July 17, 1923. 1,462,329

C. F. DENNIS

CONSTRUCTION OF VEHICLE ROOFS

Filed Dec. 14, 1921 2 Sheets-Sheet 1

Fig. 1.

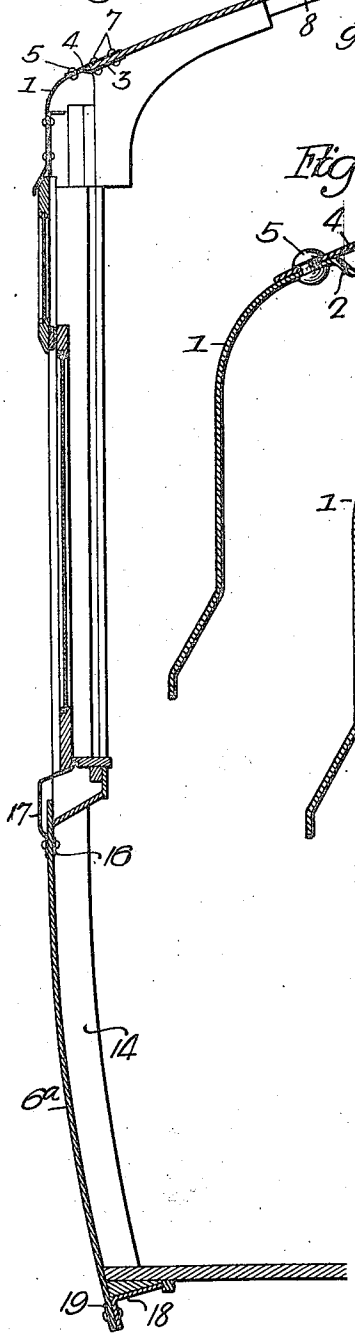


Fig. 4.

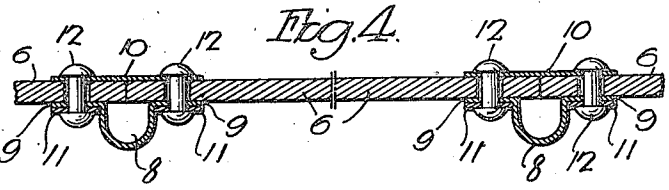


Fig. 2.

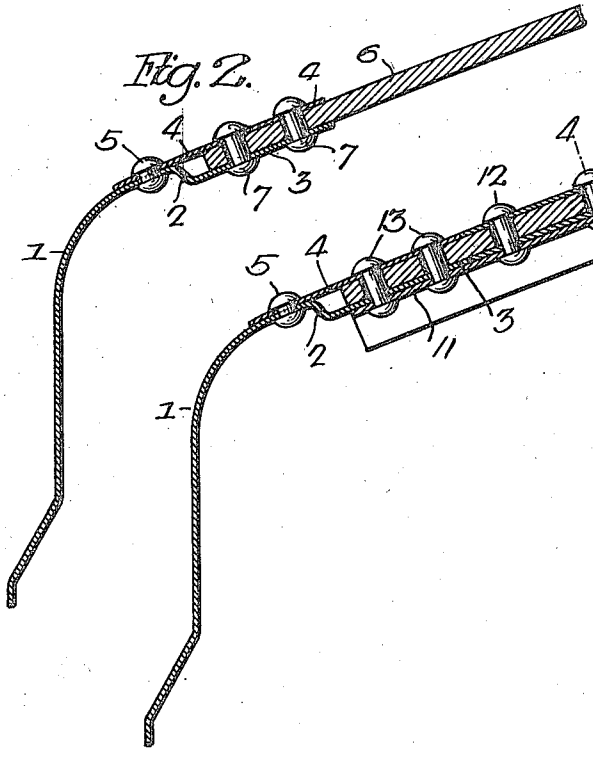


Fig. 3.

Inventor—
Charles F. Dennis.
by his Attorneys—
Howson & Howson

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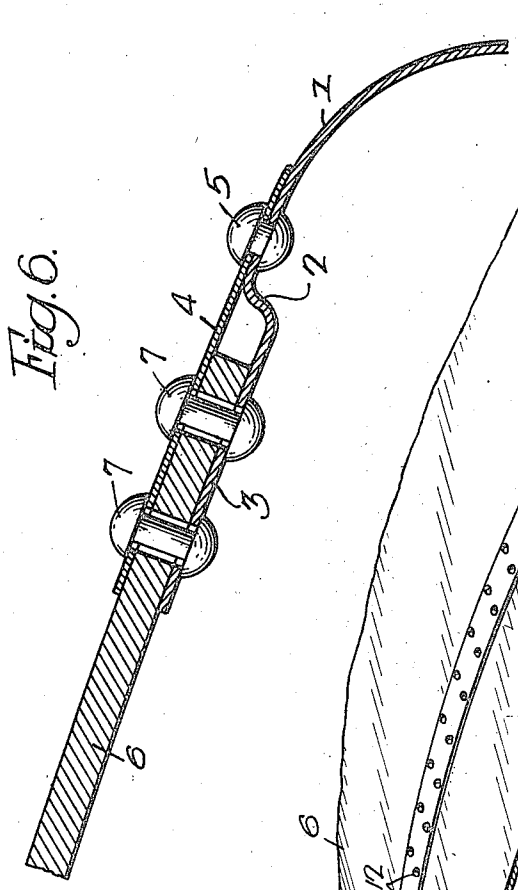


Fig. 6.

