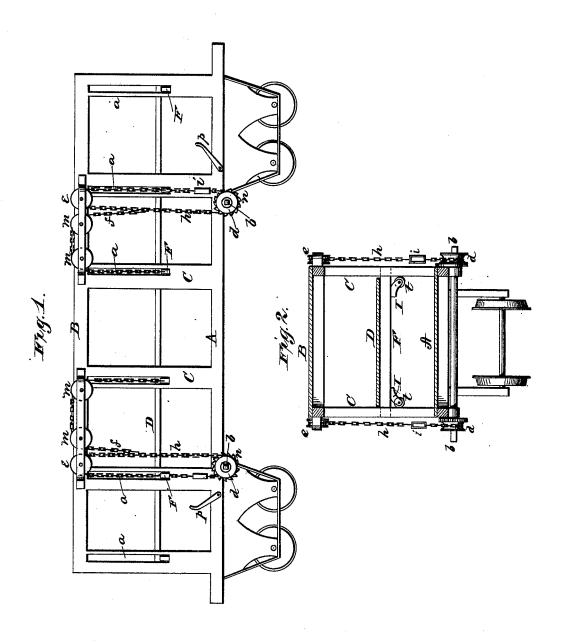
J. MILLER. Stock-Car.

No. 214,432.

Patented April 15, 1879.



WITNESSES
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Jacob, Miller-Alexandre Discoper ATTORNEYS.

## UNITED STATES PATENT OFFICE.

JACOB MILLER, OF WASHINGTON, PENNSYLVANIA.

## IMPROVEMENT IN STOCK-CARS.

Specification forming part of Letters Patent No. 214,432, dated April 15, 1879; application filed March 6, 1879.

To all whom it may concern:

Be it known that I, JACOB MILLER, of Washington, in the county of Washington, and in the State of Pennsylvania, have invented certain new and useful Improvements in Stock-Cars; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to that class of stockcars which have an adjustable intermediate deck; and it consists in the construction of devices for adjusting the same, whereby the same car can easily and quickly be changed so as to adapt it for large or small stock, as required, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to

the annexed drawings, in which—
Figure 1 is a side elevation of a stock-car
embodying my invention. Fig. 2 is a transverse vertical section of the same.

A represents the bottom, and B the roof, of a stock-car. C C are the vertical posts connecting said bottom and roof. These posts on both sides of the car are formed with vertical slots a, extending from their upper ends downward for a suitable distance.

D represents the intermediate movable deck, which is supported upon joists F F, and the ends of these joists are placed in the slots a of the posts C.

Under the car, inside of the trucks, in suitable bearings, are placed two transverse shafts, b b, provided upon their ends with pulleys d. Around each pulley d is passed an endless chain, h, which also passes over another pulley, e, at the top of the car, as shown. The endless chain h is provided with a swivel, i, at one point, so that the chain can easily be tightened after being passed around the pulleys d e. The chain h is connected to the end of one of the joists F of the movable deck. Another chain, f, is attached to said endless chain h and passes upward, then over pulleys m m at the top of the car, and then

downward, and connects with the end of another joist, F.

The various chains are so arranged that by applying a crank to one end of each shaft b, either on the same or on opposite sides of the car, and turning the same inward, the movable deck D will be raised and can be elevated till it is close up against the roof of the car, where it will then be held by means of dogs p taking into ratchet-wheels n on the shafts. By throwing the dogs off and turning the shafts b in the opposite direction, the deck D may be lowered to its former position, and the car can thus be easily and quickly changed, so as to adapt it for either large or small stock. In some cases I may only use one chain f on each side of the car, and it might be found that these chains may be entirely dispensed with.

To the joists F of the movable deck, on the under side, near each end, is secured a bracket, I, carrying a roller, t, and so arranged that if the deck in being moved up or down should tilt ever so little to either side the rollers on that side will come in contact with the inner sides of the posts C and prevent unnecessary friction and binding.

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

1. The combination of the movable deck D with joists F, the endless chains h, with swivel i, pulleys e, and shaft b, with pulleys d, substantially as and for the purposes herein set forth.

2. The auxiliary chains f and pulleys m, in combination with the deck D and endless chains h, as and for the purposes herein set forth.

3. The brackets I and rollers t, in combination with the deck and vertical posts and hoisting mechanism, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of March, 1879.

JACOB MILLER.

Witnesses:

J. J. McCarthy, H. J. Ennis.