(No Model.) 2 Sheets—Sheet 1.

A. G. STEINBRENNER.

STOCK CAR.

No. 421,528. Patented Feb. 18, 1890.

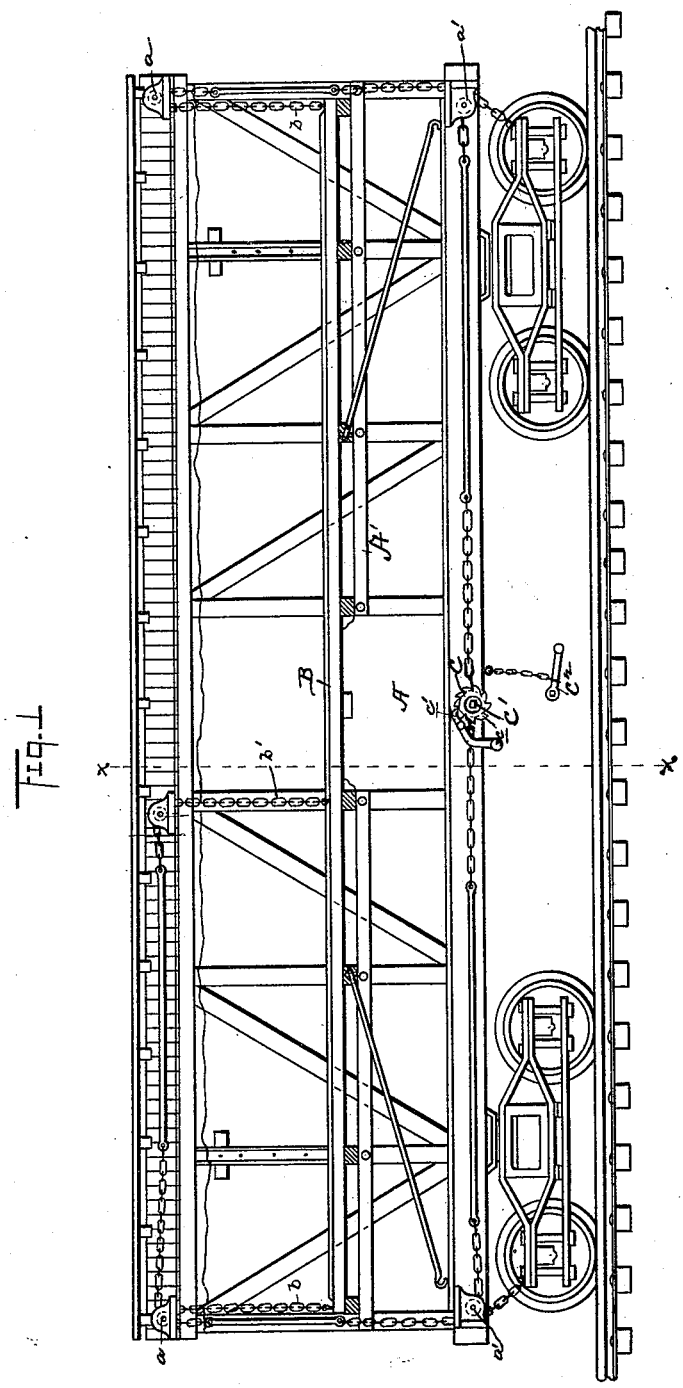

Fig. 1.

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(No Model.) 2 Sheets—Sheet 2.

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Fig 2.

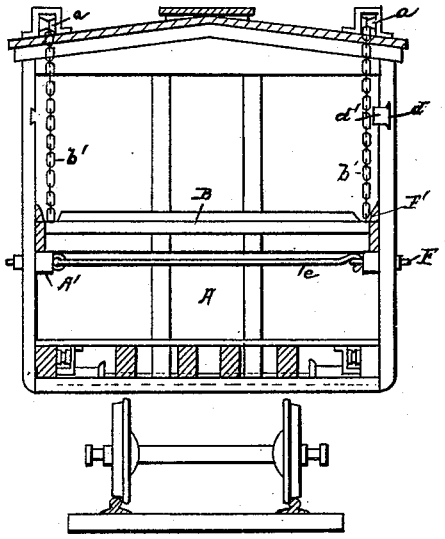
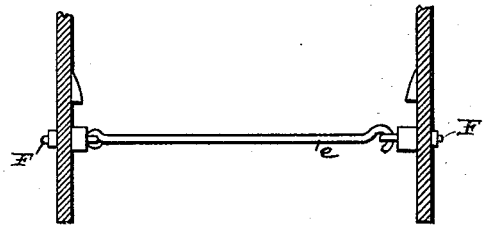


Fig. 3



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UNITED STATES PATENT OFFICE.

