(No Model.)

2 Sheets—Sheet 1

J. H. WICKES.

STOCK CAR.

No. 322,336. Patented July 14, 1885.

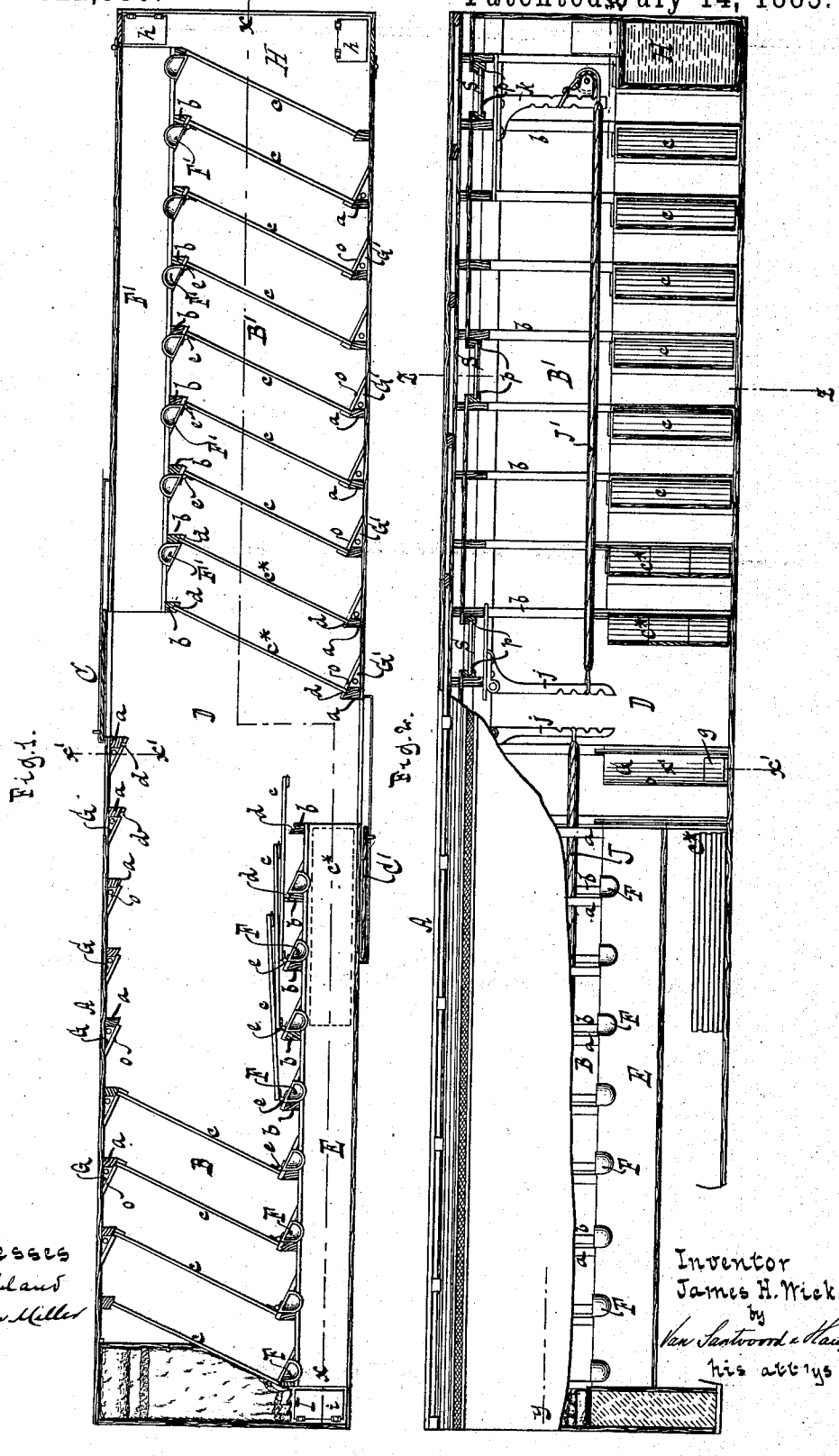


Fig. 1.

