Jan. 30, 1962 G. F. OAKLEY 3,018,740

COMBINED LADING STRAP ANCHOR AND FLOOR RACK HOLDER

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FIG. 1

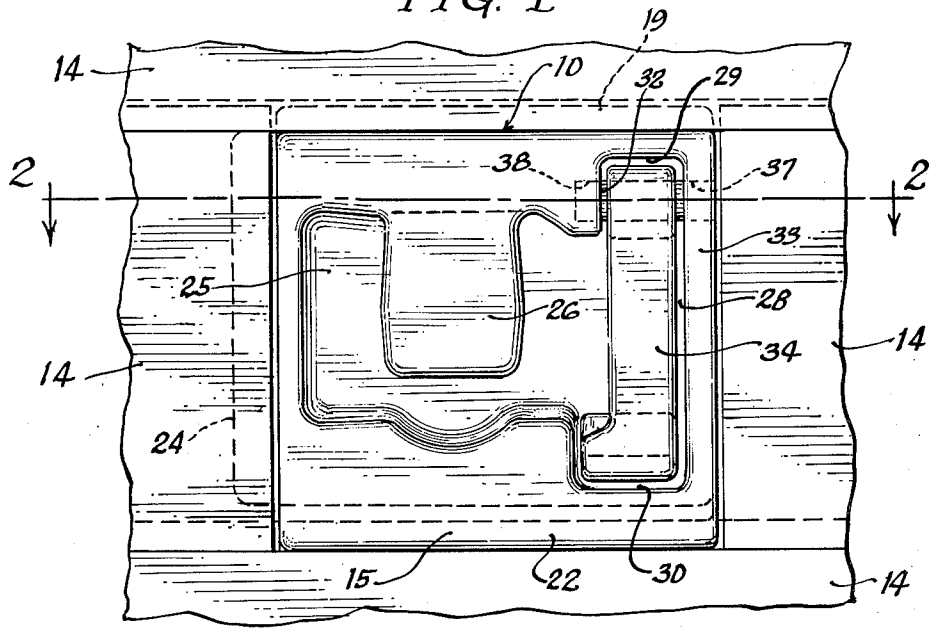
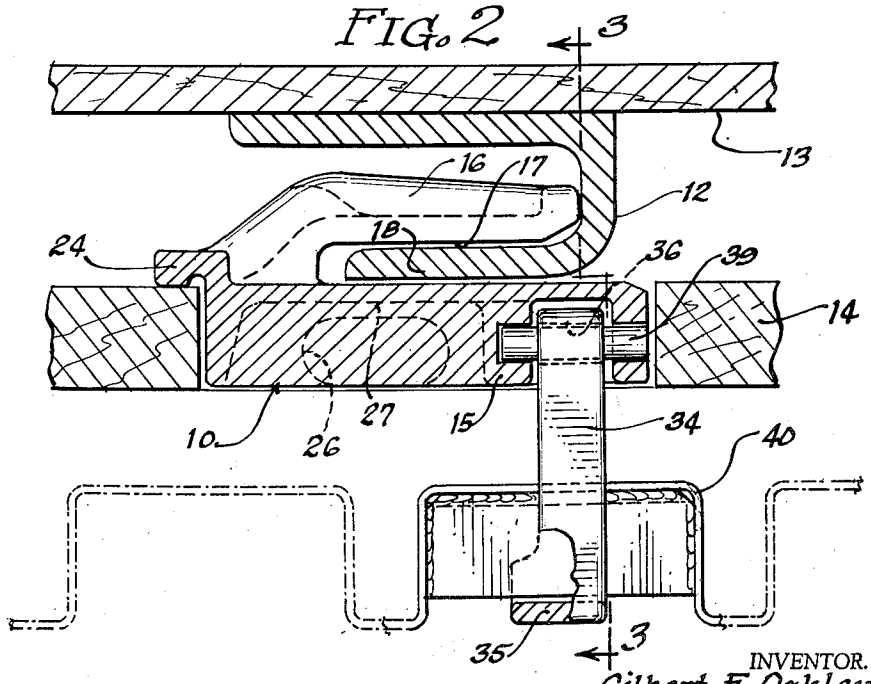


