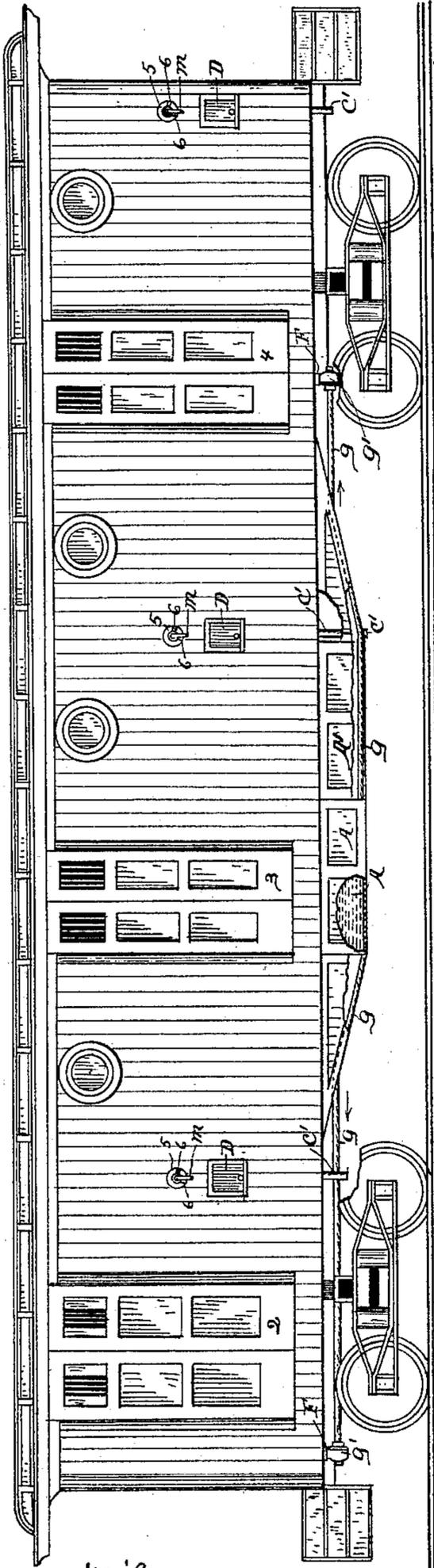


J. M. BURTON.
STOCK CAR.

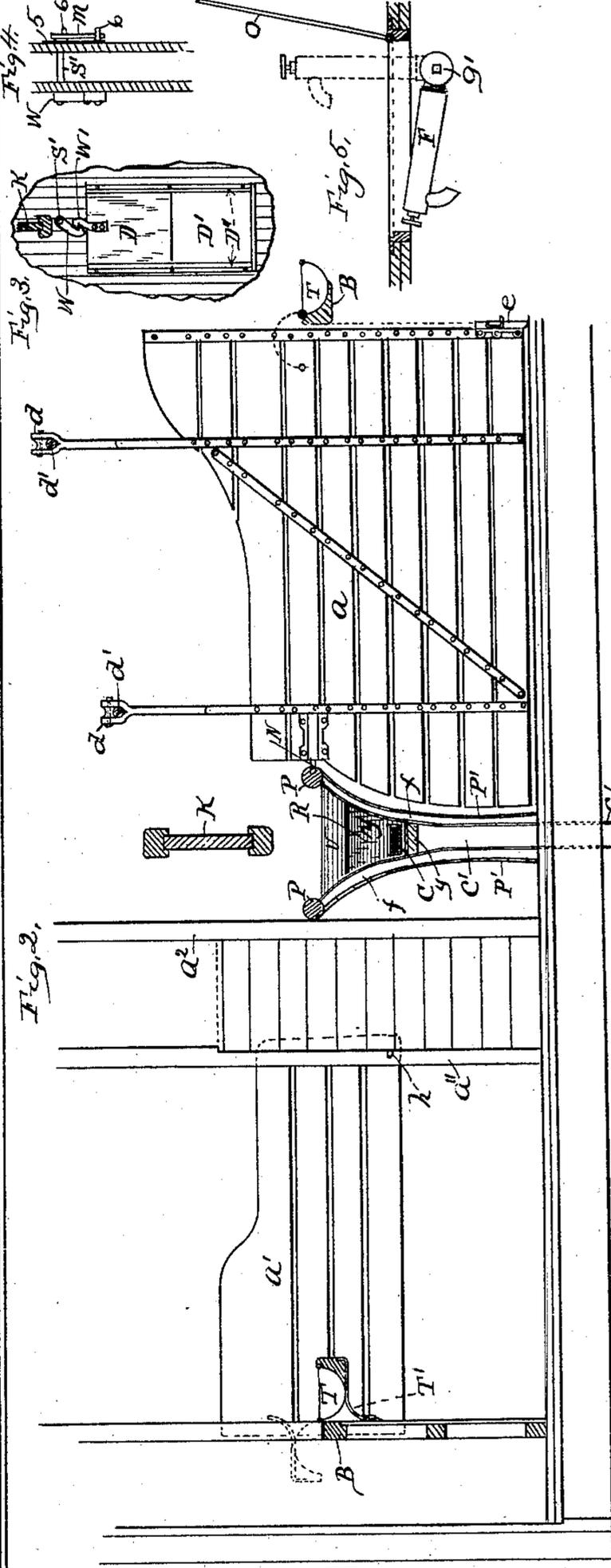
No. 473,998.

