

C. H. NEWBURY.
RAILWAY CAR.

No. 514,332.

Patented Feb. 6, 1894.

Fig. 1.

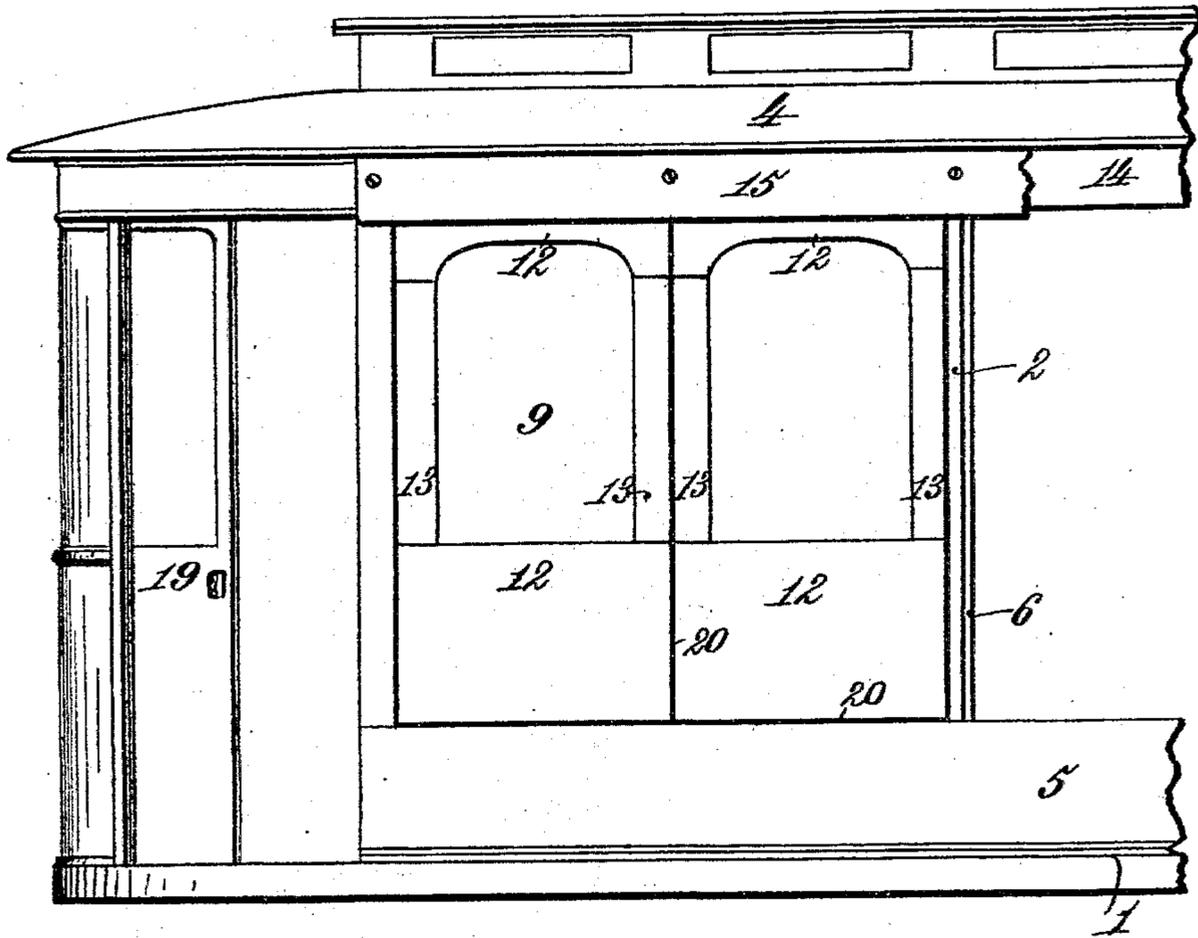
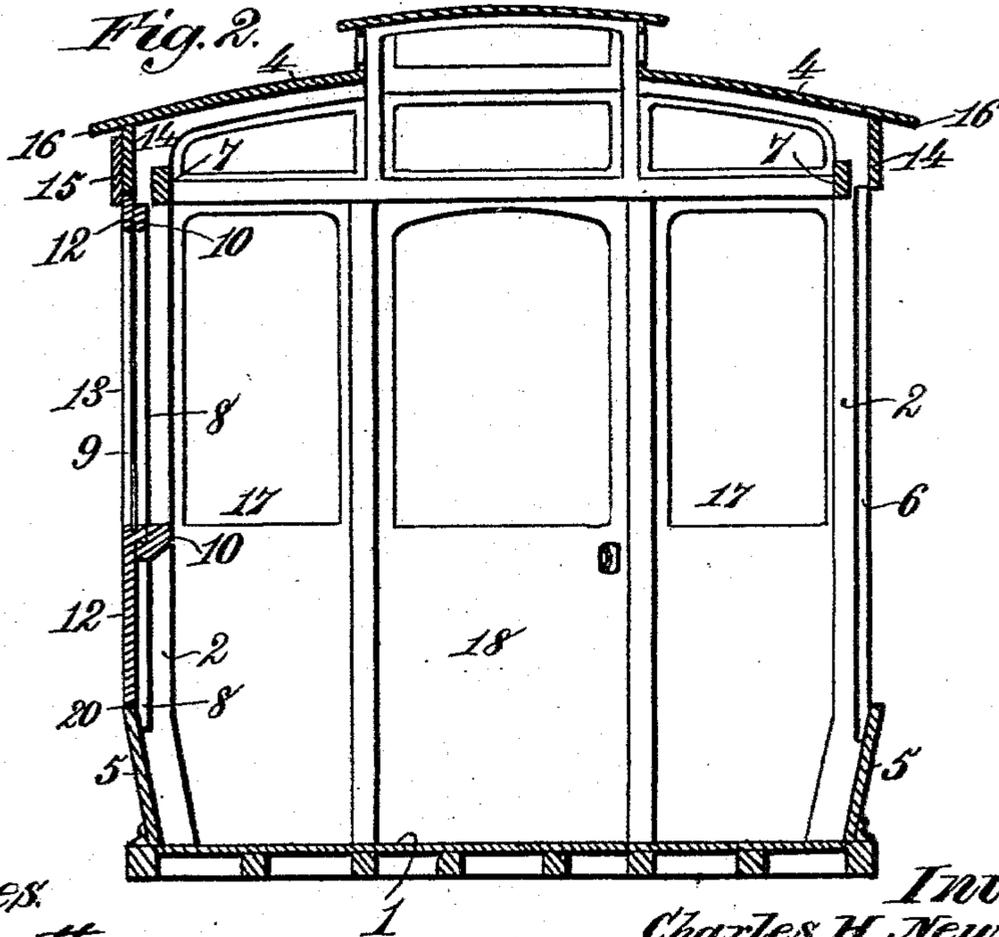


