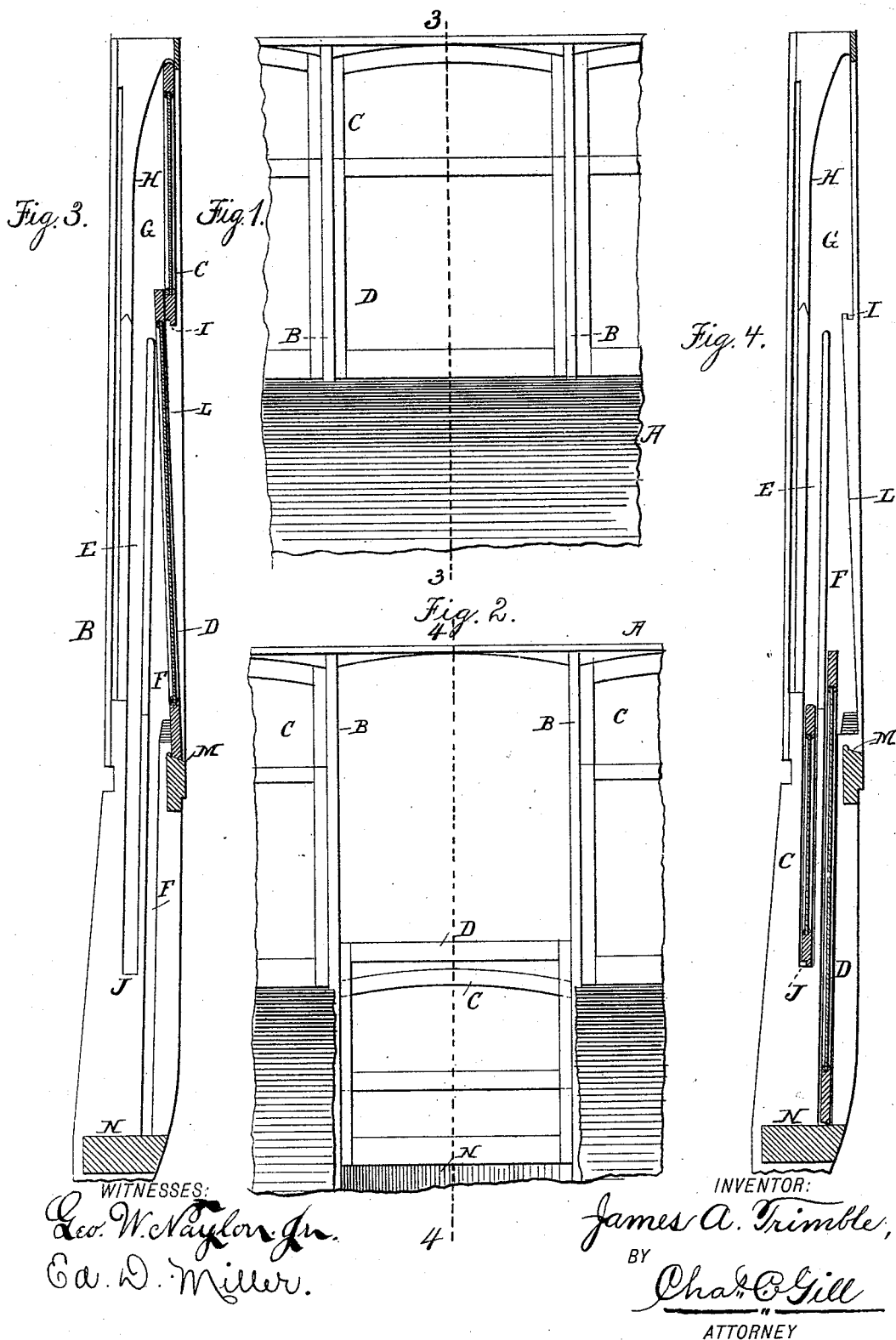


(No Model.)

J. A. TRIMBLE.
STREET CAR.

No. 498,333.

Patented May 30, 1893.



UNITED STATES PATENT OFFICE.

JAMES A. TRIMBLE, OF NEW YORK, N. Y.

STREET-CAR.

SPECIFICATION forming part of Letters Patent No. 498,333, dated May 30, 1893.

Application filed November 26, 1892. Serial No. 453,272. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. TRIMBLE, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Street-Cars, of which the following is a specification.

The invention relates to improvements in street cars, and consists in the novel arrangement of the window sashes, with their retaining grooves and supports, as hereinafter particularly described and claimed.

The invention is specially intended for use in the construction of electric cars, in which it is not practicable to have the window sash when lowered pass downward below the line of the usual seats extending the length of the car, for the reason that the space below the seats is utilized to contain the electric apparatus and the lower outer portion of the sides of the car in line with said space constitute doors to be opened and closed at will.

