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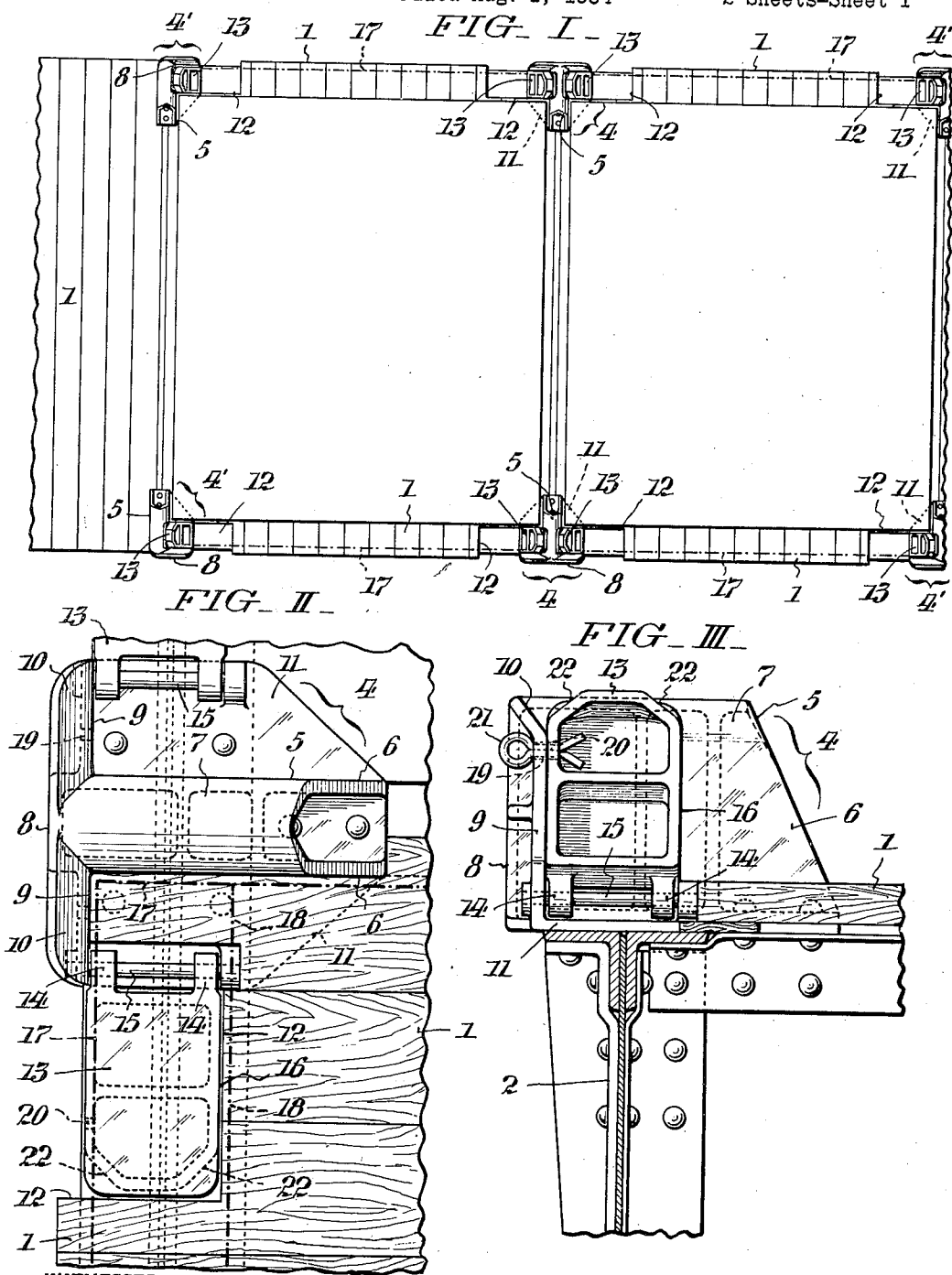
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SEATING ABUTMENT FOR CONTAINER CARRIERS

