No. 832,682. PATENTED OCT. 9, 1906.

C. A. LINDSTRÖM & J. F. STREIB.

STEEL CAR.

APPLICATION FILED AUG. 12, 1903.

3 SHEETS—SHEET 1.

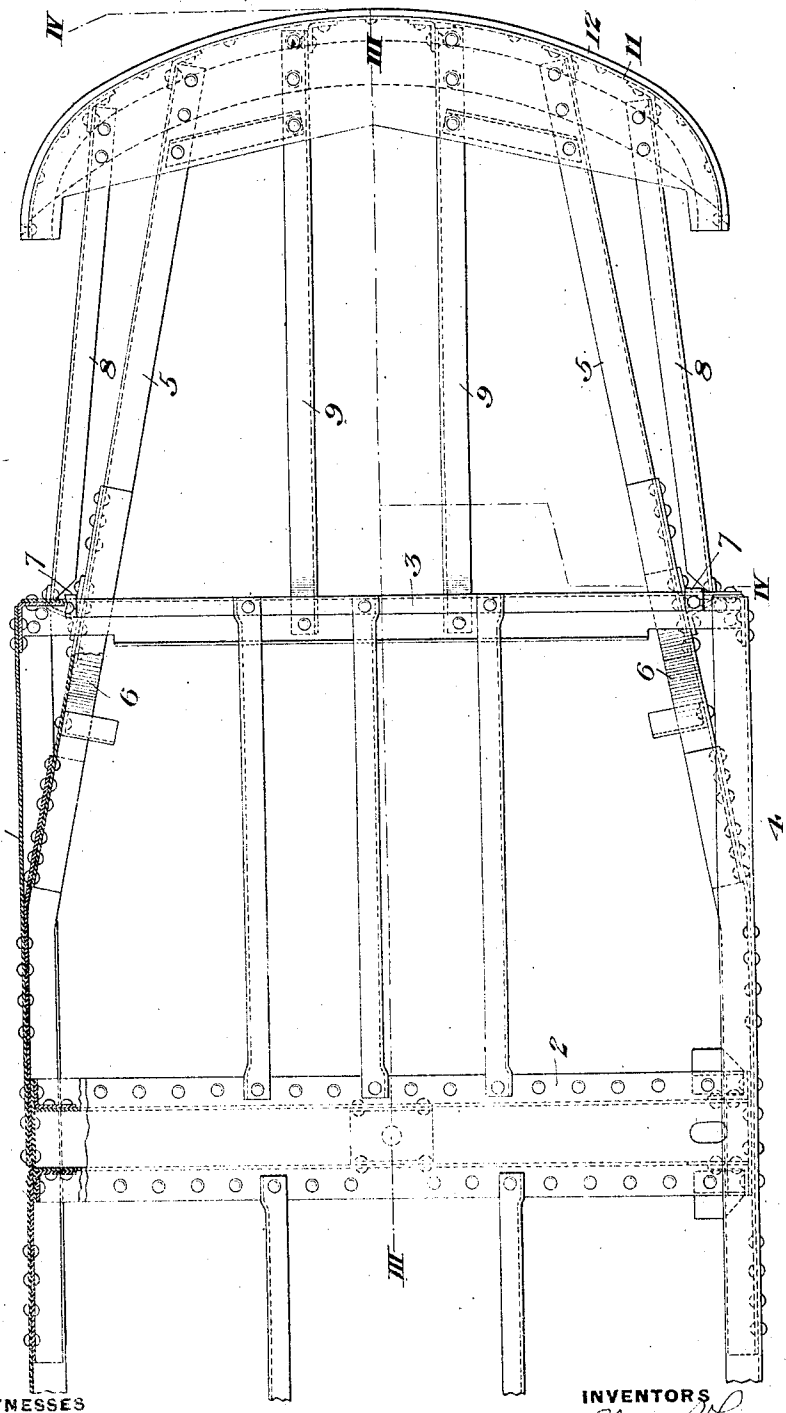


Fig. 1.