FIG. 2



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FIG. 3

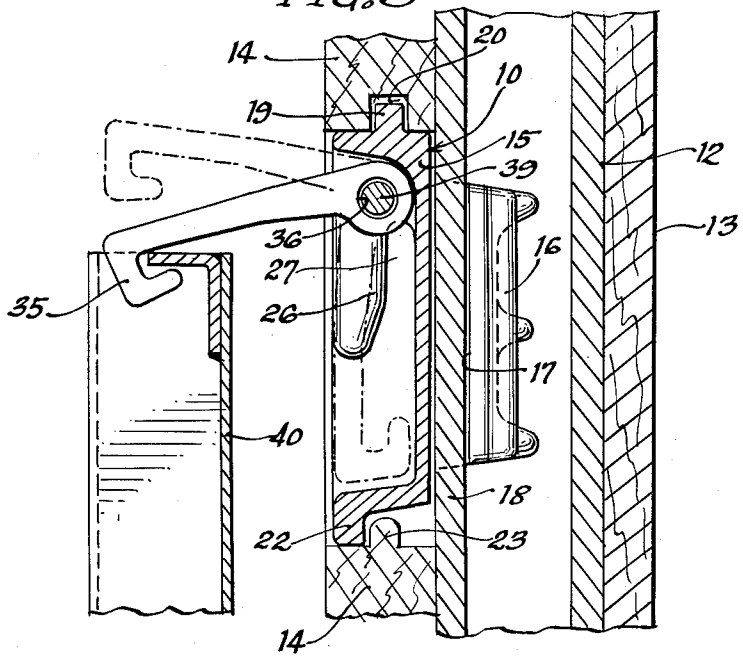
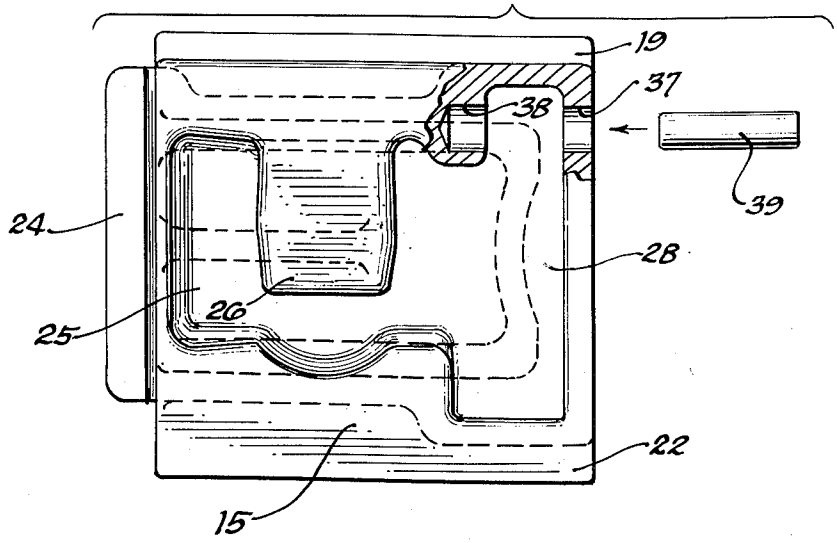


FIG. 4



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COMBINED LADING STRAP ANCHOR AND FLOOR RACK HOLDER

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This invention relates to combined lading strap anchors and floor rack holders, and more particularly to a compact assembly mountable as a unit and wherein parts having separate uses coact, rather than interfering with one another.

One of the objects of my invention is to provide a lading strap anchor which serves as a support for a movable hook-type element adapted to use for holding a floor rack in a raised position, as during cleaning of a refrigerator car, when the car is not being used for hauling lading.

Another object of the invention is to provide a combined lading strap anchor and floor rack holder for railway cars wherein the floor rack holder is a movable element that normally hangs in a position flush with the front surface of the anchor and serves as a side portion of a pocket in the anchor, in which a lading strap or tie is anchored.

As another object, my invention has within its purview the provision of a combined lading strap anchor and floor rack holder including an anchor body and a hook-type holder movably connected to the body by a normally removable pin which is readily assembled and securely held in place in the assembly of the anchor with the car wall structure.

