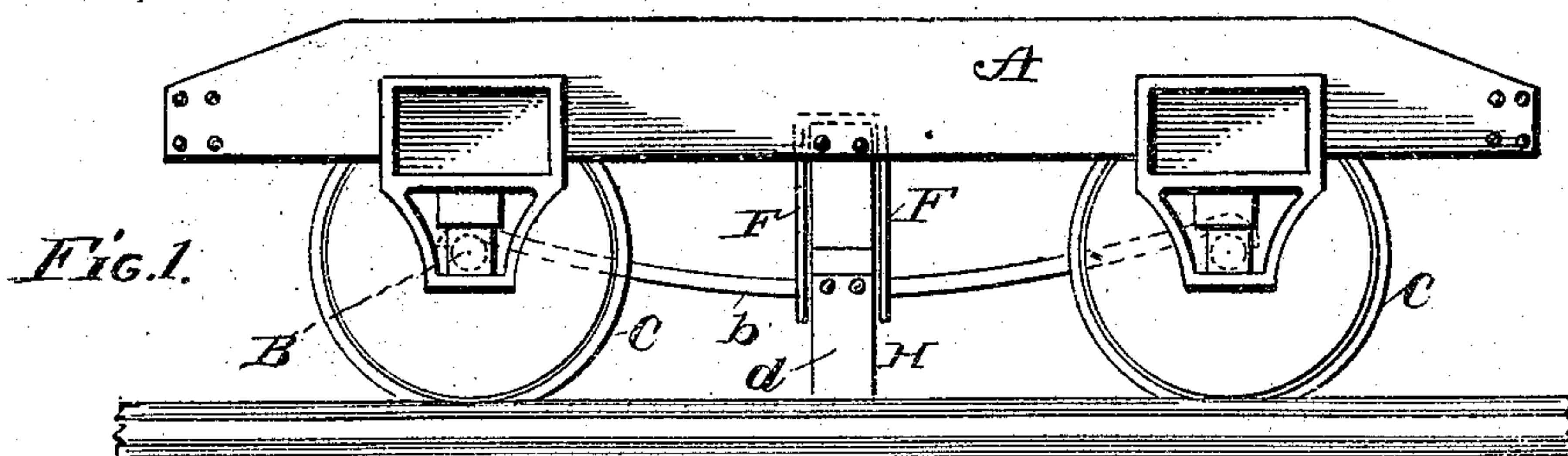


No. 840,733.

PATENTED JAN. 8, 1907.

A. ANDERSON.
DERAILMENT GUARD.
APPLICATION FILED OCT. 29, 1906.



Witnesses

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AUGUST ANDERSON, OF BIRMINGHAM, ALABAMA.

DERAILMENT-GUARD.

No. 840,733.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed October 29, 1906. Serial No. 341,043.

To all whom it may concern:

Be it known that I, AUGUST ANDERSON, a citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented new and useful Improvements in Derailment-Guards, of which the following is a specification.

My invention pertains to railway-cars, and more particularly to means for guarding railway-cars against derailment; and it contemplates the provision of a simple and inexpensive derailment-guard calculated to prevent the wheels of a truck leaving the rails in the event of the wheel-flanges breaking or jumping off the rails and one embodying such a construction that its guard-arms move laterally with the wheels and always stand in alinement with the wheel-flanges in readiness to perform their office to the best advantage.

With the foregoing in mind the invention will be fully understood from the following description and claims when the same are read in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of a car-truck equipped with the preferred embodiment of my invention. Fig. 2 is an inverted plan view of the same. Fig. 3 is a longitudinal vertical section taken in the plane indicated by the line 3 3 of Fig. 2, but showing the truck and its appurtenances in proper working position. Fig. 4 is a cross-section taken in the plane of the line 4 4 in Fig. 2 and also illustrating the parts in their proper working positions.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is a car-truck which is rectangular in form and preferably of the conventional construction, though it may be of any other construction compatible with my invention without involving departure from the scope thereof.

B B are axles journaled in suitable bearings carried by the truck A and equipped with the usual flanged wheels C and also at points intermediate the wheels with enlargements D.

