No. 639,580. Patented Dec. 19, 1899.

J. M. JONES.

RAILWAY CAR.

(Application filed May 22, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

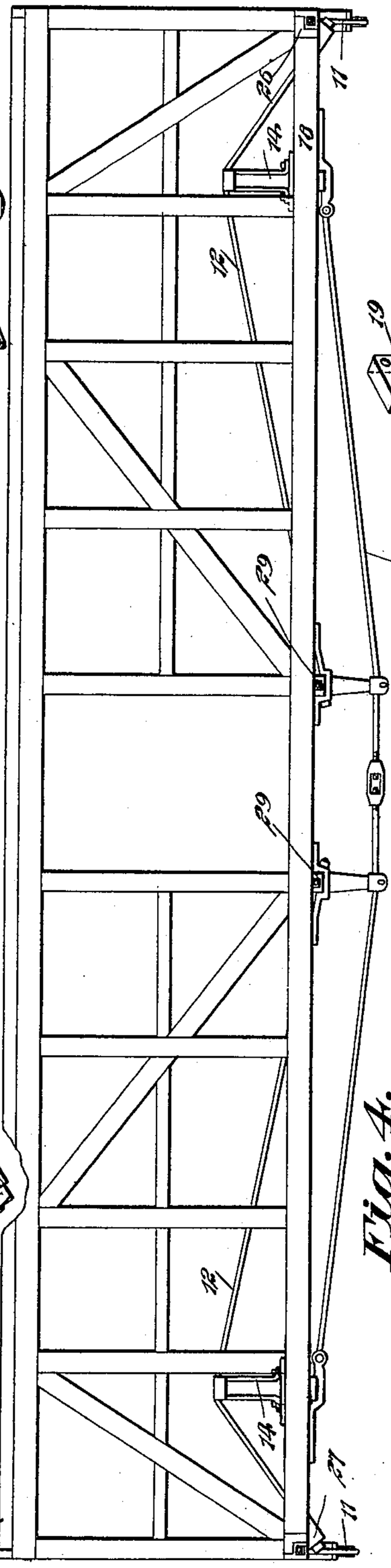


Fig. 2.

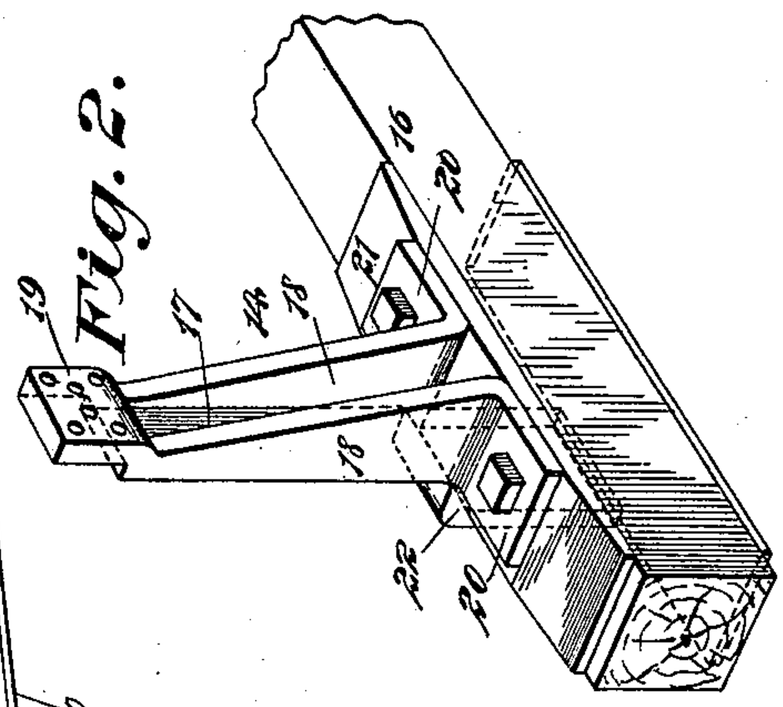


Fig. 3.

