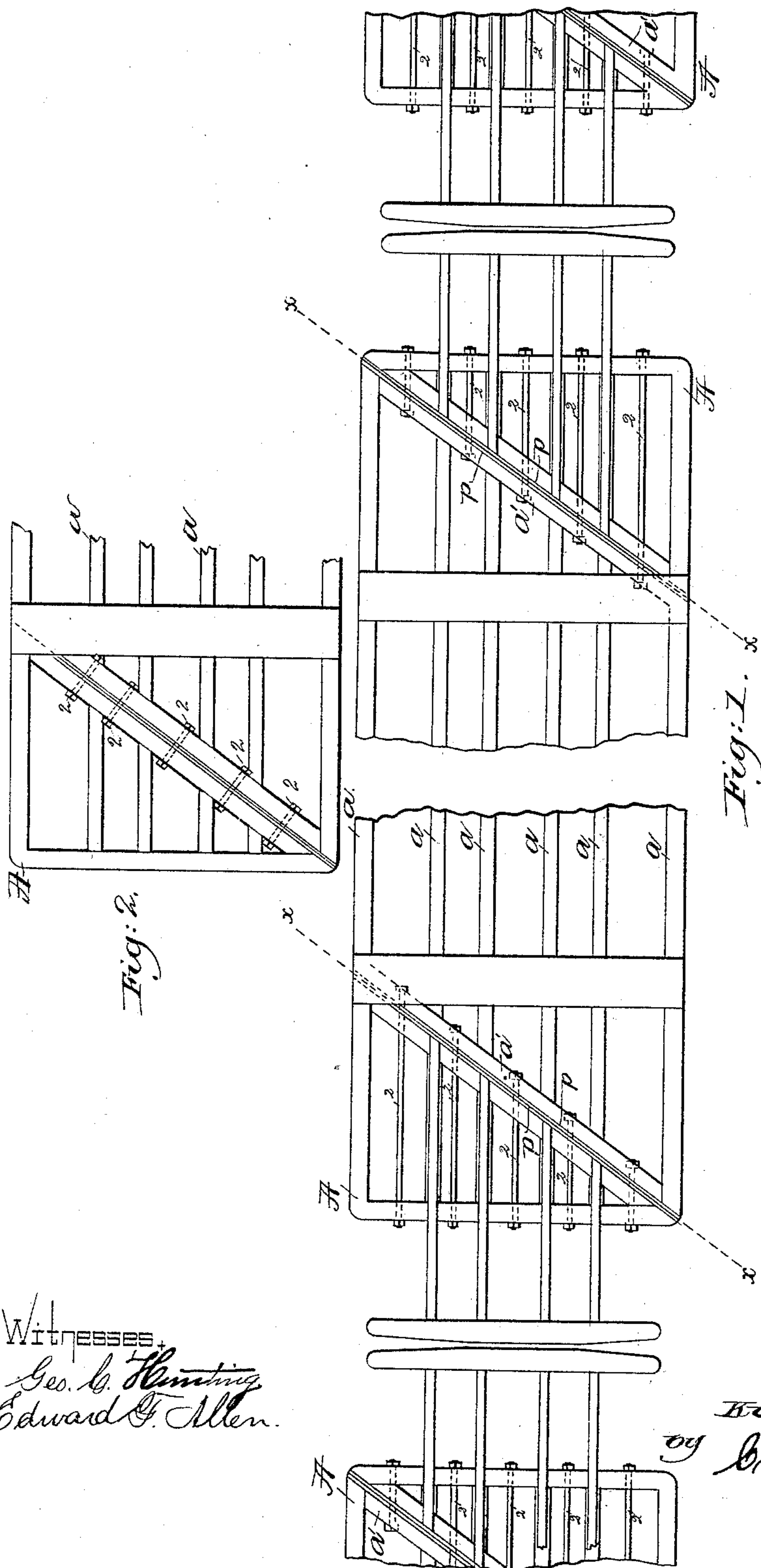


(No Model.)

K. UPTON.
RAILWAY CAR.

No. 440,729.

Patented Nov. 18, 1890.



Witnesses,
Geo. L. Huntington
Edward C. Allen.

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UNITED STATES PATENT OFFICE.

KING UPTON, OF SALEM, MASSACHUSETTS.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 440,729, dated November 18, 1890.

Application filed July 24, 1890. Serial No. 359,737. (No model.)

To all whom it may concern:

Be it known that I, KING UPTON, of Salem, county of Essex, State of Massachusetts, have invented an Improvement in Cars, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to improve the construction of cars, whereby telescoping of the same in collisions may be avoided.

My invention consists in a car-frame having vertical diagonal planes of weakness located at or near opposite ends of the car and substantially parallel with each other for the purpose specified.

In the drawings, Figure 1 represents an under side plan view of a car-frame embodying my invention, and Fig. 2 a modification to be referred to.

The car-frame herein to be described consists of the usual side and center sills a and the end sills a' , herein shown as extending from opposite corners of the car diagonally inward and across to the opposite side of the frame, and to which are secured the sills a^2 , having framed to them the corner-sills a^3 , the said sills a^2 and a^3 forming, as herein shown, triangular sections A, entirely independent of the main body-frame, to which they are secured, as herein shown, by bolts 2, to complete the rectangular frame of the car. The sides and roof of the car are similarly framed, to thereby present substantially parallel vertical planes of weakness at or near the ends of the car, as indicated by the dotted lines xx on the drawings. The abutting face of the triangular-shaped end sections and the main body are preferably fitted with metallic or other face-plates p , through which the bolts 2 or other connections are passed, and which act to sever the said connections

to permit the end sections to slide freely to one side in case of a violent shock.

It will be seen that in the event of a collision between two or more cars framed as herein shown the triangular sections A will break away from the main body-frame at the diagonal planes of weakness, (indicated by dotted lines xx), permitting the cars to slide by each other sidewise, instead of telescoping each other with the usual fatal results, as is common with cars as at present framed.

I have herein shown the triangular sections A as framed entirely independent of the body-frame of the car and secured thereto by bolts; but I do not desire to limit myself to this construction, as the triangular sections may be framed to the body-frame by mortise and tenon or in any way to present a diagonal plane of weakness, as described.

In Fig. 1 the bolts 2 are shown as extending longitudinally of the car-body; but in Fig. 2 the bolts are shown as passing through the sills at right angles thereto.

I claim—

1. A car-frame having two vertical diagonal planes of weakness located one at or near each end of the car and extending from side to side thereof, substantially parallel with each other, substantially as described.

2. A car-frame having substantially triangular-shaped end portions secured thereto, the abutting faces of the said frame and end portions being fitted with metallic or other face-plates, substantially as and for the purpose specified.

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

KING UPTON.

Witnesses:

BERNICE J. NOYES,
EMMA J. BENNETT.