

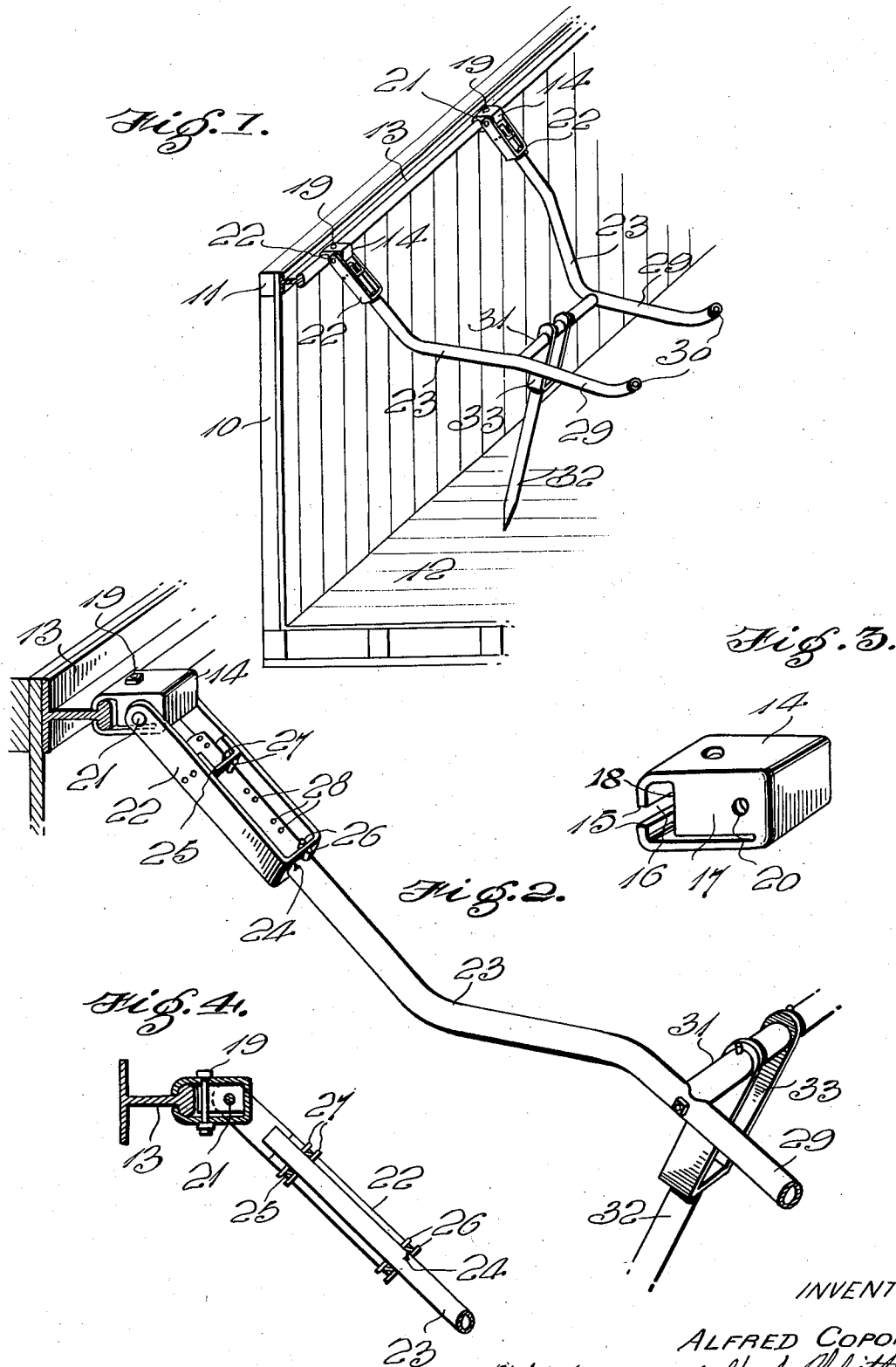
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VEHICLE DECKING DEVICE FOR FREIGHT CARS AND THE LIKE

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VEHICLE DECKING DEVICE FOR FREIGHT CARS AND THE LIKE

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This invention relates to vehicle decking devices for freight cars and the like and has as one of its primary objects to simplify, render more efficient and improve generally devices of this character.

