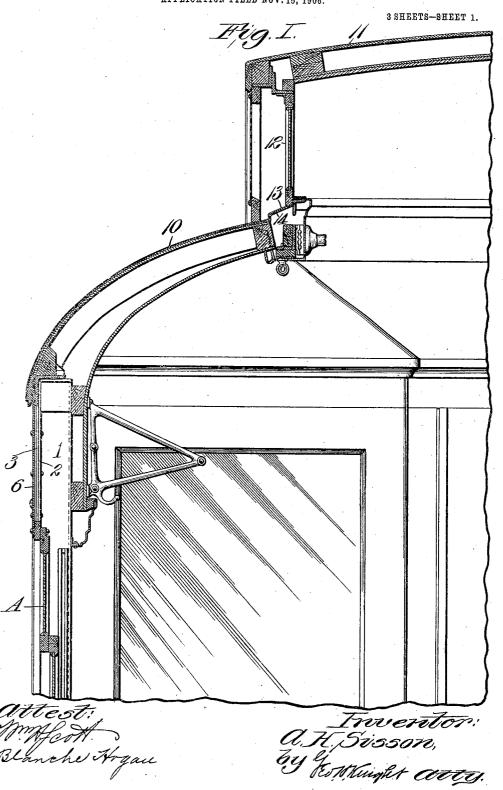
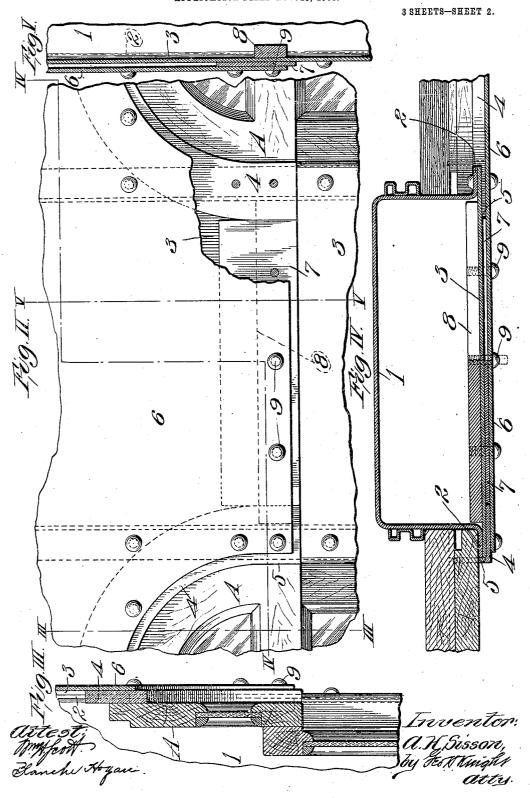
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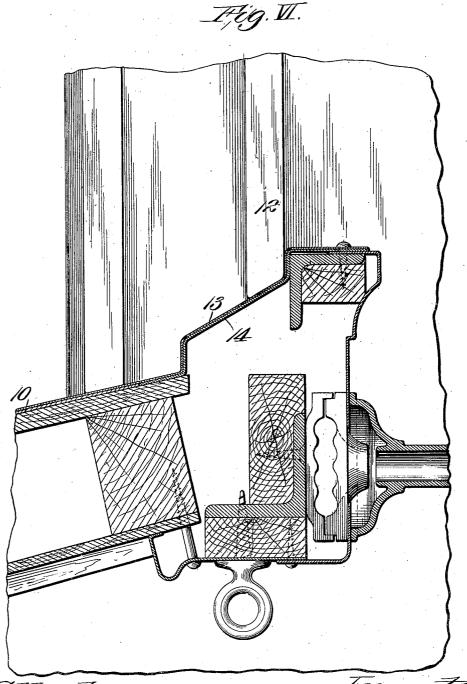
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No. 859,015.

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## UNITED STATES PATENT OFFICE.

ALBERT H. SISSON, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ST. LOUIS CAR COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION.

## CAR CONSTRUCTION.

No. 859,015.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed November 15, 1906. Serial No. 343,490.

To all whom it may concern:

Be it known that I, ALBERT H. SISSON, a citizen of the United States of America, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Car Constructions, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an improvement in that class 10 of railway cars in which the framework and the other main portions of the car body are constructed of metal to insure rigidity and strength.

The present invention has reference more particularly to the construction of the side walls of a car at the locations of the window openings and also to protective sheathings for the decks of the car at the location of the deck windows.

Figure I is a cross section taken through the upper portion of one side of a car constructed in accordance with my invention. Fig. II is an enlarged elevation of a portion of the car at the locations of the side windows therein. Fig. III is a vertical section taken on line III—III, Fig. II. Fig. IV is a horizontal section taken on irregular line IV—IV, Fig. II. Fig. V is a vertical section taken on line V—V, Fig. II. Fig. VI is an enlarged cross section through the deck of the car.

1 designates the inner or main members of the side posts of the car, these members being of **U**-shape in cross section and being provided with outturned lateral flanges 2.

