H. C. CARSON.
RAILWAY STOCK CAR.

(Application filed Sept. 14, 1896.) 3 Sheets-Sheet 1. (No Model.) WITNESSES: **INVENTOR** Harry C. Carson.

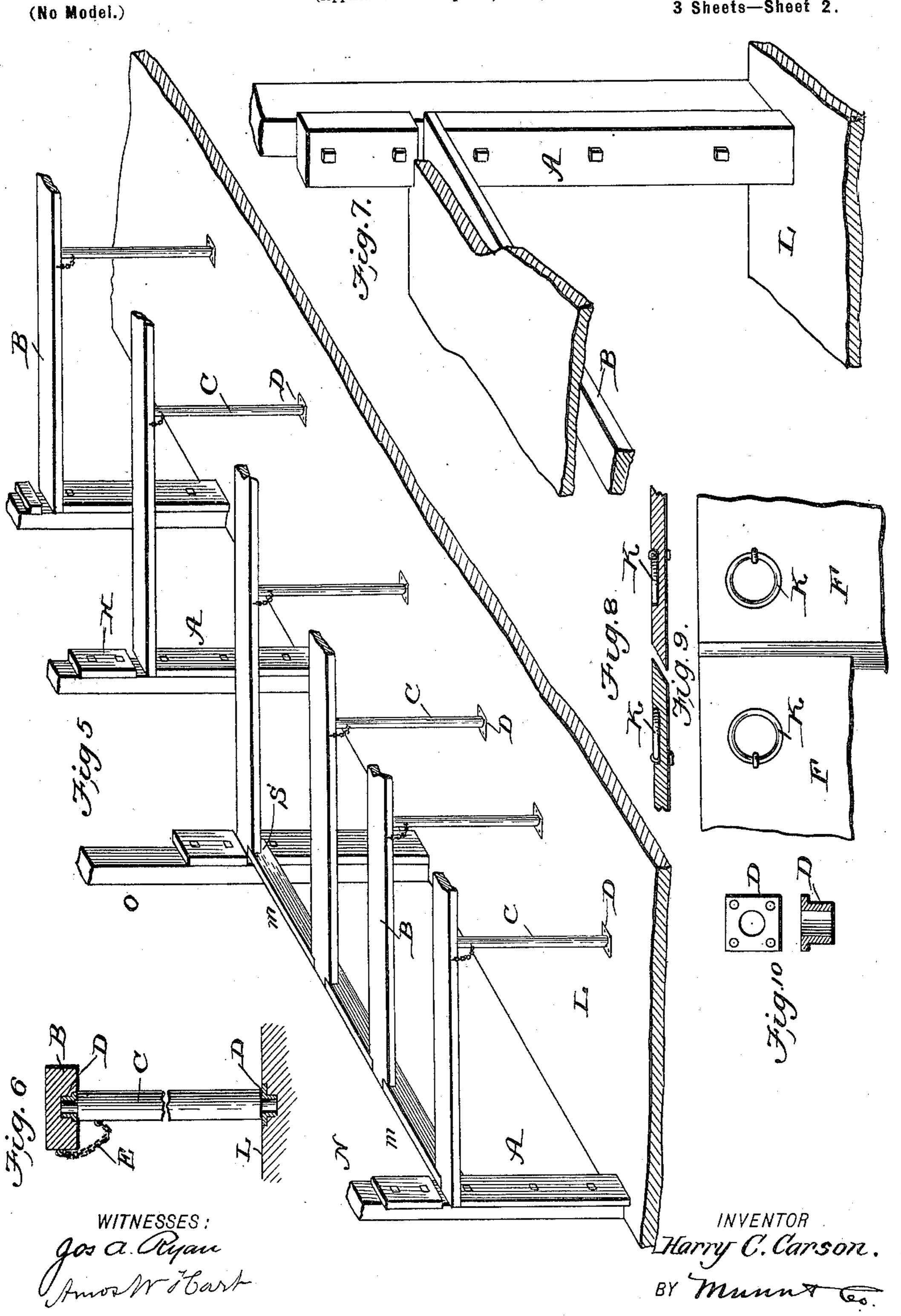
BY Munt Co. Jos. a. Ryan Amos WHart

ATTORNEYS

H. C. CARSON. RAILWAY STOCK CAR.

(Application filed Sept. 14, 1896.)

3 Sheets—Sheet 2.



ATTORNEYS

No. 652,591.

