

M. C. BECK.

STOCK CAR ATTACHMENT FOR SHIPPING HOGS IN HOT WEATHER.

APPLICATION FILED APR. 27, 1903.

NO MODEL.

Fig. 1.

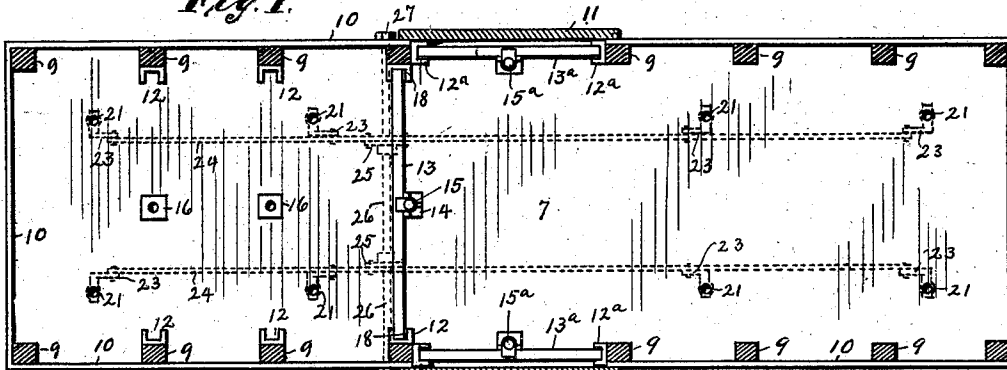


Fig. 2.

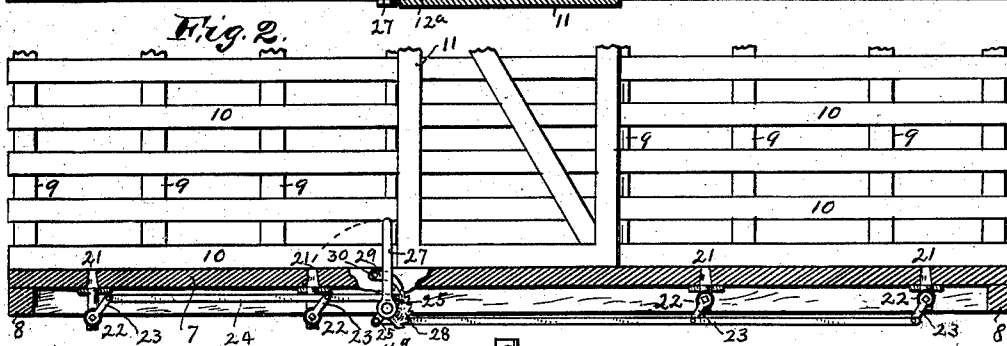


Fig. 3.



Fig. 4.

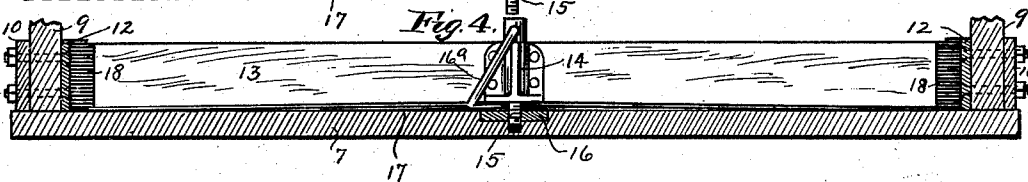
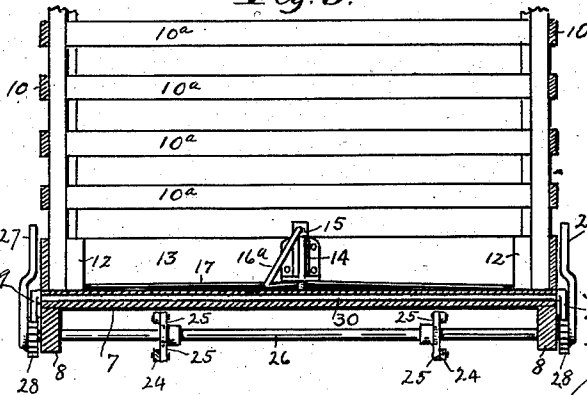


Fig. 5.