Fig. 2.



Witnesses:
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G. W. Reed

Inventor:
Charles H. Newbury,
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Atty.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

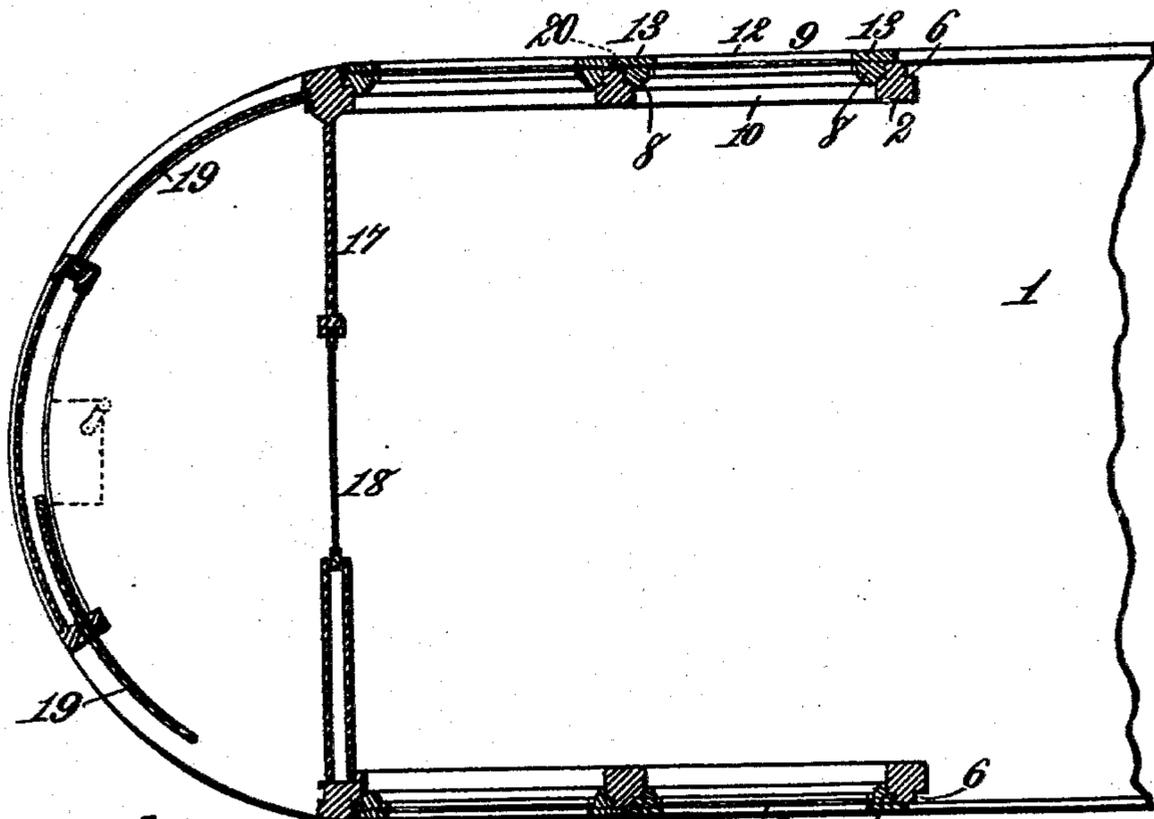
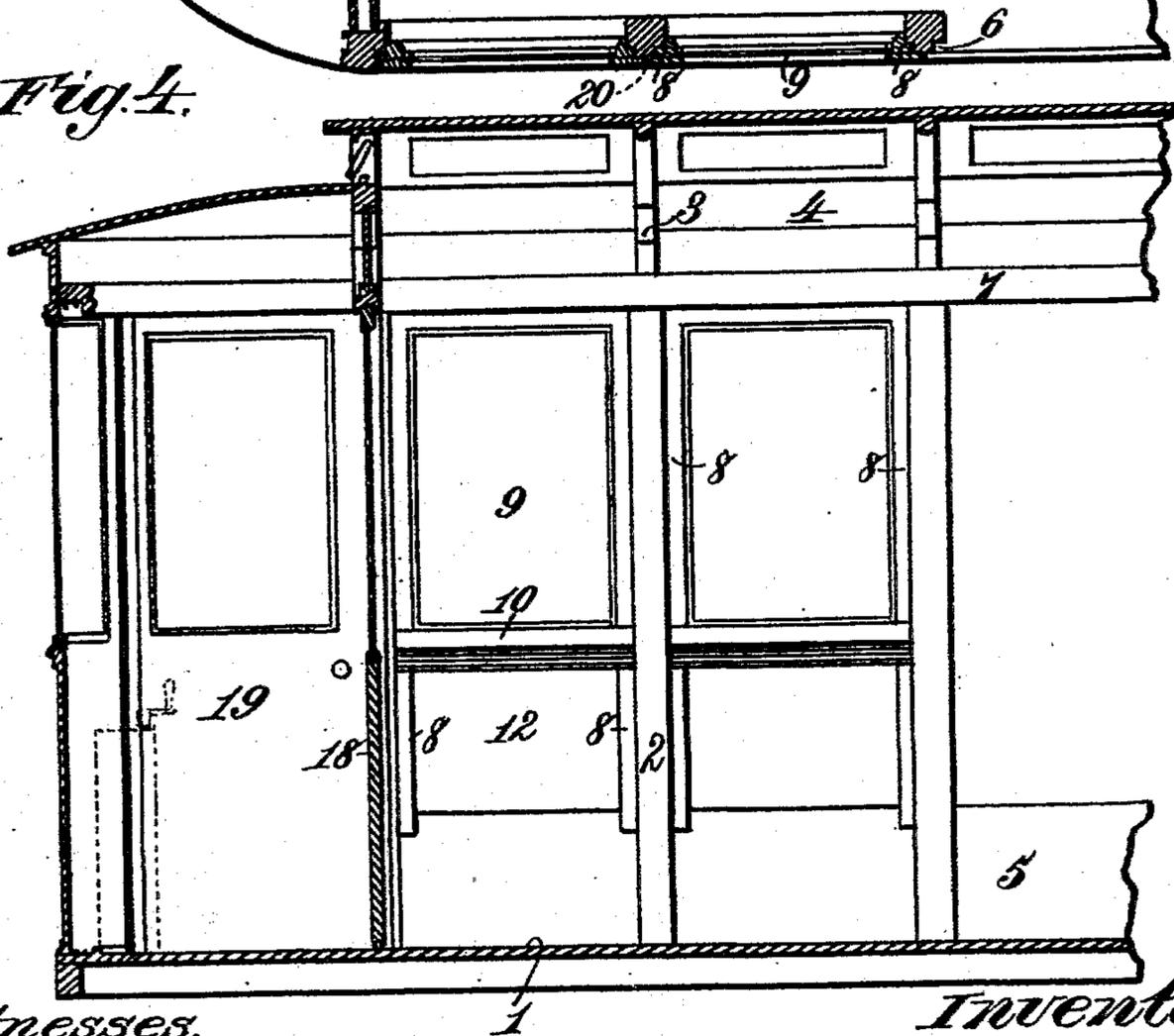