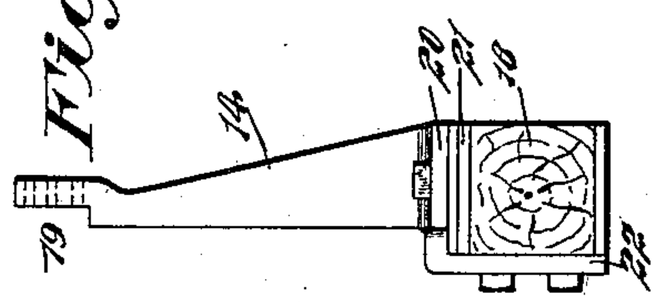


Fig. 4.

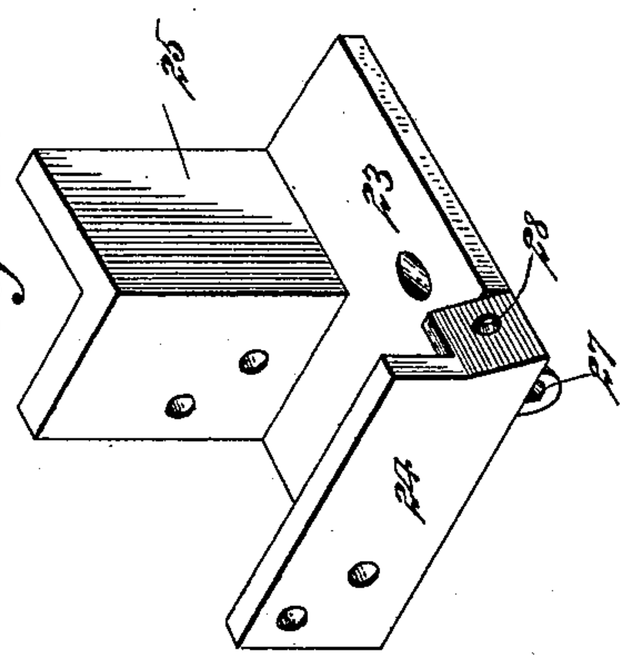


Fig. 5.

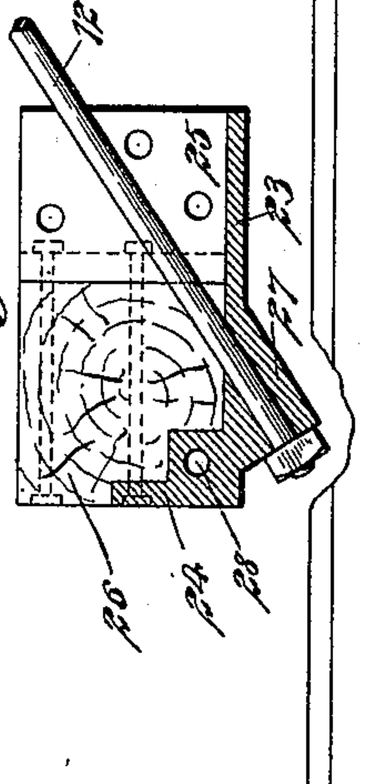
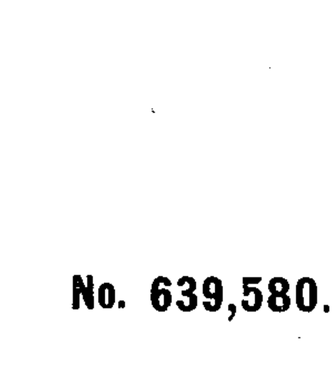


Fig. 6.



WITNESSES

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No. 639,580.

Patented Dec. 19, 1899.

J. M. JONES.

RAILWAY CAR.

(Application filed May 22, 1899.)

(No Model.)

