

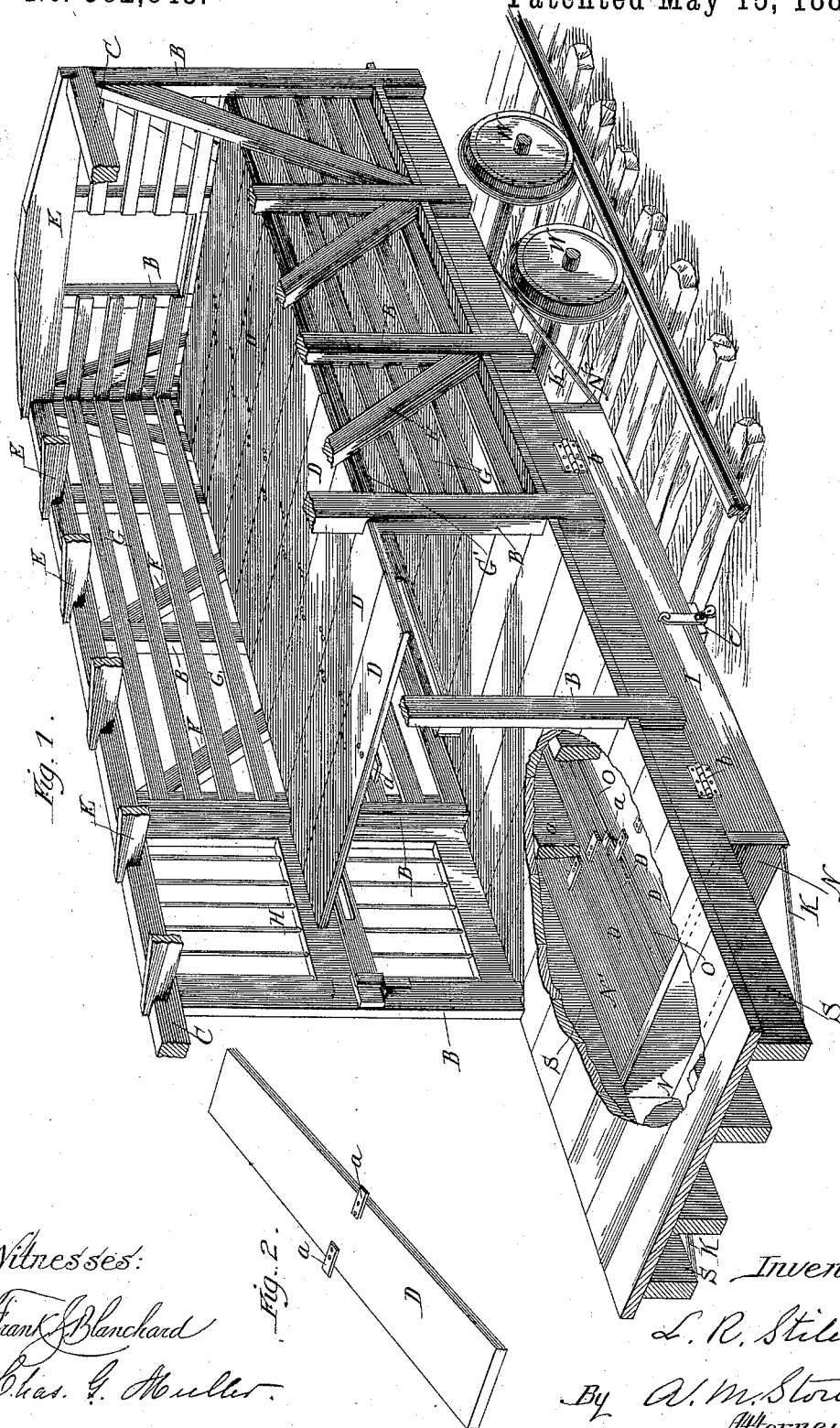
(No Model.)

2 Sheets—Sheet 1.

L. R. STILES.  
STOCK CAR.

No. 382,843.

Patented May 15, 1888.



Witnesses:

Frank Blanchard

Chas. G. Mueller.

Fig. 2.

Inventor:

L. R. Stiles.

By A. M. Stout,  
Attorney.

