No. 778,337. PATENTED DEC. 27, 1904.

J. B. SMILEY.

ADJUSTABLE DOUBLE DECK STOCK CAR.

APPLICATION FILED MAY 5, 1904.

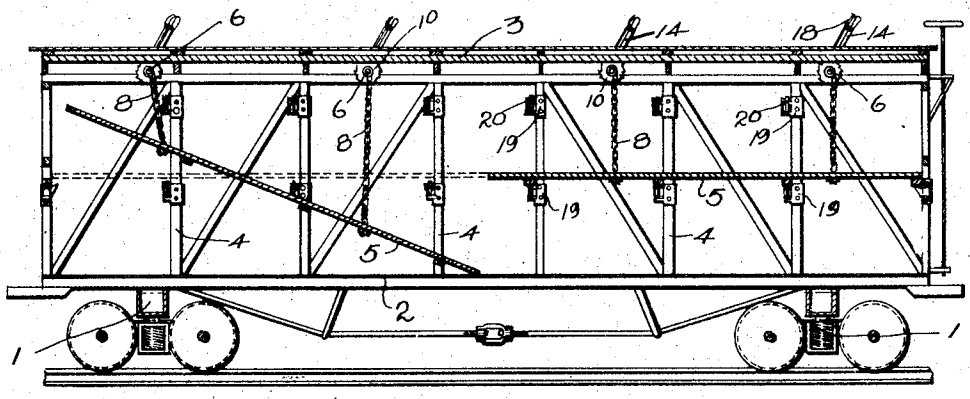


Fig. 1.

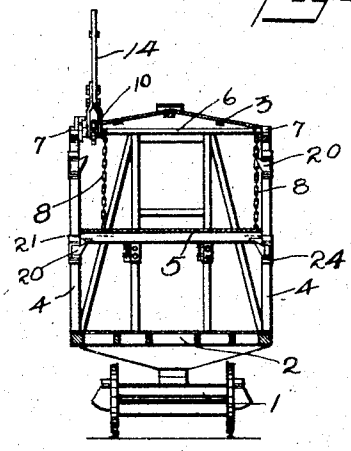


Fig. 2.

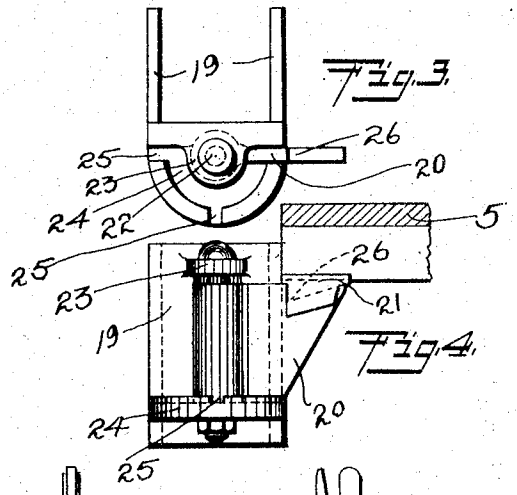


Fig. 3.

Fig. 4.

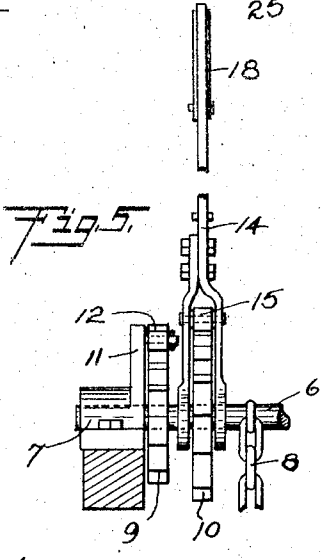


Fig. 5.

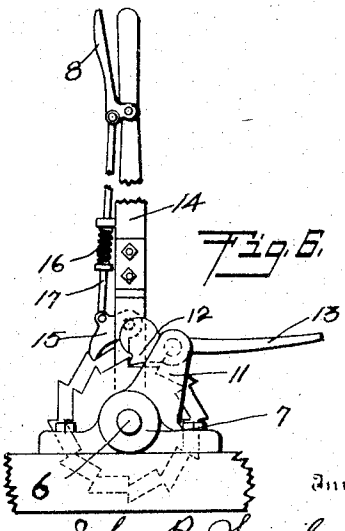


Fig. 6.

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No. 778,337. Patented December 27, 1904.

UNITED STATES PATENT OFFICE.

JOHN B. SMILEY, OF SOUTH OMAHA, NEBRASKA, ASSIGNOR OF TWO-THIRDS TO WILLIAM B. CHEEK, OF SOUTH OMAHA, AND JOHN A. EYLER, OF OMAHA, NEBRASKA.

ADJUSTABLE DOUBLE-DECK STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 778,337, dated December 27, 1904.

Application filed May 5, 1904. Serial No. 206,585.

To all whom it may concern.

Be it known that I, JOHN B. SMILEY, a citizen of the United States, residing at South Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Adjustable Double-Deck 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 appertains to make and use the same.

