Oct. 31, 1950 J. W. PATTON 2,528,074

RAILROAD CAR

Filed Nov. 16, 1948 2 Sheets-Sheet 1

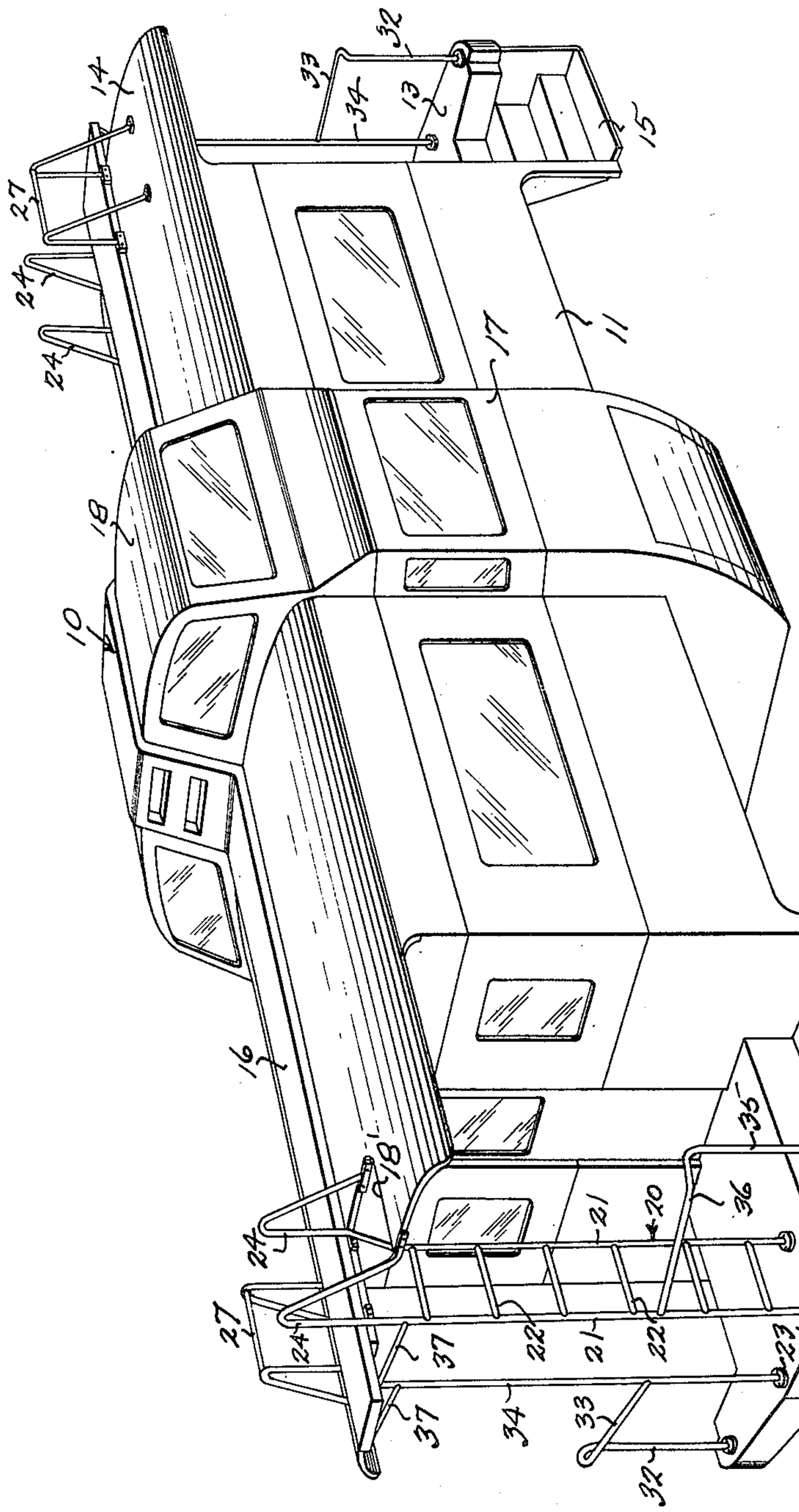

FIG. 1.

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FIG. 1.