WITNESSES

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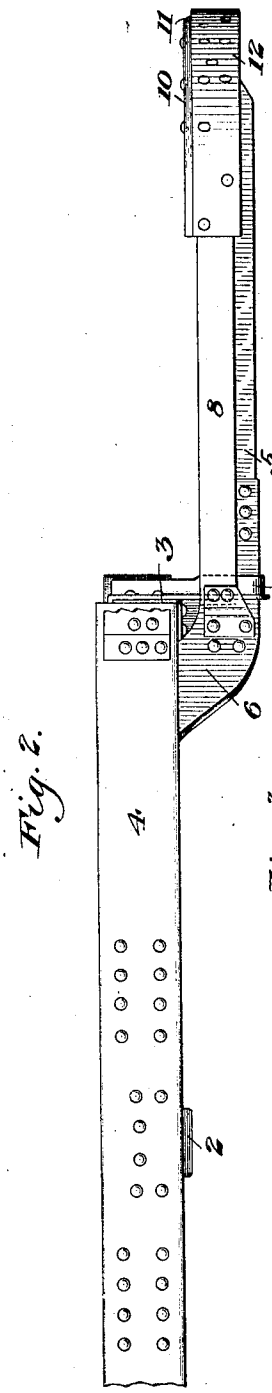


Fig. 2.

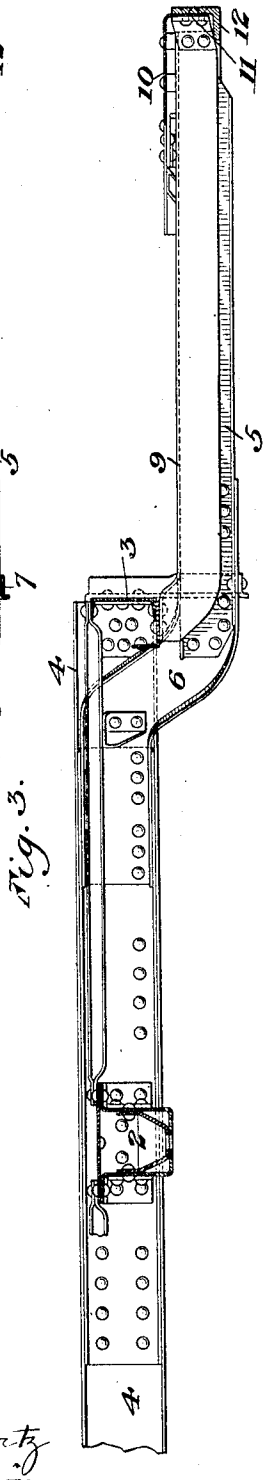


Fig. 3.

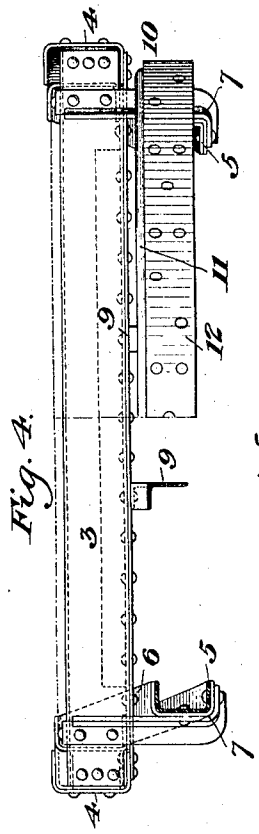


Fig. 4.

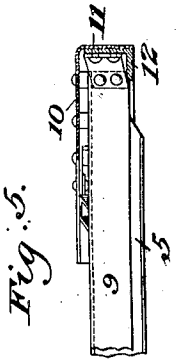


Fig. 5.

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3 SHEETS—SHEET 3.