Filed Aug. 1, 1934

2 Sheets-Sheet 1



WITNESSES:

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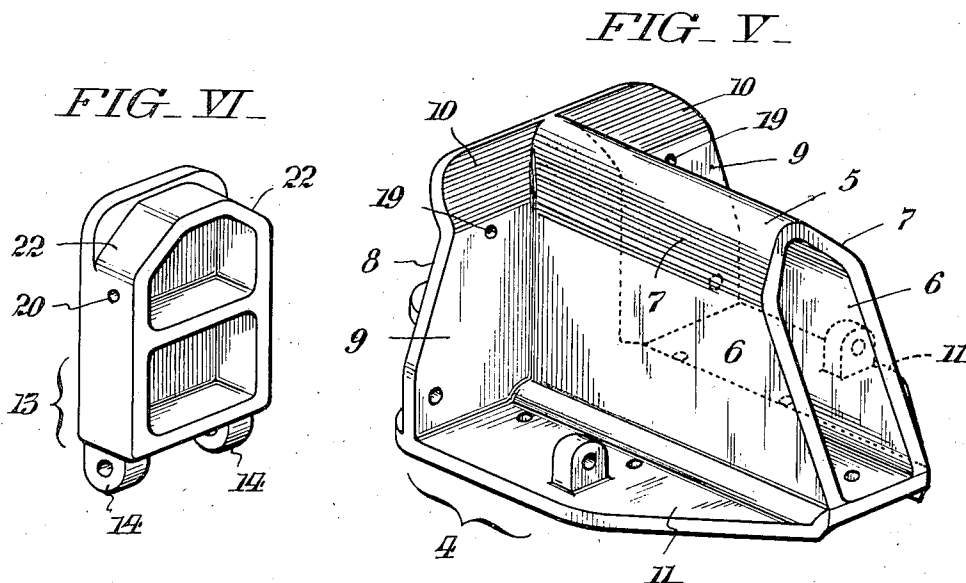
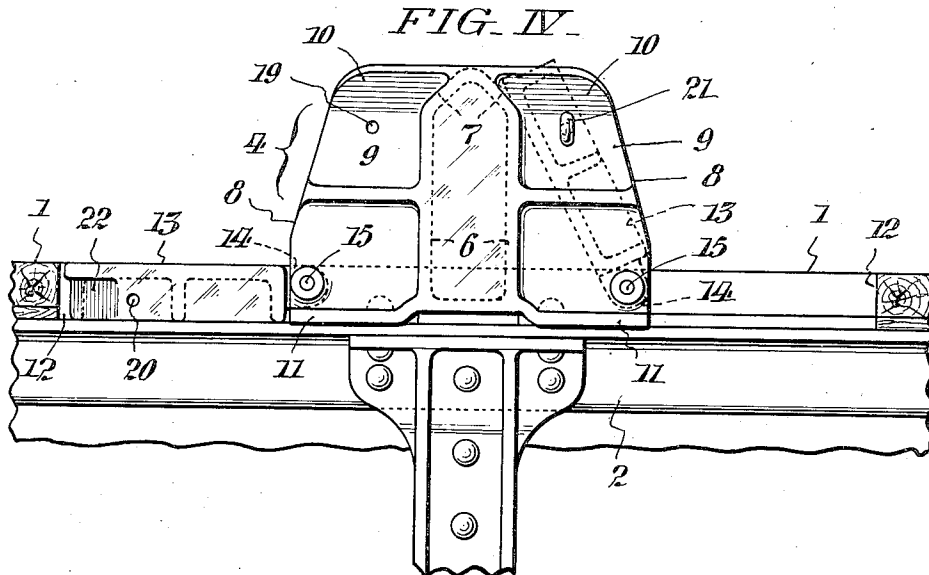
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UNITED STATES PATENT OFFICE