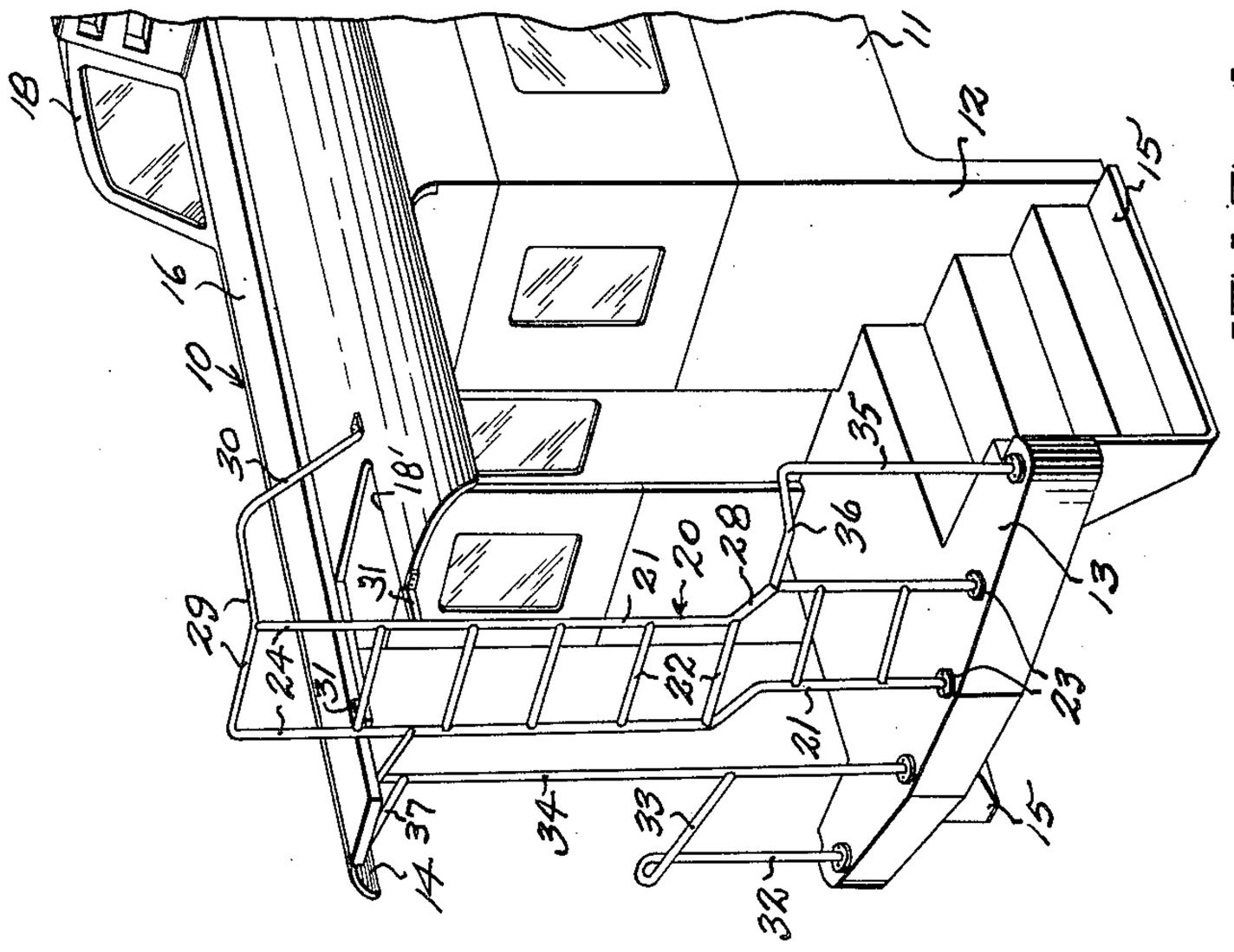


FIG. 2.