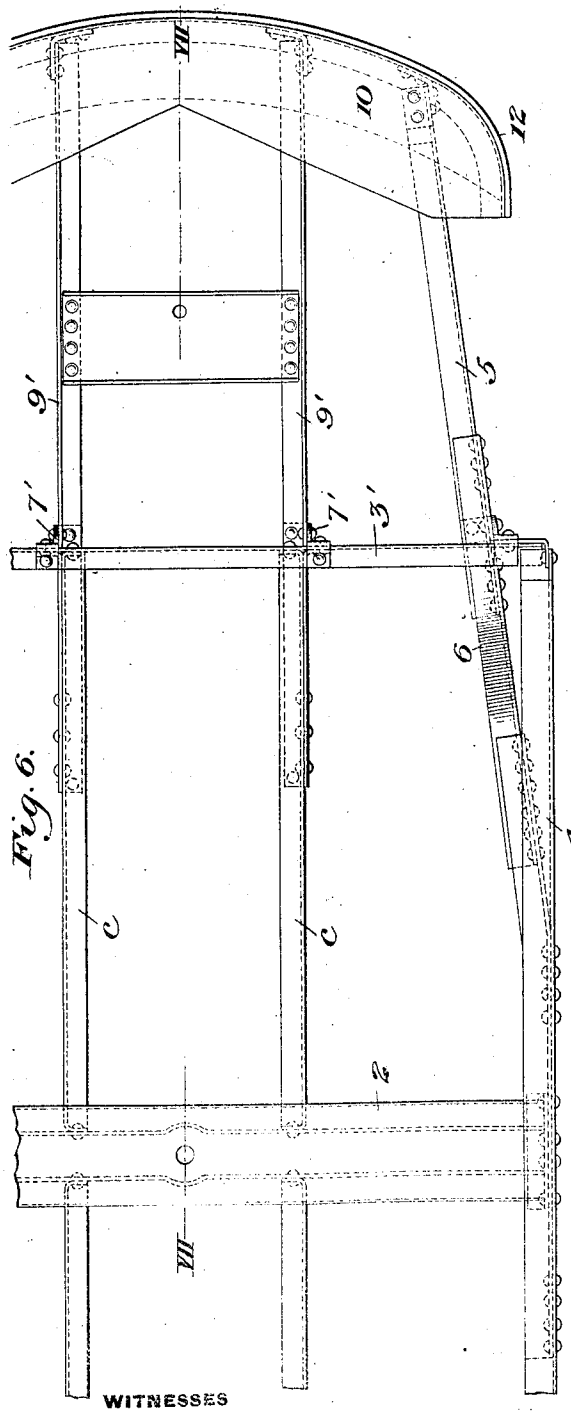


Fig. 6.

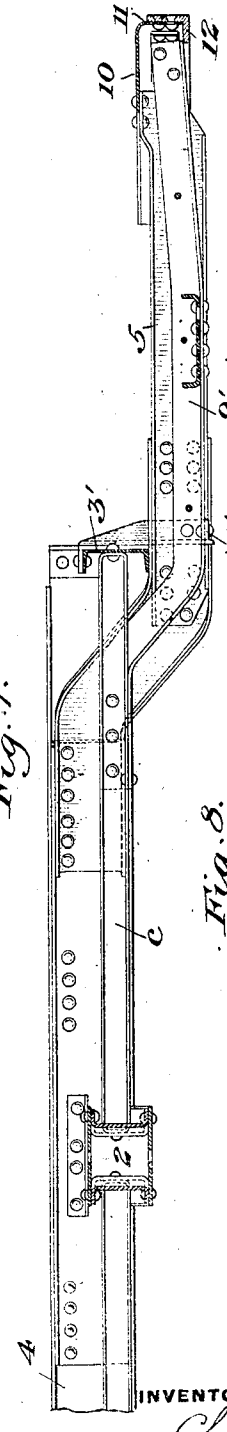


Fig. 7.

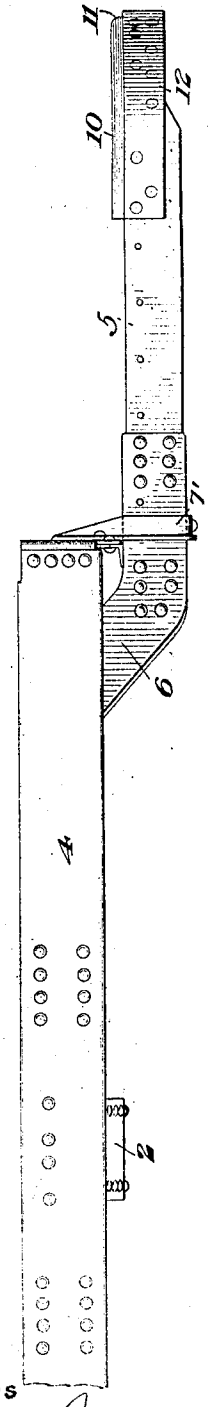


Fig. 8.

WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES A. LINDSTRÖM, OF ALLEGHENY, AND JOHN F. STREIB, OF AVALON, PENNSYLVANIA, ASSIGNORS TO PRESSED STEEL CAR COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

STEEL CAR.

No. 832,682. Specification of Letters Patent. Patented Oct. 9, 1906.

Application filed August 12, 1903. Serial No. 169,246.

To all whom it may concern:

Be it known that we, CHARLES A. LINDSTRÖM, of Allegheny, and JOHN F. STREIB, of Avalon, Allegheny county, Pennsylvania, have invented a new and useful Steel Car, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows in plan view the underframe of a car embodying our invention. Fig. 2 is a side elevation thereof. Fig. 3 is a vertical section on the line III III of Fig. 1. Fig. 4 is a cross-section on the line IV IV of Fig. 1. Fig. 5 is a detail view showing a modification. Fig. 6 is a top plan view showing a modified construction. Fig. 7 is a longitudinal section on the line VII VII of Fig. 6, and Fig. 8 is a side elevation thereof.

Our invention is designed to provide a steel car-frame for street-railway cars having end platforms at a lower level than the main frame of the car-body and to make the construction of great strength and durability.

The preferable form of our invention is shown in the drawings, in which 2 represents the bolster, 3 the end sill, and 4 4 the side sills, of the car-frame, which are made of suitably-flanged metal beams or pieces.

The platform-frame has main platform-sills 5 5, which extend forwardly of the end sill 3 at a lower horizontal plane. At or near the end sill these sills 5 5 are curved upwardly, as at 6, to the level of the side sills and are fixed thereto, extending along the side sills to a point back of the bolster, thus reinforcing the side sills and strengthening the underframe of the car at the bolster. Each of the platform-sills 5 can be made in an integral piece or, as shown in the drawings, in sections riveted together. They are supported by metal brackets 7, which depend from the end sills and terminate preferably in C-shaped supports, which embrace and are fixed to the sills 5. The entire weight of the platform can thus be carried from the end sill by the sills 5.

The remainder of the platform-frame is composed of beams 8 8 and 9 9, which are fixed to the under side of the end sill 3 at their inner ends and extend thence to the platform end sill 10. This sill 10, as shown in Fig. 1, is composed, preferably, of a plate 11, which is bent downwardly or flanged at its forward edge and is fixed to a marginal angle 12 either on the inner or outer side thereof. This affords a stiff and very strong end construction to the platform.

Fig. 5 shows the angle 12 fitted to the inside of the plate 11.

In the figures on the third sheet of the drawings the end sill 3′ is set at a lower level than the side sills and the platform-beams 9′ 9′ extend back to the bolster as continuations of the center sills *c c* and are supported from the end sill by brackets 7′.

Within the scope of our invention as defined in the claims the construction may be modified in various ways, since

What we claim is—

1. A car-frame having diagonally-extending metal platform-sills suspended from the underframe of the car, the rear portions of said sills being bent upwardly and extending along the side sills of the underframe to a point back of the bolster, thereby reinforcing the side sills and strengthening the underframe of the car at the bolster; substantially as described.

2. A car-frame having metal platform-sills suspended from the underframe of the car and extending in a direction obliquely to the center line of the car, and a flanged platform end sill overlying the forward ends of the platform-sill and having a marginal flanged angle secured thereto; substantially as described.

3. A car-frame having an end sill, side sills and bolster, metal platform-sills below the level of the side sills extending upwardly along the same to the bolster and fixed to the side sills, said platform-sills being supported on open-sided brackets attached to the end sill; substantially as described.

4. A car-frame having flanged metal platform-sills below the main underframe of the car and suspended therefrom, said platform-sills extending upwardly and fixed to the car-frame back of the end sill, and C-shaped brackets suspending the platform-sills from the end sill; substantially as described.

5. A car-frame having a platform, and a

platform end sill composed of a flanged plate and a marginal flanged beam; substantially as described.

6. A car-frame having a platform, and a platform end sill composed of a flanged plate and a marginal flanged beam of angle shape; substantially as described.

In testimony whereof we have hereunto set our hands.

CHARLES A. LINDSTRÖM.
J. F. STREIB.

Witnesses:
JOHN MILLER,
H. M. CORWIN.