J. M. HANSEN.

METAL CAR ROOFING.

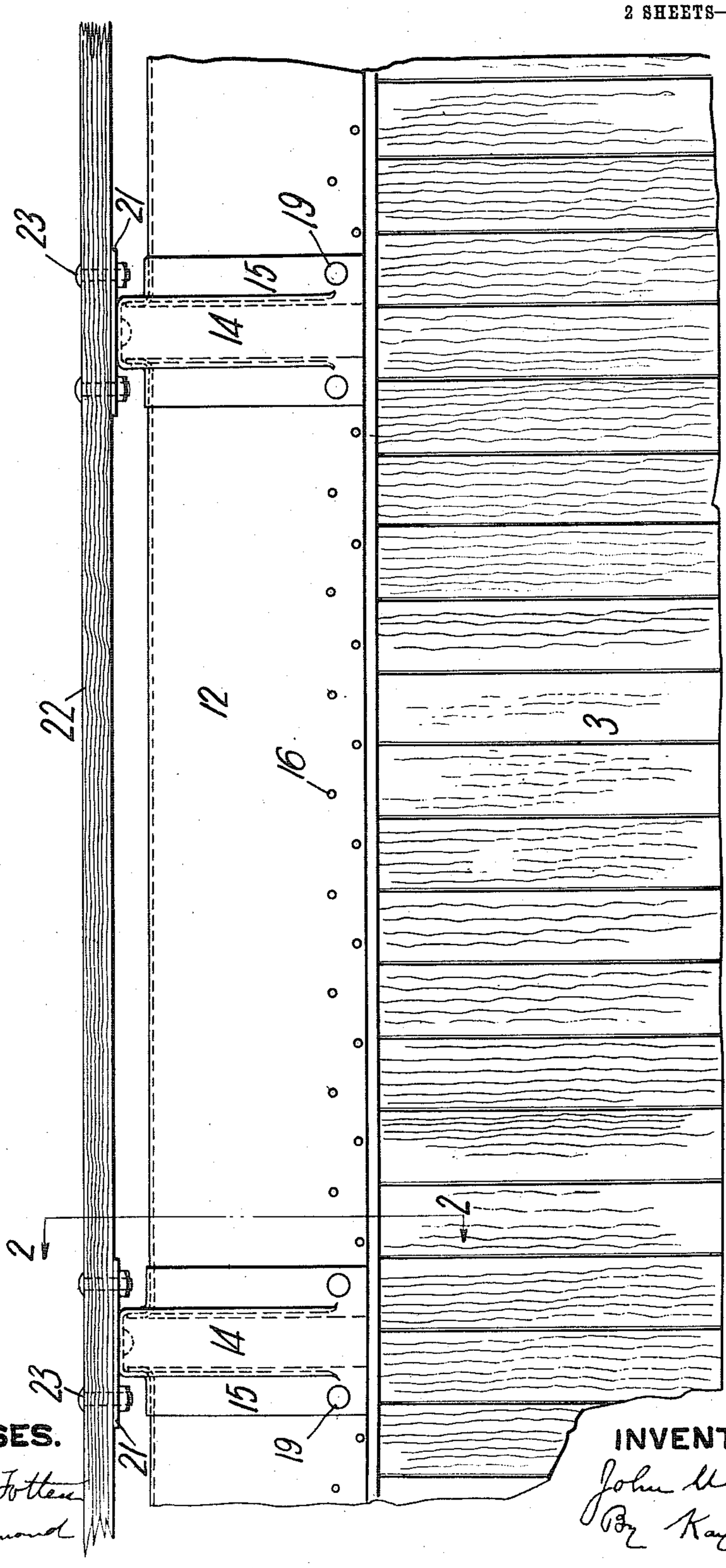
APPLICATION FILED AUG. 3, 1910.

985,340.

Patented Feb. 28, 1911.

2 SHEETS—SHEET 1.

FIG. 1



WITNESSES.

Robert C Totten

F. C. Raymond

INVENTOR

John M Hansen

By Kay & Totten

Attorneys

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2 SHEETS—SHEET 2.

