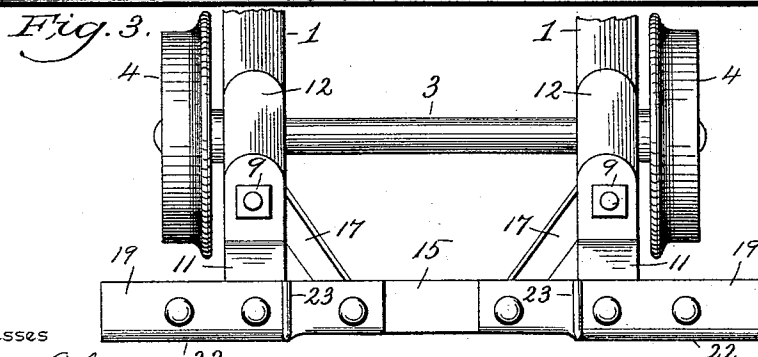
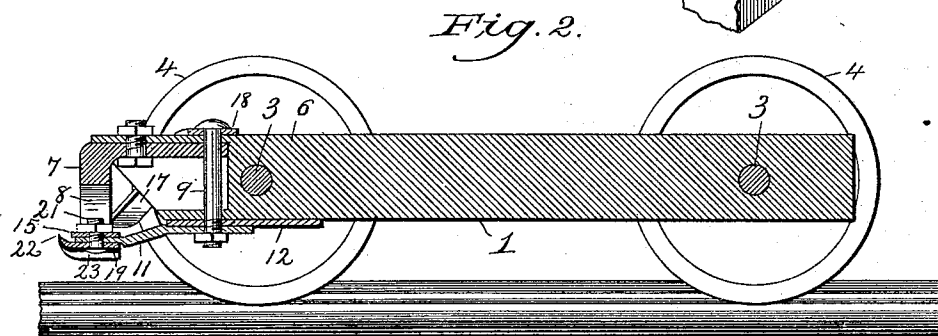
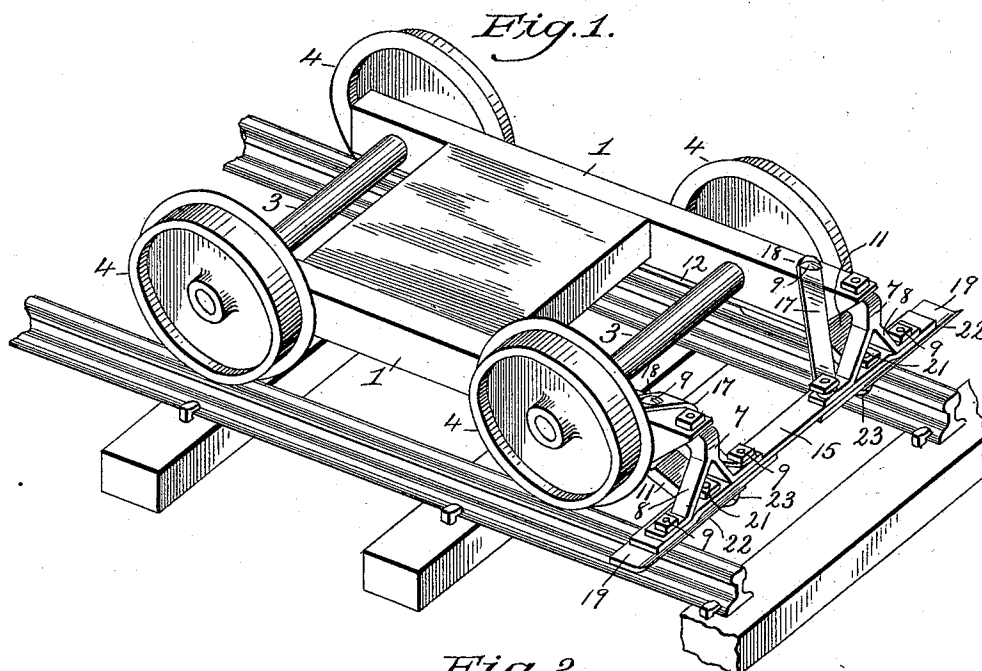


(No Model.)

L. F. FISHER.  
SAFETY ATTACHMENT FOR CAR TRUCKS.

No. 486,968.

Patented Nov. 29, 1892.



Witnesses

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# UNITED STATES PATENT OFFICE.

LOUIS F. FISHER, OF WILLOW SPRINGS, MISSOURI.

## SAFETY ATTACHMENT FOR CAR-TRUCKS.

SPECIFICATION forming part of Letters Patent No. 486,968, dated November 29, 1892.

