

(No Model.)

2 Sheets—Sheet 1.

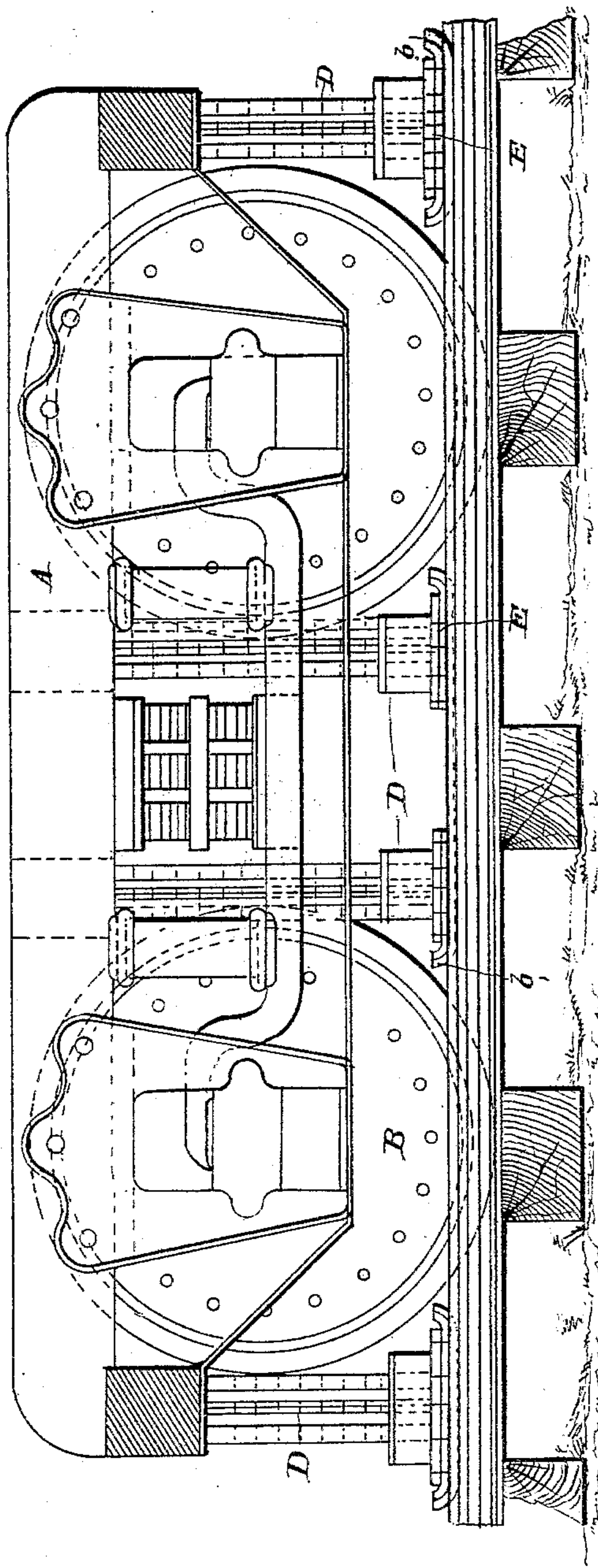
F. S. TULL.

SAFETY GUARD FOR RAILWAY TRUCKS.

No. 369,416.

Patented Sept. 6, 1887.

Fig. 1.



Witnesses

*Wm. G. Huntmann*  
*J. B. Harris*

Inventor

*Francis S. Tull*  
By his Attorney  
*J. O. McLeary*

(No Model.)

