No. 650,194. Patented May 22, 1900.

C. H. RUSSELL.

COMBINATION BOX AND STOCK CAR.

(Application filed Mar. 2, 1900.)

(No Model.)

Fig. 1.

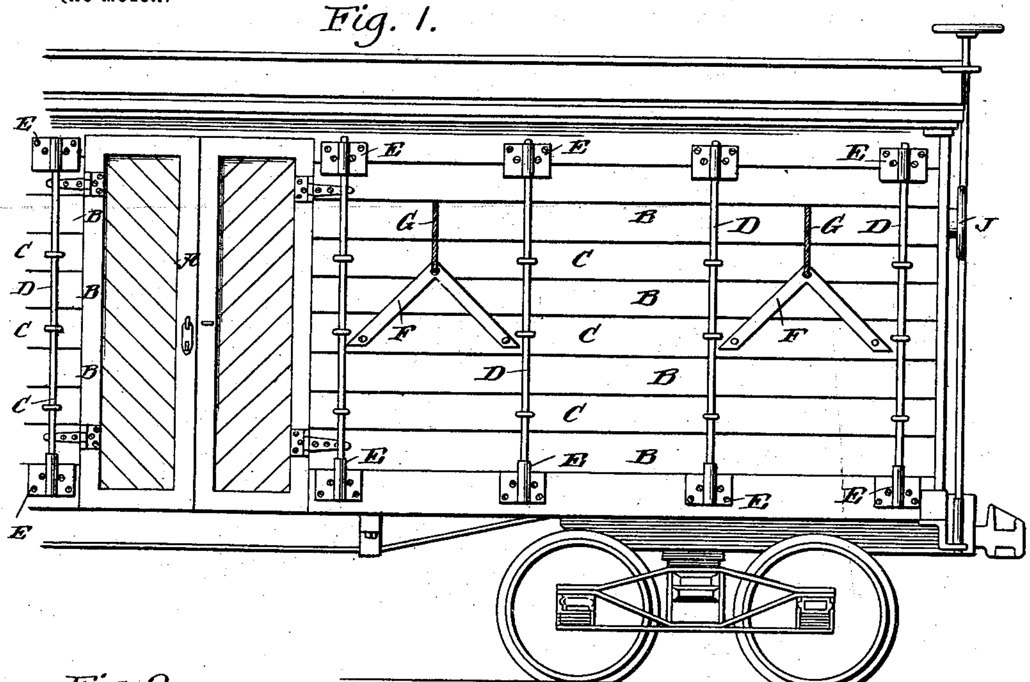


Fig. 2.

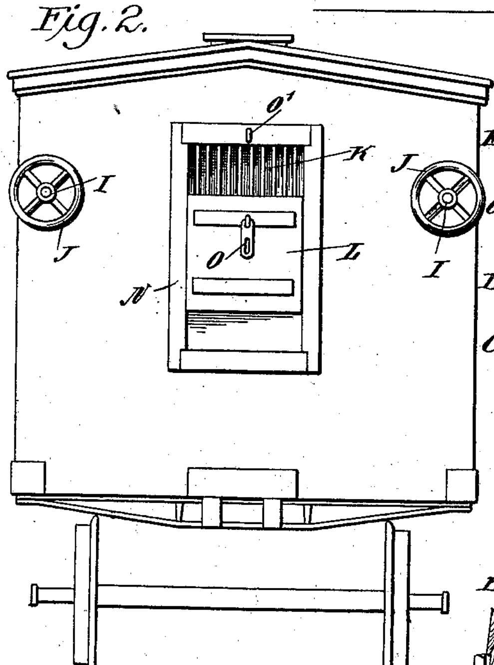


Fig. 3.

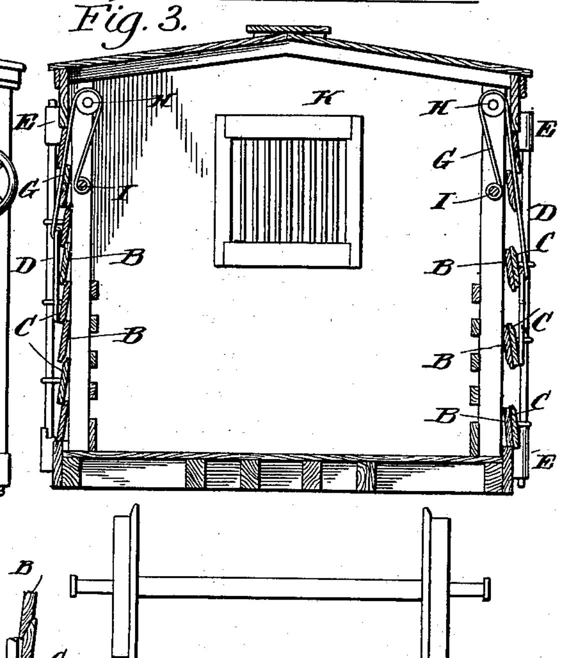
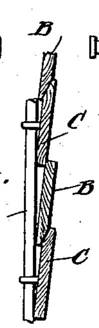


Fig. 4.



