

J. R. MAITLAND.

COMBINED FREIGHT AND STOCK CAR.

No. 188,526.

Patented March 20, 1877.

Fig. 1.

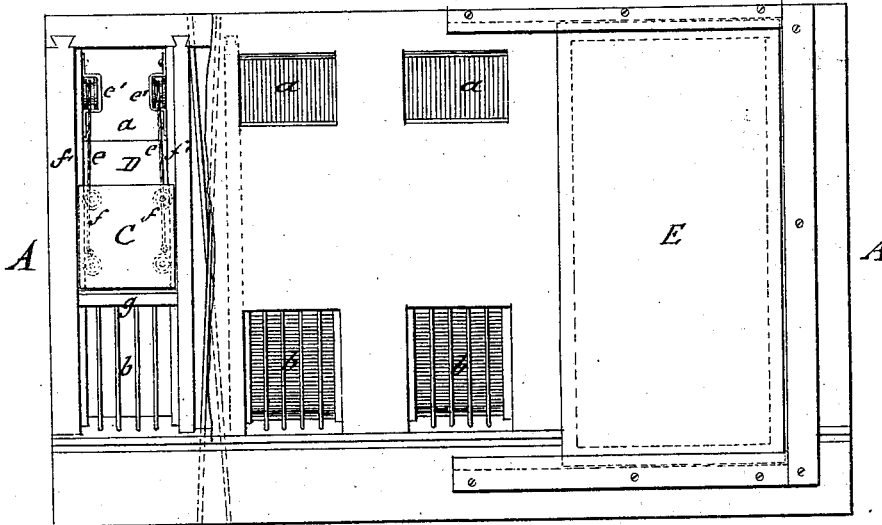


Fig. 2.

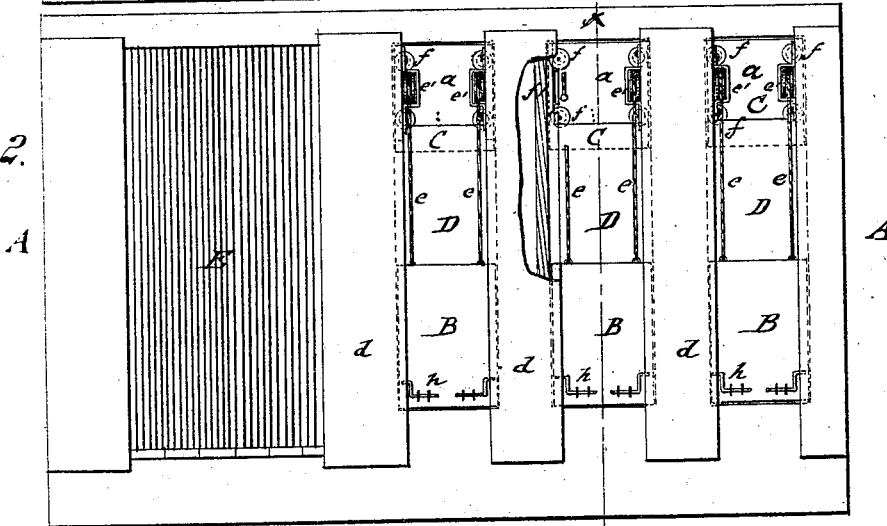
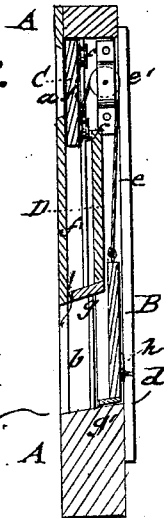


Fig. 3.



WITNESSES:

Francis McArthur,  
J. H. Scarborough.

INVENTOR:

J. R. Maitland  
BY *Munn & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JONES R. MAITLAND, OF HOT SPRINGS, ARKANSAS.

## IMPROVEMENT IN COMBINED FREIGHT AND STOCK CAR.

Specification forming part of Letters Patent No. **188,526**, dated March 20, 1877; application filed February 17, 1877.

*To all whom it may concern:*

Be it known that I, JONES R. MAITLAND, of Hot Springs, in the county of Garland and State of Arkansas, have invented a new and Improved Combined Freight and Stock Car, of which the following is a specification:

In the accompanying drawing, Figures 1 and 2 represent side elevations of my improved combination freight and stock car, showing the same, respectively, from the outside and inside. Fig. 3 is a vertical transverse section of the same, on line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The invention relates to an improved freight and stock car combined, that may be used for either purpose with great facility, serving to reduce the rolling-stock, and being adapted in a greater measure to the exigencies of the carrying service.

The invention consists of a freight-car, with jointly-sliding upper and lower sections, that either close or open the upper and lower openings of the car. The upper sections are guided by friction-rollers on guide-strips, and moved in division-casings with inclined bottom rails, having suitable openings for the shedding of the entering rain.

In the drawing, A represents the side wall or frame of a freight-car, which is provided with upper air openings *a* and lower grated openings *b*. These openings may be opened or closed, according as the car is intended to be used as a stock or freight car, by sliding sections B and C, of which the lower sections B are guided by suitable strips *d*, and connected by wire ropes *e* running over pulleys *e'* of the jambs, with the upper sections C. The rope-and-pulley connection of the sliding sections B and C produces the joint motion of the sections when the lower one is raised or lowered. The upper section C is guided by friction-rollers *f* along projecting side guides-strips *f'*, to obtain the steady motion and po-

sition of the same, without binding on the jamb.

A division piece or casing, D, is arranged between the upper and lower sections, so as to part the same, the dividing-piece D having an inclined bottom rail, *g*, that forms also the top of the iron bars of the grating, and serves to shed the water entering in storms or rain at the upper section, through a groove or opening cut between said rail and outer sheathing to the inclined bottom or sill of the lower opening, from where it is conveyed to the outside. The lower section B has also a water-shedding weather-strip, *g'*, to prevent the beating of the rain from below, keeping thereby the inside of the car dry in stormy weather.

When stock is transported the sections are thrown open and locked by sliding or spring bolts *h* of the lower sections. When freight is to be shipped the sections are closed in similar manner, providing thus a stock or freight car, as required by the service of the road.

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

1. The combination, with a car, A, having upper and lower side openings *a b* of jointly-sliding sections B and C, to open or close said openings, substantially as and for the purpose set forth.

2. The combination of the upper air-opening *a* and lower grated opening *b* of the car with guided and sliding sections connected by ropes and pulleys, substantially as specified.

3. The combination of the jointly-moving sections B C with an intermediate dividing piece or casing, D, having a water-shedding rail and exit groove or opening, for the purpose described.

J. R. MAITLAND.

Witnesses:

S. P. YOUNG,  
G. H. SCHUTTE.