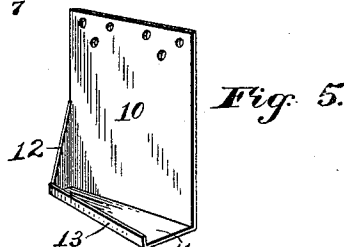
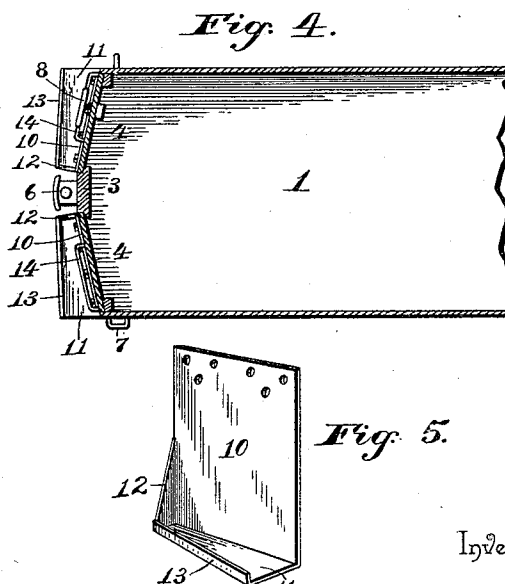
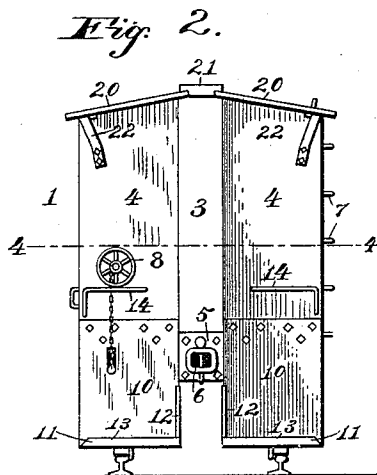
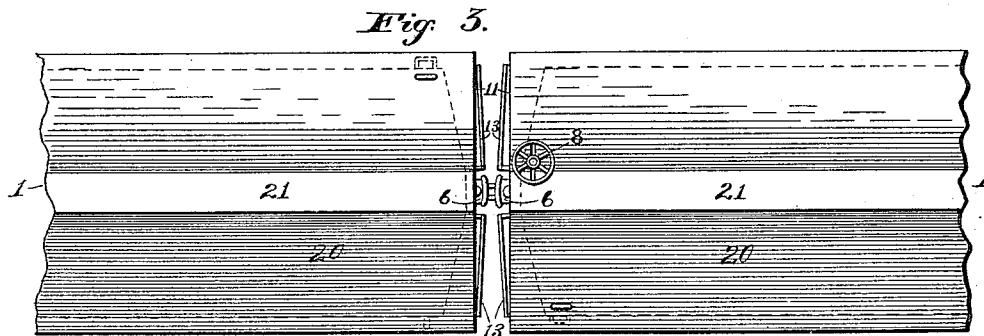
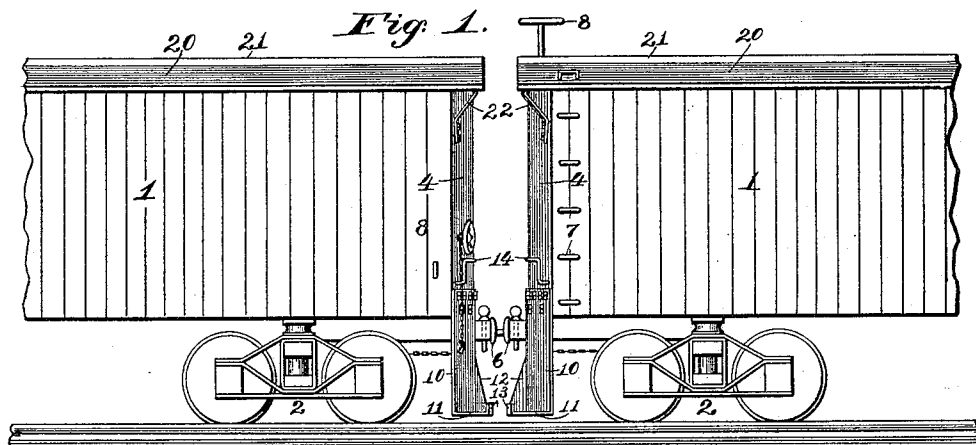


(No Model.)

C. N. COOKE.
RAILWAY CAR.

No. 461,816.

Patented Oct. 27, 1891.



Witnesses

Inventor

Rey C. Bowen
Newton L. Collamer

By his Attorneys,

Charles N. Cooke

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

CHARLES NUTEN COOKE, OF WHEATLAND, INDIANA.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 461,816, dated October 27, 1891.

Application filed June 4, 1891. Serial No. 395,054. (No model.)

To all whom it may concern:

Be it known that I, CHARLES NUTEN COOKE, a citizen of the United States, residing at Wheatland, in the county of Knox and State of Indiana, have invented a new and useful Railway-Car, of which the following is a specification.

This invention relates to railway freight-cars, and more especially to the construction of the ends of the same, whereby two cars can be coupled together by a brakeman without danger to his person, even if the draw-heads should be crushed.

