

July 4, 1933.

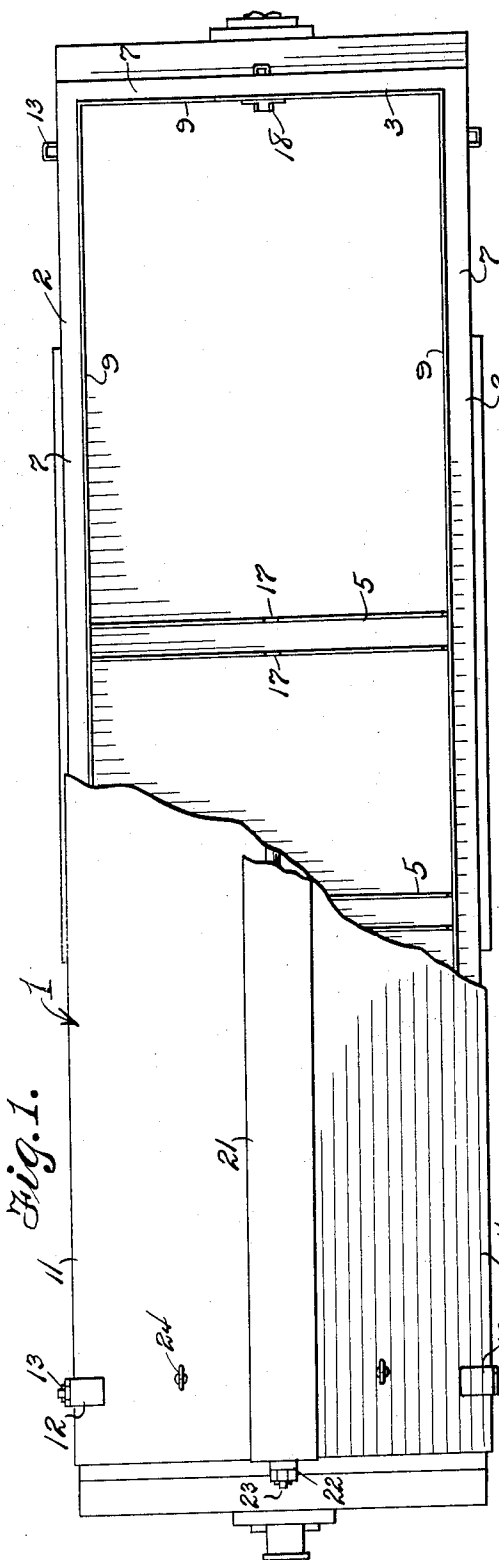
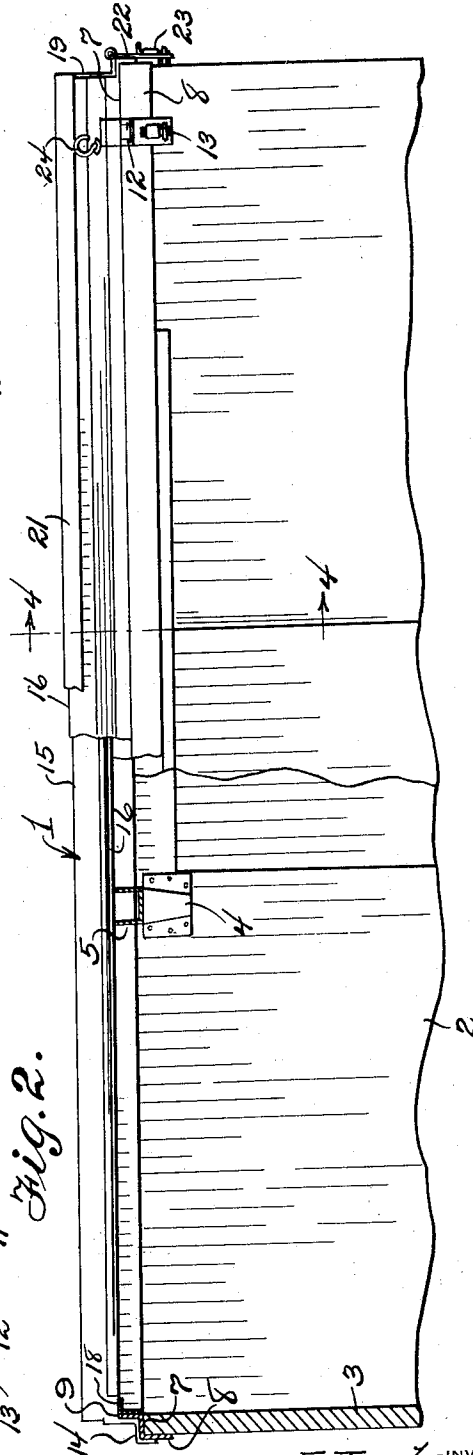
E. F. TUCKE

1,917,167

ROOF FOR CARS

Filed Oct. 4, 1932

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 3.

