

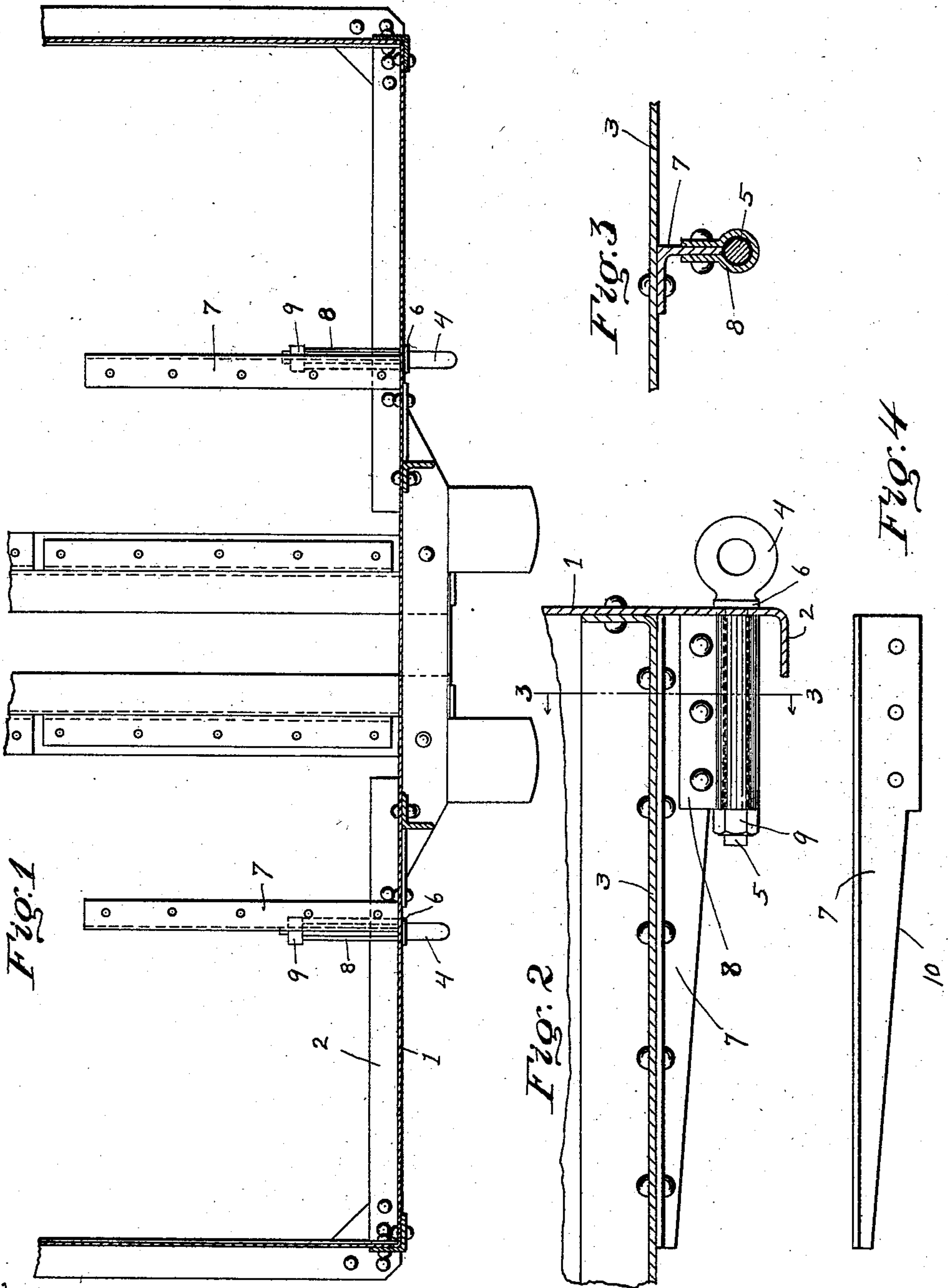
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PATENTED FEB. 10, 1903.

