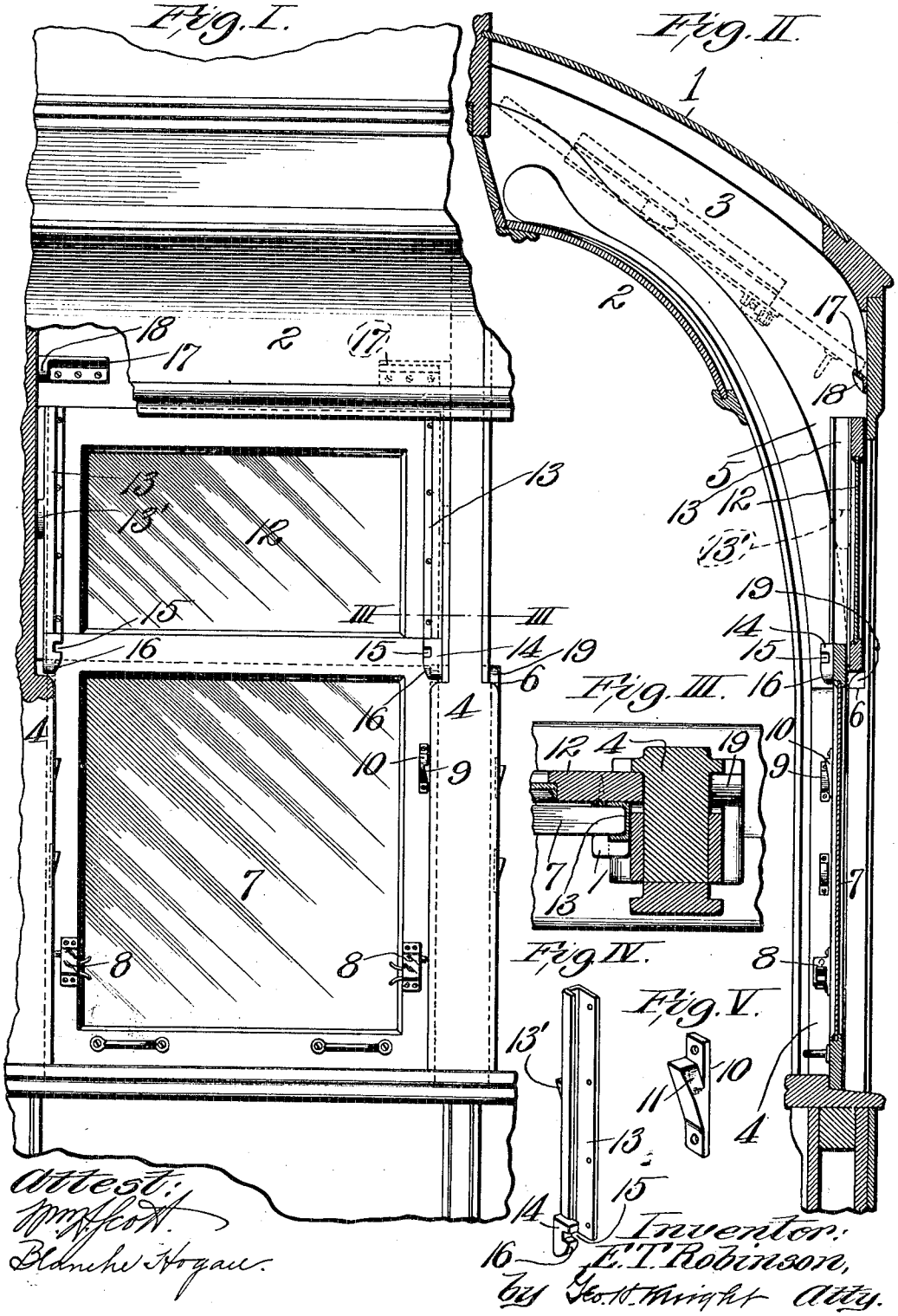
No. 844,896. PATENTED FEB. 19, 1907.

E. T. ROBINSON.

SEMICONVERTIBLE CAR.

APPLICATION FILED OCT. 11, 1906.



UNITED STATES PATENT OFFICE.

EDWARD T. ROBINSON, OF ST. LOUIS, MISSOURI.

SEMICONVERTIBLE CAR.

No. 844,896. Specification of Letters Patent. Patented Feb. 19, 1907.

Application filed October 11, 1906. Serial No. 338,427.

To all whom it may concern:

Be it known that I, EDWARD T. ROBINSON, a citizen of the United States of America, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Semiconvertible Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of railway-cars, more particularly those intended for street-car service, which are so constructed that they may be converted from a condition for closed or winter service to a condition for open or summer service, and vice versa.