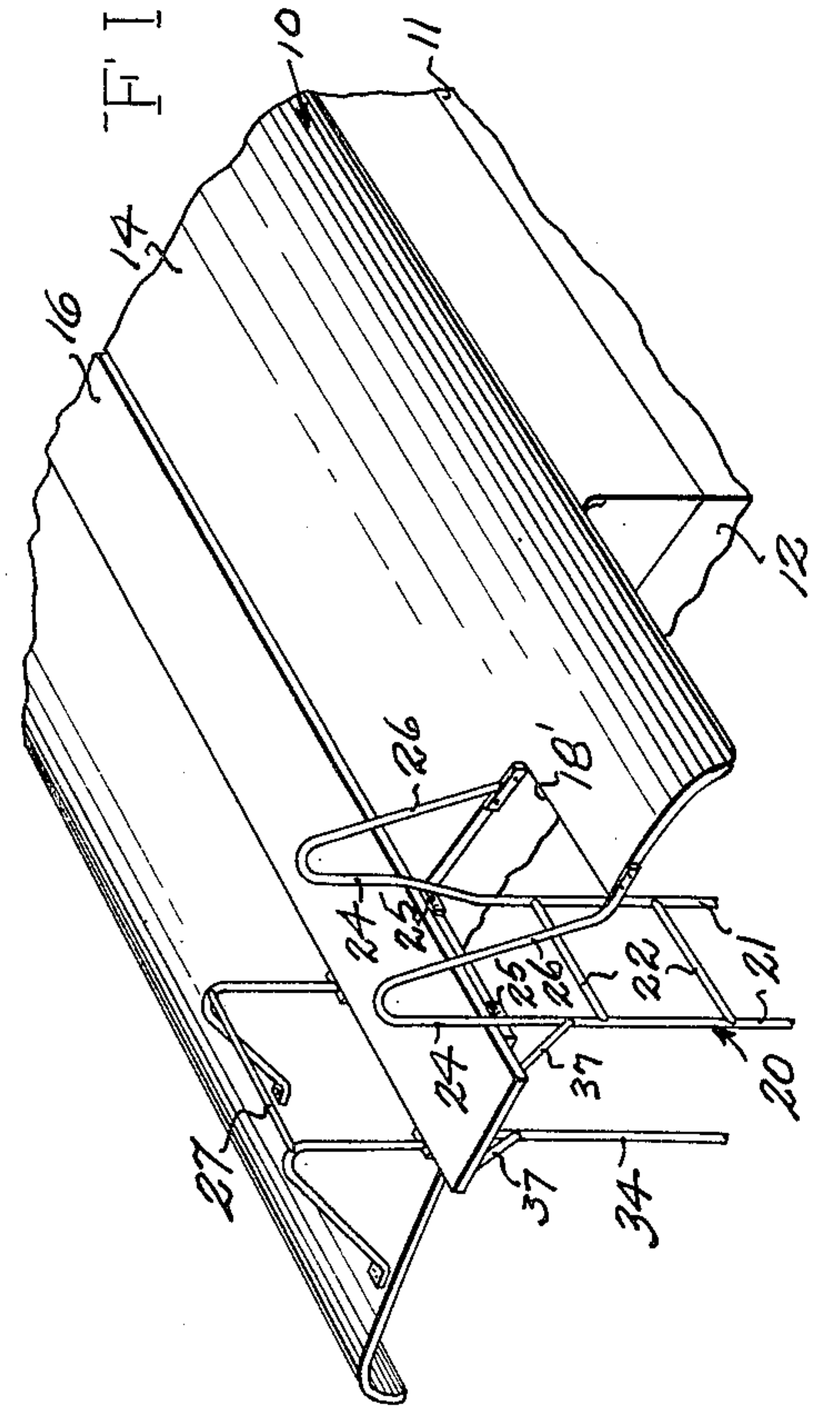
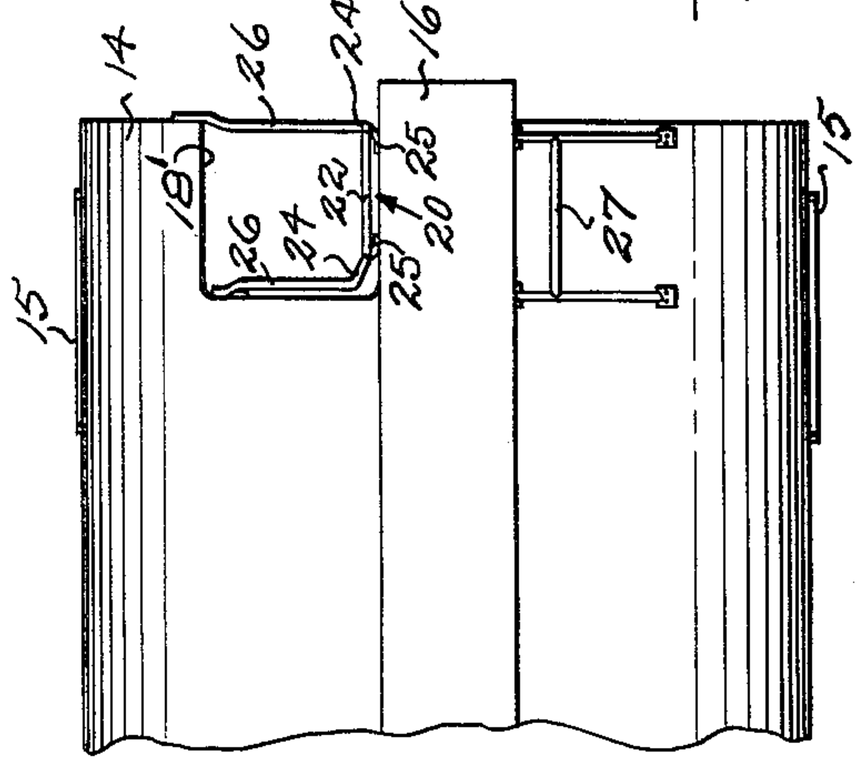


FIG. 3.