3 are face plates applied to the inner post members and serving to complete the side posts.

4 designates segmental shaped metallic stays that are 35 applied to the side posts at the locations of the side window openings of the car and which extend across the stationary upper sashes A in said window openings, as seen in Figs. I to III inclusive. These stays serve to unite the adjoining side posts throughout the 40 side walls of the car and in order that the desired rigidity may be secured in the stays, their central portions are made of considerable thickness. Inasmuch, however, as it is desirable to cause the stays to fit snugly against the portions of the side posts against 45 which they rest, namely the face plate 3 and the flanges 2 of the inner post members, said stays are reduced in thickness at the vertical points where they overlap the side post members as seen in Fig. IV, and each stay is provided at its inner edges with inwardly extending flanges 5 that jut over the adjacent edges of the post inner member flanges and face plate. The flanges of the stays serve as bearing members by impinging against the portions of the post referred to and in addi-

tion serve to provide a more finished appearance at

the interiors of the stays which are located adjacent 55 to the stationary window sashes  $\Lambda$  and exposed.

6 designates a metallic sheathing that extends longitudinally of the car and is so shaped as to surmount the window openings and extends downwardly between adjoining windows as seen most clearly in Fig. 60 II. The sheathing, the stays at the rear of it and the outer sides of the side posts are all united by rivets which are passed through these parts.

7 are filler strips that are located between the face plates of the side posts and the sheathing 6 interme- 65 diate of the stays 4 and which serve to fill the spaces between these members occasioned by the projection of the stays between the outer sides of the side posts.

For the purpose of readily connecting the portions of the sheathing 6 to the side posts, I provide upon the 70 rear side of the post face plates, horizontal strips 8 (see Figs. IV and V) that are secured to said face plates and contain threaded apertures for the reception of binding screws 9. These binding screws are preferably provided with wrench receiving heads, as illustrated 75 in dotted lines Fig. IV, in order that the screws may be inserted through the sheathing, filler strips 7 and post face plates to be seated in the strips 8, and after the screws are so seated the heads referred to are filed or otherwise operated upon to remove them and leave the 80 screw-heads in a rounded condition. The described means of connecting the sheathing to the side posts of the car is necessarily due to the fact that the interior of the side posts is inaccessible at the time of applying the sheathing for the purpose of heading the inner ends 85 of rivets that might otherwise be used for connecting the parts.

10 designates the lower deck of the car and 11 the upper deck between which are the deck windows 12. The lower deck is constructed as usual but for the purpose of preventing corrosion or rusting of the deck sheathing of such deck, I surmount said sheathing at the locations of the deck windows, at which point rusting and corrosion are most likely to take place, with a non-corrodible and non-rusting supplemental sheathing 95 13 (see Figs. I and VI) which is preferably of copper.

14 is a sheet metal sash rest, one of which is located in each deck window opening and on which the supplemental sheathing 13 is laid.

## I claim—

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- 1. A car body having side posts and provided with window openings, and arch shaped stays connecting said posts at the tops of said window openings, substantially as set forth.
- 2. A car body having side posts and provided with window openings, and arch shaped stays connecting said posts at the tops of said window openings; the stays being reduced in thickness at their portions united to said posts, substantially as set forth.

3. A car body having side posts and provided with window openings, and arch shaped stays connecting said posts at the tops of said window openings; the stays being reduced in thickness at their portions united to said posts 5 and being provided with side flanges abutting against said posts, substantially as set forth.

4. In a car body, the combination of side posts consisting of U-shaped inner members having side flanges, and face plates fitted to said flanges, and arch shaped stays connecting said posts; said stays being reduced in thickness at points fitted to said face plates, substantially as set forth.

5. In a car body, the combination of side posts consisting of U-shaped inner members having side flanges, and face plates fitted to said flanges, and arch shaped stays connecting said posts; said stays being reduced in thickness at points fitted to said face plates and being provided with flanges abutting against the edges of said inner post member flanges and said face plates, substantially as set 20 forth.

6. A car body having side posts and provided with window openings, arch shaped stays connecting said posts at the tops of said window openings, the stays being reduced in thickness at their portions united to said posts;

and a sheathing fitted over said posts and stays, sub-  $25\,$  stantially as set forth.

7. A car body having side posts with face plates and provided with window openings, arch shaped stays connecting said posts at the tops of said window openings, the stays being reduced in thickness at their portions 30 united to said posts; sheathing fitted over said posts and stays, and fillers located between said stays and between said sheathing and the face plates of said posts, substantially as set forth.

8. A car body having side posts with face plates and 35 provided with window openings, arch shaped stays connecting said posts at the tops of said window openings, the stays being reduced in thickness at their portions united to said posts; a sheathing fitted over said posts and stays; the post face plates being provided with strips 40 containing screw holes; and screws passing through said sheathing and seated in said strips, substantially as set forth.

ALBERT H. SISSON.

In presence of—
A. DIEKMANN,
H. J. MURPHY.