WITNESSES:

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CHARLES HENRY RUSSELL, OF CORSICANA, TEXAS.

COMBINATION BOX AND STOCK CAR.

SPECIFICATION forming part of Letters Patent No. 650,194, dated May 22, 1900.

Application filed March 2, 1900. Serial No. 7,090. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HENRY RUSSELL, a citizen of the United States, and a resident of Corsicana, in the county of Navarro and State of Texas, have invented a new and Improved Combination Box and Stock Car, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved box and stock car which is simple and durable in construction and arranged to permit of readily transforming the car to carry either box-freight or live stock.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement arranged as a box-car. Fig. 2 is an end view of the improvement. Fig. 3 is a transverse section of the same with one side closed as a box-car and the other side open, and Fig. 4 is an enlarged transverse section of part of the movable slat-frame.

The improved car is provided with the usual floor, roof, and timber for the sides and ends, and on each side of the car, at or near the middle thereof, is arranged a double door A, preferably hung on hinges and mounted to swing open to give access to the car. Each side of the car is provided on opposite sides of its door A with fixed longitudinally-extending slats B, placed a suitable distance apart, and the said slats are adapted to be overlapped on the outside by slats C, forming part of a frame mounted to slide vertically on the side of the car to move the slats C either over the slats B or between the slats B, so as to close the side of the car when it is desired to use the car as a box-car. When the slats C overlie the slats B, then the sides are open and the car can be readily used for carrying live stock. The several movable slats C of the slat-frame are secured to vertically-disposed posts D, mounted to slide at their upper and lower ends in guides E, attached to fixed parts of the sides at the top and bottom thereof, as is plainly indicated in Figs. 1 and 3.

One of the movable slides C, preferably the middle one, carries hangers F, on which are secured ropes G, extending upwardly and inwardly between the uppermost fixed slats to pass over pulleys H, and then to extend downward and wind on a shaft I, extending longitudinally and journaled in suitable bearings in the timber forming the skeleton frame of the car. On one outer end of the shaft I is secured a hand-wheel J, under the control of the operator, for turning the said shaft, so as to wind up on or unwind the ropes G to move the slat-frame in an upward direction into a closed position or to allow the same to slide downward by its own weight into an open position, as previously explained.

For a full-sized car having the doors in the middle of the sides four shafts and four middle slat-frames are needed; but each slat-frame is arranged for independent movement, so that the frames can be conveniently manipulated for changing the car from a box-car to a stock-car, or vice versa, by the operator turning the hand-wheels J accordingly. In each end of the car is formed a ventilating-opening K, having suitable guard-bars, as shown in Figs. 2 and 3, and each opening K is adapted to be closed by a slide L, mounted to move vertically in suitable guideways N, attached to the outer face of the corresponding end of the car. A hasp O on the slide L is adapted to engage a staple O′ to hold the slide in an uppermost closed position when it is desired to use the car as a box-car. The slide L is opened when the car is to be used as a stock-car.

The lower inner edges of the fixed slats B are preferably formed with bevels, as indicated in Figs. 3 and 4, to be engaged or overlapped by the upper external beveled edges of the middle slats C, it being understood that when the slat-frame moves in an upward direction the upper beveled edges of the slats C pass under the lower beveled edges of the fixed slats B, while the lower ends of the movable slats C overlap the upper edges of the fixed slats B. By this arrangement the sides of the car become practically sealed, as the slats C and B fit snugly one upon the other when the frame is in an uppermost po-

sition. It is understood that the guides have their opening elongated in a transverse direction to allow a slight transverse movement of the slat-frame when moving into a final uppermost or lowermost position. As the pull of the ropes G is in an upward and inward direction, it is clear that the beveled upper edges of the slats C readily move under the inner bevels of the fixed slats B, as above described.

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

1. A car, having sides with fixed spaced slats, a slat-frame movable up and down on the side at the said slats to close the space between the fixed slats, posts attached to the frame, and guides in which the posts have vertical and transverse motion, substantially as specified.

2. A car having sides with fixed longitudinally-extending spaced slats, a slat-frame movable up and down and having longitudinal spaced slats adapted to overlie the said fixed slats or fill the spaces between the same, guide-posts for said frame, and guides fixed on the side of the car and engaged by said posts, to guide the frame in its up-and-down movement, substantially as shown and described.

3. A car having sides with fixed longitudinally-extending spaced slats, a slat-frame movable up and down and having longitudinal spaced slats adapted to overlie the said fixed slats or fill the spaces between the same, guide-posts for said frame, guides fixed on the side of the car and engaged by said posts, to guide the frame in its up-and-down movement, and means, substantially as shown and described, for raising and lowering the said slat-frame, as set forth.

4. A car having sides with fixed slats each formed with an inner bevel at one edge, and a slat-frame movable on the side of the car and having spaced slats each formed with an external bevel at one edge to overlap the adjacent fixed slat at its beveled edge, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES HENRY RUSSELL.

Witnesses:
C. L. JESTER,
LEWIS CARPENTER.