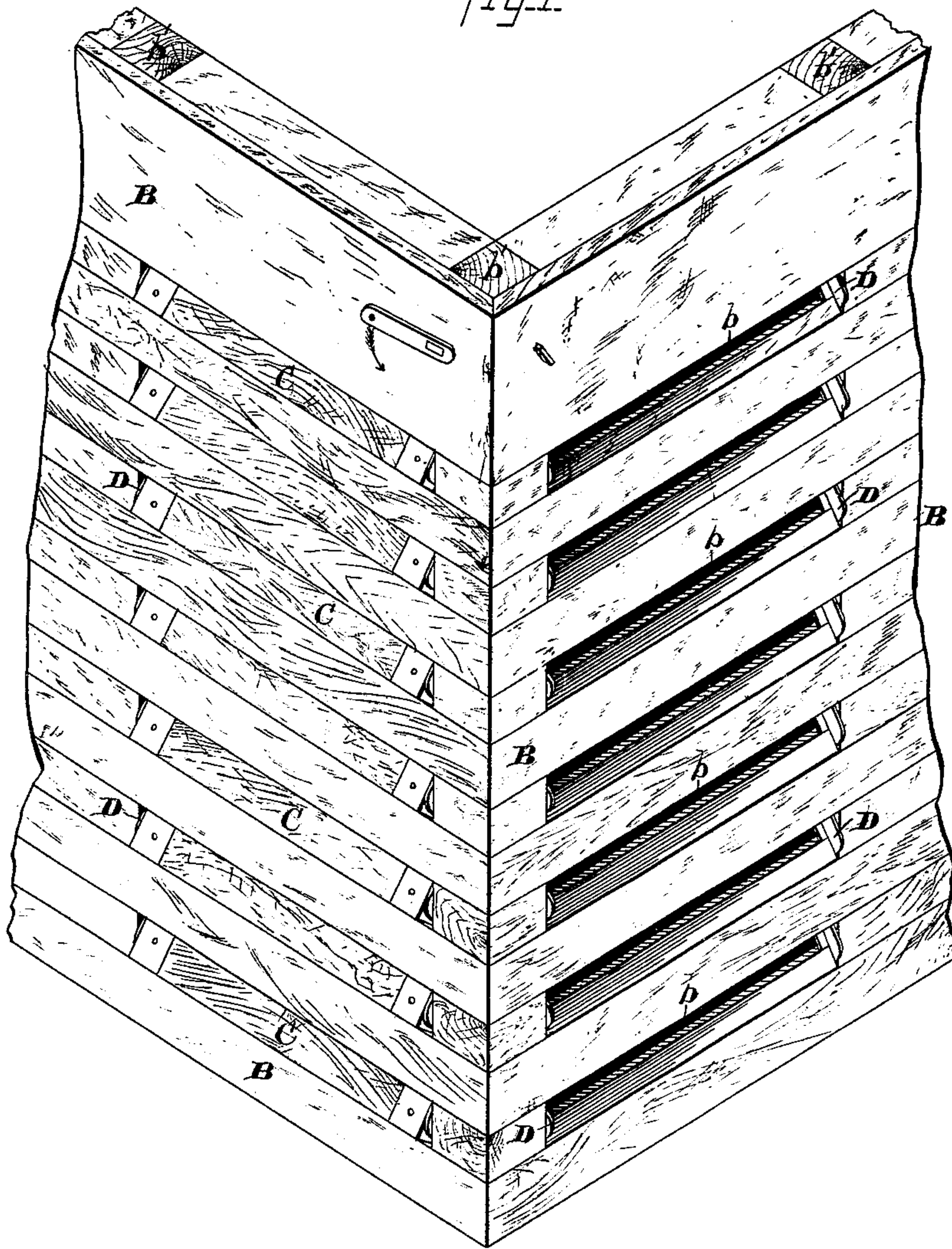


J. SPROAT.
Combined Freight and Stock Car.
No. 206,840. Patented Aug. 6, 1878.

Fig. 1.



WITNESSES—

Jas. E. Hutchinson
 Henry C. Hazard.