2 Sheets—Sheet 2.

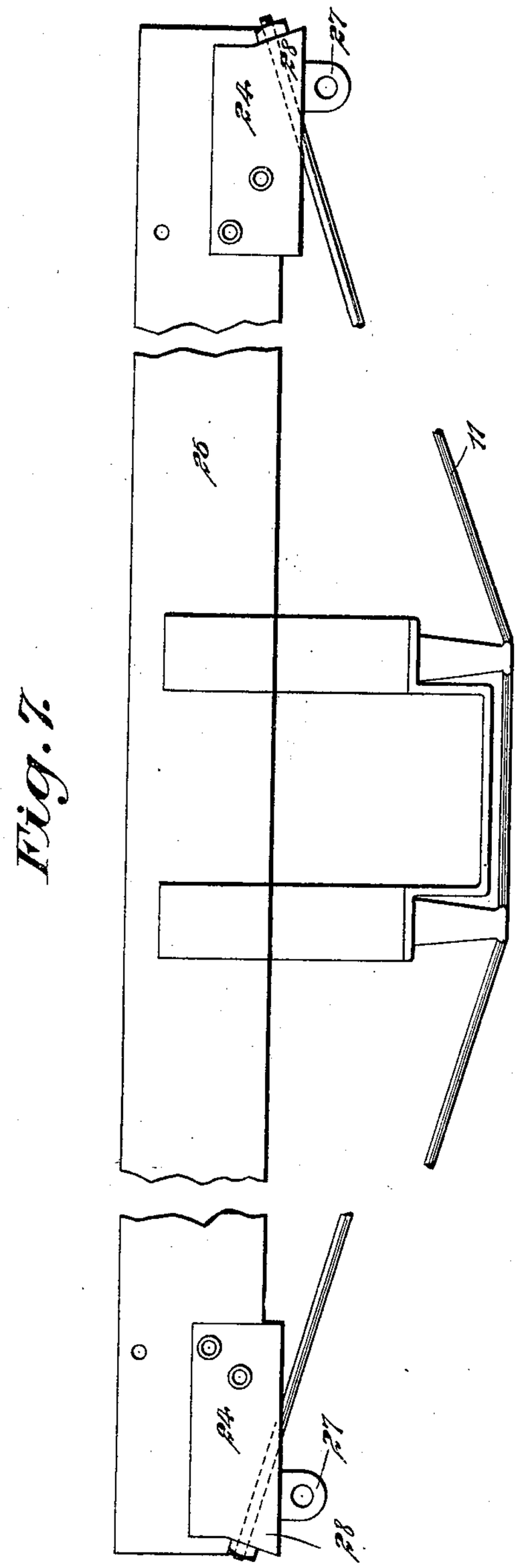

Fig. 7.

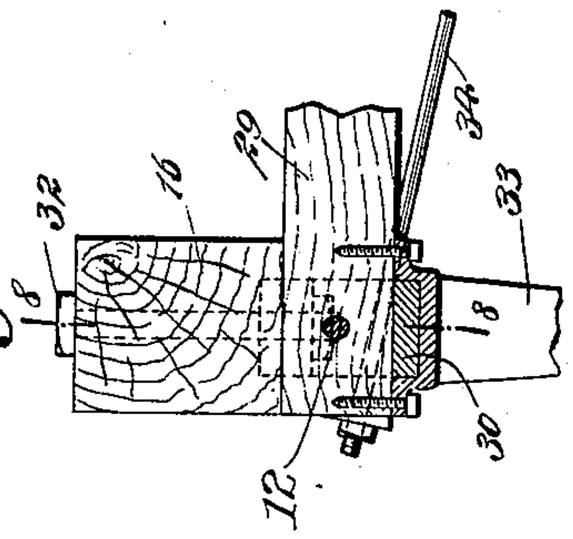

Fig. 9.

Fig. 8.

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JOHN M. JONES, OF SEDALIA, MISSOURI.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 639,580, dated December 19, 1899.

Application filed May 22, 1899. Serial No. 717,755. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. JONES, of Sedalia, in the county of Pettis and State of Missouri, have invented a new and Improved Railway-Car, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide a system of bracing railway-cars which will render the floor more secure and which will therefore tend to strengthen the whole structure of the car.

This specification is the disclosure of one form of my invention, while the claims define the actual scope thereof.

Reference is to be had to 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 side elevation of the framing of a freight-car, showing my invention applied thereto. Fig. 2 is a perspective view of one of the stanchions for carrying the truss-rods of my invention. Fig. 3 is an edge elevation of the stanchion. Fig. 4 is a perspective view of the combined corner-iron and anchor-plate. Fig. 5 is a view with parts in section, showing said corner-iron and anchor-plate, the adjacent sill being omitted. Fig. 6 is a view of the same, but with the parts in a different position, the end sill being omitted. Fig. 7 is an end elevation showing the arrangement of the corner and anchor irons in connection with the end truss of the car. Fig. 8 is a sectional view on the line 8 8 of Fig. 9, illustrating one of the anchorages for the inner ends of the truss-rods of my invention; and Fig. 9 is a sectional view of the same on the line 9 9 of Fig. 8.