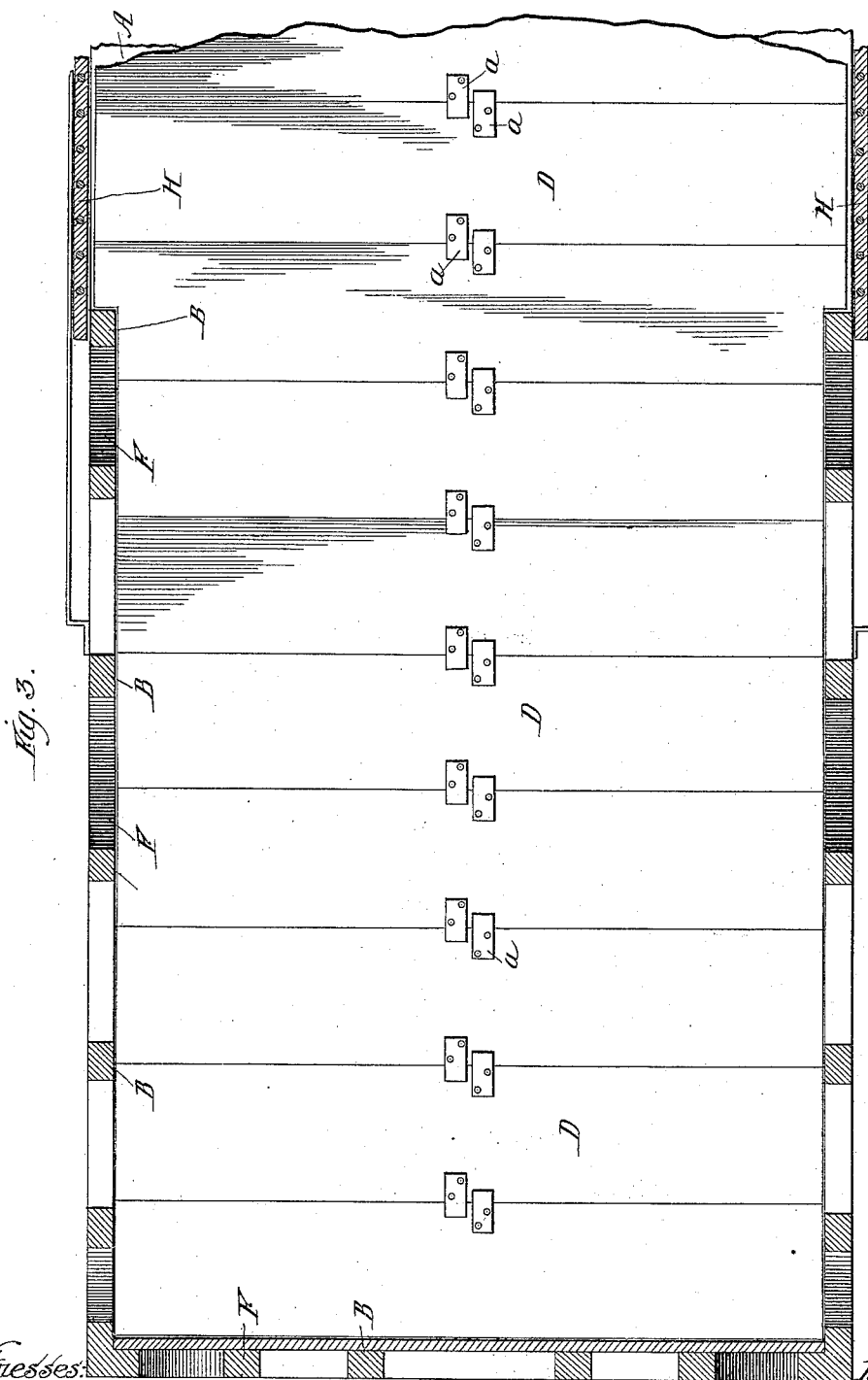
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# UNITED STATES PATENT OFFICE.

LUTHER R. STILES, OF CHICAGO, ILLINOIS.

## STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 382,843, dated May 15, 1888.

Application filed October 8, 1885. Serial No. 179,333. (No model.)

*To all whom it may concern:*

Be it known that I, LUTHER R. STILES, of Chicago, county of Cook, and State of Illinois, have invented certain Improvements in Stock-

5 Cars, of which the following is a specification.

My invention relates to the construction of a second or upper deck in a stock-car in such a manner that it shall be strong, cheap, and durable, as well as conveniently and quickly  
10 placed in position, and also removed when required.

In the Letters Patent of the United States which were issued to me on the 12th day of February, 1884, No. 293,285, an upper deck for  
15 a stock-car is shown and described, having its main portion in four equal sections, the outer edges of which were provided with eyes that were passed over hinge-rods fastened to the side walls of the car at a suitable height above  
20 the lower deck, so that the sections could be turned down against the walls out of the way when not in use, and could also be moved end-wise upon the hinge-rods. Each end of the car was provided with an end section of the  
25 deck hinged thereto, so that the section could be turned down against the end wall, so as to allow the side sections to move back from the doorways and clear them. When all the sections were turned up upon a level, their inner  
30 edges were supported by chains depending from the roof of the car; and in like Letters Patent issued to me, bearing date the 1st day of April, 1884, No. 296,245, the main portion of the upper deck was shown to be in four equal  
35 sections, which were hung upon the side walls of the car by means of rectangular hooks, with which the outer edges of the sections were provided, to fit over them, and so could be turned down against the side walls when not in use; but  
40 when in use as parts of an upper deck their inner edges were supported by a series of removable posts from below and a series of chains depending from the roof from above.