FIG. 2

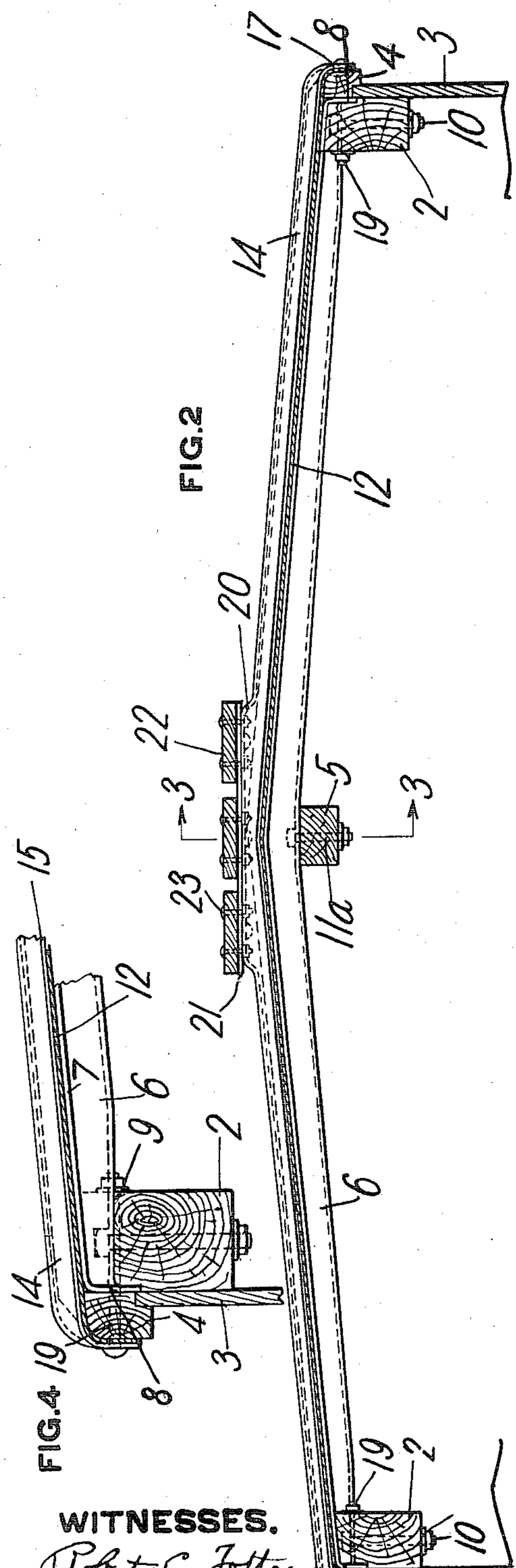

FIG. 3

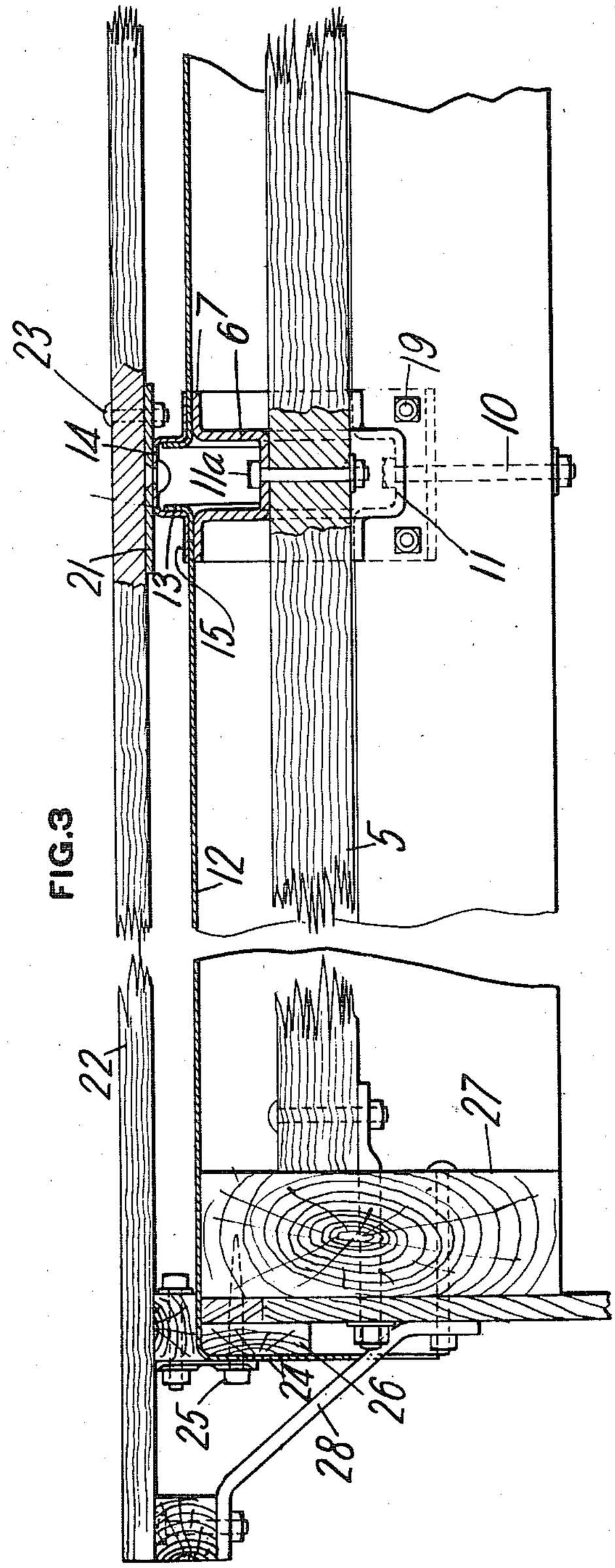

FIG. 4

WITNESSES.