ANDREW G. STEINBRENNER, OF ST. LOUIS, MISSOURI.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 421,528, dated February 18, 1890.

Application filed September 3, 1889. Serial No. 322,816. (No model.)

To all whom it may concern:

Be it known that I, ANDREW G. STEINBRENNER, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Stock-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in stock-cars in which is employed a movable deck or floor adapted to be elevated to the internal top of the car or to be lowered to a position vertically midway of the car. The deck in its elevated position is substantially out of the way, so that the car can be used for general freighting purposes, and the deck in its depressed position divides the car horizontally into two compartments, respectively, above and below the deck, both compartments being adapted to the shipment of small animals—such, for instance, as hogs, sheep, calves, &c.

My invention also relates to details of construction, hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a side elevation, partly in section. Fig. 2 is an elevation in transverse section. Fig. 3 is a detail of a stay-rod and attachment.

A represents the body of the stock-car that in the main may be of ordinary construction.

B is a deck or movable floor fitting loosely inside of the car-body. The frame-work of the car is provided inside with blockings A′ for the deck when depressed to rest on, in which position the deck divides the car into two horizontal compartments, respectively above and below the deck, both compartments being adapted to the shipment of small animals.

For shipping large animals or for general freighting purposes the deck is elevated to the internal top of the car, and for elevating and lowering the deck is provided the following mechanism: Chains or cable *b b*, as may be preferable, are attached to the deck at or near the corners thereof, and chains *b′ b′* are attached to the deck near the central portion thereof. These chains lead over sheaves *a*, connected with the top of the car, or under side of the roof, or inside, as may be suitable, the central and end chains, *b′ b′* respectively, usually joining after passing the end sheaves. From thence the chains lead down under sheaves *a′* and from thence to winches C. The sheaves, being placed on inside of the car, are made to form angles, which are bolted to corner of the car, the same answering as a tie or support to car-body at corner as well as center of the car. The winches are located underneath and at the sides of the car and are mounted on shaft C′, this shaft extending crosswise under the body of the car, the latter having attached suitable boxes for supporting the shaft. The shaft is provided with a ratchet-wheel *c*, that is engaged by pawl *c′*. A removable crank C^2 fits one end of the shaft for operating the same, this crank having, preferably, a chain for attaching it to the car to prevent it from being lost; also, made stationary, if desired, by making the handle a knuckle-joint. This will permit it to be straightened out and fastened to side of the car in shape of a hasp. By operating the shaft by means of the crank the systems of chains are simultaneously wound or unwound from the winches, whereby the deck is kept in a horizonal position while being raised or lowered. The uprights of the car-frame may be provided with gains *d*, in which may be inserted removable blocks *d′* for supporting the deck in its elevated position, thereby relieving the chains. The sides of the car at suitable intervals are provided with eyebolts F for engaging tie-rods *e*. When these tie-rods are in position engaging the eyebolts, the latter may be tightened, so as to press the sides of the car against the edges of the deck, to prevent the latter from shifting and to hold the members firmly together.

To prevent the sides of the car next above the deck from being soiled, strips F′, of plank or scantling, are set edgewise around the edges of the deck.

Heretofore so-called "double-deck" stock-cars were substantially useless, except for the shipment of small animals, and hence such cars were usually returned empty. With my

improved construction these cars may be used for the shipment of larger stock, and on the return-trip may be used as freight-cars.

What I claim is—

In a stock-car, the combination, with a movable deck and mechanism for raising and lowering the same, of blocking for supporting the deck in its lowered position, tie-rods attached at one end to one side of the car, and movable eyebolts, the eyes of which are located inside the car for engaging the free ends of the tie-rods, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 15th day of July, 1889.

ANDREW G. STEINBRENNER.

Witnesses:
PERCY VERNER,
WENTWORTH TERRY.