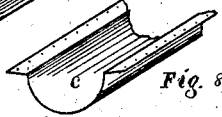
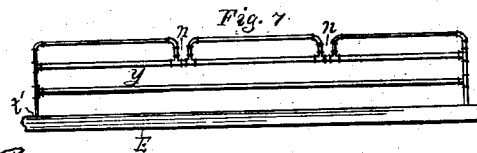
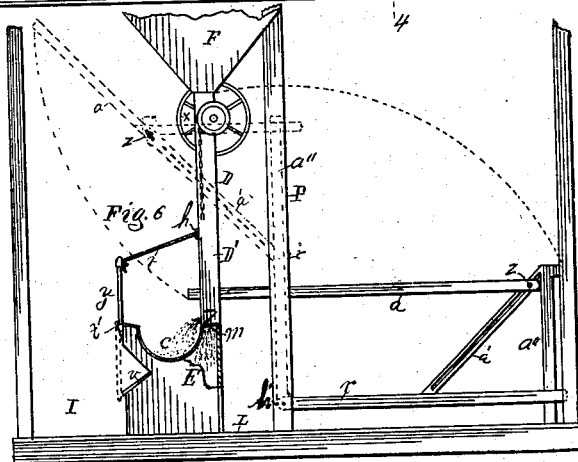
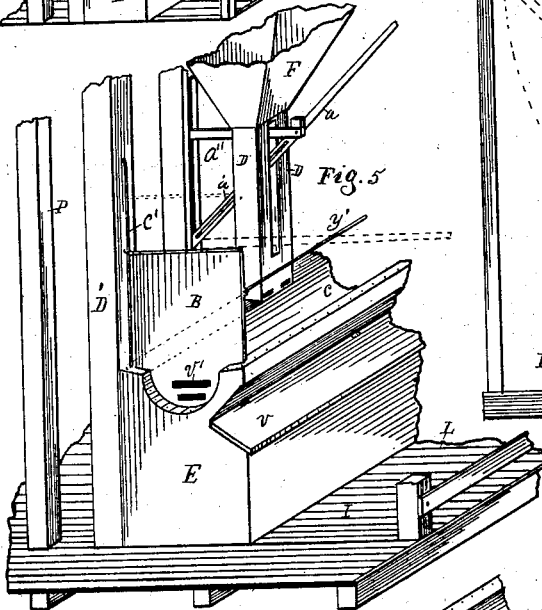
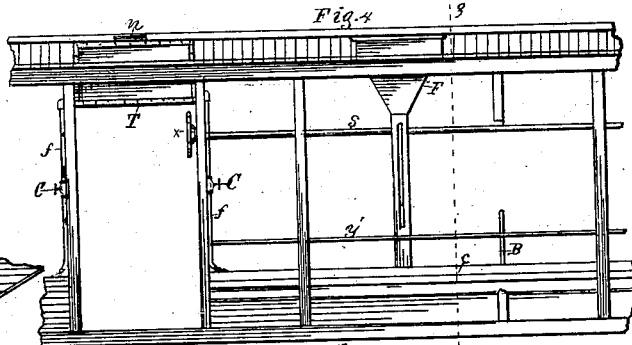
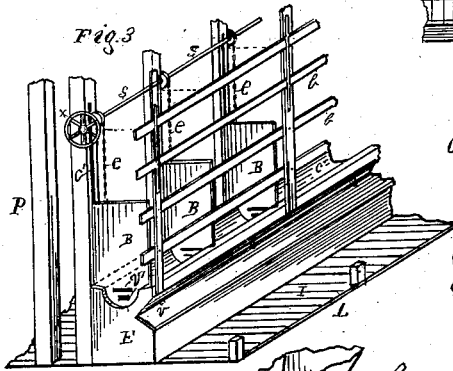
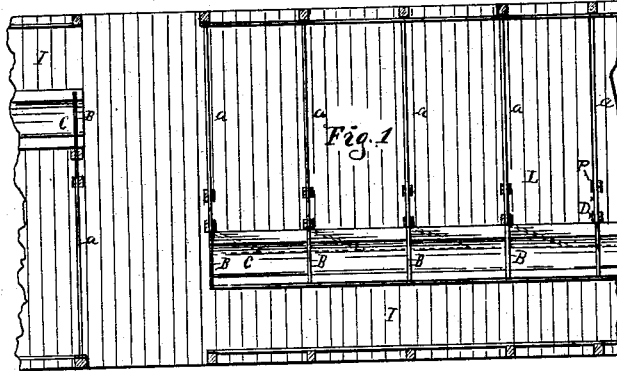
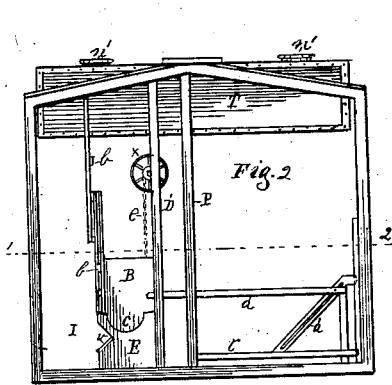


(No Model.)

J. EDMANDS.
STOCK CAR.

No. 260,009.

Patented June 27, 1882.



Attest.
John C. Perkins
Eugene S. West

Inventor.
John Edmands
By Lewis C. West
Att'y.

UNITED STATES PATENT OFFICE.

JOHN EDMANDS, OF KALAMAZOO, MICHIGAN.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 260,009, dated June 27, 1882.

Application filed November 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN EDMANDS, a citizen of the United States, residing at Kalamazoo, county of Kalamazoo, State of Michigan, have invented a new and useful Stock-Car, of which the following is a specification.