The present improvement lies in certain novel features appertaining to the lower window-sashes, which are adapted to be lowered into the usual closed positions or nested together in sets and elevated.

Figure I is an elevation of one of the windows of a car constructed in accordance with my present improvements, the window being seen at the inside thereof. Fig. II is a vertical cross-section taken through the parts of the car including the window, as seen in Fig. I. Fig. III is an enlarged horizontal section taken on line III III, Fig. I. Fig. IV is a perspective view of one of the sash-pocket strips. Fig. V is an enlarged perspective view of the antirattler-block utilized on the car-window sashes.

1 designates the deck-roof of my car, and 2 the deck-ceiling, between which is a sash-receiving space 3, into which the window-sashes may be moved when they are out of service, as will hereinafter more fully appear.

4 designates the window-posts, which are provided with the usual grooves to receive the window-sashes, the inner wall 5 of each groove being curved, as seen in Fig. II. The groove in each window-post includes a shoulder 6, which is located in such position as to restrict the downward movement of the upper sash, to be hereinafter more particularly mentioned.

7 designates the lower window-sash, which is equipped with latches 8, attached to its stiles. The latches are designed to engage catch-plates 9, that are attached to the window-posts in order that the lower sash may be upheld at desirable heights when it is desired to have the window partially open.

10 is an antirattler-block attached to the lower sash and having an inclined face 11, which is adapted to engage one of the catch-plates 9 when the lower sash is in closed position, the catch-plate to be engaged being properly located to provide for the desired engagement at the time that the lower sash is closed, whereby jarring of the sash is obviated.

12 designates the upper sash.

13 are pocket-strips of channel shape, each having one of its flanges secured to the stile of the upper sash, against the inside face of which the strip is fitted. The channels in these pocket-strips are of proper size to receive the lower sash 7 when said sash is elevated. At the lower end of each pocket-strip 13 is a protuberance 14, containing a notch 15 and having a beveled face 16. (See Fig. I.) These protuberances are designed to be engaged by the latches 8 of the lower sash when said lower sash is elevated to the full degree in the pocket-strips 13, the bolts of the latches in such instance passing readily into the notches of the protuberances by traveling against the inclined faces. After the two sashes have been nested together by elevating the lower sash to the upper sash in the manner described both of the sashes are lifted into the space 3 between the deck-roof and deck-ceiling. For the purpose of sustaining the sashes in their raised position within said space I provide angle-brackets 17, which are secured to the side wall of the car above the window-openings and within the space 3, these brackets being so positioned that the lower sash may be moved readily into engagement therewith and occupy the position indicated by dotted lines, Fig. II. Each bracket 17 is provided with a rounded portion 18, against which the upper edge of the upper sash 12 may strike when the sashes are elevated into the space 3 for the purpose of causing the sashes to be deflected inwardly into the space and away from the brackets, so that said brackets will not interfere with the movement of the sashes.

At the rear side of each pocket-strip 13 is antirattler-boss 13′, that is adapted to bear against the curved wall 5 of the window-post groove, (see dotted lines, Fig. II,) in which each upper sash operates and whereby said sash is moved outwardly when lowered into closed position and held from vibration.

19 designates rounded deflecting-blocks mounted on the shoulders 6 of the window-

post grooves and on which the upper sashes rest when in lowered position. These deflecting-blocks have no utility in so far as the upper sashes are concerned, but they are utilized to deflect the lower sashes away from the shoulders 6 when the sashes are being lowered from their nested condition in the pocket 3.

I claim—

1. In a semiconvertible car, the combination of grooved window-posts, upper and lower sashes operatable in the grooves in said posts, a pocket-strip carried by the upper sash adapted to receive the lower sash, and provided with a notch, and a catch carried by the lower sash and arranged for engagement in said notch when the lower sash is elevated into said pocket-strip, substantially as set forth.

2. In a semiconvertible car, the combination of grooved window-posts, upper and lower sashes operatable in the grooves in said posts, pocket-strips carried by said upper sash adapted to receive said lower sash and provided with notched protuberances, and catches carried by said lower sash and adapted to enter the notches in said protuberances, substantially as set forth.

3. In a semiconvertible car, the combination of grooved window-posts, upper and lower sashes operatable in the grooves in said posts, pocket-strips carried by said upper sash adapted to receive said lower sash, said pocket-strips being provided with antirattler-bosses adapted to bear against walls of the grooves in said window-posts, substantially as set forth.

4. In a semiconvertible car, the combination of grooved window-posts, a catch-plate fixed to one of said posts, a sash operatable in the grooves in said posts, and an antirattler-block attached to said sash and having an inclined face adapted to engage said catch-plate, substantially as set forth.

EDWARD T. ROBINSON.

In presence of—

H. J. MURPHY,

M. C. MURPHY.