Other objects and advantages of my invention will be apparent from the following description and the several views of the drawings, wherein:

FIG. 1 is a fragmentary front elevational view showing the adaptation of a preferred embodiment of my combined lading strap and floor rack holder to the wall structure of a vehicle, such as a railway refrigerator car;

FIG. 2 is a fragmentary top sectional view taken substantially at a position indicated by a line 2—2 in FIG. 1, and in the direction of the arrows;

FIG. 3 is a fragmentary end sectional view of the structure shown in FIG. 2, taken substantially at a position indicated by a line 3—3 and accompanying arrows in FIG. 2; and

FIG. 4 is an exploded front elevational view of two of the parts of the combined lading strap anchor and floor rack holder shown in FIGS. 1, 2 and 3.

In the exemplary embodiment of this invention which is depicted in the accompanying drawings for illustrative purposes, my combined lading strap anchor and floor rack holder **10** is shown in an adaptation to a wall structure, such as that utilized in railway refrigerator cars, wherein a channel-type structural post **12** comprises a part of the wall structure and is utilized as a support for vertically spaced lading strap anchors. The structural post is mounted between a sub-lining **13** in the car wall structure and lining boards **14** which together make up the inner lining of the wall of the car.

In at least some refrigerator cars, floor racks are utilized which normally cover the surface of the floor within the car when the car is in use. In order to facilitate cleaning of the cars, such as those utilized for hauling food products, such as meat, the floor racks are divided along a longitudinal mid-line of the car and the racks on each side of the car are hinged to the car structure, so that each can be swung upwardly to a position along the adjacent wall of the car. When thus swung upwardly for cleaning purposes when the car is not in normal use for hauling lading, the floor racks extend to a predetermined height relative to each wall. My combined lading strap anchors and floor rack holders are disposed at a height on each of the opposed side walls of the car which is commensurate with the height to which the floor racks extend. Above and below the combined lading strap anchors and floor rack holders which are mounted at spaced positions longitudinally of the car walls, ordinary lading strap anchors which do not embody the floor rack holders are utilized.

In the illustrated embodiment of this invention the combined lading strap anchor and floor rack holder **10** includes an integral base structure **15** having an over-all thickness substantially equal to that of the inner lining boards **14** of the car wall, so that when mounted on one of the structural posts **12**, the inner surfaces of the base structures of the combined lading strap anchors and floor rack holders do not extend into the car beyond the inner lining surface, but are substantially flush therewith. In the form disclosed, the base structure **15** has a hook **16** integrally secured to the rear surface of the body structure **15**, and defines a slot **17** for receiving a flange **18** of the structural post **12** to secure the anchor to the car wall structure and afford adequate support for any loads applied through the anchor. As shown in FIG. 3, the position of the base structure **15** along the structural post **12** is determined by engagement with lining boards **14** located above and below the base structure. In my preferred structure, as illustrated, the height of the base structure is substantially equal to that of one lining board of the type commonly used in freight car wall structures, so that the base structure is readily mountable with the ends of adjacent boards abutting the side edges thereof. The body structure illustrated, as shown in FIGS. 1 and 3, has a tongue **19** extending longitudinally of the top edge thereof which normally fits into a groove **20** in the adjacent lining board, and has a flange **22** on the front surface thereof which overlies a tongue **23** on the edge of the lining board below. Also, along one side of the anchor, an integral flange **24** is provided on the body structure to support the end of the lining board which abuts that end edge of the body structure.

In the mid-portion of the base structure **15** and somewhat closer to one side edge than the other, a recessed pocket **25** is provided in the body structure and opens inwardly of the car in the front face of the base structure. An anchor post or tongue **26**, which is integral with the base structure **15**, extends over the mid-portion of the recessed pocket in spaced relationship to the front surface of the pocket to provide a space **27**, for accommodating the looped end of a lading strap which is secured to the tongue or anchor post for anchoring purposes. The tongue or post **26** is narrower than the recessed pocket to provide ample space at opposite sides of the tongue for effecting the placement of such lading strap around the anchor post. In the form disclosed, the anchor post or tongue **26** terminates above the bottom portion of the base structure to provide space between the lower end of the anchor post and the bottom portion of the base structure through which a looped lading strap may be moved into position around the post. After placement of the looped lading strap around the anchor post, such lading strap may rest against the bottom portion of the base structure in the bottom of the recessed pocket while still remaining in firmly engaged relationship around the anchor post. It may be understood that the anchor post may extend across the recessed pocket from top to bottom, in which instance, the lading strap must be threaded through the recessed pocket behind the anchor post for effecting its securement to the anchor post. The spaces within the recessed pocket **25** at the opposite sides of the anchor post are desirably of sufficient width to avoid abrupt bends in a lading

strap which extends along the wall from the anchor post in reaching its retaining engagement with lading carried in the car.

