

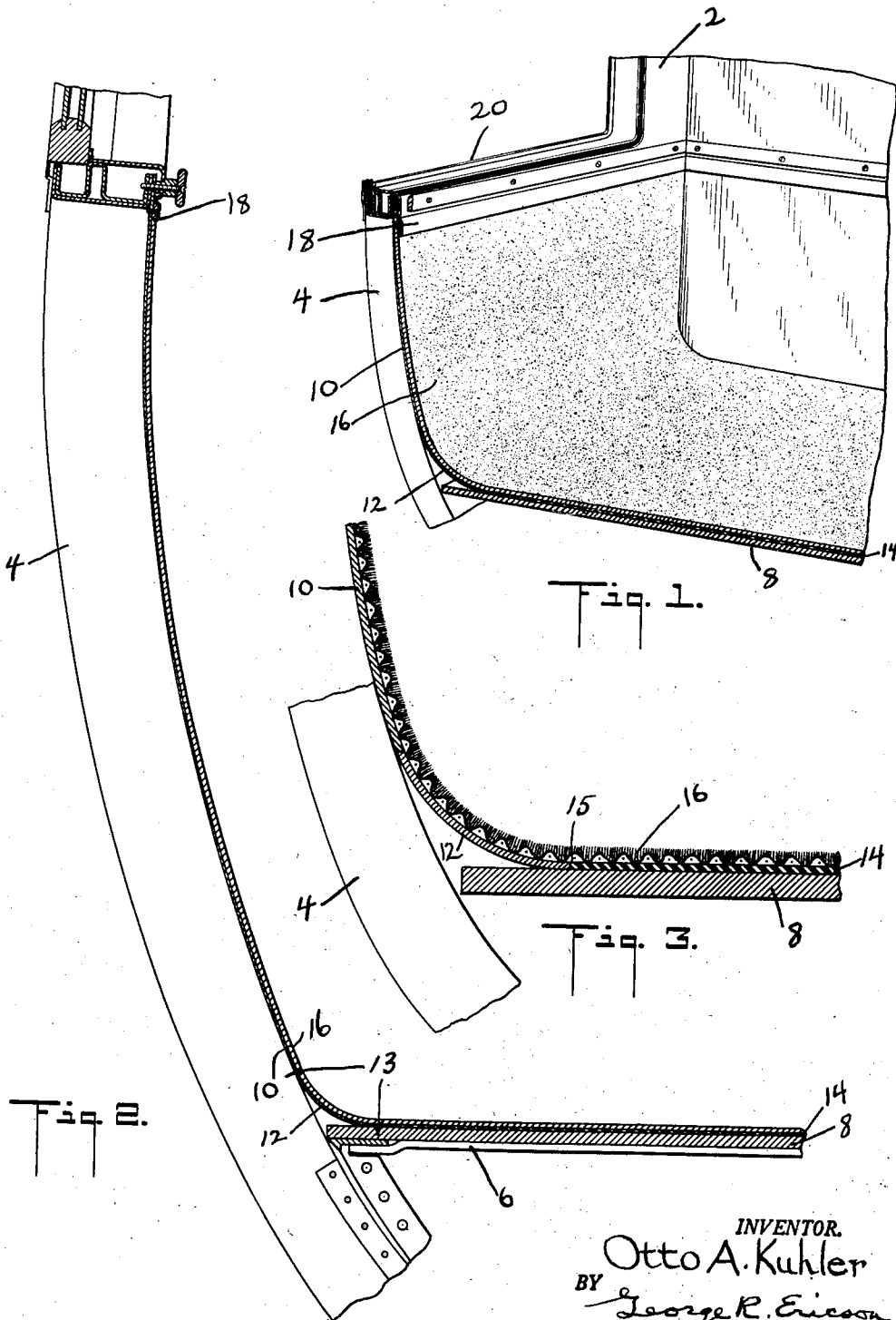
July 3, 1951

O. A. KUHLER

2,559,443

ROOM STRUCTURE

Filed Jan. 24, 1947



INVENTOR.  
**Otto A. Kuhler**  
BY *George R. Ericson*  
Attorney

# UNITED STATES PATENT OFFICE

2,559,443

## ROOM STRUCTURE

Otto A. Kuhler, Blauvelt, N. Y., assignor to American Car and Foundry Company, New York, N. Y., a corporation of New Jersey

Application January 24, 1947, Serial No. 724,023

3 Claims. (Cl. 105-422)

1 This invention relates to room structure and particularly to that part of the structure of rooms and railway cars adjacent the junction of the floor and walls.

In conventional room and railway car construction the floor and interior walls meet at an angle, resulting in the formation of angular junctions where, especially in railway cars, dirt and debris collect. It is desirable to eliminate such angular junctions, not only to prevent the undue accumulation of debris and other refuse, but also to make this area of the structure more accessible for easier cleaning. Further, by eliminating these angular junctions it is possible and desirable, particularly in railway cars, to continue the floor covering in one piece upwardly onto the interior walls to also serve as a wall covering, the smooth continuity of the covering giving a pleasing appearance to the car interior.

It is an object of the present invention to provide a cove member forming the junction between the floor and an interior wall of rooms or railway cars, eliminating angles in this area of the structure.