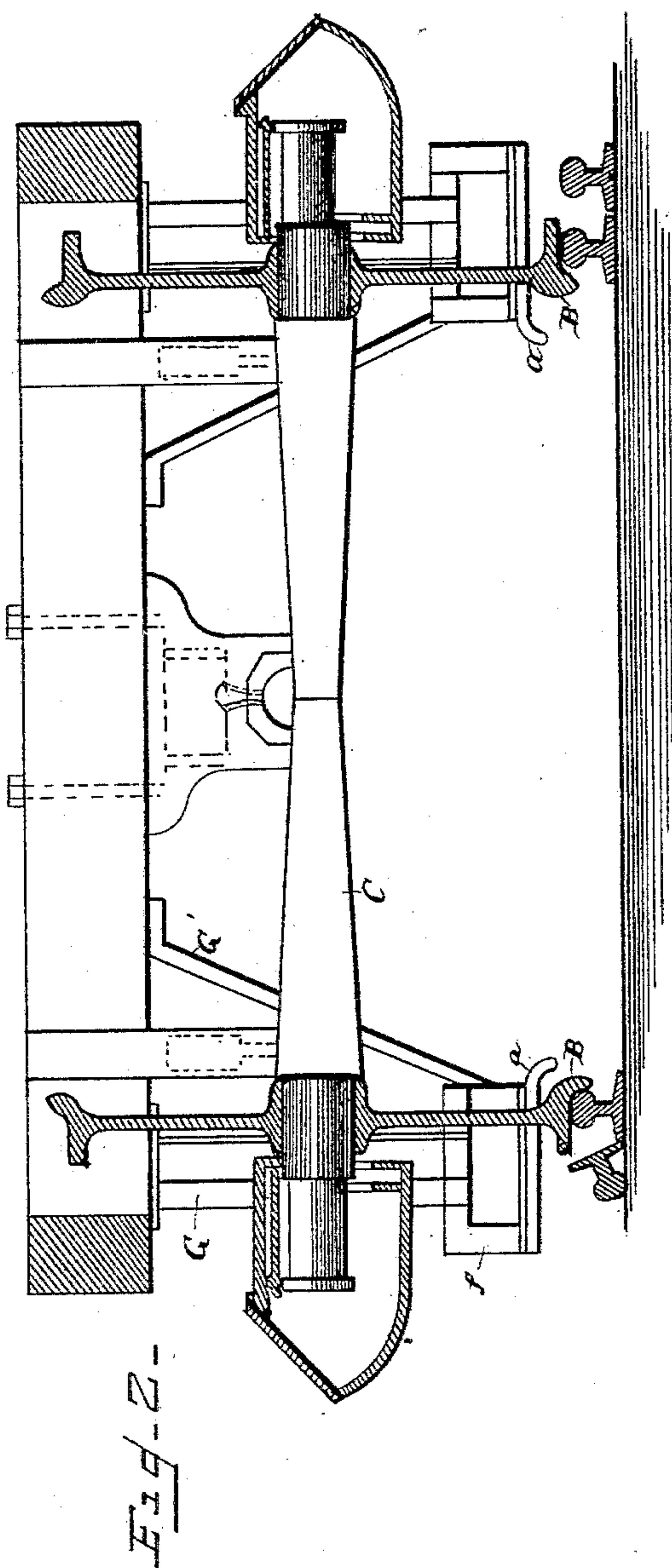
2 Sheets—Sheet 2.

F. S. TULL.

# SAFETY GUARD FOR RAILWAY TRUCKS.

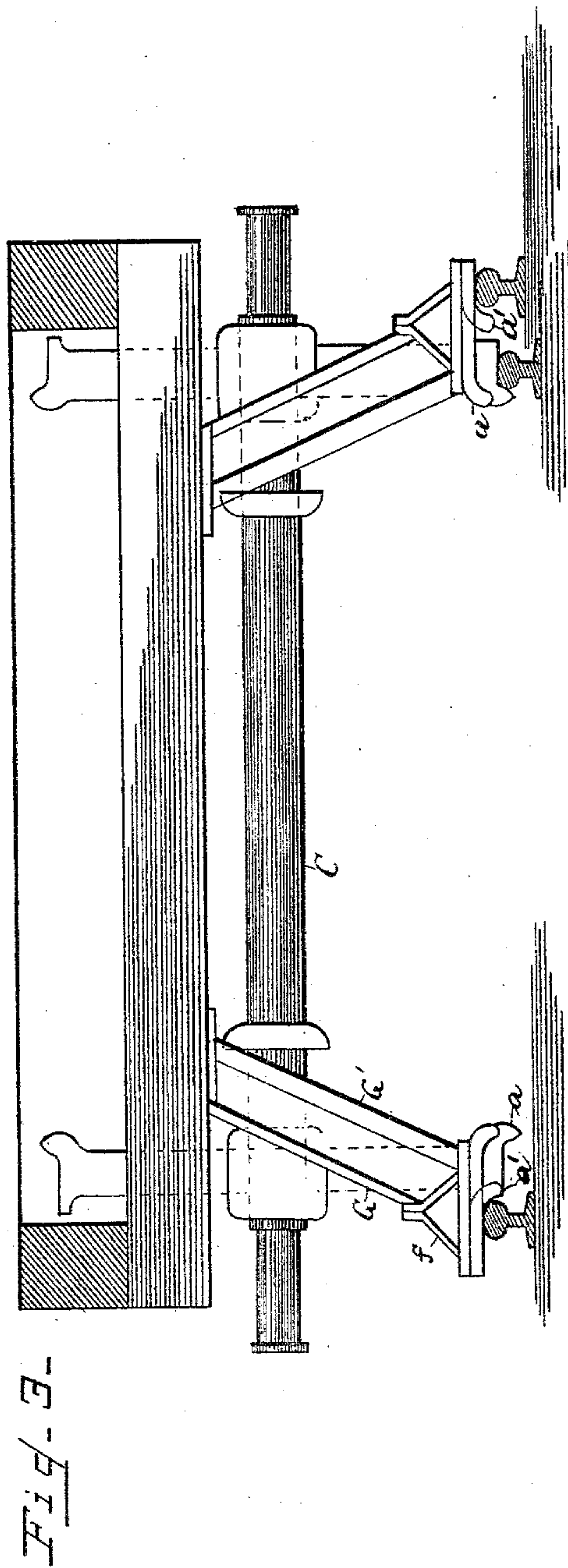
No. 369,416.