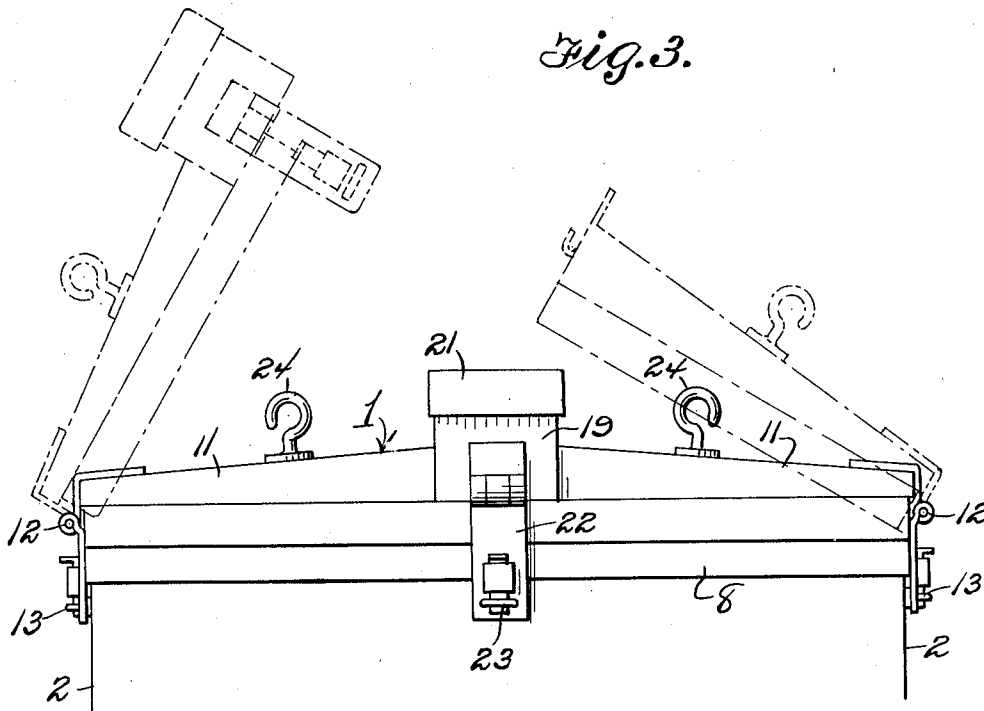


Fig. 4.

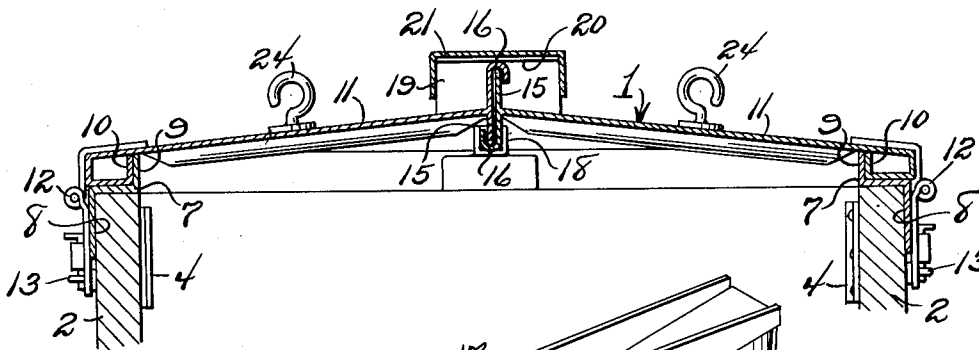
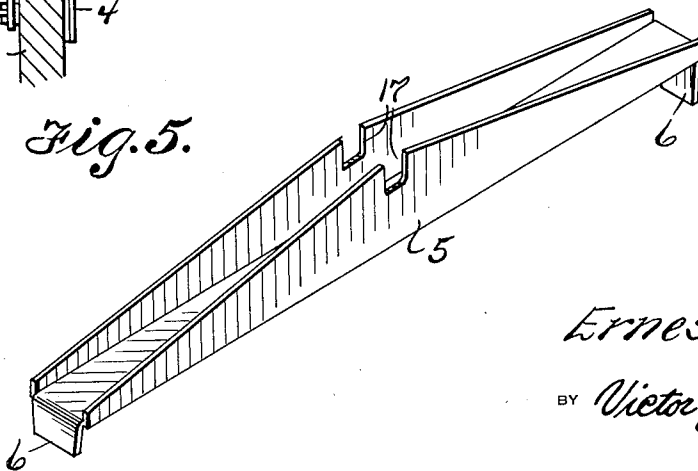


Fig. 5.



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UNITED STATES PATENT OFFICE

ERNEST F. TUCKE, OF NILES, OHIO

ROOF FOR CARS

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This invention relates to roofs for railroad cars of either the closed or open type, and has for the primary object, the provision of a device of the above stated character especially adapted for facilitating the loading and unloading of the car by the employment of a crane or the like either by opening the said roof or removing the latter from the car which materially conserves man power and time and permits large articles to be more readily handled without danger of damage and further when the roof is in a closed position efficiently protects the contents of the car from weather elements, dirt and the like.