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SEATING ABUTMENT FOR CONTAINER CARRIERS

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7 Claims. (Cl. 105-366)

This invention relates to container carriers such as railway cars, motor trucks, or trailers, and more specifically to seating abutments for holding a container against shifting while it rests on the carrier. Heretofore it has been customary to provide railway flat cars with a series of attachments at each side of the car floor so spaced as to form rectangular seats for accommodating containers in a row along the length of the car. In some cases railways are called upon to carry containers of different sizes, and while the containers are generally of a width corresponding to the width of a freight car, certain of the containers now commonly used are of slightly less width, and difficulties are encountered in holding such containers against shifting.

The object of the present invention is to provide, in combination with a carrier having a series of fixed seating attachments for accommodating relatively large size containers, a series of abutments which are normally housed in a position not obstructing the seating of the containers, and which are adapted to be elevated to positions in which they form with the fixed attachments corner seats for relatively small size containers.

Other more specific objects and advantages characteristic of my present invention will become more fully apparent from the description hereinafter set forth of one embodiment or example of the practice of the invention, having reference to the accompanying drawings, whereof:

Fig. I represents a plan view of a portion of a railway car fitted with fixed attachments and movable abutments of my invention.

Fig. II represents an enlarged plan view of one of the container seating attachments and surrounding portions of the car, showing the movable abutments associated therewith in lowered position.

Fig. III represents an end elevation of the attachment showing portions of the car in transverse cross section and with the movable abutments in raised position.

Fig. IV represents a side elevation of the attachment and neighboring portions of the car.

Fig. V represents a perspective view of the attachment by itself; and,

Fig. VI represents a perspective view of the movable abutment.

With particular reference to Fig. I of the drawings, there is shown a portion of a railway flat car with the floor or platform thereof designated by the numeral 1. The car is substantially unobstructed throughout its central floor space, but

at spaced intervals along the side sills 2, there are provided fixed attachments as designated at 4 and 4'. At the ends of the car the attachments 4' define right angular seats for accommodating the corners of the end containers. Intermediate the ends of the car, T-shaped attachments 4 are provided, each attachment affording seats for the corners of two adjacent containers. Inasmuch as the construction of the end attachments 4' is substantially similar to that of the intermediate attachments 4, except that the former are L-shaped rather than T-shaped, the description hereinafter will be confined to the detailed construction of the intermediate attachments 4.

Each fixed attachment 4 includes a transverse member 5, which in the illustrated example of the invention comprises spaced vertical walls 6 merging together at their upper ends and forming near the top of the attachment inclined guiding surfaces 7, and a longitudinal member 8 which presents a vertical wall 9 substantially along the edge of the carrier floor 1 and which terminates in an outwardly and upwardly inclined guiding surface 10. Preferably each attachment 4 also includes a horizontal member 11 which is secured to the side sill 2 and which underlies the planking of the floor 1.

As shown clearly in Figs. I and II, the floor 1 of the car is cut away at each side of the intermediate attachment 4 as indicated at 12. In the cut-out portions of the floor movable abutments 13 are mounted, one on each side of the attachment 4, these abutments being normally housed beneath the top level of the floor surface 1 and with their top surface at a level with the top of the floor. The movable abutments 13, as shown clearly in Figs. III and IV, are provided with apertured lugs 14 which engage a pivot pin 15 on the fixed attachment 4. In an obvious manner each abutment 13 may be swung upwardly from its normal position flush with the floor 1, as represented in Fig. II, to the upright position represented in Fig. III. When thus raised, the movable abutment 13 presents a vertical wall 16 extending longitudinally of the car at a spaced distance inwardly of the longitudinal member 8 of the fixed attachment 4.