A. CHRISTIANSON.
FASTENING FOR CAR SAFETY CHAINS.

APPLICATION FILED AUG. 11, 1902.

NO MODEL.



Witnesses.

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UNITED STATES PATENT OFFICE.

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FASTENING FOR CAR SAFETY-CHAINS.

SPECIFICATION forming part of Letters Patent No. 720,224, dated February 10, 1903.

Application filed August 11, 1902. Serial No. 119,230. (No model.)

To all whom it may concern:

Be it known that I, ANDREW CHRISTIANSON, a resident of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Fastenings for Car Safety-Chains; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to railway-cars, and more especially to means for securing safety-chain eyebolts to a metallic car.

The invention consists in the details hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a plan view, partly in section, of the end of a car, showing my invention applied thereto. Fig. 2 is a longitudinal section through the end of the car, showing the eyebolt and fastening means in side view. Fig. 3 is a section on the line 3-3, Fig. 2; and Fig. 4 is a side view of the connecting-angle.

The car-body may be of any desired or preferred construction, that shown in the drawings comprising a metallic end sill 1, having a vertical web and an inturned flange 2 at its bottom.

3 shows a floor-plate having upturned flanges at its edge which floor-plates are riveted to the end and side plates of the car.

The specific form of end sill shown has its web continued upwardly to form the end plate of the car; but this is not essential.

The safety-chain eyebolt is shown at 4, having the eye at its outer end and having a shank 5 extending through a hole in the end sill, and also having a shoulder or collar 6, which bears against said end sill.

7 is a section of angle-bar having its horizontal flange riveted to the floor-plate 3 and having its forward end abutting against the end sill or end plate of the car. To the vertical flange of this angle-bar is secured a strap 8, which encircles the shank of the eyebolt and has two flanges which fit over the vertical flange of the angle 7. Rivets, bolts, or other suitable devices pass through the flanges of the strap and through the vertical flange of the angle 7 and unite these members. The strap 8 is attached to the angle 7 in such position that its forward end is flush with the forward end of the angle, so that the ends of both the strap and the angle bear securely

against the end sill or end plate. This partially relieves the rivets which unite the strap to the angle and also the rivets which unite the angle to the floor of shearing stresses. The shank of the eyebolt 4 passes through the strap and is provided at its rear end with threads for receiving a nut 9, which holds the eyebolt from pulling out. This nut, together with the collar 6, bearing against the front face of the end sill or plate, firmly binds the strap 8 to the end sill or plate. The vertical flange of the angle 7 is cut away at its rear portion, as shown at 10, in order to provide clearance for turning the nut 9.

The angle 7 and strap 8 are simple of construction and provide a secure holding means for the safety-chain eyebolt. They are so connected to the car as to relieve the connecting rivets or bolts of most of the shearing stress.

It is obvious that in place of the angle-bar 7 any other flanged shape which will provide a downwardly-projecting flange may be used. A T-bar is one example of such other flanged shape.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a railway-car, the combination with a metallic floor and end sill, of a safety-chain eyebolt projecting through the end sill, an angle-bar attached to the floor, a strap surrounding the shank of the eyebolt and secured to the vertical flange of said bar, and a nut or the like on the end of the shank of the eyebolt bearing against one end of the strap.

2. In a railway-car, the combination with a metallic floor and end sill, of a safety-chain eyebolt projecting through the end sill, of a flanged bar secured to the floor and having a downwardly-projecting flange, a strap surrounding the shank of the eyebolt and having its edges secured to said downwardly-projecting flange, and means for securing the shank of the eyebolt in said strap.

In testimony whereof I, the said ANDREW CHRISTIANSON, have hereunto set my hand.

ANDREW CHRISTIANSON.

Witnesses:

WM. BIERMAN,
ROBERT C. TOTTEN.