The invention pertains particularly to permanent decking devices for use in railway freight cars and contemplates a construction of such a design and character as to facilitate permanent installation of the devices.

Many advantages are obtainable with the present construction, several of which will be briefly referred to. For instance, the present construction is adaptable to half decking as well as full decking with equal ease and facility; the decking devices are adjustable in the door opening without necessitating the use of door bars across the door opening to support the structure; the devices may be quickly and easily adjusted after the lower cars are placed; and furthermore the decking devices are so constructed as not to project below the lowest point of upper machine whereby none of the height of the railway car is wasted by the supporting structure of the decking device.

Many other objects and advantages and the novel details of construction of this invention will be made more apparent as this description proceeds, especially when considered in connection with the accompanying drawings wherein:

Figure 1 is a fragmentary perspective view of a freight car showing my improved decking device in position;

Figure 2 is an enlarged fragmentary detail perspective view of a portion of a decking device removed from the freight car;

Figure 3 is a detail perspective view of one of the parts, and

Figure 4 is a sectional view through the part shown in Figure 3, showing a supporting member secured to the same.

Referring now more particularly to the drawings wherein like reference characters indicate like parts it will be noted that there is fragmentarily illustrated a freight car having side walls 10, side plates 11 and a floor 12. Arranged longitudinally of the freight car at each side thereof and secured

preferably to each side plate 11 is a rail 13. A track rail may be, and preferably is, employed as illustrated in the drawings.

Reference character 14 indicates a bracket for engagement with the rail 13, this bracket being preferably formed of pressed steel and of U-shape in cross section. Laterally bent ends 15 are spaced to provide a slot 16 so that each clip may be attached to the rail 13, as clearly illustrated in Figure 2, with the laterally bent ends 15 engaging the head of the rail while the web of the rail extends through the slot 16. Each bracket is also provided with end flanges 17, the edges or faces 18 of which cooperate with the ends 15 to form a slot through which the head of the rail 13 extends. Thus, any appreciable rocking movement between the brackets and rail is prevented. Obviously each bracket may be adjusted longitudinally of the rail to the desired point within the car and each bracket is secured in place by means of a bolt 19 extending therethrough.

The end flanges 17 of each bracket are apertured as indicated at 20 to accommodate the pivot pin 21 of a stirrup 22. These stirrups provide means for adjustably supporting the ends of vehicle carrier or supporting bars 23 which extend into the stirrup through apertures 24 formed in the end thereof and through stirrup braces 25 arranged intermediate the length thereof. The supporting bars are secured in place by pairs of pins 26 and 27 insertable through pairs of apertures 28 in the manner clearly illustrated in Figure 2.

These vehicle supporting bars 23 extend downwardly and then laterally in a substantially horizontal direction as shown at 29. The supporting bars terminate preferably in an upwardly extending end 30. Each pair of bars 23 are tied together by a cross brace 31 to which a supporting member 32 is pivotally connected, as for instance, by means of a stirrup 33. The supporting member 32 is adapted to maintain the pair of vehicle supporting bars in operative position and for this purpose engages with its lower end the floor 12 of the car. In practice each wheel of the vehicle will rest between and be sup-

ported by the horizontal portions 29 of the pair of supporting bars 23 so that four of the decking devices will be required for each vehicle. The spacing of the bars 23 is such that the wheel rests well down between the same whereupon the vehicle will be braced against end shocks. Furthermore the structure of the decking device under these conditions does not extend below the lowermost point of the vehicle so that none of the height of the railway car is wasted.

Adjustability of the decking device is obtained partly by altering the incline of the supporting member 32 and partly by adjusting the bars 23 within their stirrups 22. When not in use the decking devices may obviously be swung upwardly in a substantially vertical path and secured, for instance, to the roof of the railway car in any desired manner (not shown).

It will be apparent that the decking devices secured to one side of the car are entirely independent of those mounted upon the other side of the car and that the structure permits of both longitudinal and vertical adjustment sufficient to accommodate the devices to any and all conditions.

While an embodiment of the invention has been illustrated and described herein somewhat in detail, it will be apparent to those skilled in this particular art that many of the essential and all of the non-essential details of construction may be varied without departing from the spirit and scope of the invention and to this end reservation is made to make such changes as may come within the purview of the accompanying claims.

