June 17, 1952 W. F. DIETRICHSON 2,601,103

TIE STRAP ANCHOR

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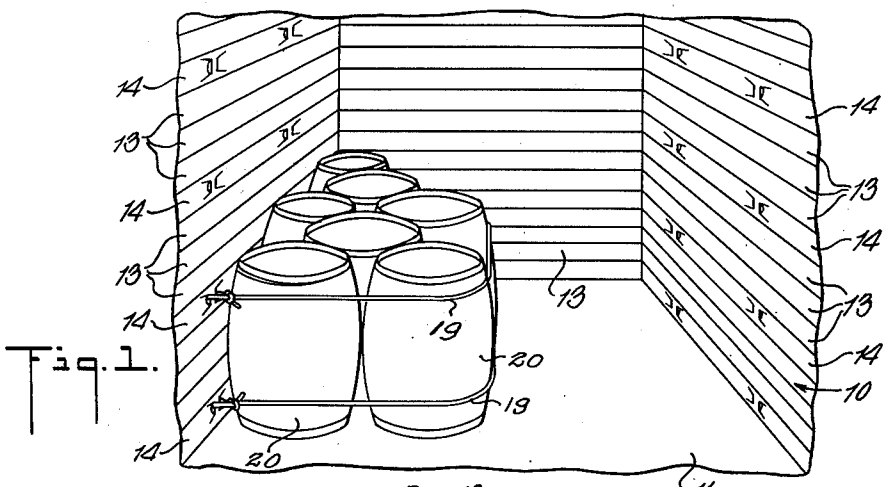

Fig. 1.

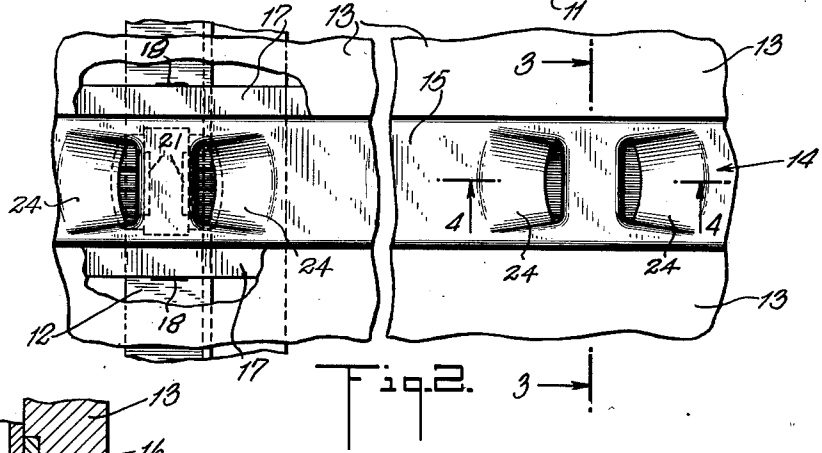

Fig. 2.

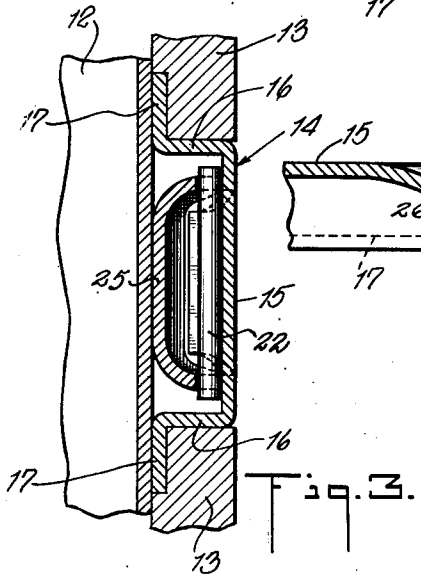

Fig. 3.

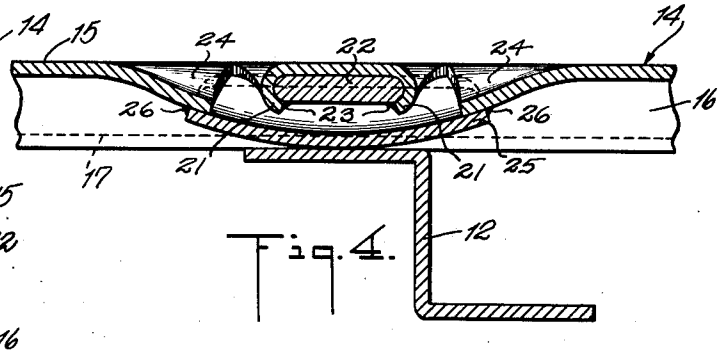

Fig. 4.

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TIE STRAP ANCHOR

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5 Claims. (Cl. 105—369)

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This invention relates to freight cars and more particularly to anchor means for lading tie straps.