To this end the invention consists in the specific details of construction hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a side elevation of the ends of two freight-cars embodying my invention, showing them as coupled together. Fig. 2 is an end elevation of one car. Fig. 3 is a plan view of Fig. 1, and Fig. 4 is a horizontal section on the line 4 4 of Fig. 2. Fig. 5 is a perspective detail of the plate and step.

Referring to the said drawings, the reference-numeral 1 designates the body of a freight-car supported by a truck 2. The end of this car comprises a central vertical board 3 and two sides 4 4, connected at their inner edges to the central board, inclining toward the center of the car and connected at their outer ends to the sides of the car. At the lower end of the central board 3 is a flat plate 5, taking the place of the dead-block heretofore used, and through a hole in this plate projects the draw-head 6 of the coupling, which may be of any approved pattern. A ladder 7 may be secured to the side of the car, as usual, and the brake-wheel 8 may be at the end or at the top of the car, as desired.

Depending from each of the side pieces 4 is a plate 10, having at its lower end a foot-piece 11, projecting outwardly from the end of the car and being of a sufficient width and of the proper triangular shape, so that the outer edges of the two foot-pieces 11 will stand in a transverse horizontal line. These plates and foot-pieces may be of boiler-iron or of any suitable material, and diagonal braces 12 may connect the inner edges of the plates 10 with the small inner ends of the foot-pieces 11, if desired, to prevent the latter

from sagging. The outer edges of the foot-pieces 11 may be turned up, as at 13, to prevent the operator's feet from slipping off. Handles 14 are secured to the end pieces 4 above the plates 10, and the operator grasps one of these when he stands on one of the foot-pieces 11.

The roof 20 of this improved car is of the usual shape and size, slanting slightly from the ridge-pole, above which it has a plank 21 for the brakemen to walk upon. As the end of the car is beveled off, as above described, but the roof is not, it is obvious that the latter will project over the end pieces 4, so as to stand about above the outer edges of the foot-pieces 11; but none of these members project so far as to come in contact with similar members on another car when the train is rounding curves. The corners of the roof are preferably supported by inclined braces 22, as shown.

With the above construction of parts it will be found that the car-body, by being elongated slightly at the center of its ends, will have a greater capacity than heretofore, while in making the car the end sills and roof-beams can be made of the proper shape and the end boarding of the car-body put on in this manner with a very slight additional expense, and even this is probably saved by omitting the dead-block and the bolting and ironing which necessarily accompanies it. The ends of the roofs of two cars by standing so close together prevent a person falling between the cars. The foot-pieces 11 are obviously for the purpose of affording a support to a brakeman or other operator while in the act of coupling the cars, uncoupling them, or riding temporarily on the train, and these foot-pieces are supported for a slight distance above the treads of the rails. When two cars embodying such foot-pieces are coupled together, all danger of a person falling upon the rails at such point is avoided.

The advantage of beveling the corners of the cars is not only that the centers of their ends can come closer together, but also that there will be between each two cars a sufficient space to admit the body of a brakeman, even though the cars are driven so closely together as to crush the two draw-heads. The brakeman will naturally be standing upon

one of the two foot-pieces and near the side of the car—that is, near the outer end of the foot-piece—and the nearer such outer end he is the broader the space between the cars, the size of this space depending of course upon the angle at which the car-builder applies the end pieces 4 to the body.

Considerable change in the details of construction may be made without departing from the spirit of my invention. For instance, there might be a single plate 10 continued across beneath the car-coupling, there might be a brace for such plate extending beneath the car-body, the diagonal braces might be omitted, and the turned-up edges 13 might also be omitted.

My improvement may be added to all freight-cars and locomotive-tenders, and indeed to all cars that are to be coupled by hand. It is obvious that the plates 10 may be employed on a car of ordinary construction.

What is claimed as new is—

1. In a freight-car, the combination, with the car end, whose corners incline inwardly, and a draw-head beneath the center of said end, of plates depending from the end of the car on each side of the draw-head, and an outwardly-projecting foot-piece at the lower end of each plate, substantially as described.

2. In a freight-car, the combination, with the car end, whose corners incline inwardly, a plate beneath the center of said end, and a draw-head projecting through said plate, of handles on the beveled portions of the end, a

plate depending from each beveled portion, and a triangular foot-piece extending outwardly from the lower edge of said plate, the outer edges of said foot-pieces standing on a transverse line across the car, substantially as described.

3. In a freight-car, the combination, with the car end, the corners inclined inwardly, of a rigid plate depending from each inclined portion of the end, an approximately triangular foot-piece projecting forwardly from the lower edge of said plate and having its front edge turned up, and a brace connecting the inner end of the foot-piece with the inner edge of the plate, substantially as described.

4. In a freight-car, the combination, with the car end comprising a central vertical board and side portions inclined inwardly and connecting the edges of this board with the sides of the car-body, and a roof whose end stands on a straight line transverse to the length of the car, of plates depending from said inclined side portions, and outwardly-projecting foot-pieces at the lower edges of said plates, the outer edges of said foot-pieces standing beneath the end line of the roof, all as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CHARLES NUTEN COOKE.

Witnesses:

HORACE S. ANDERSON,
THOMAS A. GREEN.