114795 G.W. Fox. Stock Cars. PATENTED MAY 16 1871 Fig.3. Witnesses: .Unventor: Attorneys. PER

UNITED STATES PATENT OFFICE.

GEORGE WASHINGTON FOX, OF LARAMIE, WYOMING TERRITORY.

IMPROVEMENT IN STOCK-CARS.

Specification forming part of Letters Patent No. 114.795, dated May 16, 1871.

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON Fox, of Laramie, in the county of Albany and Territory of Wyoming, have invented a new and useful Improvement in Stock-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

My invention relates to stock-cars; and consists in certain improvements, which will be first described in connection with all that is necessary to a full understanding thereof, and then clearly pointed out in the claim.

The object of my invention is to provide for the better transporting of beef-cattle from the western prairies and mountains and valleys to the scaboard markets without suffering or having to unload or reload them, thereby enabling me to deliver them to the markets in a sound, healthy condition. My invention will be valuable, also, for shipping horses or mules, and in time of war would be indispensable.

Figure 1 is a side view of my improved car, partly in section and partly in elevation. Fig. 2 is a transverse section of the car, showing in what manner the timbers are put together to form the doors, ways, spaces for feed-racks, provender-lofts, &c. Fig. 3 is a view, partly in plan and partly in horizontal section, showing the water buckets or troughs, and hose for connecting with the tank, said hose connecting with pipes to receive and conduct the water through the car, and connecting with sections of pipe or hose to conduct the water to the troughs; also shows pipe for drawing off surplus water. Fig. 4 is a view of a lifting-hock to be used for taking out partition-bars.

Similar letters of reference indicate corresponding parts.

The cross-pieces A, Fig. 2, mortised into the stringers B, are for the purpose of supporting the posts C, Fig. 3, which are placed alternately with two posts, D D', on one side of the car, and one on the other, as supports for the alternate partitions A¹ A², the others being supported by posts D. The posts C D are each grooved for the purpose of securing the bars of the cross-partitions which separate the space into stalls. These posts contain a niche,

opening into the grooves at the top, one foot in length, for the purpose of inserting and removing the partition-bars. The posts D' are plain, forming one side of the doorway, and being set six inches, or thereabout, from the line of partition toward the feed-rack F, thereby making the door so much wider than the stalls, for the purpose of admitting large-horned cattle easily, also for making greater space for ventilation. The posts C are set one foot (more or less) toward the center of car from the outer edge. The cross-pieces F for the support of the racks are framed into the posts D and D' and the joists G. The joists G are to support the floor of the provenderloft. The posts D, being framed to the rail I, extend to the top and support the roof; the tops of posts D' are framed to rail I, and do not extend above; the tops of posts C are framed to joists G. The timbers for the roof are framed together so that the rafters J and the cross-pieces K form openings for doors K1 on the roof, one-half of which are over the loftfloor and one-half over the feed-rack, giving space to reach the provender and fill the feedracks from the top of the car, over which openings are made through the floor of the provender-space K². The spaces between the joists G, the cross-pieces F', and rails I form the openings in floor of loft over each feedrack. Each alternate space between the posts D on the sides of loft is provided with doors, by which the loft is filled with provender. Every alternate one should be well braced. Braces should also be placed between the posts D and D', extending two feet high from the floor, also across the ends of car.

The hose L, Fig. 3, is fastened to the end of pipe L' by a screw-band, which fits snugly around the head of said pipe. On the loose end is a strap, a, and buckle b, with which to secure it to the tank. A small rope, d, also connected with the hose, secures the connection more firmly by being wound a few times around with the strap. L' is the pipe which extends around the floor of loft K². This pipe has feeders O attached above the head of each stall. These feeders extend down the post D, through the cross-piece F', which keeps it firm and conducts the water to the bucket or trough P. A pipe, Q, extends from the bottom of the trough or bucket down through the floor, with

a cock at the end to hold the water, or to draw off the surplus water in freezing weather.

The water is forced to each trough or bucket at the same time by the pressure of water in the tank, with which the hose is to be connected at the stations. The projecting rails R, Fig. 2, are grooved to hold the tops of the sliding doors S for the slats. The iron bars T are to confine the doors S at the bottom on the rails which support them. The wire-nettings U are to keep out all sparks of fire, also flies during warm weather; they also afford the required ventilation. The doors are fastened by bolts V, passing through mortises of the door and side of car, locking on the inside by a key-from the outside at key-hole W, thus leaving the surface of the car smooth for the doors to work either way. The doors X are made to fit against the frame, sinking in flush with the outer surface, leaving nothing for sparks of fire to catch against. These doors X need not be opened only to fill the loft with provender. The doors K¹ are situated nearly directly over the openings in the floor or loft for the feedracks, for the purpose of filling said racks with provender as the animals may want it. These doors are raised from the roof for the purpose of shedding water. They are also made to fit down in the scuttle-hole, as well as to cover over it, thus making the loft perfectly tight and fire-proof. e are bars to keep animals from backing against the door.

The partitions between the stalls are made of hard-wood plank, the ends of which slide in the grooves of posts C and D, as heretofore described. The partitions have a hand-hole at either end, by which they can be removed

without entering the car by using the pikehooks shown in Fig. 4, one man being at each side of car to place a pike-hook in the handhole, and raise the partition to the top of post, and take it out of the groove at the niche for that purpose.

Gentle stock may be loaded in this car all at one door by having the partitions down, and putting them up as the animals are led to They may be unloaded in the their places. same manner, by taking the partitions down as they are led out. In shipping valuable stock every alternate partition may be taken out, thus giving them double stalls. Wild, ferocious stock can be put through the doors in their respective stalls, after which there is no need of entering the car to take care of them. In unloading ferocious animals it is necessary to use the pike-hooks and remove the partitions held by the posts C for letting two animals out at a time, each passing out at the door the other came in at, or passing nearly directly forward through the car, instead of backing them out. The next are led out in the same manner, and so on to the last.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The series of stalls, sliding doors, doorways wider than the stalls, and movable partitions, all relatively arranged in a stock-car, as and for the purpose described.

GEORGE W. FOX.

Witnesses:

C. R. LE ROY, J. S. PFEIFFER.