

(No Model.)

H. B. PLANT.
CAR.

3 Sheets—Sheet 1.

No. 531,859.

Patented Jan. 1, 1895.

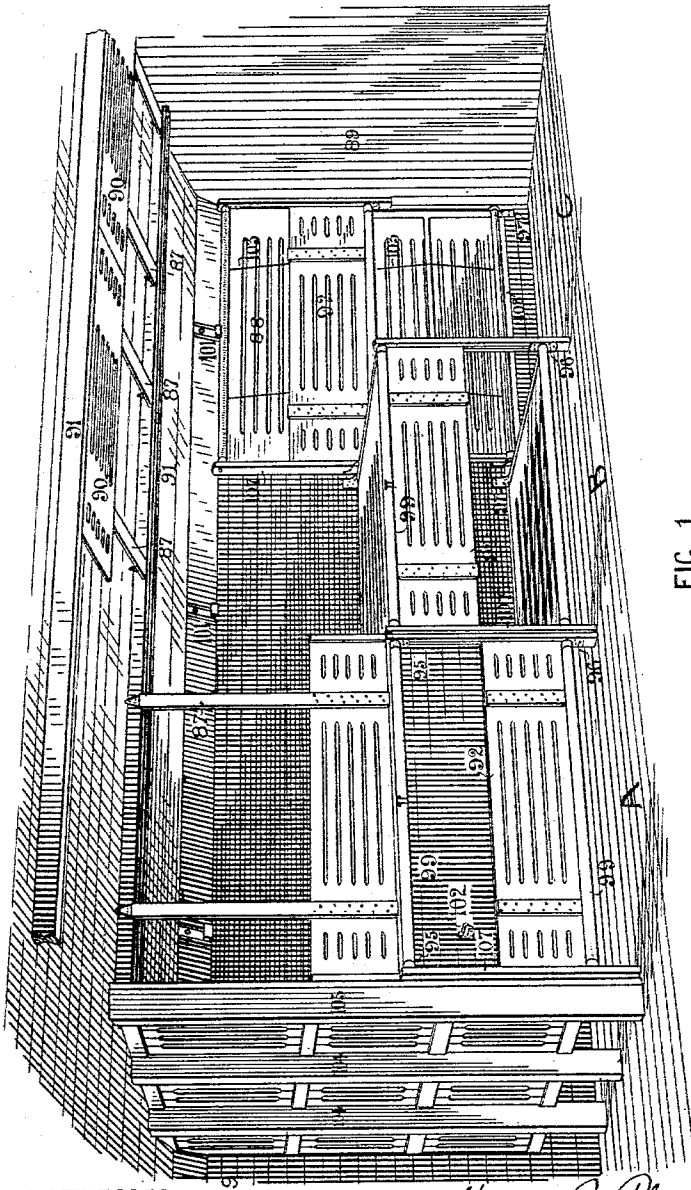


FIG. 1.

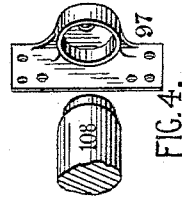


FIG. 4.

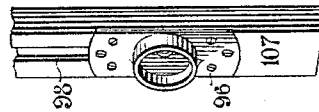
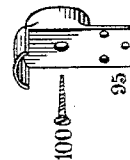
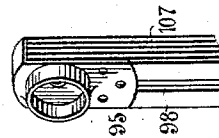
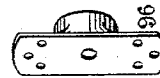


FIG. 3.



FIG. 2.



WITNESSES

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(No Model.)