According to my invention I apply to the car having the usual needle-beam truss 10 and the end-sill truss 11 the truss-rods 12, which may be of any desired form, and which are arranged one at each end of each transom of the car, and which are supported by stanchions 14, mounted, respectively, over the ends of the transoms. The respective outer ends of the truss-rods 12 are anchored by the combined corner-irons and anchorage-plates, (shown in Figs. 4, 5, and 6,) and the inner ends of the rods 12 are anchored by the means shown in Figs. 8 and 9, which latter means are carried by the needle-beams of the car, all of which will be described in detail hereinafter. By means of these truss-rods 12, anchored and sustained as shown, I am enabled to effectively strengthen the ends of the car, and thus to render rigid and secure the entire structure.

The stanchions 14 (shown best in Figs. 2 and 3) are mounted on the side sills 16 of the car and comprise each a web 17 with tapering side flanges 18, the upper end of the stanchion terminating in a vertical lip 19, to which the truss-rods are secured in any desired manner. The base of the stanchion has the ribs 18 turned outward at their lower ends to form feet 20, bolted to a bed-plate 21 and into the side sill. The web 17 is turned outwardly and downwardly to form a plate 22, which lies against the inner side of the side sill and is secured thereto.

The combined corner-irons and anchorages for the outer ends of the truss-rods 12, as shown in Figs. 4, 5, and 6, are formed each of a base-plate 23, provided at its outer transverse edge with an upwardly-extending flange 24 and having at its inner longitudinal and transverse edges a square-angled flange 25. The adjacent end sill 26 is adapted to lie on the plate 23 between the flange 24 and the flange 25, and the adjacent side sill 16 is adapted to lie on the plate 23 to meet with the end sill. The plate 23 is provided with a downwardly-projecting thimble 27, through which passes and in which is anchored the front end of the adjacent truss-rod 12, the truss-rod passing through the adjacent sill 16, and the end-sill truss 11 is anchored in a thimble 28, formed at the outer corner of the plate 23 and at the side or outer end of the flange 24 thereof. The angled flange 25 lies against the end and side sills 26 and 16, at the inner faces thereof, as shown in Figs. 5 and 6.

The anchorages for the inner ends of the truss-rods 12 are arranged at the needle-beams 29 of the car, and each comprises, as shown in Figs. 8 and 9, a U-shaped body portion 30, lying around the adjacent needle-beam and secured thereto by lag-screws, as shown. From each side of the main or body portion 30 arms 31 project, which extend along the under sides of the adjacent side sill 16 and are secured thereto by bolts 32. The inner end of the coacting truss-rod 12 is passed

through the side sill and needle-beam and is anchored in the inner side of the main or body portion 30 of the anchorage. The needle-beams 34 also carry the struts 33 of the side-sill trusses 10, and the needle-beam trusses 31 (see Figs. 8 and 9) are passed through the ends of the needle-beams and anchored thereto, as usual. The ends of the arms 31 have upwardly-turned lugs 35, that are projected slightly into the side sill to hold the anchorage in place.

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

1. A stanchion for trusses, the stanchion having a web, and strengthening-ribs running longitudinally with the web and having their lower ends turned outward to form feet for mounting the stanchion, and the lower end of the web being turned outwardly and downwardly to form a plate also for mounting the stanchion.

2. A railway-car, having needle-beam truss-rods anchored at the transoms of the car, stanchions mounted on the floor of the car over the transoms, truss-rods supported on said stanchions and running with the side sills of the car, the inner ends of the truss-rods being anchored to the needle-beams, combined anchorages and corner-irons to which the outer ends of the said truss-rods are fastened, and end-sill truss-rods, the ends of which are also fastened to the combined anchorages and corner-irons.

3. A railway-car, having needle-beam truss-rods anchored at the transoms of the car, struts projecting downward from the needle-beams and carrying such truss-rods, stanchions mounted on the transoms, and truss-rods supported on such stanchions and anchored at their outer ends to the end sills of the car and at their inner ends to the needle-beams directly at the said struts thereof.

JOHN M. JONES.

Witnesses:
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JAMES M. KNAUS.