INVENTOR—

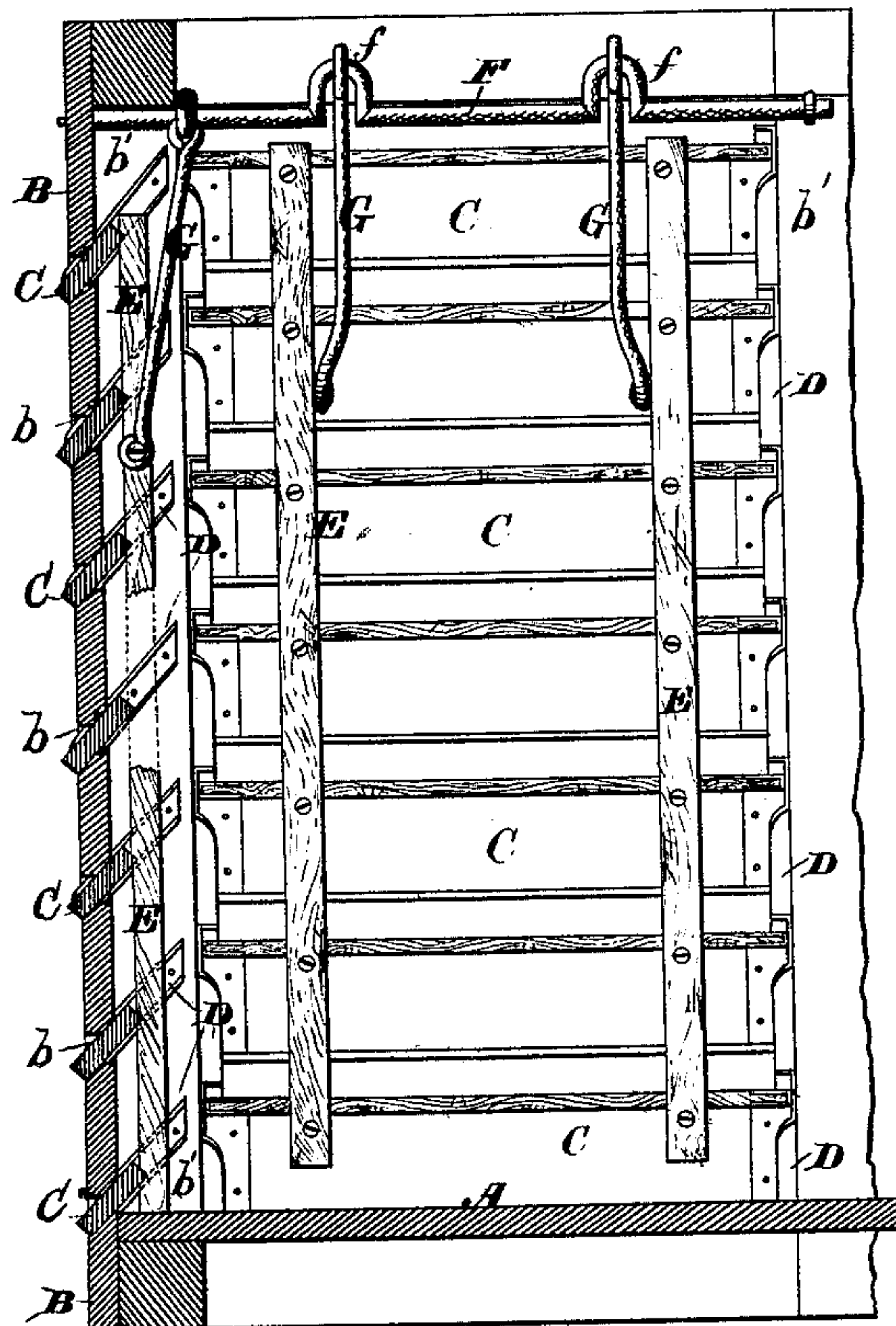
John Sproat, by
 Prindle & Co. his Attys.

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Fig. 2.



WITNESSES

Jas. C. Hutchinson
 Henry C. Hazard,

INVENTOR

John Sproat, by
 Orinelle & Co. his attys.

UNITED STATES PATENT OFFICE.

JOHN SPROAT, OF CAIRO, ILLINOIS.

IMPROVEMENT IN COMBINED FREIGHT AND STOCK CARS.

Specification forming part of Letters Patent No. **206,840**, dated August 6, 1878; application filed July 1, 1878.

To all whom it may concern:

Be it known that I, JOHN SPROAT, of Cairo, in the county of Alexander, and in the State of Illinois, have invented certain new and useful Improvements in Combined Freight and Stock Cars; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of one corner of a car of my improved construction, and Fig. 2 is a vertical transverse section of one of the sides of the same.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to render practicable the employment of cars for both stock and freight purposes; and it consists in a car which is provided within its walls with horizontal slots or openings, that are closed, when desired, by means of correspondingly-shaped slats, which are capable of being moved into or out of said openings, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A represents the bottom, and B and B the sides or side and end of a car at its corner.

Within the side B are formed a series of parallel horizontal openings, *b*, which, when open, admit light and air to the interior of the car, and render it suitable for the transportation of stock.

When the car is to be used for ordinary freight purposes, it is necessary that its walls should be closed, which result is effected in the following manner: The wall B, at the lower outer side of each opening *b*, is cut away upon a downward and outward extending line, and at the inner upper side of each opening said wall is cut away upon an upward inward line, the result being that a bar or slat of wood, C, which has substantially the same thickness as the original horizontal opening, can be inserted from within upon a downward and outward inclination, as shown in Fig. 2.

The ends of the slats C are bound with metal, and each end is contained within a metal guide, D, which is secured upon the post *b'*, or other like part of the car-frame, at the end of each opening *b*. Each series of slats C is secured together by means of two or more vertical bars, E, which are rigidly attached to the inner edges of said slats, while they are moved into or out of the openings *b* by means of a crank-shaft, F, that is journaled near the top of the car, and is connected with said slats by means of rods G, which at their ends are pivoted upon the cranks *f* and upon the bars E. The ends of the shafts F are preferably extended through the walls of the car, and are provided with suitable means whereby they may be partially rotated, so as to move the slats C downward into the opening *b*, or to draw said slats upward out of said openings.

When the slats C are inserted within the openings *b* they are protected from injury, and said openings are more thoroughly closed than would be possible by other means, while, from the inclination of said slats, water cannot be driven into the interior of the car during a rain-storm. When the slats are withdrawn from the openings the latter are entirely unobstructed, and through them can be had a view of the interior of the car.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

A combined freight and stock car, in which the walls are provided with horizontal openings, which are closed, when desired, by means of slats that are capable of being moved into or out of said openings, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand.

JOHN SPROAT.

Witnesses:

W. HYSLOP,
EDGAR R. MINS.