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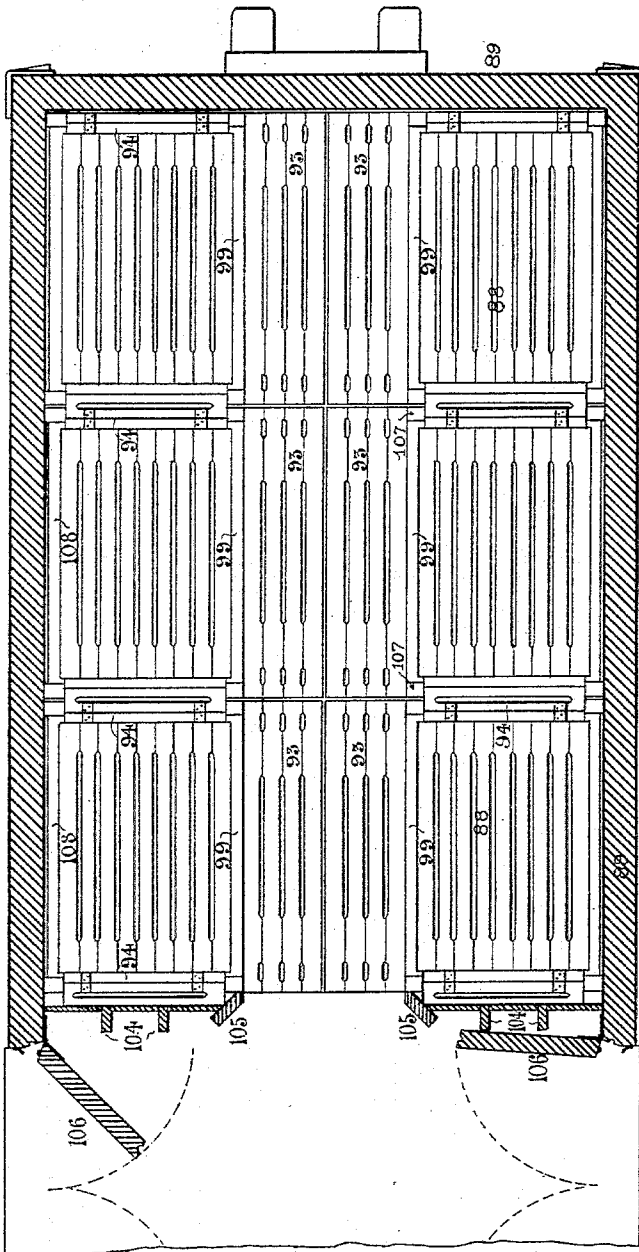


FIG. 5.

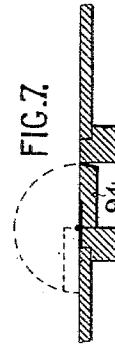


FIG. 7.

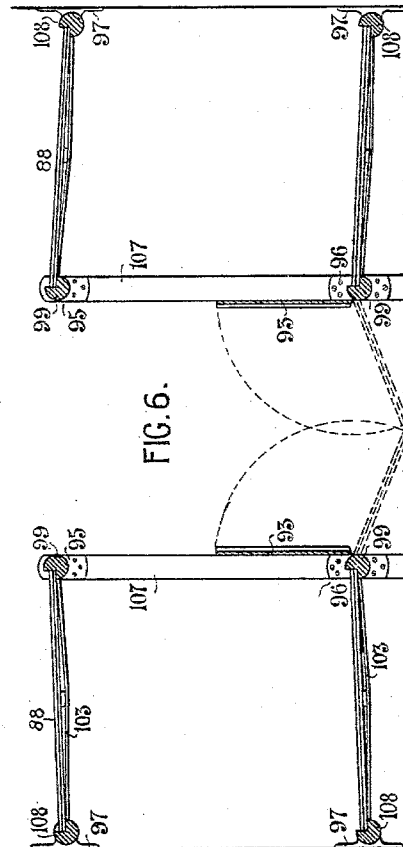


FIG. 6.

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(No Model.)

