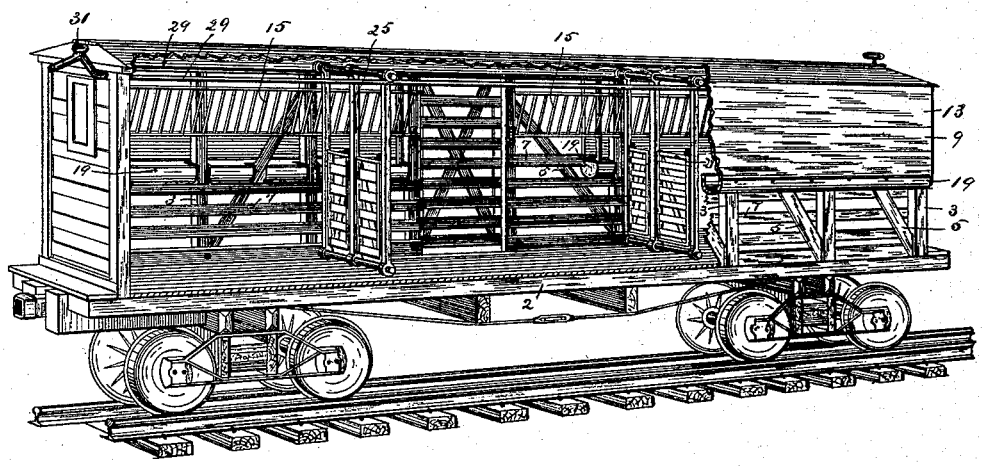
(No Model.) 2 Sheets—Sheet 1.

R. H. RIPLEY.

STOCK CAR.

No. 384,931. Patented June 19, 1888.

Fig. 1



Witnesses.
J Jossen.
a. m. Gaskell.

Inventor,
Royal H Ripley.
By his Attorneys
Paul, Sanford & Merwin.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

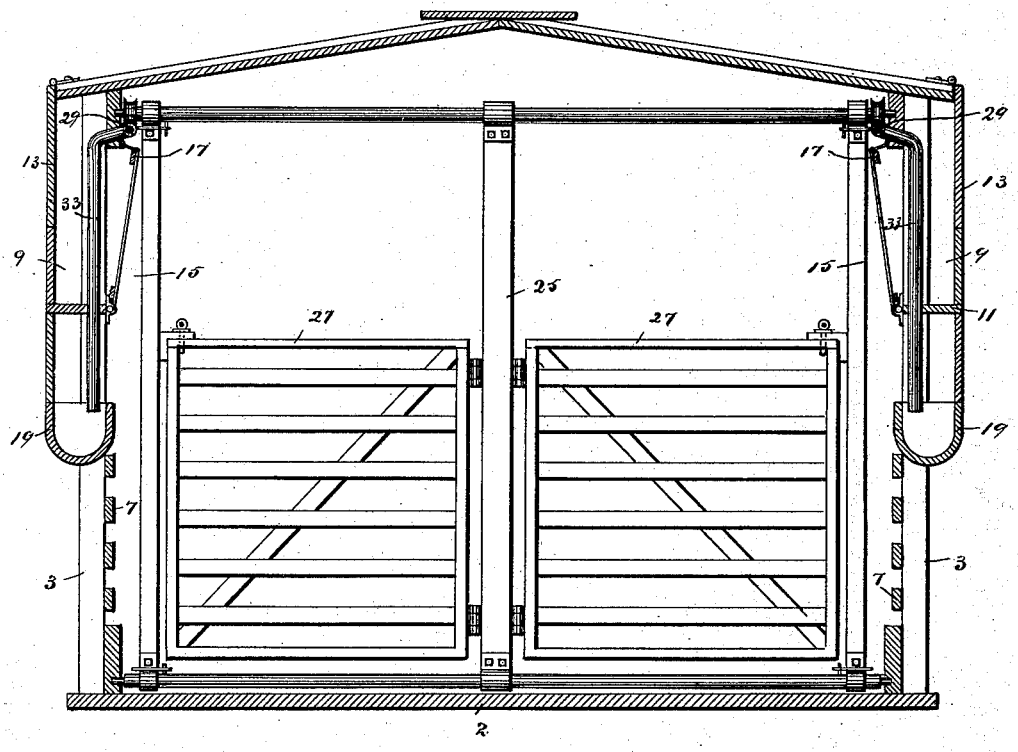
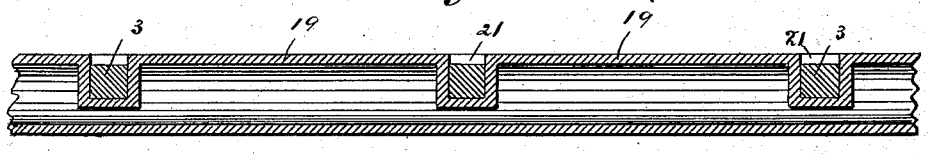