Fig. 5.

Inventor-
Charles F. Dennis.
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Howson & Howson

Patented July 17, 1923.

1,462,329

UNITED STATES PATENT OFFICE.

CHARLES F. DENNIS, OF CLEVELAND, OHIO, ASSIGNOR TO THE J. G. BRILL COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CONSTRUCTION OF VEHICLE ROOFS.

Application filed December 14, 1921. Serial No. 532,284.

To all whom it may concern:

Be it known that I, CHARLES F. DENNIS, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain Improvements in the Construction of Vehicle Roofs, of which the following is a specification.

One object of my invention is to construct the roof of an omnibus, or other vehicle, so that the veneers, or panels, of the roof will be held to the metallic portion of the frame by friction so as to allow the veneer panels to have a certain amount of movement in the frame.

A further object of the invention is to design the roof so that the carline will be connected rigidly to the letter panels.

In the accompanying drawings:—

Fig. 1 is a transverse sectional view of one side of a vehicle body illustrating my invention;

Fig. 2 is an enlarged sectional transverse view through one side of the roof;

Fig. 3 is a transverse sectional view through the carlines and the letter panel showing the method of attaching the carlines to the panel;

Fig. 4 is a longitudinal sectional view on the line 4—4, Fig. 3;

Fig. 5 is a sectional perspective view of the roof of the vehicle; and

Fig. 6 is a view illustrating a modification of my invention.

1—1 are the letter panels of the bus body. These are made of sheet metal and extend the full length of the body of the bus and each panel is depressed at 2 to form an extended flange 3. 4 is a veneer plate which extends the full length of the letter panel and is secured thereto by rivets 5. 6 is the veneer roofing which may be made of wood or wood composition or a wooden center sheathed with thin metal. The edges of the roofing extend into the space between the steel plate 4 and the flange 3 of the letter panel and is clamped by the two plates. Two series of rivets 7 in the present instance extend through holes in the plate and through enlarged holes in the veneer roofing, as shown in Figs. 2, 3 and 4. This construction allows a certain amount of play, the veneer roofing being held in position by friction.

Extending from one letter panel to another is a series of carlines 8. These carlines are U-shaped in cross section in the present instance as shown in Fig. 4, and they have flanges 9 resting against the under side of the veneer roofing 6 and extending across the roof from one letter panel to another. Directly above each carline is a steel plate 10 and a short plate 11 extends under each flange 9 of each carline and under the flange 3 of the letter panel. These plates 10 and 11 are secured by rivets 12 to the flanges of the carlines and by rivets 13 to the flange 3 of the letter panel. Both sets of rivets extend through enlarged holes in the veneer roofing so that there is a direct metallic connection through the carline from one letter panel to the other. The opening in the veneer roofing for the rivets 12, being larger than the rivets, allows the roof to expand and contract, yet the metallic parts of the roof structure will be rigidly connected.

In Fig. 6 I have shown the enlarged holes for the rivets extending through the clamping plates as well as the veneer. This construction may be used when the plates and veneers are punched after being assembled.

I claim:

1. The combination in a vehicle roof structure, of a frame having two longitudinal letter panels extending at the side and over part of the roof, the portions of each panel at the roof being depressed to form a flange; a veneer plate extending the full length of the flange of each letter panel and secured at one edge to said panel; carlines connecting the flanges of the two panels; and roofing sections extending from one side of the vehicle to the other side thereof and resting on the flanges of the letter panels and under the veneer plates.

2. The combination in a vehicle roof structure, of a frame having two longitudinal letter panels extending at the sides and over part of the roof, that portion of each panel at the roof being depressed to form a flange; a veneer plate extending over the flange of each letter panel; carlines connecting the flanges of the two panels; roofing sections extending from one side of the vehicle to the other side thereof and resting on the flanges of the letter panels and under the veneer plates; and rivets extending through

enlarged openings in the roofing sections and securing the carlines to the flanges of the letter panels and the veneer plates.

3. The combination in a vehicle roof structure, of a frame having two longitudinal letter panels extending at the sides and over part of the roof, that portion of each panel at the roof having a depressed flange extending the full length of the panel; a veneer plate attached to each letter panel and extending over the flange; flanged carlines extending from one side of the vehicle to the other and connecting the letter panels; roofing sections mounted on the carlines and extending into the spaces between the flanges of the letter panels and the veneer plates; coupling plates connecting the carlines with the flanges of the letter panels; transverse plates located above the carlines and overlapping the joints of the roofing sections; and rivets extending through enlarged holes in the roofing sections and securing the carlines and the transverse plates to the letter panels and to the veneer plates.

CHARLES F. DENNIS.