Fig. 6.



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UNITED STATES PATENT OFFICE.

MARTIN C. BECK, OF INDIANAPOLIS, INDIANA.

STOCK-CAR ATTACHMENT FOR SHIPPING HOGS IN HOT WEATHER.

SPECIFICATION forming part of Letters Patent No. 741,875, dated October 20, 1903.

Application filed April 27, 1903. Serial No. 154,514. (No model.)

To all whom it may concern:

Be it known that I, MARTIN C. BECK, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Stock-Car Attachments for Shipping Hogs in Hot Weather, of which the following is a specification.

This invention relates to improvements in cars for the shipment of live stock, and particularly to cars for the shipment of hogs; and the principal object of the invention is to provide means for flooding all or a portion of the car-floor with water for the purpose of keeping the animals from becoming overheated and for retaining a quantity of water in said car during the occupancy of it by the hogs.

The object also is to provide convenient means for draining the water from the car when desired and to provide a means which will compel the opening of the drain-outlets upon the opening of the car-door for the discharge of the animals.

I accomplish the objects of the invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a horizontal section above the floor of the car, showing the floor in top plan view with my invention applied; Fig. 2, a detail in side elevation and partial vertical section of the car shown in Fig. 1; Fig. 3, a side elevation of the removable partition for transversely dividing the car into water-tight compartments of less than the whole area of the car-floor space; Fig. 4, a detail in transverse section of a car with the movable partition in operative position; Fig. 5, a transverse section of the partition, and Fig. 6 a detail in transverse section of a car equipped with my invention.

Like characters of reference indicate like parts throughout the several views of the drawings.

The invention is adapted to be applied to cars already constructed and in use as well as to cars which are provided with my invention in the original building of same.

7 is the floor of a stock-car, which is supported on any suitable and usual framing-timbers 8, and 9 represents the vertical posts, to which the horizontal boards 10 are secured to

form the sides or retaining-walls of the car, all of which are of usual construction with the exception that the lower horizontal board instead of being a slight distance above the car-floor, as heretofore, is dropped down against the floor to form a water-tight joint between it and the floor. The closure thus formed by the car sides is provided with the usual sliding doors 11 11, positioned on opposite sides of the car.

Beginning with the posts on one side of the doors and carried out on the remaining posts to the adjacent car end are the channel-plates 12, preferably of cast-iron, with their channels turned outwardly to form ways to receive and hold the ends of a removable partition 13. This partition is preferably a plank of wood of requisite length to extend with a loose sliding fit between the opposite plates 12. The partition has a vertical perforation, preferably formed in an iron block 14, bolted to the middle of the partition in the manner shown, and through this vertical perforation a bolt 15 is inserted. The lower end of the bolt is screw-threaded to fit a screw-threaded opening in a metal plate 16, secured to the floor of the car and preferably mortised into the floor to make its outer face flush with the corresponding face of the floor. The head of the bolt has a transverse perforation to receive a lever to be used as a handle in turning the bolt. This lever may be made a permanent feature, as shown in the drawings at 16^a and which is a bent lever adapted to drop down, as shown in Fig. 4, when not in use and to be raised for use, as shown in Fig. 3. The lower edge of the partition will be provided with a rubber packing-strip 17, which will preferably be a half-round strip nailed or otherwise fastened to the edge of the partition. The width of the partition will decrease from each end toward the middle, as is shown by comparison with the straight dotted line in Fig. 3. This will cause the ends of the partition to touch the floor first, and when the arched middle is brought down by means of the screw-bolt a water-tight fit throughout the whole length of the partition will be assured. This construction is important in order to compel a tight joint between the partition and rough and uneven floors. The same kind of partitions are used between the door-posts to

make a closure at the door-openings when it is desired to use the whole floor-space of the car for hogs. Channel-plates 12^a, identical with the plates 12, are used to retain the partitions 13^a, having bolts 15^a. The ends of all of the partitions have the packing-strips 18, preferably of rubber, to make a seal between the channel-plates and the ends of the partitions. When the whole floor of the car is used for hogs, the transverse partition 13 will not be used, and if less than half of the floor-space is required the door-partitions 13^a will not be needed and will therefore not be used. When the number of hogs is insufficient to fill the car, the requisite space is partitioned off, in which water is used to keep the hogs cool in hot-weather shipments, and the remainder of the car is kept dry for cattle, sheep, or other stock to which a wet floor would be injurious. The partitions are continued by means of the usual slatted wall 10^a, as shown in Fig. 6.