Another object of the invention is the provision of a cove member for room or railway car structures, permitting the use of a floor covering extending over the cove member and continuing upwardly onto the interior walls.

A further object of the invention is the provision of a room structure in which cove members form the junction between the floor and side walls, the floor, cove members and walls having contiguous inner faces forming a smooth, continuous interior contour for the application of a carpet or other covering material.

These and other objects of the invention will be apparent to those skilled in the art from a study of the following description and accompanying drawings, in which:

Figure 1 is a fragmentary perspective view of a railway car embodying the present invention:

Fig. 2 is a cross-sectional view through one side of the car, and

Fig. 3 is an enlarged view of a portion of the structure shown in Fig. 2.

Referring now to the drawings, the invention is shown as applied to a railway car 2 having curved side posts 4 (only one of which is shown) to which are connected, by any suitable means, transverse framing members 6.

The framing members 6 support a floor extending lengthwise of the car between the side posts and which comprises a main floor portion 8 and a raised floor portion 14. The raised floor

2 portion is of less width than the main floor, and may be a separate element, or it may be formed integral with the main floor portion, defining shoulders 15 adjacent the sides of the main floor.

The floor portions may be made of any suitable material, but the raised floor portion is preferably composed of rubber, as indicated in the drawings. The car is provided with interior side walls 10, of plymetal or other lining material, secured to the inner faces of the side posts and extending downwardly, terminating a short distance above and beyond the sides of the floor.

It will be seen that the lower edge of the interior side walls and the side edge of the floor are spaced vertically from each other, the space between these parts at each side of the car being covered or spanned by a longitudinally extending cove member 12. The cove members 12 are preferably formed of curved sheet metal, such as aluminum, and are secured in any suitable manner, such as by the screws 13, to the side posts and floor of the car. The lower portion of the cove members overlap and rest on the main floor portion, at opposite sides of the car, with the edges abutting the shoulders 15 of the raised floor portion. The upper edge portions of the cove members abut the lower edge portions of the interior walls 10 with the inner faces of the cove members lying flush with the adjacent inner faces of the walls and with the adjacent upper surface of the raised floor portion. Thus the inner faces of the side walls and cove members and the upper surface of the raised floor portion 14 are contiguous, lying flush with each other, and presenting a continuous contour for the smooth application of covering material 16.

The covering may be a strip of suitable material, such as a carpet 16, that is of sufficient length to extend laterally beyond the upper surface of the raised floor portion so as to overlie the cove members and a portion of the interior walls of the car. The covering is suitably bonded, preferably by cementing or gluing, to the upper surface of the raised floor portion and the inner faces of the cove members and walls. The upper portions of the covering are also secured to the walls by a molding strip 18 extending around the car interior beneath the window openings 20.

In addition to improved sanitary conditions and easier cleaning, it is believed obvious that the above described arrangement will also provide additional heat insulation and soundproofing, as well as giving a smooth flowing contour to the interior of the car.

While the invention has been described more

3

or less in detail, it will be apparent to those skilled in the art that various modifications may be made without departing from the scope of the invention as defined in the following claims.

What is claimed is:

1. In a railway car having side posts, a floor extending between and supported by said posts, said floor having a raised intermediate portion formed of resilient material extending between the sides thereof, side walls secured to the inner face of said posts and having their lower edge portion spaced above and beyond the sides of said floor, cove members spaced in part from said floor extending longitudinally of said car and spanning the space between the lower edge portion of the walls and the side edge portions of said raised floor portion, said cove members having their inner faces lying flush with the adjacent surfaces of said side wall and raised floor portions, window openings in said side walls, a covering on said raised floor portion extending laterally beyond the side edges thereof and over said cove members, said covering continuing upwardly to said window openings and being secured to said walls, and a molding fastening strip securing the upper edge portion of said covering beneath said window openings.

2. In a room structure, a supporting floor, a raised floor of less width than the supporting floor mounted thereon and forming shoulders adjacent the sides thereof, interior side walls having their lower edges terminating above and beyond the sides of said supporting floor, and cove members joining the side walls and raised floor with one edge portion abutting against the shoulders formed by the raised floor and having their opposite edge portion abutting against the lower

4

edge of said walls, the contiguous faces of the side walls, cove members and raised floor lying flush with each other to provide a smooth unbroken surface for application of a covering thereover.

3. In a railway car having side posts, a supporting floor extending between and joined to said side posts, said side posts being curved upwardly and outwardly above the sides of the supporting floor, a raised floor of less width than the supporting floor mounted thereon and forming shoulders adjacent the sides thereof, side walls secured to the inner face of said posts and having their lower edges terminated above and beyond the sides of said supporting floor, and cove members spaced in part from said supporting floor joining the side walls and raised floor with one edge portion abutting against said shoulders and having their opposite edge portion abutting against the lower edge of the side walls, the contiguous faces of said side walls, cove members and raised floor lying flush with each other.

OTTO A. KUHLER.

#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

Number	Name	Date
1,072,501	Richter	Sept. 9, 1913
1,091,073	Meek	Mar. 24, 1914
1,880,661	Baker	Oct. 4, 1932
2,047,133	Christianson et al.	July 7, 1936
2,056,230	Blomberg	Oct. 6, 1936
2,211,618	Gilpin	Aug. 13, 1940