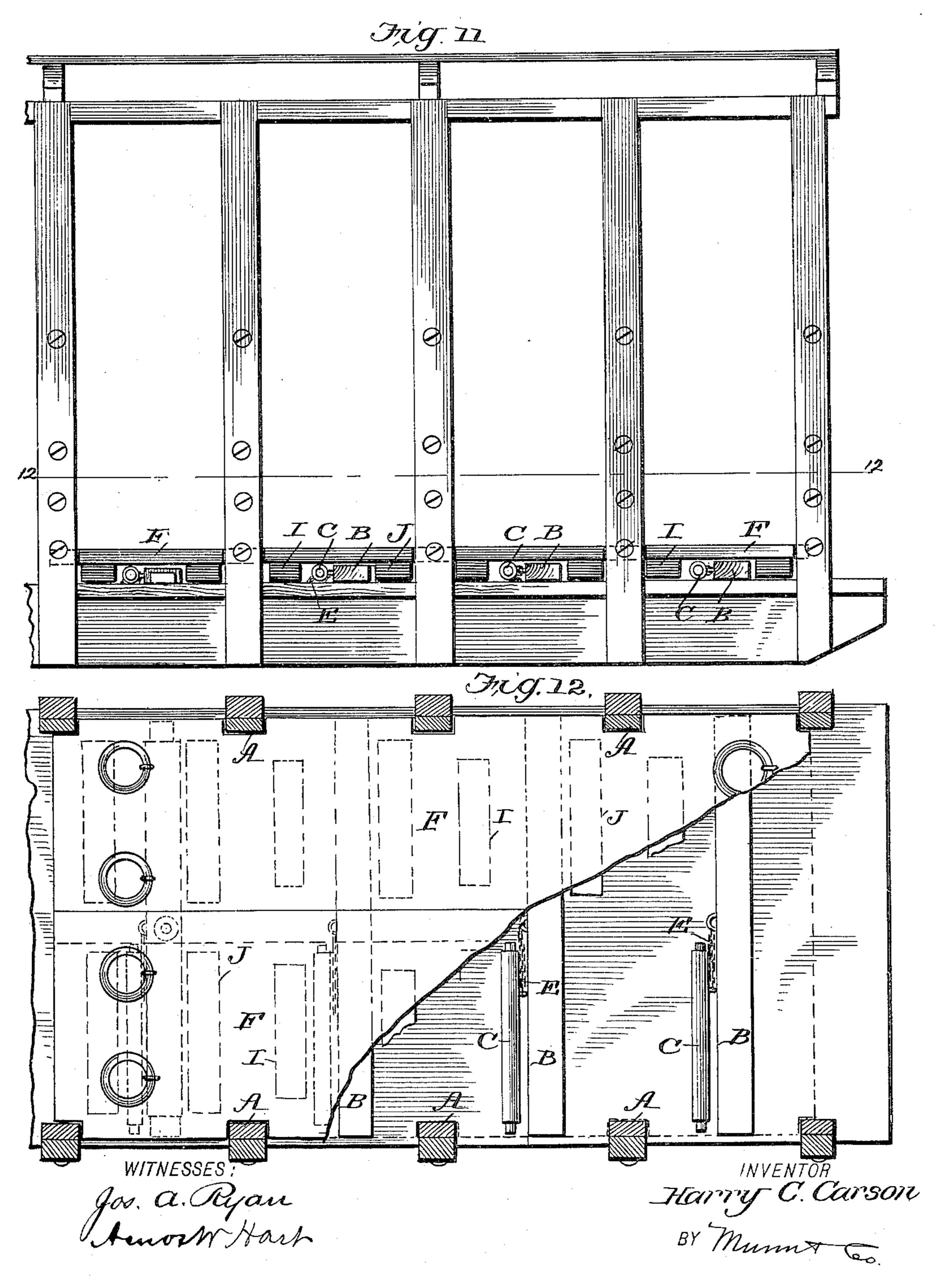
Patented June 26, 1900.

## H. C. CARSON. RAILWAY STOCK CAR.

(Application filed Sept. 14, 1896.)

(No Model.)

3 Sheets—Sheet 3.



## United States Patent Office.

HARRY C. CARSON, OF CHEVIOT, OHIO.

## RAILWAY STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 652,591, dated June 26, 1900.

Application filed September 14, 1896. Serial No. 605,805. (No model.)

To all whom it may concern:

Beitknown that I, HARRY C. CARSON, a citizen of the United States, residing at Cheviot, in the county of Hamilton and State of Ohio, 5 have invented certain new and useful Improvements for the Changing of Railway Stock-Cars from Single Deck to Double Deck, and Vice Versa; and I do hereby declare that the following is a full, clear, and exact de-10 scription of the invention, which will enable others to construct and use the same.