Application filed June 15, 1892. Serial No. 436,859. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS F. FISHER, a citizen of the United States, residing at Willow Springs, in the county of Howell and State of Missouri, have invented a new and useful Safety Attachment for Car-Trucks, of which the following is a specification.

My invention relates to improvements in safety attachments for railway-coach and engine trucks; and the objects in view are to provide such a device as will be of cheap and simple construction, readily applied, and which will serve, should the wheels leave the rails, to support the coach or engine upon the rails, thus avoiding the contact of the wheels with the ties, maintaining the coach or engine in a vertical position, so that it may be controlled by the engineer, who will not be thrown from his post, which will act as a brake to retard and overcome the momentum of the coach or engine, and which will prevent such lateral movement or tendency as would cause the coach or engine to leave the track.

With these and other detailed objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a perspective view of the front end of an engine-truck with my invention applied. Fig. 2 is a longitudinal section through one of the side sills of said truck. Fig. 3 is a bottom plan view of the invention.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the opposite side sills of, for instance, a front truck of an engine, and the same has its lower corners at its front ends beveled or cut away at an angle, as shown. These sills at their ends are recessed, and in rear of the recesses axles 3, provided with ground-wheels 4, are journaled in the sills.

The safety attachment, which I will now proceed to describe, it will be understood, is preferably located at the outer ends of the two trucks of a coach or engine; but in this instance I have merely shown a portion of one truck, (the front,) and hence but one attachment appears. In the recessed ends at the front of the sills are inserted the horizontal shanks 6 of a pair of inverted-L-shaped hangers 7, the lower ends of which are bifurcated

to form diverging branches 8. Bolts 9 are passed through the horizontal shanks of the hangers and through the sills. These bolts 9 at their lower ends project through the rear ends of a pair of inclined brackets 11, which extend forward beyond the ends of the sills, and upon their upper faces are reduced to form central transverse shoulders, which embrace and abut against the rear edges of a pair of metal plates 12, through which said bolts 9 also pass and which are applied to the under sides of the aforesaid sills. Interposed between the lower spread or diverging bifurcated ends of the hangers and the upper sides of the forwardly-disposed brackets is a transverse bar 15, considerably wider than the track upon which the truck is to run. Bolts 16 pass through the bifurcations of the brackets and through the transverse bar at points coinciding with their locations. Inclined braces 17 are bolted at 18 to the upper sides of the sills, decline therefrom, extend forward, and by the same bolts as secure the inner bifurcations of the hangers and the transverse bars together are secured at their lower ends to said inner bifurcations. Applied to the under side of the transverse bar is a pair of metal plates 19, said plates being located at and extending beyond the ends of the bar. The plates are provided at proper intervals with bolt-holes, two holes of each plate being for the purpose of receiving the two bolts 9 of the hangers, while the central holes of said plates have passed therethrough and the transverse bar-bolts 21. These plates at their front edges project beyond the corresponding edge of the transverse bar and are slightly upturned or curved to form a flange 22. Upon their under sides and at points between the wheels and adjacent thereto the plates are provided with pendent guard-flanges 23.

It will be seen that the attachment I have described is most securely mounted in position and well able to withstand the severe strain to which it will be subjected in case the truck should leave the track. In case of such accident or event it will be observed that as the wheels leave the rails the transverse plates and bar will rest upon the rails across the same. The upturned flanges of the plates will prevent injury to the rails or engaging with joints, frogs, &c., and to the contrary

will slide or ride over the same, while the pendent guard-flanges, taking between the rails, will obviously prevent the truck from having such a lateral movement as would permit it to leave the track. The consequence is that the engine, though not running upon its wheels, which are held out of contact with the ties, simply glides or rides over the rails, the contact of the plates with the rails serving to create sufficient friction to overcome within a reasonable distance from the point the truck left the rails the momentum of the same. The coach or engine is maintained vertical or in its normal position, and thus a wreck is avoided, and the engineer may reverse his engine and terrible accidents be avoided.

Having described my invention, what I claim is—

20 The combination, with the opposite sills recessed at their front ends, the inverted-L-shaped hangers having their upper horizontal portions inserted into the recesses and bolted to the sills, said hangers having their lower

ends provided with diverging bifurcations terminating in perforated ends, of the transverse bar upon the under sides of the bifurcations, the metal plates upturned at their front edges, provided with depending flanges and applied to the under side of the transverse bar, the diagonal braces bolted to the sills and having their front ends terminating over the inner bifurcations of the hangers, and the series of bolts passed through the lower ends of the braces, the inner bifurcations, the transverse bar and plates, and bolts passed through the outer bifurcations, bar, and plates, and through bar and plates between the bifurcations, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LOUIS F. FISHER.

Witnesses:

A. C. WRIGHT,  
S. G. JOHNSTON.