Fig. 2.

Witnesses
Otto Hufland
William Miller

Inventor
James H. Wickes
by
Van Santvoord & Hauff
his attys

N. PETERS. Photo-Lithographer. Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

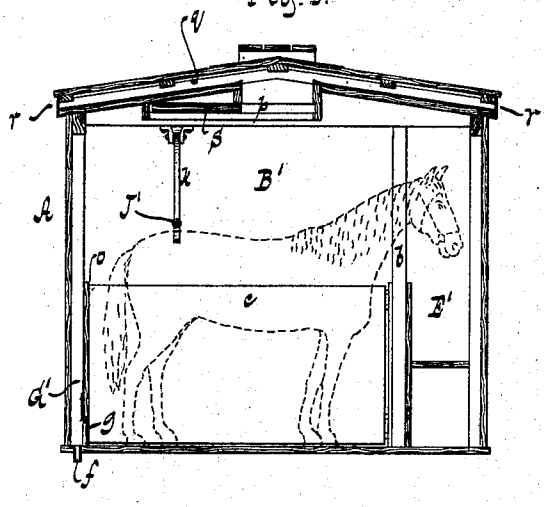
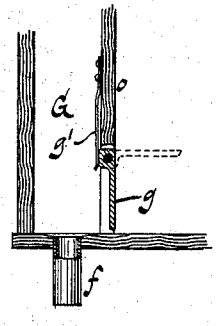


Fig. 4.



WITNESSES:

Otto Hupfeld

William Miller

INVENTOR

James H. Wickes

BY Van Santvoord & Hauff

ATTORNEYS

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

JAMES H. WICKES, OF NEW YORK, N. Y.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 322,336, dated July 14, 1885.

Application filed June 4, 1885. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. WICKES, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Stock-Cars, of which the following is a specification.

The principal object of this invention is to facilitate the shipping of horses or other animals in cars. The peculiar and novel features in the construction of my car are pointed out in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 represents a horizontal section in the plane *y y*, Fig. 2. Fig. 2 is a longitudinal vertical section in the plane *x x*, Fig. 1. Fig. 3 is a transverse vertical section in the plane *z z*, Fig. 2. Fig. 4 is a vertical section of one of the clearing-compartments on a larger scale than the previous figures, the plane of section being indicated by the lines *x' x'*, Figs. 1 and 2.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates the body of my car, in which are formed a series of stalls, B B', each affording room for one horse.

C C' are the doors, which are situated on the opposite sides of the car near the middle of its length, but not directly opposite to each other. Through these doors access is had to the middle compartment, D, which divides the stalls B from the stalls B'. The stalls are formed by means of a number of stanchions, *a a b b*, and partitions *c c*. The stanchions *a a* are situated close to one side of the car; but the stanchions *b b* are at a distance from the opposite side, leaving room for the mangers E E', which also allow a person to pass from one end of the car to the other, as will be hereinafter more fully explained. The partitions *c c* are placed obliquely, as shown in Fig. 1, and I consider the oblique position of the stalls important, since a horse standing obliquely in the car is much less liable to be knocked about by the sudden movements and shocks of the car than a horse standing at right angles to the sides of the car. The first two partitions, *c* c**, on each side of the entrance-compartment D are made each in three sections, and they are fitted into grooves *d d* in the stanchions *a b*, whence they can be readily withdrawn in order to give free access to the succeeding stalls. In Fig. 1 of the drawings the two partitions of the stalls B next to the entrance-compartment are withdrawn from the grooves *d d* and their sections are placed beneath the manger E, and said partitions are made in sections in order to be able to store them away beneath the mangers. The partitions *c* c** on the opposite side of the entrance-compartment are in their normal position. The partitions *c c* are connected to the stanchions *b* by hinge-joints *e*, so that they can be opened to give access to the stalls nearest to the ends of the car. Each stall is provided with its own feed-trough F or F', while the manger E is common to all the stalls B, and the manger E' is common to all the stalls B'. The feed-troughs F F' are secured to the stanchions *b b*. On the stanchions *a a* are secured oblique partitions *o o*, forming the clearing-compartments G G', one for each stall. In the bottom of each of these compartments is secured a pipe, *f*, (best seen in Fig. 4,) through which the water of the horses is free to discharge, and each of the partitions *o o* is provided with a door, *g*, which, when closed down, leaves a narrow channel for the water to pass through, while it prevents a draft in the stall. As seen in Fig. 4, these doors *g* are hinged at the top and exposed to the action of springs *g'*, which retain them in their closed as well as in their open positions.