Patented Sept. 6, 1887.



Witnesses

Wm. J. Huntmann.  
J. B. Davis.



Inventor

Inventor  
Francis D. Sullivan  
By his Attorney  
J. O. McKeary



# UNITED STATES PATENT OFFICE.

FRANCIS SHALIS TULL, OF GALVESTON, TEXAS.

## SAFETY-GUARD FOR RAILWAY-TRUCKS.

SPECIFICATION forming part of Letters Patent No. 369,416, dated September 6, 1887.

Application filed October 6, 1886. Serial No. 215,491. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS SHALIS TULL, of Galveston, in the county of Galveston and State of Texas, have invented certain new and useful Improvements in Safety-Guards for Railroad-Trucks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which pertains to make and use the same.

My invention relates to safety-guards designed to be applied to car-trucks; and the object of the invention is to improve the construction of this class of devices.

The invention consists in certain novel features of construction and combinations of parts, which will be hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a car-truck with my improved safety-guard applied thereto. Fig. 2 is a sectional end elevation of the same, and Fig. 3 is an end elevation of a truck with a modified construction of guard applied thereto.

A represents the truck of a car, which is of the usual construction.

B represents the wheels, and C the axle.

D represents the guard, of which there may be as many as desired or found necessary.

It is my purpose, however, to locate a guard in front and in rear of each wheel, so that it will be fully supported in the event of the wheels leaving the track.

The guard D comprises a shoe, E, having a smooth flat face, and having its inner edge turned downwardly to form a flange, *a*, designed to hold the shoe in position upon the track when it is traveling thereon. The ends *b* are turned or curved slightly upward, to prevent them from engaging the spaces between the abutting ends of the rails and to allow the shoes to slide easily upon the rails and pass any slight obstructions there may be thereon.

Bolted to the upper side of the shoe E is a box or bracket, F, of any suitable construction. The bracket and shoe are supported and the latter normally held a slight distance above the rails by means of braces G G', secured to the truck at their upper ends and bolted or otherwise secured to the box or bracket F at their lower ends. Both of the braces may extend diagonally from the under side of the truck to the box or bracket, as shown in Fig. 3, or one may extend vertically and the other diagonally, as shown in

Fig. 2, or in any other suitable manner, as their arrangement is immaterial.

In Fig. 3 the shoe is shown provided with a supplemental flange, *a'*, located midway its sides, which is adapted to hold the shoe in place upon the rail should they spread, while the inner flange of the shoe would serve the same purpose should the axle or wheel of the truck break, in which case the shoe would fall directly on the rail. The shoes extend laterally beyond the outer edge of the car-wheel quite a distance, and thus allow for considerable spreading or abnormal separation of the rails.

As shown in Fig. 1, there is a guard in front and one in rear of each wheel, and the guard located between the wheels may consist of two connected shoes or of a single continuous shoe supported at each end by braces and brackets, thus serving as a rear guard for one wheel and a front guard for the adjacent wheel.

It will be noticed that the shoes are located but a slight distance above the rails, so that should an axle or wheel be broken, or the rails spread or otherwise deranged so as to cause the wheels to leave the track, the guards will engage and travel upon the rail or rails until the train can be stopped.

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

1. The combination, with a truck, of a safety-guard consisting of a shoe, F, having a flat surface to bear upon the rails when required, upwardly-turned ends, and a flange, *a*, and braces G G', for firmly bracing the shoe, substantially as described.

2. The combination, with a truck, of a safety-shoe braced to the truck and provided with an inner flange, *a*, and a supplemental flange, *a'*, substantially as described.

3. The combination, with a truck, of a safety-shoe projecting outwardly beyond the wheels and provided with a flange or flanges, and inclined braces G G', for supporting the shoe in position to strike the rails when the latter spread, substantially as described.

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

FRANCIS SHALIS TULL.

Witnesses:

JAS. W. HALE,

RICHARD B. S. GRIM.