At one side of the recessed pocket **25**, a recessed pocket **28** joins the pocket **25** and comprises an extension thereof. The recessed pocket **28**, in the disclosed structure, is longer than the recessed pocket **25**, thereby to provide end extensions **29** and **30** in the upper and lower portions respectively of the base structure **15** and a shoulder **32** at the upper end portion of the recessed pocket **28** and in spaced and opposed relationship to a side wall portion **33** of the base structure.

The recessed pocket **28** is of a size and depth to hold a hook type floor rack holder **34** in substantially flush relationship to the front surface of the base structure **15**. The hook type floor rack holder **34** and a hook portion **35** at one end thereof and has a cross bore **36** extending therethrough near the opposite end. For use, and so that the hook type floor rack holder will normally gravitate to a retracted or out-of-the-way position, the end thereof having the cross bore **36** therethrough is placed in the upper end of the recessed pocket **28** between the shoulder **32** and side wall portion **33** of the base structure. Aligned bores **37** and **38** through the side wall portion **33** and shoulder **32** in the base structure and extending into the base structure from the outer edge of the side wall portion **33** removably carry a supporting element, such as a pin **39** which extends through the cross bore **36** in the floor rack holder to suspend that floor rack holder for swinging movement relative to the base structure. When desired, the floor rack holder may be manually swung to an extended position in which it projects outwardly from the front face of the base structure, as indicated in FIGS. 2 and 3, for retaining engagement with a floor rack **40** which has been lifted from its normal position on the floor to a position extending upwardly along the car wall.

In order to limit the over-all width of the structure **15** of the combined lading strap anchor and floor rack holder while providing ease of access to the floor rack holder in its retracted position and without limiting the effective width of the recessed pocket **25** at opposte sides of the anchor post or tongue **26** when the floor rack holder is in its retracted position and the anchor post or tongue **26** is subject to use for anchoring a lading strap. The floor rack holder, when retracted, serves to define one side of the recessed pocket **25**. It may be understood that a lading strap anchored to the anchor post **26** will extend across the surface of the floor rack holder **34** without being abruptly bent. On the other hand, the hook type floor rack holder is readily accessible for use when the car is not in hauling service, as when it is being cleaned. Furthermore, the floor rack holder normally gravitates to its retracted position when it is not in use for holding a floor rack.

In the disclosed structure, the base structure, including the integral anchoring post or tongue **26** and the hook **16** constitutes one readily fabricated portion of the structure. The hook type floor rack holder constitutes another readily fabricated portion and the pin **39** constitutes a third readily fabricated part. The three parts can be made with size limits providing ease of assembly when the combined lading strap anchor and floor rack holder is applied to a car wall in which it is used. When thus assembled and applied to the car wall, disassembly of the structural parts is prevented, since the pin **39** is held in place by the end of the lining board **14** which abuts the adjacent edge of the base structure.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United states is:

1. A combination lading strap anchor and floor rack holder comprising, in combination, an integral metal body having a back surface and a front face and openly adjoined recessed portions of different shapes and dimensions opening outwardly through the front face thereof and serving as lading strap anchor and hook retaining recesses, an anchor post integral with the body and overlying the mid-portion of the lading strap anchor recess, said anchor post being spaced from said back surface of the body to provide space for connecting a lading strap thereto, a hook element of a shape and size to fit into the hook retaining recess in spaced relationship to said anchor post and having a normal position substantially flush with said front face of the body, said hook element, when in said normal position, serving as a side wall of said lading strap anchor recess and substantially equalizing the widths of the recessed areas on opposite sides of the anchor post, and means supporting the hook element relative to the body for swinging movements between said normal position and a projecting position in which the hook element extends outwardly from the hook retaining recess and away from said front face of the body, said hook element being accessible through the lading strap anchor recess for moving the hook element to the projecting position.

2. A combination lading strap anchor and floor rack holder as defined in claim 1, and wherein said means supporting the hook element relative to the body is at one end of the hook element and the hook element normally depends therefrom to said normal position.

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