E is a cross-bar fixed to and extending between the side bars of the truck A and having hangers F, in the lower portions of which are mounted antifriction-rollers G, extending

in the direction of the length of the truck, and H is my novel derailment-guard as a whole.

The said guard H is preferably made up of a bar *a*, movable crosswise of the truck between the hangers F and on the rollers G, the latter to avoid frictional wear and render movement of the guard easy, a longitudinal central bar *b*, fixed to the cross-bar *a* and having its end portions recessed at *c* and arranged on the axles B, between the enlargements D thereof, and guard-arms *d*, fixed to the cross-bar *a* and depending therefrom to points below the flanges on the wheels C and having their outer sides beveled at their forward and rear edges, as indicated by *e*, for a purpose which will presently be set forth. When deemed necessary, braces *f* and *g* may be interposed between the longitudinal bar *b* and the guard-arms *d*; but these braces are not essential to the successful operation of my improvements, and I therefore do not desire to be understood as confining myself to the employment of the same.

It will be gathered from the foregoing when considered in connection with the drawings that because of the recessed ends of the bar *b* being arranged between the enlargements D on the axles B my novel guard as a whole will move laterally synchronously with the wheels C on axles B and in consequence the guard-arms *d* will always stand in alinement with the flanges of the wheels, so as to move along at the inner sides of the rails on which the wheels travel and be in position to immediately bear against the inner sides of the rails in the event of any one of the wheels tending to leave the same as the result of a broken flange or the flange jumping the rail. The bevels *e* of the guard-arms are advantageous, since they enable the guard-arms to move along close to the inner sides of the rails and yet preclude the guard-arms catching into any of the joints of the rails that may be uneven.

By virtue of the construction of my novel guard it will be apparent that the guard is enabled to move laterally in company with the wheels and with respect to the truck A without subjecting any of the parts to frictional wear or strain, and it will also be apparent that the ability of the guard to move laterally assures the guard-arms *d* standing at all times closely adjacent to the inner sides of the rails, so that in an emergency the said

guard-arms will promptly impinge against the inner sides of the rails and in that way prevent the wheels leaving the rails and the damage to property that would likely follow a derailment.

The construction herein shown and described constitutes the preferred embodiment of my invention; but I desire it understood that in practice various changes in the form, construction, and relative arrangement of parts may be made within the scope of the appended claims without affecting my invention. The said construction is obviously simple, efficient, and well adapted to withstand the rough usage to which railway rolling-stock is subjected and is preferable for such reasons.

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

1. The combination in means for guarding against derailment, of a truck, flanged wheels carried by axles journaled in bearings on the truck, and a derailment-guard connected and movable with the axles and wheels and with respect to the truck and having depending arms standing in alinement with the flanges of the wheels; the outer sides of the said depending arms being beveled at their forward and rear edges.

2. The combination in means for guarding against derailment, of a truck, axles journaled in bearings carried by the truck and having enlargements, flanged wheels fixed on said axles, and a derailment-guard compris-

ing a cross-bar connected with and movable crosswise of the truck, a longitudinal bar fixed to said cross-bar and having portions arranged between the enlargements on the axles, and guard-arms depending from the cross-bar and standing in alinement with the flanges on the wheels.

3. The combination in means for guarding against derailment, of a truck, axles journaled in bearings carried by the truck and having enlargements at opposite sides of their middles, flanged wheels fixed on said axles, a cross-bar fixed to and extending between the side bars of the truck and having hangers and longitudinally-disposed rollers mounted in the lower portions of said hangers, and a derailment-guard comprising a cross-bar movable between the hangers and on the rollers, a longitudinal bar fixed to said cross-bar and having recessed end portions resting adjacent to the axles and between the enlargements thereon, and guard-arms fixed to and depending from the opposite ends of said cross-bar and standing in alinement with the flanges on the wheels; said guard-arms having their outer sides beveled at their forward and rear edges.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

AUGUST ANDERSON.

Witnesses:

A. LEO OBERDORFER,
LILLIAN DELLAHUNTY.