Figure 1 is a side elevation, partly in section, of a railway stock-car provided with my improved supplemental floor; Fig. 2, a plan 15 view, partly in section, of the supplemental floor; Fig. 3, a vertical cross-section of the car; Fig. 4, a detail view showing the junction of the sections of the supplemental floor; Fig. 5, a perspective view of the interior of 20 a car, showing the framework of my improvement; and Figs. 6, 7, 8, 9, and 10, detail views. Fig. 11 is a side view of a portion of the car. 12 12 of Fig. 11, the false floor being shown 25 in lowered position and partly broken away.

My invention is an improvement in that class of stock-cars which are provided with a false and movable floor adapted to be supported above the true or ordinary floor. The 30 invention is embodied in the construction, arrangement, and combination of parts hereinafter described and claimed.

The peculiar construction and special advantages of the invention are fully illustrated 35 in the accompanying drawings, in which O indicates the side stanchions of an ordinary stock-car, and P the door-posts. Short studs A are securely bolted to the stanchions and form supports for the ends of cross-beams or 40 joists B. Removable bars m extend across the doorways and are notched to receive the joists which occupy that space. The joists are centrally upheld by metal posts C, provided on their ends with suitable tenons to 45 engage flanged metal sockets D, which are inserted flush with the surface of the lower floor and securely fastened thereto by screws. The upper ends of the posts are fixed in the cross-beams B in the same manner and are 50 also attached thereto by slack chains E, the purpose of which will be hereinafter ex-

plained. In order to facilitate the labor of

I handling the supplemental floor, it is divided, forming four main sections F and two smaller doorway-sections G, all of which are provided 55 at their corners with iron hand-rings K, which are countersunk flush with the surface of the floor and suitably fastened by eyebolts. In order to prevent possible injury to the feet or limbs of animals in the event of accidents 60 which might force the sections apart, the joints are beveled, as shown in Fig. 9. The outer sides of the supplemental floor, being adapted to fit the inner walls of the car, are necessarily notched to admit the studs A. It 65 will be seen that when the floor is raised to its position the notches are exposed and would admit and mangle the feet of small animals. This danger is obviated by covering the notches with blocks H, which are bolted to 70 the stanchions, as clearly shown in Fig. 7. The said blocks are alined with the studs A, but separated therefrom by a space sufficient to receive the ends of bars B and allow the Fig. 12 is a horizontal section of the car on line | latter to be easily inserted in and removed 75 therefrom. The blocks H have the same thickness and width as the studs A, and hence cover the notches in the floor-sections, which notches also enable the sections to be slid up or down on said blocks in the opera- 80 tion of laying the sections on bars B or removing them therefrom.

When the main sections of the floor are adjusted in operative position, transverse cleats I are attached to the inner sides thereof and 85 close to one side of each joist by suitable screw-bolts which engage each plank of the floor. The sections are thus firmly bound together, and the several planks are by the same means secured against dislocation from any 9c cause. Short cleats J are similarly attached on the opposite sides of the joists for the purpose of guarding against the displacement of the ends of the joists in the event of an accident, which might cause a longitudinal shift- 95 ing of the supplemental floor. The door-sections may be cleated in the same manner, but are preferably provided on both sides of the joists with long cleats, as shown in the drawings.

To lower the false or supplemental floor, two sections are raised free of blocks H and shoved over upon the other two that still remain in place. Then the bars B, with the posts

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C, whereon the displaced floor-sections were supported, are removed and laid upon the true floor or bottom of the car, crosswise thereof and parallel to each other. The displaced floor 5 sections are next drawn back and laid upon the bars B and posts C, so that the latter two lie between pairs of cleats I and J, as shown in Figs. 11 and 12. Thus the said cleats, which hold the bars B in place when the floor-10 sections are elevated, also perform the same office for said bars and the posts C when the said sections are lowered. In this manner the false floor-sections and their supports B C may be quickly set up or lowered and oc-15 cupy as small space as practicable in the latter position.

What I claim is—

The combination with a stock-car body having vertical side studs, or uprights, A, and 20 alined blocks, H, both of like thickness and

width, the blocks being separated from the studs by narrow spaces, cross-bars B whose ends project into and lie free in such spaces, floor-sections having parallel cross-cleats on the under side, and side notches adapted to 25 receive the aforesaid studs and blocks, so that the sections may slide up or down thereon, and supporting-posts C, connected with the cross-bars and adapted to enter sockets in the same and in the floor of the car, the afore- 30 said cleats being separated to accommodate the bars B between them as required when the floor is elevated, and arranged in pairs which are separated to receive a bar and post between them as required when the floor is 35 lowered, as shown and described.

HARRY C. CARSON.

Witnesses:

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