The object of my invention is to effect certain improvements in stock-cars, whereby the stock can be more conveniently loaded and unloaded and attended to while in transit than by previously constructed cars, in which no aisle or passage-way is made in front of the heads of the stock.

The construction embodying my improvements consists in a car having stalls formed crosswise of the same, in the usual manner of arrangement, and having mangers constituting feed-chests at the heads of the stalls and an aisle between said manger and the car-wall.

In the drawings forming a part of this specification, Figure 1 shows a plan of arranging stalls, manger, and the aisle, said figure being a top view from line 1 2 in Fig. 2; Fig. 2, a right-hand end view; Fig. 3, a manger in perspective; Fig. 4, a side elevation; Fig. 5, an enlarged detached portion of manger, also showing a hopper and feed-spout; Fig. 6, a cross-section on line 3 4 in Fig. 4; Fig. 7, a guard to the manger, and Fig. 8 a broken portion of trough in perspective.

The partitions between the stalls I construct adjustable from horizontal bars *a r*, upright bar *a'*, and oblique brace *a'*, the latter being slotted, as shown. The end of bar *a* is connected with the slot of brace *a'* by a pivot movably located therein at *z*, and the end of bar *r* is pivoted with post *P*, near the bottom, at *h'*. In Figs. 2 and 6 this partition is shown in the position it occupies when the car is loaded with stock, Fig. 1 showing the arrangement of stalls. The partition is held in place by the end of bar *r* and a projection at top of standard *a''*, fitting in a recess or groove, as designated in Figs. 2 and 6. When unloading the stock this partition or gate is thrown up and over into the other part of the car, as shown by dotted lines in Fig. 6, in which pivot *z* has moved down the slot of bar *a'*, and the front end of bar *a* has been carried forward and upward in the operation. Thus no portion of the gate remains in that part of the car forming

the stalls. Those portions of the gate liable to be pressed or rubbed against by the stock may be upholstered.

E is the manger, constituting also a feed-receptacle, having its end inclosures and sides at the top adapted to receive and support the trough *c*, Figs. 5 and 6. The manger-chest has an inclined door, *v*, located in a niche within the boundary-line of the outer side of the chest, from which feed may be readily taken and placed in the trough *c*. The trough *c* is divided off into compartments for each one of the cattle by doors *B B*, the lower sides of which conform to the shape of the trough and have orifices *v'*, through which the water flows from one compartment of the trough to another. These doors *B B* extend sufficiently far above the trough *c* to guard the heads of the cattle from each other. They are movably hinged on rod *c'* and jointedly connected by rod *y'* in a manner to be raised and swung back toward the car-wall by means of shaft *s* and its pulleys and chains *ee*, when desiring to clean out said trough.

I is the aisle, running longitudinally with the car in front of manger *E*, by which means the attendant can pass along at any time and attend or feed the stock in a very convenient manner. When desiring to feed hay a rack made of standards and bars *b b*, as in Fig. 3, may be employed, the lower bars of which may be raised up or removed when placing in hay. This rack also serves as a guard in front of the cattle, protecting the attendant from their heads when thrown about by the motion of the car. In Figs. 6 and 7 an equivalent form of rack, *y*, is shown, which I prefer to use. It is hinged at *t'* and supported by a hooked rod, *t*, said rod being jointedly connected with post *D'* at *h*. By this arrangement guard-rack *y* may be thrown down, as shown by dotted lines in Fig. 6, when desired. Recesses *n n* are formed in guard *y* to accommodate bar *a* in its outward transit when being thrown up in position shown by dotted lines in Fig. 6.

As it may be desirable to supply the trough with grain from an elevated hopper and spout, I have provided one, (shown at *F*,) which can also be employed in supplying the chest of manger *E* with grain, as in Fig. 6, at *m*. It has double spouts *D D*, with space between

them to allow bars *a a'* to be raised when said spout is employed, the same as when not.

5 T is a water-tank projecting through each inclined side of the car-roof, and has orifices *n' n'*, through which it may be supplied with water. By the plan a large tank is used without occupying but little space in the car, and without projecting above the highest point of the car-roof. With this tank the usual pipes
10 and faucets may be used, as at *f f* and *C*, or other practicable plan.

What I claim as new is—

1. A stock-car having an aisle or passage-way in front of the stalls, in combination with the
15 manger and trough and the detachable guard-rack, for the purposes set forth, substantially as specified.

2. The manger, constituting the grain-chest and trough-support, and provided with the inclined door, substantially as described.

20 3. The combination, in a stock-car, of the mauger, grain-chest, and hopper and spouts for supplying said chest with grain, substantially as set forth.

25 4. The manger and trough, in combination

with the division-doors hinged to vertical rods, and the shaft and chains for operating them.

5. The trough and the doors adapted to fit therein, provided with the orifices, and hinged to the vertical rods and jointedly connected
30 with their coupling-rod, all in combination substantially as shown and described.

6. The manger and trough, with its division-doors adapted to be raised, and its guard-rack adapted to be temporarily removed in supply-
35 ing hay or in cleaning out the trough, all in combination substantially as specified and shown.

7. In a stock-car constructed with stalls, the adjustable gates composed of the horizontal
40 bars, the end upright bar, and the oblique slot-
ted brace, the inner end of the upper bar pivoted in said slot, and the opposite end of the lower bar pivoted to the car-post, all substantially as set forth.

JOHN EDMANDS.

Witnesses:

EUGENE S. WEST,

FRANK C. GIBBS.