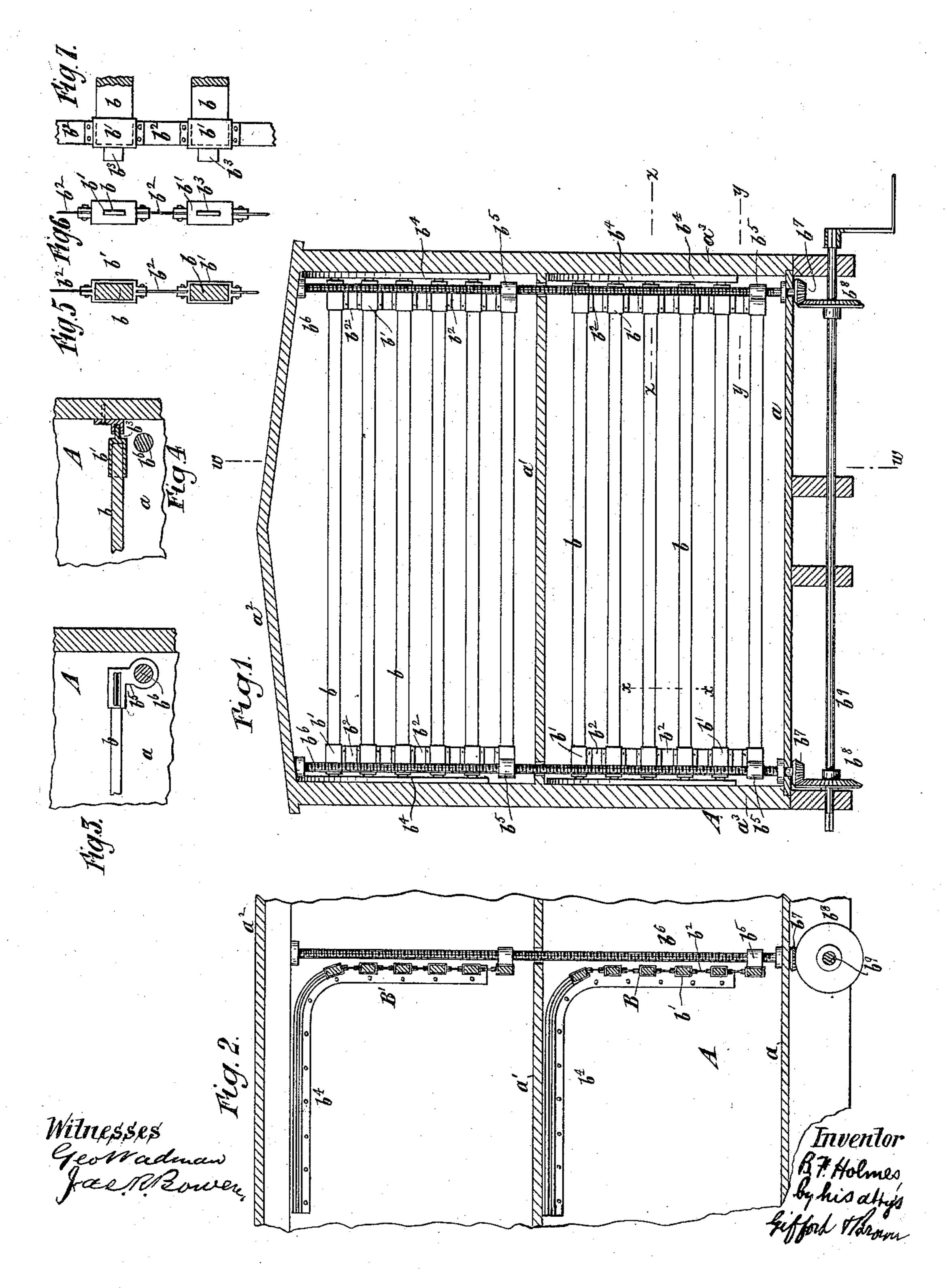
B. F. HOLMES. STOCK CAR.

No. 343,956.

Patented June 15, 1886.