It will be noted that when the abutments 13 are in their depressed positions, they do not obstruct the floor surface of the car which is then adapted for the handling of large size containers having base dimensions as illustrated by the broken lines indicated at 17 in Figs. I and II. When the movable abutments 13 are raised they serve as spacing members and define with the

transverse members 5 right angular corner seats for accommodating small size containers, the base dimensions of which are indicated by the broken lines at 18 in Fig. II. To secure the movable abutments 13 in their raised positions, I preferably provide holes 19 in the longitudinal walls 9, as well as holes 20 in the abutments 13, and insert cotter pins 21 or the like through the holes 19 and 20.

It will be noted that each movable abutment 13 is provided with a bevelled surface 22 so formed that when the abutment is in its raised position this surface affords a guide which cooperates with the guiding surfaces 7 of the fixed attachment 4 and thus assists in the seating of small size containers on the car. It will also be noted that the transverse members 5 of the fixed attachments 4 extend inwardly of the car a sufficient distance so that when the smaller size containers are carried on the car, and the abutments 13 are raised, corner seats of ample size are defined between these members for restraining the containers against shifting.

While the abutments 13 in their housed positions do not interfere with the carriage of the larger size containers, in the event that the car is to be adapted for the carriage of containers of less width, these abutments may be readily swung to the raised positions and there secured; and when thus raised they are adequately braced by the longitudinal members 8 of the fixed attachments 4, so that they serve as rigid members capable of sustaining the side thrust caused by transverse movement of a container.

While I have described one particular form of apparatus embodying my invention, it will be apparent that various changes may be made in the form of the apparatus and the manner of its attachment to the carrying vehicle, without departing from the spirit of my invention as defined in the annexed claims.

Having thus described my invention, I claim:

1. In a container carrier, fixed attachments at the edges of the carrier floor defining corner seats for a relatively large container, and abutments pivotally mounted on the carrier at said attachments, said abutments being normally housed beneath the level of the top of the floor and being swingable to raised positions wherein they form with said fixed attachments corner seats for a relatively small container.

2. In a container carrier, fixed attachments at the edges of the carrier floor defining corner seats for a relatively large container, movable abutments mounted on the carrier at said attachments, said abutments being normally housed beneath the level of the top of the floor and being adapted

to be raised to positions wherein they form with said fixed attachments corner seats for a relatively small container, and means for locking said abutments in raised positions.

3. In a container carrier, fixed attachments at the edges of the carrier floor having longitudinal and transverse walls defining right-angular seats for a container of one size, and movable abutments mounted on the carrier at said attachments, said abutments being normally housed beneath the level of the top of the floor and being adapted to be raised to positions wherein they form with the transverse walls of the fixed attachment right-angular seats for a container of smaller size.

4. In a container carrier, fixed attachments at the edges of the carrier floor defining corner seats for a container of one size, and abutments pivotally mounted on the carrier at said attachments, said abutments being normally housed flush with the carrier floor and within said corner seats and being swingable to raised positions wherein they form with said fixed attachments corner seats for a container of smaller size.

5. In a container carrier, a T-shaped attachment at the edges of the carrier floor defining corner seats for two adjacent containers, and abutments pivotally mounted, one on each side of said attachment, said abutments being normally housed beneath the level of the top of the floor and being swingable to raised positions wherein they form with said fixed attachment corner seats for containers of a different size.

6. In a container carrier, fixed attachments at the edges of the carrier floor having longitudinal and transverse walls defining right angular seats for a relatively large container, and movable abutments pivoted on said attachments, said abutments being normally housed beneath the top of the floor and being adapted to be raised to positions wherein they form with one wall of the fixed attachment a right angular seat for a container of smaller size, while braced by the other wall of the fixed attachment against thrust in that direction, said abutment having a bevelled surface at the free end thereof.

7. In a container carrier, a fixed attachment at the edge of the carrier floor defining a corner seat for a relatively large container, and an abutment pivotally mounted on the carrier to lie normally beneath the level of the top of the floor, the abutment having capacity to swing up and into the corner seat to accommodate smaller containers, said abutment in the up position being in braced contact with the adjacent faces of said corner seat.

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