My invention relates to stock-cars; and it is the object thereof to provide an inexpensive adjustable equipment to be put into stock-cars of the ordinary type, so that the said cars may be used as ordinary stock-cars or as double-deck stock-cars, as desired. My invention consists in the particular constructions, combinations, and arrangements of parts shown in the accompanying drawings and hereinafter described and claimed.

In the accompanying drawings is shown a car equipped with mechanism embodying my invention.

In the drawings, Figure 1 is a longitudinal section of the car, for the sake of clearness the framework only being shown. Fig. 2 is a transverse section of the same. Fig. 3 is a detail plan view of one of the securers placed on the side posts of the car to hold in position the movable deck-sections. Fig. 4 is a detail elevation of the same. Fig. 5 is a detail end elevation of the ratchet-and-lever combination used in raising and lowering the movable deck-sections, and Fig. 6 is a detail side elevation of the same.

In the car shown in the drawings the trucks 1, floor 2, roof 3, and side framing 4 are all of the ordinary construction for a single-deck stock-car. My equipment represented placed therein consists of the vertically-movable deck-sections 5, the devices for raising and lowering the same, and the devices for securing the same in either raised or lowered position.

The shafts 6 are revolubly held in suitable bearings 7 at a position near the roof of the car and extending transversely across the same. Chains 8 are secured to the said shafts and extend downward to connect with the deck-sections 5, as represented. Near one of the bearings 7 on each of the shafts 6 are secured the ratchets 9 and 10. On the bearings 7, adjacent to the ratchets 9, are lugs 11, on which are pivoted pawls 12, engaging said ratchets. The said pawls are weighted to hold the same normally in engagement with the ratchets and have extending foot-pieces 13 thereon, by which the same may be thrown out of engagement with the ratchets. Adjacent to the ratchets 10 the ratchet-levers 14 are pivoted on the shafts. The said levers carry pawls 15, normally held into engagement with the ratchets 11 by springs 16 on the rods 17, connected with the pawls and extending upward to the release-handles 18, as shown in Fig. 6.

To raise the movable decks, the ratchet-levers are moved back and forth, the fixed pawls 12 engaging the ratchets 9 and holding the same during the backward movement of the ratchet-levers, thus winding the chains 8 around the shafts 6. To lower the deck-sections, the fixed ratchets are released by pressing with the foot upon the foot-piece 13, and the shafts are allowed to turn to lower the sections, the same being prevented by the ratchet-levers from dropping suddenly. After lowering the deck by the stroke of the lever the fixed pawl is again let into engagement with the ratchet 9, the pawl 15 is released by means of the handle 18, the lever moved forward, the pawl 15 again dropped into engagement, the pawl 12 released, and the operation repeated until the section has been lowered to the desired position.

To secure the deck-sections rigidly in either the raised or lowered position and to prevent lateral movement thereof, I provide the securing devices shown in detail in Figs. 3 and 4, the same comprising the brackets 19, which are secured to the sides of the frame-posts 4, the swinging arms 20, pivoted on said brackets, and the contact-plates 21 on the deck-sections adapted to fit into and around the swinging arms 20. The arms 20 are of the gen-

eral form shown in the drawings and are pivoted on the pins 22, passing through the lugs 23 and 24 on the brackets. The hub portion of the swinging arms is slightly shorter than the space between the lugs 23 and 24 to permit the arms to be raised out of the notches 25 in the lower lug 24 and swung from one notch to another. On the upper sides of the swinging arms are beveling-notches 26, into which the contact-plates 21 on the deck-sections fit. Said contact-plates also have portions fitting over the sides of the arms, as represented in Fig. 4.

The manner of using the securing devices is obvious, the swinging arms being placed in the notches 25 on the sides of the lugs 24, thus intercepting downward movement of the deck-sections when it is desired to support the same, and being swung to the front notches in the lugs 24, so as to clear the deck-sections and not protrude into the car when not in use to support the deck-sections. When the deck-sections are resting on the swinging arms, the contact-plates 21, fitting into the beveling notches 26 and over the sides of the arms, effectually prevent lateral movement of the sections.

In cleaning the car the deck-sections may be placed at a convenient inclined position, as represented at one end of the car in Fig. 1, the same facilitating the flushing and removal of refuse thereon. It is preferred to make the deck-sections very slightly longer than the space into which they must fit and in lowering the same into position to lower the outer ends first, so that on lowering the central ends the same will wedge tightly together and assist in maintaining the lateral placement of the deck.

Now, having described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a car of the class described, vertically-movable deck-sections, means for raising and lowering the same, and securing means for holding the same in position to form a double-deck car and at a position adjacent to the roof of the car, said securing means comprising brackets secured to the side framing of the car, swinging arms pivoted thereon, and means on said brackets for holding the arms at a position intercepting the deck-sections and at a position clearing the deck-sections, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN B. SMILEY.

Witnesses:

HOWARD J. COWGILL,

D. O. BARNELL.