Fig. 4.



Witnesses,
Robert G. Smith,
G. H. Rear,

Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES H. NEWBURY, OF ST. PAUL, MINNESOTA.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 514,332, dated February 6, 1894.

Application filed November 23, 1893. Serial No. 491,773. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. NEWBURY, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented new and useful Improvements in Railway-Cars, of which the following is a specification.

My invention relates to certain improvements in the construction of railway-cars, and particularly that class or type of cars employed upon street railways.

It is the purpose of my said invention to provide a novel construction and combination of parts whereby a summer-car may be readily and quickly converted into a winter-car, or closed car, and vice versa, without dismantling the structure or requiring material changes therein.

It is a further purpose of my said invention to provide a car which shall be convertible into either a closed winter-car, or an open summer-car, said car having, in its latter form, a protective strip upon each side to prevent small children from falling out and guard against the loss of packages, said strips forming a permanent portion of the car under both forms.

The said invention consists, to the ends specified, in the several novel features of construction and new combinations and arrangements of parts hereinafter fully explained and then particularly pointed out in the claims which form part of this specification.

To enable those skilled in the art to which my said invention pertains to fully understand and to make, construct, and use the same, I will now proceed to describe said invention in detail, reference being had, for this purpose, to the accompanying drawings, in which—

Figure 1, is a side elevation of a railway-car constructed in accordance with my invention. Fig. 2, is a transverse, vertical section of the parts shown in Fig. 1. Fig. 3, is a horizontal section of one end of the car, showing the construction by which it is converted into a closed, or vestibuled car, and the grip-man, or motor-man, separated from the passengers, and protected from the inclemency of the weather. Fig. 4, is a longitudinal, vertical section, showing more fully the construction and arrangement of the window-sections.

In the said drawings the reference-numeral

1 indicates the floor of the car, which is constructed and combined with the running-gear in the ordinary manner. Rising from the flooring, at or near the sides thereof, and at suitable intervals, are posts 2, which extend upward to, or nearly to, the roof, where they unite with and support overhead, arched beams, or rafters 3, on which rests the roof 4, the latter being composed of metal, or other suitable material, and its ends being rounded off to conform, substantially to the extremities of the flooring 1.