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Fig. 1.



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UNITED STATES PATENT OFFICE.

JOHN M. BURTON, OF WICHITA, KANSAS.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 473,998, dated May 3, 1892.

Application filed February 18, 1891. Serial No. 381,789. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. BURTON, a citizen of the United States of America, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Stock-Cars, of which the following is a specification, reference being had therein to the accompanying drawings, and the letters and figures of reference thereon, forming a part of this specification, in which—

Figure 1 is a side elevation of the car exterior; Fig. 2, a detailed longitudinal section of the interior thereof; Fig. 3, a detailed plan of a sliding door and a gravity-latch for holding the door open, it being a portion of the car construction; Fig. 4, a detailed section of the side walls of the car, showing the gravity-latch; Fig. 5, a section in detail of the car-floor through a door thereof, showing a pivoted pump. Fig. 6 is a horizontal section of the car, showing the interior plan of construction; Fig. 7, a detailed perspective of a manure-receptacle and kicking-bar of said interior construction. Fig. 8 is a vertical cross-section of the car, and Figs. 9 and 10 are enlarged detailed plans of portions of the interior construction of the car shown in Fig. 6.

This invention relates to certain improvements in stock-cars, and especially in that class of stock-cars adapted for the transportation of horses wherein stalls are erected within the car for separating the several horses usually loaded into a car; and it consists, essentially, in the application and use of receptacles within the main body of the car for catching and holding deposits of manure from the stock during transportation, and also in other detailed improvements, which are fully set forth and explained in the following specification and claims.

Heretofore cars of this class have been so constructed that no provision was made for catching and holding the manure from the animals, and it has been injurious to many valued animals standing in manure during transportation; also, in cars of this class the interior construction and arrangement has been such that the car would not accommodate more than sixteen horses, that number being less than is usually accommodated in

an ordinary stock-car, which latter class of cars usually accommodate twenty horses; also, cars of this class have not heretofore been equipped in such manner as to provide transportation room for baggage, sulkies, and the like separate from the usual aisles when the usual number (sixteen horses) are transported; also, their water-supply system has been demonstrated to be defective.

The object of this invention is, in addition to providing the manure-receptacles, which is the essential feature herein, to provide a compartment in one end of the car adapted to be used as a baggage and sulky compartment and for like use when the remaining portion of the car is sufficient for the number of horses being transported and in providing such compartment with adjustable pivoted stalls adapted to be brought into service when a greater number of horses are being transported than the remaining portion of the car will accommodate, and also in providing a water system below the car-floor having pumps accessible through doors in the floor.

Referring to the drawings, the main body of the car is represented as provided with the series of sliding stall-partitions *a*, which are of the usual construction, supported by means of hangers *d* on cross-rods *d'* and having sliding bolts *e* and *N* (see Fig. 2) for holding their lower portions fixed into position, as shown, which partitions divide the car interior where they are located into the several series of stalls parallel with the side walls of the car. Between the head of said series of stalls are the usual cross-aisles *I'* and *I''* of the car, having, respectively, the doors *3 3* and *4 4*, as shown, leading from the car.

At one end of the car interior I have provided a chamber *I*, having side doors *2 2*, which are of greater width than the former doors and wide enough to admit a sulky; also, along one side of this chamber I have arranged the three pairs of posts *a''* and in rear of said posts the corresponding pairs of posts *a²*, to which posts I have secured sheathing, as shown, in such manner as to provide a chamber between the two sheathing-walls and the said posts at each set of posts, as shown at *a³*, and between the pairs of posts *a''* I have pivotally arranged the adjustable stall-partitions *a'* in such manner that when not in service

they are tilted back between the said posts to a vertical position, and when in service they are let down to a horizontal position, as shown in Fig. 2, with their extended ends resting on a breast-bar B.

At the head of each series of stalls is a vertically-sliding breast-bar B, which is provided with feeding-troughs T, which bars and troughs are of the usual construction and operated in the usual manner.

At the end of the car, adjoining compartment I, is a small room J, intended for use as an aisle for watering and feeding animals occupying said compartment I, and from said room is an outer door 1, leading therefrom at the end of the car.