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UNITED STATES PATENT OFFICE

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RAILROAD CAR

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Application November 16, 1948, Serial No. 60,261

7 Claims. (Cl. 105—457)

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This invention relates to railway cars and more particularly to car handrail and ladder structures.

Heretofore it has been the practice to provide hand grabs applied to the outer walls of a car for the use of a trainman in climbing to or descending from the roof. With such arrangement, the trainman is in a hazardous position outside of the vertical walls of the car while climbing or descending as he is exposed to danger from passing trains and from the train on which he is riding in the event he falls or slips.

An object of this invention is to reduce such hazard to trainmen by providing a car with ladder means on which he may climb or descend without exposure beyond the vertical car outline.

Another object of the invention resides in increasing the safety for trainmen at the platform area of a caboose through a novel handrail and ladder structure.

A further object of the invention resides in a novel ladder structure for the ends of a caboose in which the upper ends of the uprights serve as hand grips above the roof.

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 perspective view of the body of a caboose equipped with ladder and handrail structure.

Figure 2 is a perspective view of one end of the caboose roof end, ladder and handrail structure.

Figure 3 is a plan view of an end portion of the caboose.

Figure 4 is a perspective view of one end of the caboose with a modified form of ladder structure.

In the drawings numeral 10 designates generally a railroad car that may be utilized as a caboose. Such car includes side walls 11, end walls 12, end platforms 13 projecting beyond the end walls and a roof 14 having end portions extending above and slightly beyond the platform. Steps 15 are arranged at each side of the platforms and a running board 16 is fixed centrally on and coextensive with the roof. The sides of the central portion of the car are formed with bay windows 17 and a cupola 18 extends across the top of the car above the bay windows, such structure forming the subject matter of copending design application Serial No. D. 6,282 filed November 26, 1949 by Aurion M. Proctor.

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The end portions of the roof overhanging the ends of the platforms are provided with openings 18' at one side of the running board and ladder structures 20 extend from the platforms to the roof openings in a manner such that a trainman can travel between the top of the roof and the platforms without his body being exposed beyond the vertical extremities of the car.

In both forms of the invention, as shown in Figures 1 and 4, the ladder structure at each end of the car is composed of uprights or side members 21 to which are secured rungs 22. The feet 23 of the uprights for both forms of ladders lie within the boundary edges of the platforms and are secured on the platforms by suitable means such as screws. The upper ends 24 of the uprights project through the roof openings and serve as hand grips.

The ladder shown in Figures 1 to 3 inclusive is arranged so that the rungs extend longitudinally of the car and the upper ends of the uprights are secured to brackets 25 fixed to the roof at the side of openings 18' next to the running board. The end portions 26 of the ladder uprights are bent downwardly and secured to the roof by suitable fastening means. Portions 26 may also be used as hand grips by the trainman. Handrails 27 are secured to the roof at the side of the running board opposite the ladder. It will be noted that the ladder in Figures 1 to 3 inclusive lies entirely within the vertical outlines of the car as defined by the edge of the platforms and the car sides.

The ladder shown in Figure 4 is arranged so that the rungs extend transversely of the car and the uprights are bent outwardly at 28 so that the upper portion of the ladder is substantially in vertical alignment with the end of the platform therebelow. The upper end of one of the uprights is bent to extend transversely and longitudinally of the car forming a handrail 29 and the extreme end 30 is bent downwardly and suitably secured to the roof. The uprights are also secured to the roof by brackets 31.

In both forms of the invention, the hand rails at the ends of the platforms are similar. At one side of the car is a tubular standard 32 and an integral handrail 33 secured to a standard 34 extending between and secured to the platform and roof adjacent one of the ladder uprights. At the other side of the car is a tubular standard 35 and an integral handrail 36 secured to one of the uprights 21 of the ladder.

The handrails are preferably secured to the ladder upright and standard **34** by weldment.

The ends of the running board **16** project beyond the ends of the roof and are supported by two braces **37**, one of which is secured to standard **34** and the other of which is secured to a ladder upright.

It will be noted that the ladder in Figures 1 to 3 inclusive is located over the platform so that a trainman can climb or descend without exposure of his body beyond the vertical outer end. The train

on the platform and extending through the roof opening, the ends of the ladder uprights extending through the roof opening being turned back and fastened to the roof end, and means anchoring the ladder uprights to the platform.

4. In a railroad car, an end platform, a roof end overlying the platform and having an opening therethrough of sufficient