Fig. 3.



Witnesses,

J. Jessen.

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Inventor.

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UNITED STATES PATENT OFFICE.

ROYAL H. RIPLEY, OF MINNEAPOLIS, MINNESOTA.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 384,931, dated June 19, 1888.

Application filed April 4, 1888. Serial No. 269,551. No model.)

To all whom it may concern:

Be it known that I, ROYAL H. RIPLEY, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Stock-Cars, of which the following is a specification.

My invention relates to improvements in cars designed especially for the transportation of live stock, and the objects which I have in view are to provide devices which may be readily and cheaply applied to common stock-cars for the purpose of affording facilities for feeding and watering the stock while in transit and for dividing the cars into any number of compartments, thereby permitting the separation of the stock into small lots, and where mixed stock is shipped separation of the different kinds from each other. In Letters Patent No. 377,959, granted to me February 14, 1888, I have shown and described a stock-car provided with adjustable partitions which are adapted to be secured at any points in the car, so as to divide it into compartments of any desired size, and are also adapted to be turned up and secured in a horizontal position under the roof, thus leaving the interior of the car entirely free for the shipment of dead freight.

My present invention relates more particularly to devices for affording facilities for the feeding and watering of stock while in transit.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view, partly broken away, showing a stock-car provided with my devices. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a detail section of a portion of one of the troughs, showing the manner of applying it to the wall of the car.

In the drawings, 2 represents the body of an ordinary stock-car. As these cars are usually constructed their side walls consist of a series of vertical posts, 3, with diagonal posts 5 arranged between them, and with a series of slats, 7, secured to the inside of the posts. In applying my feeding and watering devices to cars of this kind that are already constructed, I remove a number of the slats from the upper part of the side walls of the car and build a hay-receptacle, 9, on the outside of the posts 3. This receptacle may be extended to any desired distance outside of the posts, and it also includes the space between the posts, as the bottom 11 of the receptacle 9 extends preferably between the posts and is flush with their inner edges. The hay-receptacle is also preferably provided with a door, 13, which may be hinged to the edge of the roof of the car and be adapted to be thrown back onto the roof when the receptacle is to be filled with hay.

The outer wall of the receptacle and the door 13 are preferably made tight, so as to prevent sparks from getting into the hay. The hay-receptacle 9 preferably extends along both sides of the car, excepting on the spaces covered by the doors when they are open. I also prefer to provide a folding rack that forms the inner wall of the hay-receptacle, and through which the stock may pull the hay when feeding. The hay-rack 15 is preferably hinged to the wall of the car at substantially the lower part of the hay-receptacle 9, and is provided at its upper end with a cord or chain, 17, by which it is held in an inclined position. When not in use, these racks may be folded up against the side of the car and secured by any suitable means. The racks 15 are preferably arranged on both sides of the car and extend from the ends of the car to the doors.