At the foot of each series of stalls I have provided a manure-receptacle R, consisting of a frame-work *f*, so constructed as to cross the car interior and present curved sides, with their upper portions extending toward their respective stalls and covered with a sheathing, as shown at P', and a distance above the car-floor I have arranged between said walls or sides a floor *y*, inclined each way from the car center, and at the center a cross rib or ridge *v* as a divider for the receptacle and for giving strength thereto, and within the receptacle, above the floor *y*, I have placed a metallic lining, made water-tight and preferably of galvanized iron. These receptacles fit close to the inner side walls of the car, and at each end thereof I have provided a doorway D' through the car-walls as exits for cleaning manure from the receptacles, and at each doorway D' is a vertically-sliding door D, held by vertical keepers within the car, and at the upper portion of each said door is a latch-hook *w'*, (see Figs. 3 and 4,) and arranged through the car-walls is a shaft S', having fixed on its inner end a gravity-hook *w*, so arranged at each door as to engage with and hold the door-hook *w'*, and thus hold open the door when raised far enough to thus engage the gravity-latch. This latch *w* may be worked from the inside of the car direct, and to enable one at the outside of the car to operate it I have provided a depending arm *m* on said shaft S'. I have further provided a plate 5, forming a bearing for each end of such shaft, at the outer side of the car, and with these plates I have provided two extending lugs 6 at each plate, one for the arrest of arm *m*, so the latch *w* within will be held into position so as to be automatic when the door is raised, and one to arrest the reverse movement of said arm when disengaging the latch, and by such construction of doors and latch mechanism the doors are adapted to be operated from within or without the car and the manure cleaned from the receptacles either from within by pushing it from the car or from without by pulling it from the car.

At the upper terminal of the side walls of the receptacles R, I have arranged, fixed to said walls, a cross rail or bar P, made round and smooth, held at each end in sockets S,

which are fixed to the side walls of the car, which rails or bars are for the purpose of a bearing for the rear portion of an animal and are so arranged as to engage a horse between the rump and hocks, and thereby hold him from the side walls of the receptacle, so that he will not be liable to injure his hocks by kicking or otherwise, and, further, such position of the rails P and the curved side walls of the receptacle brings the receptacle close enough to an animal so that all manure deposits will be caught and not fall at the feet of the animal.

At each end of each receptacle R, I have provided a screened urine-exit C, having a pipe C' leading therefrom to without the car, for the purpose of draining off urine which may be deposited into the receptacles.

Above the manure-receptacles, which are arranged between the series of stalls, I have arranged a kicking-bar K, fixed at each end to the side walls of the car for the purpose of a barrier between the series of stalls, so that it cannot be possible for kicking animals to injure animals in neighboring stalls.

A' represents the usual feed-box arranged beneath the car-floor, and adjoining this box I have provided a water-tank A and leading each way from said tank along the car-bottom a pipe *g*, the tank A being immediately under a door O in the car-floor, one pipe *g* terminating under a second door O', also in the car-floor at one end of the car, and the opposite pipe terminating under a third door O'' in the car-floor at the opposite end of the car, each door being at an aisle in the car.

Pivotaly attached to the terminal of each pipe *g* and to a similar pipe within the tank A is a pump F, as shown in Figs. 1 and 5, which pumps are adapted to be turned down, as shown in full lines in Fig. 5, to be below the car-floor when not in use, at which time the doors are closed, and when they are in use they are turned to an upright position, the doors having first been opened, as shown by dotted lines in said figure, when the action of the pumps will draw water from the tank.

Having thus described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is as follows:

1. The combination, with a stock-car, of the manure-receptacles consisting of a frame-work curved on its side or sides to extend sidewise at its upper portion, sheathing secured to said frame-work, an inclined floor supported by said frame a distance from the car-floor, a metallic lining within the receptacle, and a screened urine-exit pipe leading from the receptacle, substantially as and for the purpose set forth.

2. The herein-described manure-receptacle, consisting of the curved side walls and the double inclined floor supported by said side walls, substantially as and for the purpose set forth.

3. A stock-car provided with a water-tank beneath the floor thereof, pipes leading from

said tank to other portions of the car-bottom, doors in the car-floor above said tank and pipe-terminals, and pumps pivotally connected with said pipes beneath said doors and adapted to be turned up through the said doors into position for use, substantially as set forth.

4. A stock-car provided with series of stalls across within the main car-body, with a cross-aisle within the car at the head of each series of stalls, and with a manure-receptacle across within the car at the foot of each series of stalls, and with doors in the side walls of the car at the ends of the manure-receptacles for providing an exit for manure accumulated in the receptacles, substantially as set forth.

5. A stock-car provided within its main body with stalls for the accommodation of stock during transportation and with a manure-receptacle arranged transversely at the foot of said stalls, said receptacle being provided with a door or doors leading therefrom to without the car for providing an exit or exits for accumulated manure, substantially as described.

6. A stock-car provided with a manure receptacle or receptacles arranged within the main body of the car for catching and holding deposits of manure and urine from stock during transportation, said receptacle or receptacles being provided with a screened urine exit or exits and with an exit door or doors for the removal of manure, substantially as set forth.

7. A stock-car provided with a manure-receptacle arranged within the main body of the car for catching and holding deposits of manure from stock during transportation, said receptacle being provided with an inclined floor arranged above the floor of the car, and with curved side walls overreaching toward the stock in transit, and with a bar fixed along the upper terminal of said receptacle-walls, adapted to be engaged by the rear body portion of the stock, substantially as and for the purpose set forth.

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