What I claim as my invention is:—

1. In a vehicle decking device for freight cars, the combination with vehicle supporting means of means for separately mounting said supporting means on the sides of the car and means engageable with the floor of the car for holding said supporting means in operative position.

2. In a vehicle decking device for freight cars, the combination with a plurality of vehicle supporting members of means for pivotally mounting said supporting members respectively on the sides of the car and means engageable with the floor of the car for holding said members in operative position and for adjusting the said members relative to their spaced relation with the floor.

3. In a vehicle decking device for freight cars, the combination with vehicle supporting means of means adjustable longitudinally of the car for pivotally mounting said supporting means on the side of the car for movement in a vertical path and means for variably limiting the downward movement of said supporting means.

4. In a vehicle decking device for freight cars, the combination with vehicle supporting means of longitudinally adjustable

means for pivotally mounting said supporting means on the side of the car for movement in a substantially vertical path, said supporting means being adjustably connected to said adjustable means.

5. In a vehicle decking device for freight cars, the combination with pivotally mounted vehicle supporting means adjustable longitudinally of the car, of means for supporting said supporting means in operative position and for vertically adjusting said supporting means.

6. In a vehicle decking device for freight cars, the combination with pivotally mounted vehicle supporting means adapted for movement in a substantially vertical path, of longitudinally movable means for adjustably securing said supporting means in operative position.

7. In a vehicle decking device for freight cars, a plurality of vehicle supporting members each adapted for engagement with a wheel of the vehicle and means for independently mounting each of said members on a side of the car, said means permitting vertical, lateral and longitudinal adjustment of said members.

8. In a vehicle decking device for freight cars, a plurality of vehicle supporting members each adapted for engagement with a wheel of the vehicle and means for separately mounting each of said members on a side of the car, said means permitting adjustment of said members longitudinally of the mounting.

9. In a vehicle decking device for freight cars, a vehicle supporting member, a rail secured to the car longitudinally thereof and means clampingly engaging said rail for pivotally mounting said supporting member thereon.

10. In a vehicle decking device for freight cars, a vehicle supporting member, a rail secured to the car longitudinally thereof, a bracket adjustably clamped to said rail and means for pivotally connecting said supporting member to said bracket.

11. In a vehicle decking device for freight cars, a vehicle supporting member, a rail secured to the car longitudinally thereof, a bracket adjustably secured to said rail and means for adjustably pivotally connecting said supporting member to said bracket.

12. In a vehicle decking device for freight cars, a rail secured to the side wall of the car longitudinally thereof, a vehicle supporting member, means pivotally connecting said supporting member to said rail for movement in a substantially vertical path and a support pivotally connected to said supporting member for securing the latter in operative position.

13. In a vehicle decking device for freight cars, a rail secured to the side wall of the car longitudinally thereof, brackets slidably

mounted on said rail with means for securing the same in adjusted position, a vehicle supporting member, adjustable means pivotally connecting said supporting member to said brackets and a support pivotally connected to said supporting member for securing the latter in operative position.

14. In a vehicle decking device, a plurality of spaced bars pivotally supported at one end and adapted to have their free ends positioned under a vehicle to support the same and means for supporting the free ends of the said bars in operative position and for varying the elevation of the said free ends of the bars.

15. In a vehicle decking device, a plurality of spaced bars pivotally supported at one end and adapted to have their free ends positioned under a vehicle to support the same, a member connecting said bars and means carried by said member for supporting the free ends of the said bars in operative position and for varying the elevation of the said free ends of the bars.

16. In a vehicle decking device, a pair of spaced bars pivotally supported at one end and adapted to have their free ends positioned under a vehicle to support the same, a cross member connecting the said bars adjacent the free ends, and a supporting member pivoted to the said cross member for supporting the free ends of the said bars in operative position.

17. In a vehicle decking device for cars, a supporting member adapted to be swung toward and away from the floor of the car and a member carried by the said supporting member adapted to engage the floor of the car and to have its angle of engagement with the floor of the car varied to vary the elevation of the said supporting member.

In testimony whereof I affix my signature.

ALFRED COPONY.