From the flooring 1, upon the exterior of the posts 2, rise protective strips 5, extending upward a foot, or more, and furnishing a safeguard against the escape of packages placed upon the floor, between the seats, as well as against the falling of young children from the car.

The risers, or posts 2, are grooved, or rabbeted upon both outer edges, as shown by the reference-numeral 6, said rabbets extending from the top frames 7 to a point below the upper edges of the protective strips 5. These grooves, or rabbets, receive the parallel, vertical members 8 of the window-sections 9. Each of these window-sections is composed of the two parallel members 8, already referred to, which unite with and extend beyond an upper and lower member 10. The four parts indicated by said reference-numerals 9 and 10, constitute, practically, the inner casing of the window proper, upon the exterior of which are arranged two horizontal strips 12, extending, respectively, above and below the upper and lower members 10, and two vertical strips 13 which project beyond the inner edges of the vertical members 9. The upper horizontal strip 12 abuts against the edge of a flat strip 14, which extends along the outer ends of the beams, or rafters 3, and it is held in position, against outward displacement, by an outer strip, or plate 15, mounted upon the strip 14 and dropping slightly below the lower edge of the same. The lower edge of the lower horizontal strip 12 abuts upon, or closely approaches the upper edge of the protective strip 5, below which the ends of the vertical members 8 extend, upon the inside, thereby preventing outward displacement of the window.

The strip, or plate 15, is detachable, in or-

der that the window sections may be removed and replaced. It is secured in place by screws, or other suitable fastenings, and its upper edge lies beneath the projecting edge of the roof 16, which extends laterally far enough to carry the rain and drip from the roof over said edge.

The ends of the car are inclosed by window-sections 17, having substantially the same construction as those used upon the sides of the car, and by sliding doors 18, of any ordinary, or preferred construction. The platform space, occupied by the motor-man, or engineer, is also inclosed in front by means of sliding doors 19, admission to the car being obtained by means of steps at the sides of the curved ends of the car platform 1.

By my invention I provide a car of simple and economical construction, which may be readily and quickly converted into a closed car, for winter use, or into an open car, for summer, thereby avoiding the necessity of keeping on hand and idle, a quantity of rolling-stock equal to that in use, and requiring a large inclosed area, or car house, for its storage.

Between the vertical strips 13, which overlap upon the outer faces of the posts 2, I interpose rubber-strips 20, which afford a protection against the entrance of air and moisture. These rubber strips are extended downward as far as the edges of the protective strips 5, and upward as far as the edges of the strips 14. Similar strips 20 are also interposed between the lower edges of the strips 12 and the upper edges of the protective strips 5, as seen in Figs. 1 and 2.

What I claim is—

1. In an interchangeable summer or winter car, the combination with posts, or risers, upon the sides having protecting strips at the bot-

tom and strips, or plates, at the top, of window-sections having parallel vertical members which engage rabbets in the outer angles of said posts and extend below the upper edges of the protective strips, and detachable strips, or plates, arranged beneath the projecting edges of the roof and overlapping the upper edges of the window-sections, substantially as described.

2. In an interchangeable summer or winter car, the combination with posts or risers and with protective strips rising from the car-floor, or platform, on the outer side of said posts and forming a permanent portion of the structure, of removable window-sections filling the space between the upper edges of said protective strips and the upper portion of the sides of the car, substantially as described.

3. In an interchangeable summer or winter car, the combination with posts, or risers, extending from the floor to the beams of the roof, of protective strips rising above the floor upon the outside of the posts, removable and replaceable window-sections each comprising two vertical members lying in rabbets in the posts and extending below the edges of the protective strips and having broad outer strips upon the four sides, of detachable strips or plates arranged beneath the laterally projecting edges of the car-roof and having their lower edges overlapped upon the upper edges of the said window-sections, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES H. NEWBURY.

Witnesses:

J. W. PINCH,

Mrs. A. W. LANCASTER.