I have now to describe the means by which the water used is immediately discharged at the unloading of the hogs, so as to dry the floor for the use of other kinds of stock or to prevent decay of the wooden flooring which continued moisture would occasion.

21 represents drain-openings, which are distributed over the floor of the car in a suitable manner to drain off the water. These will preferably increase in diameter downwardly and will each terminate with the cocks 22, of usual construction. The valve-stems of these cocks have arm extensions 25, which are connected by bars 24 with the arms 25 of a crank-shaft 26, mounted transversely of and under the car. This shaft 26 has an arm 27 at each of its ends which project up in the paths of their respective adjacent sliding car-door. The relation between the arms 27 and the valves of the cocks is such that when the arms are in vertical position the cocks will be closed; but when the arms are turned down in horizontal position necessary for the opening of the doors the cocks are all open. Thus the opening of the car-doors for the unloading of the hogs will require the opening of the cocks to discharge the water. The accidental lowering of the arms 27 to open the cocks, as by the motion of the train, is prevented by the ratchets 28 at each end of the shaft 26, which are engaged by the dogs 29. The latter are mounted on a shaft 30, which connects them, whereby when one dog or pawl is raised out of engagement with its ratchet the other will be raised out of engagement in like manner. By this means the shaft 26 may be unlocked from either side of the car without the inconvenience of going always to a certain side of the car.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent, is—

1. In a car for shipping live stock, a bottom and sides, said sides having openings for

ingress and egress, and said bottom and sides making water-tight joints except at said openings, removable barriers to obstruct the openings and other removable barriers to partition off less than the entire floor-space, a water-tight packing between said barriers and the car and means for compressing the packing between said barriers and car.

2. A partition or barrier for stock-cars having an edge to contact with the car-floor the ends of which are lower than any intermediate parts of said edge.

3. A partition or barrier for stock-cars having an edge to contact with the car-floor the ends of which edge are lower than intermediate parts and a compressible packing between said edge and floor.

4. In a stock-car, a pair of channel-bars at opposite sides of an opening, a removable barrier resting on the car-floor and having ends in said channel-bars, the lower edge of said barrier being concave and having an elastic packing and means for drawing the barrier down toward the floor to compress the packing.

5. In a stock-car, a pair of channel-bars at opposite sides of an opening, a removable barrier resting on the floor of the car and having ends in said channel-bars, packing between the barrier and channel-bars, said barrier having a lower concave edge, an elastic packing along said edge and a screw mounted on said barrier and taking into a threaded opening in the car-floor to draw the barrier down toward the floor.

6. In a car for shipping live stock, a bottom and sides, said sides having openings for ingress and egress and said bottom and sides making water-tight joints except at said openings, removable barriers to obstruct the openings and other removable barriers to partition off less than the entire floor-space, drains leading through said floor, cocks regulating the discharge through said drains and means for simultaneously opening and closing all of the cocks.

7. In a car for shipping live stock, a bottom and sides said sides having openings for ingress and egress and said bottom and sides making water-tight joints except at said openings, doors to said openings, removable barriers to obstruct the openings and other removable barriers to partition off less than the entire floor-space said barriers making water-tight connection with the car, drains leading through the car-floor, cocks regulating the discharge through said drains, and means compelling the opening of all of the cocks when a car-door is opened.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 18th day of April, A. D. 1903.

MARTIN C. BECK. [L. S.]

Witnesses:

S. MAHLON UNGER,
J. A. MINTURN.