My improvement herein described and  
45 claimed, in general terms, consists in constructing the upper deck of such a car of detachable planks extending entirely across the car, their ends being supported by side bars of the walls of the car, and the whole deck  
50 may be composed of such planks, or the main portion only, and the ends of the car provided

with hinged end sections, as in the other patents, suitably supported when raised, and each individual plank is provided with my improved devices, hereinafter fully described,  
55 by means of which they all unite to sustain the weight pressing upon each; and my improvement consists, further, in providing a safe and convenient receptacle or box, in which to stow away the planks when not in use, immediately  
60 under the lower deck and between the axles and wheels of the car.

My said improvement will be more fully described hereinafter with reference to the accompanying drawings, in which—

Figure 1 is a perspective of a little more than one-half the length of a stock-car embracing my improvement, the top portion being broken away in order to display a view from above of a portion of the upper deck in position; Fig.  
70 3, a plan of a horizontal section of the same made under the upper deck and above the lower deck inverted, in order to display the lower side of the upper deck; and Fig. 2, a detail view in perspective of one of the planks  
75 of the upper deck inverted.

S indicates the outer bottom sills of the body of the car; A, the lower deck thereon; B, the vertical studs; C, the upper sills for the purlins to rest upon; E, the purlins; D, the planks  
80 of which the upper deck is composed, and *a* the cleats riveted or otherwise fastened upon the under sides of the planks D; F, the diagonal struts; G, the side bars, and G' the two side bars upon which rest the ends of the  
85 planks; N N' N<sup>2</sup>, the three sides of the box to contain the planks when not in use; O, the bottom of the box; I, the door of the box, swinging upon its hinges *b*, and *c*, the hasp and lock for that door. K indicates two iron  
90 bars bent into the form shown, and fastened at their ends to the lower sills, S, of the car, and they help to sustain the weight of the box for the planks and its contents, and also strengthen the car itself, and the box itself is  
95 simply a plain strong one, having sufficient capacity to hold the planks when not in use.

The side bars, G', are designed to support the ends of the planks when in use for an upper deck, and they should have sufficient strength  
100 and stiffness to sustain the ends under pressure of the load, and they may, if need be, be

plated with metal to enable them to preserve their upper faces from abrasion. The studs B and the diagonal struts F will prevent end-wise motion of the planks.

5 The planks should preferably each have the same length, breadth, and thickness except at the doorways, the width, say sixteen inches, and the thickness sufficient merely to enable them to withstand the pressure upon them  
10 when supported by the cleats *a*. The thickness requisite will depend upon the character of their material, and each plank should be a counterpart of all the rest, except the ones next the doorways, which must be longer than  
15 the rest, because the doors of the car are outside of its walls. It has been specified heretofore that the ends of the planks rest upon the side bars, *G'*, which is correct, except that those bars are cut away to form the doorways,  
20 the places of which are filled by the slotted and pivoted bars shown, which support the ends of the planks and also protect the gates. Each plank is provided upon one of its edges with a cleat on one side of its cross median  
25 line, and another cleat upon the other edge upon the opposite side of that line.

By means of the construction and arrangement specified there will be no interference between cleats, and the planks in the making  
30 up of the removable deck will be interchangeable, and the operation will require no special care, no skilled labor, and but little time and strength, and the planks will be easily removed and placed in the box for them, and so leave  
35 the car entirely free for use as a single compartment.

In fastening the cleats to the planks I simply rivet them on without cutting away the planks to form beds for the cleats, which would

weaken them, and I use at least two rivets for each cleat in order to prevent it from turning laterally.

The box above mentioned for holding the upper deck when not in use may be a tight or a loose box or frame either of planks, slats, 45 or wire rods.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. An upper and removable deck for a stock-car, composed of planks the ends of which are sustained by the side walls of the car, and each plank provided with two cleats extending out laterally from each of its edges so as to support and receive support under pressure from adjacent planks, substantially as described. 55

2. As a component part of an upper and removable deck for a stock-car, the plank D, provided with two cleats, *a*, one of which is fastened upon each side edge of the same and extends out laterally therefrom, the two cleats 50 being placed on opposite sides to each other of the plank and also of the short axis of the plank, adapted to afford support to and receive support from adjacent planks and to render the same interchangeable, substantially as 65 described.

3. In combination with a stock car having a removable upper deck, the described receptacle for holding the removable deck when not in use, located immediately under the 70 lower deck of the car and supported in position by any suitable means, substantially as described.

LUTHER R. STILES.

Witnesses:

W. A. WEED,  
FRED N. HARRIS.