An object of the invention is to provide freight cars with an improved lading tie strap anchor means that forms a part of the car framing.

Another object of the invention is to eliminate the possibility of injury to lading secured in carrier vehicles by providing tie strap anchors lying within the inner wall surface of the vehicle.

A further object of the invention is to provide lading strap anchor means for a vehicle that is inexpensive to manufacture and readily assembled in the vehicle.

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 one end of the interior of a freight car showing the anchor means with tie straps secured thereto.

Figure 2 is an enlarged fragmentary plan view of the inner wall of the freight car showing a portion of one of the anchor means.

Figure 3 is a sectional view taken on lone 3—3 of Figure 2.

Figure 4 is a sectional view taken on line 4—4 of Figure 2.

The invention can be applied to lading carriers of various types and for the purpose of illustration, I have selected a freight car 10 of conventional design. Such car has the usual floor 11, vertically extending metal wall framing members 12 and horizontally extending inner wall boards 13 formed of wood.

Anchor means, forming the subject of this invention, is a sheet metal structure 14 preferably of the same length and width as the wooden wall boards for assembly as a part of the wall framing and the inner wall structure. The number of such structures employed and their location in the inner wall is optional.

The sheet metal wall structure 14 includes a sheet metal member bent to form a base 15, top and bottom flanges 16 and flange extensions 17 providing feet that are secured to the wall frame members 12 by welding as indicated by numeral 18. The inner face of base 15 lies flush with the inner faces of the wooden boards of the inner wall. As the metal anchor members are fixed to the vertical frame members they serve as braces in the framing and add to the strength thereof.

The metal wall members are formed to provide one or more anchors for tie straps 19 that are applied to lading, such as barrels 20, and serve

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to hold the same in a set position on the floor of the freight car. Base 15 of the metal member is first punched to form a pair of tongues 21 for each anchor having their base portions in adjacent but spaced relation. A metal reinforcing member 22 is next applied by welding to the outer face of base 15 between the bases of the tongues. The tongues are next bent around the side edge portions of the reinforcing member and are welded thereto as indicated by numeral 23. At the same time, the tongues are being bent, or in another operation, the areas of the base 15 adjacent the sides and free end of the tongues are bent outwardly to form concave pockets 24 thereby serving as guiding surfaces for the tie strap when being applied to the anchor which consists of the tongues 21, the portion of the base 15 between the tongues and reinforcing member 22. To further guide the tie strap and to reinforce the metal member 14 adjacent the openings, a concave cover plate 25 is welded over the outer surface of the concave portions of base 15, as indicated by numeral 26. This cover is coextensive with both of the pockets 24 adjacent each of the anchors.

It will be noted that the structures 14 extend parallel with and between wall boards to form part of the car interior wall and also a part of the wall framing. The anchor means is outside of the inner wall surface and cannot come in contact with the lading to cause injury thereto.

The invention may be modified in various respects as will occur to those skilled in the art and the exclusive use of all modifications as come within the scope of the appended claims is contemplated.

What is claimed is:

1. An inner wall member for freight cars comprising a sheet of metal formed with a wall surface base, flanges extending from the sides of said base, feet at the ends of said side flanges, and spaced tongues struck outwardly from said wall base and bent toward one another, said tongues and the base wall portion of the member therebetween forming a lading strap anchor.

2. In a freight car, an inner wall member formed with a wall surface base and side flanges, tongues struck out from the base with their base portions in spaced relation, and a reinforcing member fixed to the outer surface of the member base between the tongues, said tongues being bent over the reinforcing member and secured thereto.

3. In a freight car, an inner sheet metal wall member, a pair of spaced tongues struck out from

said member and bent toward each other, said tongues and the portion of the wall member therebetween forming a lading strap anchor, and an outer cover plate secured to the wall member over the openings formed by striking the tongues, said cover plate being spaced outwardly of the tongues.

4. In a freight car, an inner sheet metal wall member having a base wall section with outwardly extending top and bottom flanges, spaced tongues struck outwardly from said base section and bent toward each other, said tongues and the intermediate base wall section forming a lading strap anchor, portions of the base section of the wall member adjacent said tongues being curved outwardly, and an outwardly curved cover plate secured over the outside of the curved portions of the wall member and spaced outside of the anchor.

5. In a freight car, an inner sheet metal wall member having a base wall section with outwardly extending flanges at the top and bottom, spaced tongues struck out from said base section,

a reinforcing strip secured to the outside of the base section between the tongues, said tongues being bent around and secured to the reinforcing strip to form a lading strap anchor, portions of the base section adjacent the tongues curving outwardly, and a cover plate fixed to the outside of the curved portions of the base section and spaced from said tongues.

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