Arranged beneath the hay-receptacles 9, and preferably projecting the same distance from the walls of the car, are the water-troughs 19. These troughs are also preferably arranged upon both sides of the car and extend the full length thereof, except for the spaces that are covered by the doors when they are open. The troughs are also provided with recesses 21, which fit around the posts 3 and 5, thus permitting the troughs to fill the spaces between the posts and their inner edges to be flush with the inner walls of the car. The troughs, being arranged beneath the hay-receptacles, are covered and protected by them, and thus kept clear from dust and dirt. The troughs may be arranged to tilt for the purpose of dumping their contents, or they may be provided with plugs or faucets, by means of which the contents may be discharged.

The troughs are arranged far enough below the bottoms of the hay-receptacles to leave an open space above the troughs of sufficient size to allow the stock access to the trough.

If preferred, means may be used for covering the water-trough when not in use. Suitable

devices are also employed for filling the troughs with water. I prefer to provide means by which all of the troughs may be filled at once from either end of the car, and I prefer also to utilize the pipes upon which the movable partitions are supported as conveyers through which the water may be conducted to the troughs. The partitions 25 are preferably similar to those described in my former patent, being provided with small gates or wickets 27, and being supported upon pipes 29, arranged near the top of the car upon either side thereof. These pipes 29 preferably extend the full length of the car, and any number of partitions may be supported upon them. They are preferably provided at each end with a common supply-pipe, 31, through which water may be supplied to both pipes. They are also provided with branch pipes 33, through which water may be conveyed from the pipes 29 to each of the water-troughs. By this means all of the troughs may be filled simultaneously from either end of the car, thus making it possible to fill the troughs of two cars from the same supply-pipe at one stop, which is of great advantage over those devices which necessitate a stop for each car. I do not confine myself, however, to this means for filling the water-troughs, as any other suitable devices may, if preferred, be used for the purpose.

If preferred, the hay receptacles and racks and the watering-trough may be extended to the doors on both sides of the car, in which case the doors of the car may be arranged to slide outside of the projecting receptacles and troughs; or hinge-doors may be used instead.

If preferred, the hay-racks may be made stationary instead of folding and be arranged substantially flush with the inner wall of the car.

I claim as my invention—

1. The combination, in a stock-car provided with the series of posts 3, of the hay-receptacles 9, having a bottom, 11, and projecting outward beyond said posts and extending between the posts to their inner surface, and the folding racks hinged at their lower edges to the wall of the car and forming the inner walls of said receptacles, substantially as described.

2. The combination, in a stock-car provided with the series of posts 3, of the hay-receptacles 9, having bottoms 11 projecting outward beyond said posts and extending between the posts to their inner surface, the doors in the outer walls of said receptacles, and the folding racks hinged at their lower edges to the wall of the car and forming the inner walls of the receptacles, substantially as described.

3. The combination, with the stock-car provided with the series of posts 3, of the hay-receptacles 9, arranged partially between and partially outside of said posts, and provided with closed bottoms and with racks at their inner sides secured to the inner surface of the walls of the car, and the water-troughs 19, arranged beneath said hay-receptacles and provided with recesses fitting around said posts, substantially as described.

4. The combination, in a stock-car, of a hay-receptacle arranged entirely outside of the inner surface of the wall of the car and a folding rack hinged to the inner surface of the wall of the car at or near the bottom of the receptacle, and adapted to be turned down to an inclined position within the car or to be folded up flush against the wall of the car, substantially as described.

5. The combination, in a stock car provided with the series of posts 3, of the hay-receptacles 9, having bottoms 11 projecting outward beyond said posts and extending between the posts to their inner surfaces, the folding racks secured to the inner surface of the walls of the car, forming the inner sides of said receptacles, and the water-troughs arranged beneath said receptacles, and also projecting outward beyond the posts and inward to their inner surfaces, substantially as described.

6. The combination, in a stock-car having the adjustable partitions 25, of the water-troughs and the pipes 29, extending longitudinally in said car and forming supports for said partitions, and also forming conductors for conveying the water to said troughs, substantially as described.

In testimony whereof I have hereunto set my hand this 22d day of March, 1888.

ROYAL H. RIPLEY.

In presence of—

A. C. PAUL,

T. D. MERWIN.