Robert C Totten

G. C. Raymond

INVENTOR.

John M Hansen

By Kay & Totten

attorneys

UNITED STATES PATENT OFFICE.

JOHN M. HANSEN, OF PITTSBURG, PENNSYLVANIA.

METAL CAR-ROOFING.

985,340. Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed August 3, 1910. Serial No. 575,227.

To all whom it may concern:

Be it known that I, JOHN M. HANSEN, a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Metal Car-Roofing; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to car-roofs and more especially to a metallic roof which may be readily applied to a wooden box-car.

The object of my invention is to provide a car-roof in which the carlines, roof-plates, running-board, &c., are all united in such a manner as to form a strong, rigid structure which may be built up complete and then bolted or otherwise secured to the side-frames and ridge-pole of the car, and to these ends my invention comprises the novel features hereinafter set forth and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a car showing my improved roof applied thereto; Fig. 2 is a cross-section on the line 2—2 Fig. 1; Fig. 3 is a section on the line 3—3 Fig. 2; Fig. 4 is an enlarged detail.

In the drawing the wooden frame-work of the car is made up of the side-plates 2, the sheathing 3, the fascia or molding 4, and the ridge-pole 5. The carlines 6 consist of channel or U-shaped members with the outwardly extending flanges 7. These carlines slope from the median line of the roof to the eaves, and at their ends are bent down to form the flanges 8, which fit down over the outer faces of the side-plate 2. The side-plates 2 are cut out or grooved to receive the end portions of the carlines which have their end portions on a horizontal plane as indicated at 9 Fig. 5. The bolts 10 pass down through the webs 11 of the carlines and through the side-plates 2 to secure the carlines to the said side-plates. The bolts 11 also pass down through the webs 11 of the carlines and through the ridge-pole 5.

The roof-plates 12 are made in sections and said roof-plates have the lateral flanges 13, the flanges of adjoining roof-plates being inclosed by the cover-strips 14. These cover-strips 14 are U-shaped in section and have the flanges 15 so that when cover-strips are arranged in inverted position the flanges 15 will rest on the roof-plates and will register with the flanges 7 of the carlines. The roof-plates 12 are secured at their outer edges to the fascia 4 by means of the nails 16.

The outer ends of the cover-strips 13 are flattened out to form the downwardly extending end flanges 17, and bolts 19 passing through said flanges, the fascia, the side-plates and flanges 8 of the carlines secure the cover-strips in place. In this manner I provide for securely uniting the parts together in such a way as to form a very rigid, strong construction. The cover-strips not only provide for holding the roof-plates in position, but at the same time strengthen the construction of the roof and greatly add to its rigidity.

The cover-plates at their central portions are slightly raised to form the horizontal base 20 and to this base is riveted the plate 21 upon which the running-board 22 rests. The running-board is bolted by bolts 23 to the plates 21. At the ends of the car the roof-plates are bent down as at 24 and lag screws 25 secure the roof-plates to the end fascia 26 and the end plate 27. The bracket 28 is bolted to the end of the car and extends out in position to support the outer end of the running-board 22.

What I claim is:

1. In a car-roof, the combination with side-plates, of U-shaped carlines having outwardly projecting flanges, the outer ends of said carlines having downwardly extending flanges engaging the outer faces of said side-plates, roof-plates having upwardly extending flanges, and inverted U-shaped cover strips containing said flanges of said roof-plate, downwardly extending flanges on said cover-strips, and fastening devices passing through the end flanges on said cover-strips and carlines securing the same to said side-plates.

2. In a car-roof, the combination with side-plates, of a channel carline resting thereon, downwardly extending flanges at the ends of said carline engaging the outer faces of said side-plates, roof plates having upwardly extending flanges, cover-strips inclosing said flanges, downwardly extending end flanges on said cover-strips, a fascia, and fastening device passing through the downwardly extending flange on said cover-strip, the fascia and carline and securing same to said side-plates.

3. In a car-roof, the combination with side-plates, of a channel carline resting on

said side-plates, downwardly extending end flanges on said carline engaging the outer faces of said side-plates, roof-plates resting on said carline, cover-strips resting on said roof-plates in line with said carline, downwardly extending flanges at the ends of said cover-strips, the outer ends of said roof-plates being turned downwardly, a fascia, and connecting means passing through said flanges on said cover-strips, the roof-plates, the fascia, the downwardly extending flanges on said carline, and said side-plate.

In testimony whereof, I the said JOHN M. HANSEN, have hereunto set my hand.

JOHN M. HANSEN.

Witnesses:

ROBERT C. TOTTEN,

JOHN F. WILL.