In the space between the last of the stalls B' and the end of the car is placed a water-tank, H, with doors *h h* in its top, through which it can be filled and its contents can be reached, as required. In the space between the last of the stalls B and the end of the car is placed a feed-box, I, intended to receive oats or other solid food for the animals in the car. A door, *i*, in the top of this box gives access to the same. On this box may be placed a bed for the person tending the animals. This person can pass through the manger E to the entrance-compartment, and thence through the manger E' to the opposite end of the car. (See Fig. 1.)

Over each series of stalls B and B' is stretched a rope, J and J', respectively, which is intended to prevent the horses from kicking. For this purpose I use, by preference, wire ropes covered with rubber or other soft mate-

rial, so that they are not liable to produce an injury to the horses. Each rope is secured to two hangers, *j k*, the hangers *j* being situated in the entrance-compartment D, and the hangers *k* each in one of the end compartments. Said hangers are provided with notches or otherwise so arranged that the kicking-rope can be adjusted higher or lower, and with the hanger *k* is combined a device for straining the kicking-rope—such as a shaft—on which the straining-cord is fastened, and which can be turned in order to keep the kicking-rope taut. A ratchet-wheel and pawl prevent the shaft from turning backward.

The hangers *j j* in the entrance-compartment are hinged at the top, so that they can be turned out of the way when horses are led in or out of the car.

The ventilation of the car is effected by means of shutters S, (see Figs. 2 and 3,) which slide in guide-grooves *p*, and through which the interior of the car is brought in communication with air-channels *q*, which extend laterally, Fig. 3, and communicate through wire screens *r* with the open air. When the shutters S are opened, therefore, the foul air from the interior of the car is free to escape, and if the doors *g* in the clearing-compartments are opened a circulation of air can be produced in the car, which is very desirable in the hot season.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the stalls B B′ and the entrance-compartment D, intermediate between said stalls, of the water-tank H, in one end of the car, and the feed-tank I, in the opposite end of the car, substantially as shown and described.

2. In a stock-car, the combination, with the stalls for receiving the animals, of clearing-compartments G, substantially as shown and described.

3. In a stock-car, the combination, with the stalls for receiving the animals, of the clearing-compartments G, one for each stall, the doors *g*, forming a communication between the clearing-compartments and the corresponding stalls, and the discharge-pipe *f*, substantially as shown and described.

4. In a stock-car, the combination, with the stalls for receiving the animals, of the ventilating-shutters S in the roof and the air-channels *q*, substantially as shown and described.

5. In a stock-car, the combination, with the stalls B B′, the clearing-compartments G G′, the discharge-pipes *f*, and the doors *g*, of ventilating-shutters in the roof and the air-channels *q*, substantially as shown and described.

6. The combination, with the stalls receiving the animals, of the hangers *j k*, the kicking-rope J, secured to said hangers, and a tightening mechanism secured to one of the hangers and connected with one end of the rope for straining said rope and keeping it taut, substantially as shown and described.

7. The combination, with the stalls B B′ and the entrance-compartment intermediate between said stalls, of the hinged hangers *j* in the entrance-compartment, the rigid hangers *k* in the end compartments, and the kicking-ropes J J′, secured to said hangers, substantially as shown and described.

8. The combination, with the stalls for receiving the animals, of the hangers *j k*, the notches formed in the edges of the hangers, the kicking-rope secured in these notches, and a tightening mechanism secured to one of the hangers, substantially as shown and described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JAMES H. WICKES. [L. S.]

Witnesses:
W. HAUFF,
E. F. KASTENHUBER.