3 Sheets—Sheet 3.

H. B. PLANT.
CAR.

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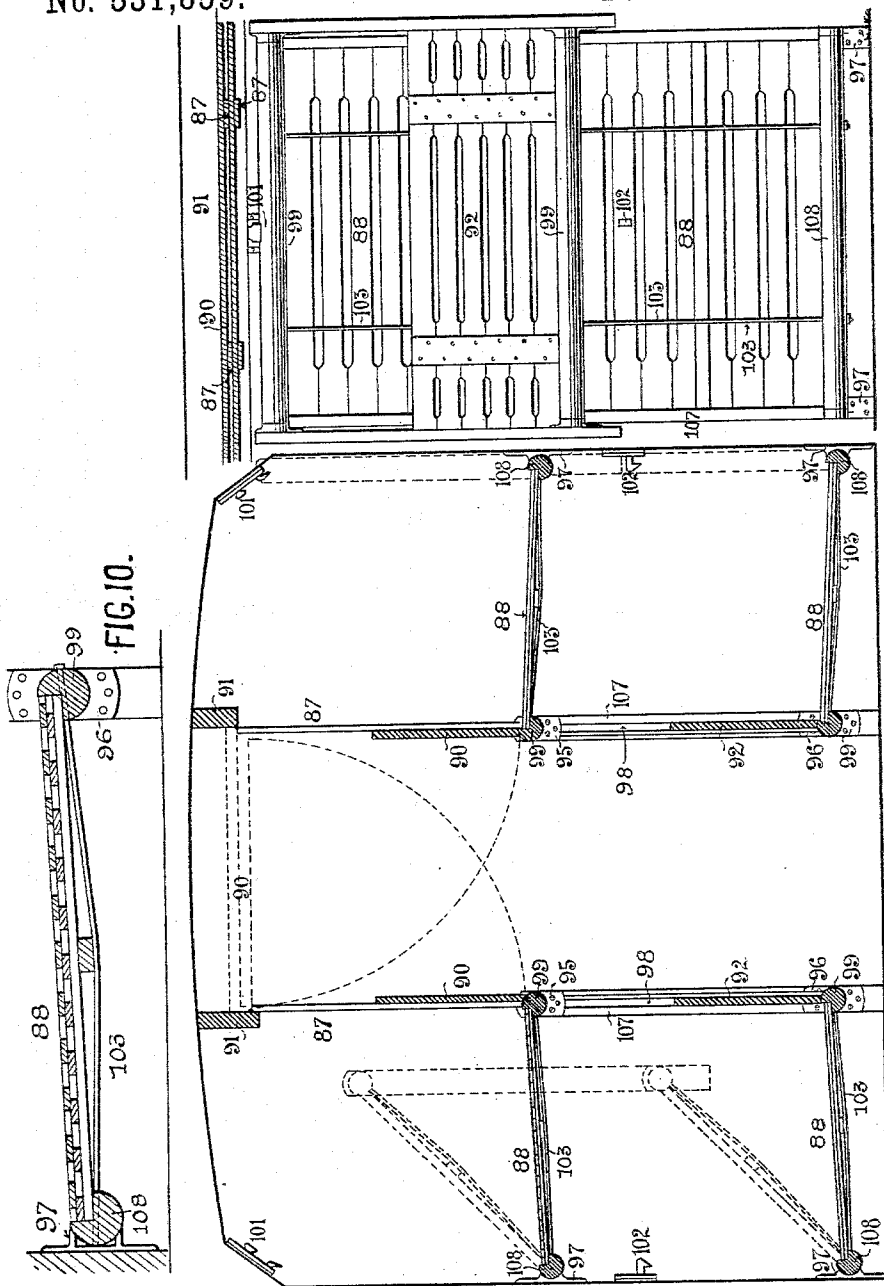


FIG. 9.

FIG. 8.

WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY B. PLANT, OF NEW YORK, N. Y.

CAR.

SPECIFICATION forming part of Letters Patent No. 531,859, dated January 1, 1895.

Application filed April 30, 1894, Serial No. 509,577. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. PLANT, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Cars, of which the following is a specification.

My invention relates to cars, and has reference more particularly to that class of cars employed for the transportation of perishable freight, such for instance as fruits.

The invention consists in a novel construction and arrangement of supporting racks, whereby, when not in use, they may be folded back out of the way to leave the interior of the car unobstructed.

In the drawings, Figure 1 is a perspective view of a portion of the inside of a car showing three sets of racks in different positions; Figs. 2, 3, and 4, perspective views of certain details hereinafter referred to; Fig. 5, a plan view of the lower trays or racks; Fig. 6, a vertical transverse sectional view of the same; Fig. 7, a sectional view illustrating the filling or spacing block; Fig. 8, a transverse sectional view through the car; Fig. 9, a face view showing the racks or trays folded; and Fig. 10, a section from front to rear of one of the trays.

In the drawings 89 is the car body, which may be made in most any desired form, but which should be provided with the longitudinal timbers 91, 91, along the roof (see Figs. 1, 8 and 9); and the upright posts 104, 104, and 105, shown in Figs. 1 and 5.

Posts 104 will be connected by an open work filling, as shown in Fig. 1, or by solid work as in Fig. 5; the said posts and the intermediate filling pieces preventing the contents of the racks from falling out at the ends next to the doors 106.

The posts 105 are for the purpose of protecting the doors and corners of the racks, trays, or shelves from injury by the trucks used in loading and unloading; and they also form a brace to keep the racks or bins firmly in place in case of heavy buffing, for when all the racks are down into position the ends of their top and bottom front rails 99 abut against each other and form practically one continuous structure from the end of the car to the post 105.

The trays or racks comprise a body portion 88 which will be made preferably of some open-work material such for instance as wire netting, or lattice-work; said body portion having along its front edge the bar 99 and along its rear edge a corresponding bar 108, as shown in Figs. 1, 5, 6, 8, 9 and 10, suitable truss rods 103 being advisably employed to give strength and rigidity to the trays. The bars 108 are journaled at their ends in brackets 97, shown in detail in Fig. 4, secured to the wall of the car; while the bars 99 are journaled at their ends in brackets 95 and 96, shown in detail in Figs. 2 and 3.