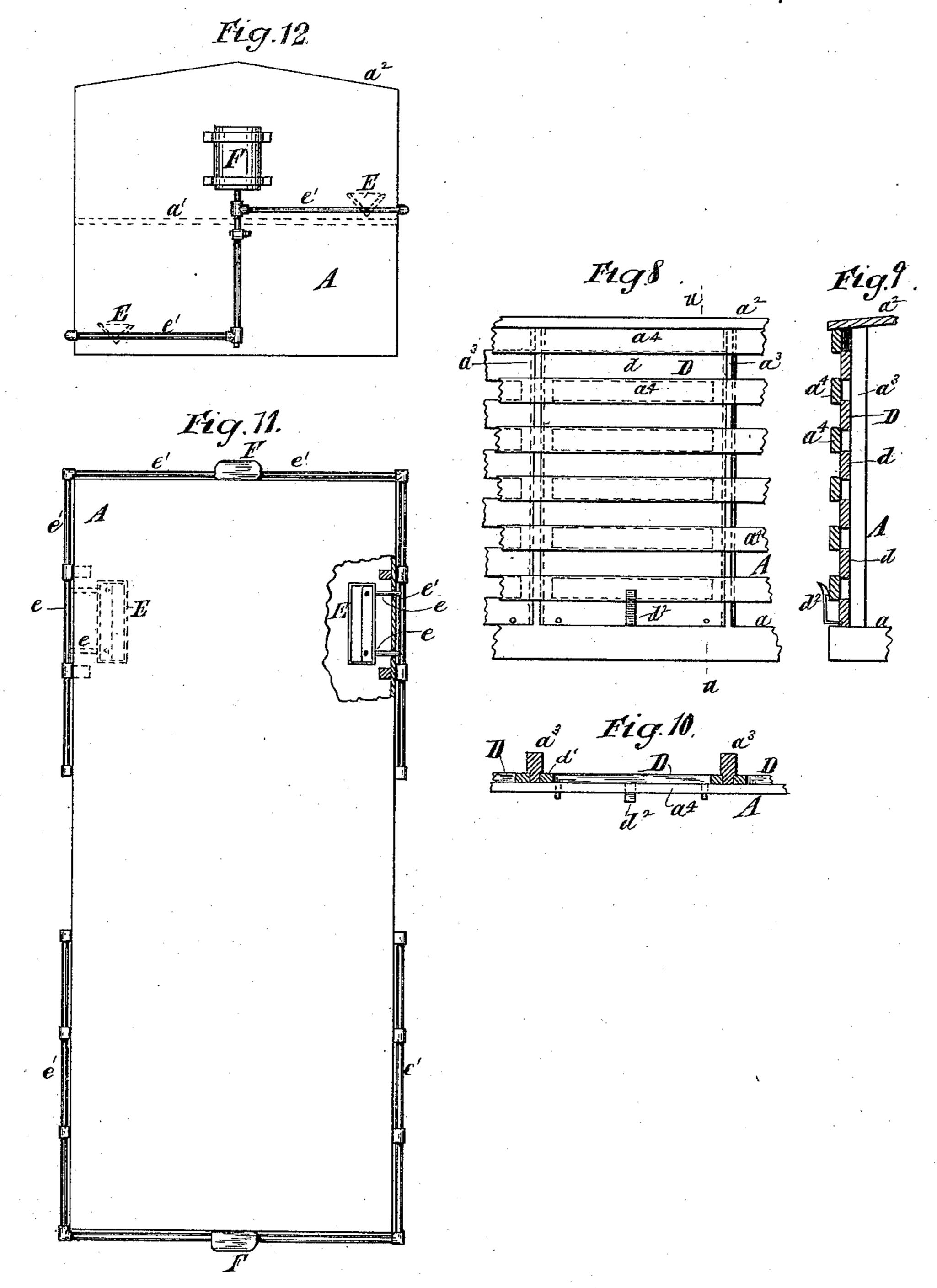


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United States Patent Office.

BENJAMIN F. HOLMES, OF NEW YORK, N. Y., ASSIGNOR TO SAMUEL F. PIERSON, TRUSTEE, OF SAME PLACE.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 343,956, dated June 15, 1886.

Application filed October 21, 1885. Serial No. 180,471. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. HOLMES, of New York, in the county and State of New York, have invented a new and useful Im-5 provement in Stock-Cars, of which the following is a specification.

I will describe a stock-car embodying my improvement, and then point out the various features of the improvement in claims.

In the accompanying drawings, Figure 1 is a transverse section of a stock-car embodying my improvement. Fig. 2 is a longitudinal section of the car, taken at the plane of the dotted line w w, Fig. 1. Fig. 3 is a horizontal 15 section of certain parts of the car, taken at the plane of the dotted line y y, Fig. 1. Fig. 4 is a horizontal section taken at the plane of the dotted line z z, Fig. 1. Fig. 5 is a vertical section taken at the plane of the dotted line x x, 20 Fig. 1. Fig. 6 is an end view of a portion of a transverse partition that is employed in the car. Fig. 7 is a front view of a portion of such partition. Fig. 8 is a side view of a portion of a car, illustrating means whereby it can be 25 completely closed in or used partly open at the sides. Fig. 9 is a transverse section taken at the plane of the dotted line u u, Fig. 8. Fig. 10 is a horizontal section of the parts illustrated in Figs. 8 and 9. Fig. 11 is a dia-30 grammatic plan or top view of a car such as I have shown in the other figures, but illustrating means whereby cattle contained in the car may be watered. Fig. 12 is an end view of the car, illustrating the watering apparatus.

Similar letters of reference designate corre-

sponding parts in all the figures.