With these and other objects in view this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which

Figure 1 is a top plan view partly broken away illustrating a roof for railway cars constructed in accordance with my invention.

Figure 2 is a side elevation partly broken away in vertical section to illustrate the application of the roof to a car.

Figure 3 is an end elevation illustrating in dotted lines the roof sections swung into partly open position.

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

Figure 5 is a perspective view illustrating a brace employed to prevent spreading or separation of the sides of the body of the car.

Referring in detail to the drawings, the numeral 1 indicates a removable roof to be applied to either open railroad cars or cars of the box type wherein their ordinary roofs are removed and the roof 1 substituted in lieu thereof. The side and end walls of the car are illustrated by the characters 2 and 3, respectively, the side walls 2, at spaced intervals, being provided with brackets 4 to removably receive braces 5. Each brace is of channel iron construction, as shown in Figure 5, and has formed at its ends angularly

disposed tongues 6 removably secured in the brackets 4.

The roof 1 includes a frame 7 adapted to rest upon the upper edges of the end and side walls of the car and said frame is provided with marginal flanges 8 engaging the outer faces of said walls. Upstanding flanges 9 are formed on the frame 7 at the inner edges thereof to form in said frame a channeled seat for receiving shouldered portions 10 formed on the outer edges of roof sections 11. The sections 11 have hinges 12 secured thereto which overlie the marginal flanges 8 and are detachably secured to the side walls 2 by removable fasteners 13 whereby the roof sections 11 are hinged to the frame and are also removably secured to the sides of the car, permitting the roof sections to be entirely removed from the car when desired. The fasteners 13 are in the form of sliding bolts engageable with keepers carried by the side walls 2 of the car.

The ends of the roof sections are provided with stepped flanges 14 engageable with the end channeled portions of the frame 7 and also overlap the end marginal flanges of the frame when the roof sections are in a closed position. Roof sections constructed in accordance with the foregoing cooperate in such a manner with the frame as to establish leak-proof connection with the latter to prevent the entrance of weather elements, dirt and other foreign matter.

The roof sections 11 are provided with flanges 15 and 16, oppositely arranged to each other, and the flanges 16 are curved to form troughs to receive the flanges 15 when the roof sections 11 are brought to closed position, establishing leak-proof connections between the roof sections.

The braces 5 are provided with notches 17 to receive the trough portion of one of the flanges 16 and the ends of the frame 7 are provided with U-shaped brackets 18 to receive said last-named flange 16. Vertical plates 19 are carried by one of the roof sections 11 and are provided with angularly related portions 20 overlying the flange 16 of the respective roof section to form seats to be engaged by a cat-walk 21. The cat-walk

is provided with marginal flanges to frictionally engage the vertical plates to prevent accidental displacement thereof while permitting the cat-walk to move with one of the roof sections when desiring to open or swing the roof sections on their hinges to expose the interior of the body of the car. One of the roof sections carries hasps 22 engageable with keepers 23 on one of the end walls of the body of the car, the hasps being retained on the keepers by sliding bolts, thereby effectively locking the roof sections in closed position.

A device constructed in accordance with the foregoing permits the loading and unloading of a car through the roof thereof by swinging the roof sections into open position. When loading a car with comparatively large articles it is preferable that the braces 5 be removed, allowing the articles to pass freely into the car. Besides facilitating the loading and unloading a roof of this character effectively protects the contents of the car from weather elements, dirt and other foreign matter and may be conveniently installed on the types of cars now in use.

Hook-shaped elements 24 are attached to the roof sections 11 to facilitate the opening and closing of the latter.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the spirit and scope of my invention, as claimed.

Having described the invention, I claim:

1. A roof comprising a frame mounted on the walls of a car body, and having channeled seats, roof sections engageable with the channeled seats and hingedly and detachably secured to the walls, means for forming an interlocking connection between the roof sections when in a closed position and a cat-walk mounted to the roof sections and overlying said last-named means.

2. A roof comprising a frame mounted on the walls of a car body, and having channeled seats, roof sections engageable with the channeled seats, and hingedly and detachably secured to the walls, means for forming an interlocking connection between the roof sections when in a closed position, a cat-walk mounted to the roof sections and overlying said last-named means and braces detachably secured to the sides of the car body.

3. A roof comprising a frame mounted on the walls of a car body, and having channeled seats, roof sections engageable with the channeled seats and hingedly and detachably secured to the walls, means for forming an interlocking connection between the roof sections when in a closed position, a cat-walk mounted to the roof sections and overlying said last-named means, hasps carried by one of the roof sections, keepers carried by the car body and engaged by the hasps to retain the roof sections in a closed position.

In testimony whereof I affix my signature.

ERNEST F. TUCKE.