The trays, which are similar in all respects, are arranged in pairs one above the other, and are connected at their outer ends by the short bars or uprights 107. The front bar 99 of the upper tray fits into the socket or bracket 95 secured to the upper end of post 107, while the corresponding front bar 99 of the lower tray has its ends journaled in the brackets or sockets 96 secured to the lower ends of the posts 107. Screws 100 passing through the sockets into the ends of the bars, hold the parts together while permitting them to turn.

The trays of the respective sections are placed end to end, but owing to the presence of the connecting posts 107, there is a space left between the ends of adjacent trays through which the fruit would fall. In order to prevent this, I hinge to one end of each tray, a filling-block 94, shown in Figs. 5 and 7, which, fitting between the adjacent trays, forms, practically, a continuation thereof.

The opposing faces of the posts 107 are grooved vertically as at 98, Figs. 1, 2, 3 and 8, to receive a sliding guard 92, which, when resting upon the bar 99 of the lower tray, prevents the fruit from rolling off the lower tray. This guard is free to be raised and lowered, and may be held in its elevated position (see section B, Fig. 1) by any suitable means.

Instead of using a guard 92 which shall slide or rise and fall relatively to the tray, I may employ a hinged or pivoted front guard 93, Fig. 6, which may be swung down into the central aisle, as indicated by the dotted lines in said figure, in order to form an extended tray or fruit holding surface. It is to be understood that this arrangement of trays will advisably be duplicated, so that when the

front boards 93 are swung downward they will, in themselves, constitute a tray supported at the sides by the bars 99 and at the center by the car floor.

5 87, 87 indicate bars or arms which are hinged or pivoted at their upper ends to the beams 91,—Figs. 1 and 8,—and carry at their lower ends the boards or guards 90, the construction and arrangement being such that
10 when swung down into position, these guards will rest upon the front bar of the upper tray and prevent the latter from rising. If desired, these guard boards 90 may be provided with latches to engage the said bars 99 to prevent the former from swinging outward.
15

In Fig. 1 I have shown three tray sections A, B and C in different positions. In section A the parts are in the position they ordinarily occupy when in use. In section B the upper
20 guard 90 is shown swung up out of the way, and the lower guard 92 raised, preparatory to loading or filling the trays; while in section C the parts are shown as folded up out of the way.

25 The trays are held in their folded positions by one or more latches, preferably two, one of them, 101, engaging the bar 99 of the upper tray, while the other, 102, engages the body portion of the lower tray, as shown in Figs. 1,
30 8 and 9.

The guards 90 fold up against the roof, between the timbers 91, as shown in Figs. 1, 8 and 9, the latches which serve to lock said guards to the trays serving also to hold and
35 lock the guards in their raised positions.

Having thus described my invention, what I claim is—

1. In a car, a series of trays pivoted to the side of the car, end to end, and connected in
40 pairs at their front edges by posts 107; and the filling blocks 94 fitting between the ends of adjacent trays behind the posts.

2. In a car, the combination with the posts 104, 104; of the trays hinged to the sides of the
45 car, between the end of the car and said posts;

and a connection between the posts serving to form an end for the series of trays when the latter are folded down, substantially as described and shown.

3. In a car, two trays, each comprising a
50 body portion 88, and front and rear bars 99 and 108; posts 107, 107; sockets 95 and 96 carried by the posts to receive the bars 99; and sockets 97 secured to the car body to receive the bars 108.
55

4. In a car, two trays, pivoted at their inner ends to the car body; in combination with adjustable guards,—one for each tray,—the guard for the upper tray being hung from
60 above.
65

5. In a car, two trays pivoted at their inner ends to the car body; in combination with a guard for the upper tray, said guard being hinged to the roof of the car and adapted to swing downward.
70

6. In a car, a tray pivoted at its inner end to the car, and a guard pivoted to the roof above the outer edge of the tray.

7. In a car, two trays pivoted at their inner ends to the car; and bars 87, 87, hinged at their
75 upper ends to the roof and carrying at their lower ends the guard 90.

8. In a car, two trays pivoted at their inner ends to the car and pivotally connected at their outer ends; in combination with a guard
80 pivoted to the roof and adapted to swing down over the upper tray whereby both trays are prevented from rising.

9. In a car, the combination with the tray pivoted at its inner end to the side of the car; 80 of the grooved posts 107 at the outer ends of the tray; and the guard 92, seated at its ends in said grooves.

In witness whereof I hereunto set my hand in the presence of two witnesses.

HENRY B. PLANT.

Witnesses:

M. F. LOUGHMAN,
W. H. HENDEE.