A designates the body of the car. It consists of a floor, a, a second floor, a', arranged at a considerable distance above the other, a 40 roof, a^2 , upright posts or stanchions a^3 , and slats a^4 , fastened to the upright posts or stanchions, so as to form the sides of the car.

I have not deemed it necessary to show the slatted construction of the sides and ends of 45 the car in all the figures of my drawings, but it may be understood by reference to Figs. 8, 9, and 10.

I use two floors, a a', in order that cattle such as hogs or sheep—may be arranged some 50 above others, to economize space.

two floors a a', movable partitions B B', in order that the spaces above the floors can be divided up into small compartments or pens, or may be opened continuously from time to 55 time when desirable—as, for instance, to adapt

the car to carrying general freight.

I will now describe more fully the partitions BB'. They may be best understood by reference to Figs. 1, 2, 3, 4, 5, 6, and 7. They 50 severally consist of slats b, provided at the ends with caps b', united by pieces b^2 , of resilient metal, such as steel. The caps b' are provided with toes b^3 , that extend into grooved guides b^4 , that are arranged upon the sides of 65 the car. The caps of the lower slats are provided with nuts b^5 , which engage with upright screws b^6 . By rotating the screws b^6 in one direction the partitions B B' may be lowered close to the floors a a', to divide the spaces 70 above the floors into compartments or pens. When it is not desirable to have these spaces divided up, the partitions B B' may be raised and adjusted into approximately horizontal positions by rotating the screws b^6 in the other 75 direction, for then the screws will force the partitions along the portions of the guides b^4 that extend horizontally. The partitions B will then be close to the lower surface of the floor a', and the partitions B' will be close to 80 the roof. The screws b^6 extend upwardly beyond the floor a nearly to the roof, passing through the floor a, and operating not only the partitions B, but also the partitions B'. At their lower ends the screws b^6 are provided 85 with bevel-wheels b^{7} , that engage with bevelwheels b^8 , affixed to a shaft, b^9 , arranged below the floor a of the car.

Cars having slatted sides and ends are the most desirable for the transportation of cattle 90 or live stock during temperate weather; but oftentimes in winter they afford so slight a protection against the cold that many live stock perish.

One feature of my improvement is designed 95 to provide for converting a car having slatted sides into one having solid or continuouslyclosed sides and ends. This feature in my improvement I have illustrated in Figs. 8, 9, and 10.

D designates slatted shutters arranged be-I employ in the car, in conjunction with its I tween the posts or stanchions a^3 , and consist-

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ing severally of slats d, secured at the ends to uprights d'. The slats d are slightly wider than the slats a^4 . By raising the shutters D so as to bring the slats d behind the slats a^4 5 openings will be left for the circulation of air through the sides of the car. The shutters may be retained in this position by means of a spring-catch, d^2 , affixed to them, and adapted to engage with slats a^4 . The shutters may be to lowered by disengaging the catch d^2 , so that the slats d of the shutters will be opposite the spaces between the slats a^4 . Then the shutters will close the sides of the car and protect the contents of the car better.

Troughs E are provided between the several posts or stanchions a^3 , for use in feeding or watering the cattle occupying the compartments or pens of the car. These troughs are connected by branch pipes e with supply-pipes 20 e', extending around the outside of the carbody. The pipes e' on one side of the car are arranged just above the level of the floor a, and those at the other side of the car are arranged a short distance above the floor a'. 25 Tanks F are connected with the pipes e', and

supply the latter with water.

Sections of the pipes e' to which the troughs E are connected may be arranged and supported so as to be capable of rocking, in order 30 that the troughs may be swung down for use, and up out of the way when not needed.

I do not herein lay claim to the combination of a doorway, a door fitted to travel along guides in the sides of the doorway, and extending therefrom close to the roof, so that the door 35 may be moved crosswise of the car close to the roof when not required to close the doorway; nor do I claim such combination together with a screw for operating the door, as I intend to make the same the subject of a separate appli-40 cation for Letters Patent.

What I claim as my invention, and desire to

secure by Letters Patent, is—

1. In a car having two floors arranged one above the other, the combination of two sets of 45 partitions, one set for each floor, and mechanism common to both for operating them.

2. In a car having two floors arranged one above the other, the combination of two sets of partitions, one set for each floor, and 50 screws for operating both sets of partitions.

3. The combination, with a car having slatted sides, of slatted shutters fitted in place so that they may be made to close the spaces between the slats forming the sides of the car or 55 adjusted into line therewith, and catches or locks for securing said slatted shutters in place, substantially as specified.

4. The combination, with a car having two floors arranged one above the other, of a wa- 60 ter-tank and a single pipe extending from the same to and along each side of the car on different levels, substantially as specified.

BENJAMIN F. HOLMES.

Witnesses:

DANIEL H. DRISCOLL, JAS. R. BOWEN.