In view of the construction above noted of the electric cars, it has been a difficult problem to provide adequate window space and means of ventilation adjacent to the top of the car, and the solving of this problem is the object of the present invention, by which I am enabled without encroaching on the space below the seats to furnish abundant window space and means of ventilation in electric cars.

In accordance with my invention the windows on each side of the car will each be composed of two sashes and the stanchions or jambs at the edges of these sashes will be provided with independent grooves and rests for the same, the grooves extending down behind the back of the seats but not below the horizontal line of the seats. These grooves at their upper portion merge into a wider groove or space in order that the upper sash when raised may reach its rest in position to have its lower edge engaged by the upper edge of the lower sash and the entire window space thus effectually closed. When in use either or both sashes of the window may be opened or closed and the ventilation of the car regulated at will.

The invention will be more fully understood from the detailed description herein-

after presented, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a detached portion of a car showing the window sashes and stanchions or jambs embodying the invention, said sashes being shown in their elevated or closed position above the back of the usual seat. Fig. 2 is a like view of same, the back of the seat being broken away and the sashes lowered. Fig. 3 is an enlarged vertical section of same on the dotted line 3—3 of Fig. 1, and Fig. 4 is an enlarged vertical section of same on the dotted line 4—4 of Fig. 2.

In the drawings A designates the car having at definite intervals along its sides the vertical jambs or stanchions B between which are formed the window spaces each containing the vertically sliding sashes C, D. The stanchions or jambs B and pairs of sashes C, D, are duplicated along the sides of the car and hence it will suffice to describe and illustrate one pair of the stanchions or jambs and window sashes.

Upon each face of each of the stanchions or jambs B are formed the independent grooves E, F, the former for the upper sash C and the latter for the lower sash D, and these grooves E, F, merge or terminate at their upper end in the wider groove or space G having at one side the inclined surface H and at the other the rest I. The groove E below the space G has parallel sides and terminates at its lower end in the shoulder or stop J, as indicated in Figs. 3 and 4, while the groove F at its lower portion has parallel sides but at its upper portion has one inclined side L leading downward to the sill or rest M, which receives and supports the sash D when in its upper or closed position. The groove F passes downward below the groove E and terminates at the horizontal beam N which is on a line with the usual seats, not shown, for the passengers.

It will be noted that the sashes C, D, are of the same width but unequal in height, the upper sash C being the smaller and the two combined forming a very substantial window extending upward from a line adjacent to the back of the seats to the roof of the car. The method of using the sashes C, D, will be apparent from an inspection of Figs. 3 and 4, the former illustrating the sashes in

their closed or upper positions and the latter in their open or lower positions. When the sashes are in their closed positions, the lower edge of the sash C extends from the contracted top of the space G to the rest I, and the sash D extends from the lower frame of the sash C to the rest or sill M. When the sashes C, D, are to be moved to their open positions, the sash D is lifted from the sill or rest M and allowed to slide down the grooves F to the beam N, and the sash C is lifted from the rests or shoulders I and moved to and down the grooves E. On returning the sashes C, D, to their upper positions, the sash C will move against the inclined surfaces H and have its upper portion deflected thereby to position in line with the rests or shoulders I on which the lower edge of the sash will be placed; and the sash D will be moved vertically upward to the proper position and its lower edge lifted on the sill or rest M. It is not necessary that both the sashes C, D, be opened or closed at one time, and hence either or both may be opened or closed at will according to the temperature or the condition of the atmosphere in the car. The line of sashes C, D, extending from the back of the seats to the roof of the car and both movable furnish abundant light and air and are specially applicable for electric cars since neither of the sashes when lowered can pass below the horizontal line of the seats.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The car having along its sides the stanchions or jambs forming the window spaces, the upper and lower movable sashes for said spaces, and the sills M for the lower sashes, the facing sides of the said jambs being provided with the independent grooves E, F, the space G at the upper ends of said grooves, and the rests I, J for the upper sash, the rests I being at the outer side and below the upper edge of the lower sash when closed and the lower end of the groove F terminating about on a line with the car seat, substantially as and for the purposes described.

2. The car having along its sides the stanchions or jambs forming the window spaces, and the sills M between said jambs, the facing sides of the jambs being provided with the grooves E, F merging at their upper ends in the spaces G having the inclined surfaces H on one side and the sash rests I on the opposite side, and the grooves F having the inclined sides L, combined with the sashes C, D adapted to move in said grooves and spaces, the rests I being at the outer side and below the upper edge of the lower sash when closed, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 23d day of November, A. D. 1892.

JAMES A. TRIMBLE.

Witnesses:

CHAS. C. GILL,
ED. D. MILLER.