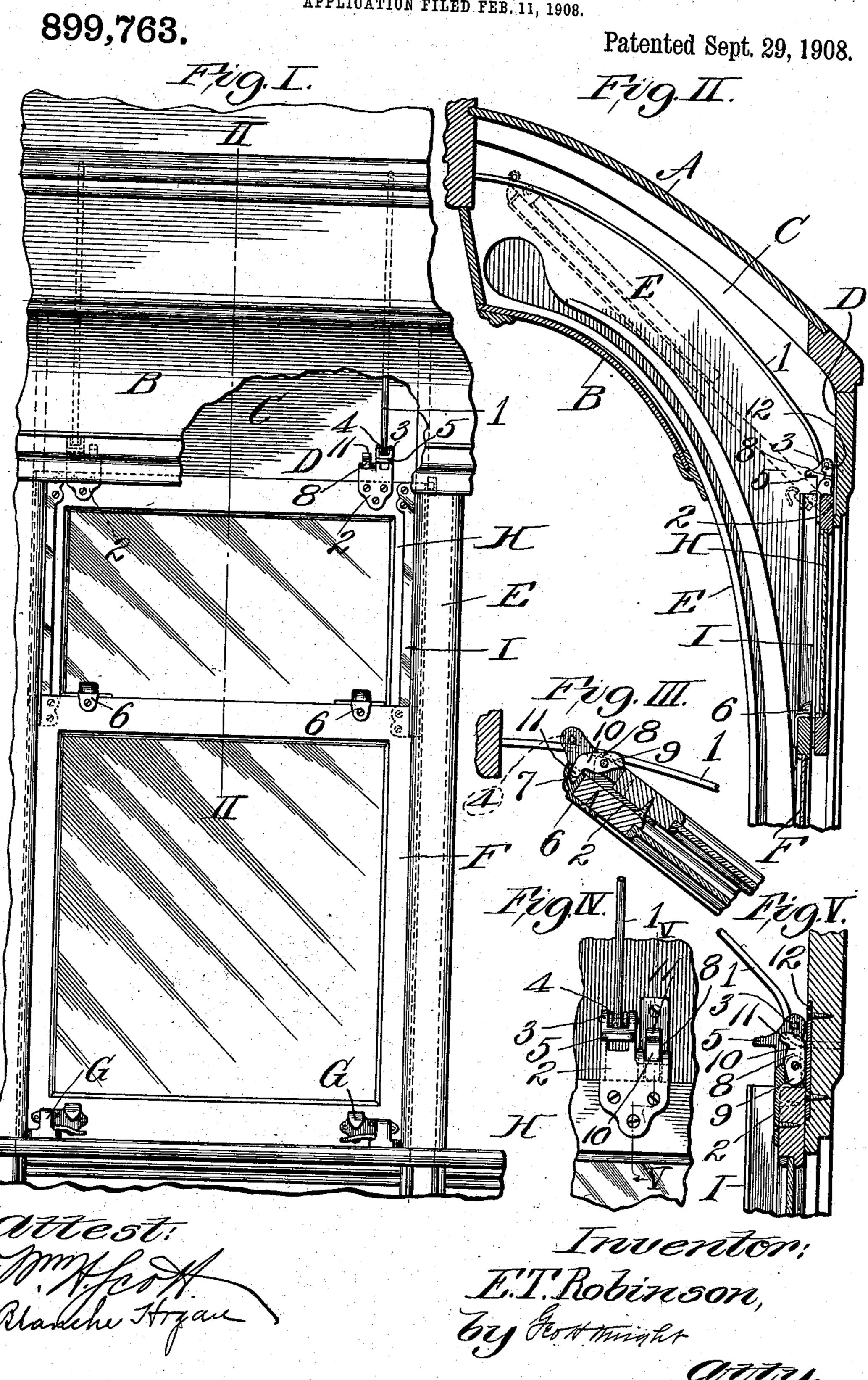
E. T. ROBINSON. RAILWAY CAR.

APPLICATION FILED FEB. 11, 1908.



UNITED STATES PATENT OFFICE.

EDWARD T. ROBINSON, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ST. LOUIS CAR COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION.

RAILWAY-CAR.

No. 899,763.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed February 11, 1908. Serial No. 415,353.

To all whom it may concern:

Be it known that I, EDWARD T. ROBINSON, a citizen of the United States of America, and residing at the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Railway-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 character of railway cars which are provided with deck compartments located above the window openings and into which lower and upper window sashes may be elevated when the car is to be used in an open condition and the window openings are to be unobstructed by

the sashes.

The objects of the present invention are to provide efficient means by which the window sashes are guided and supported when they are elevated into the deck compartments and after they have been elevated into said compartments, and means whereby the upper sash may be always lowered in conjunction with the lower sash by which it is controlled when the sashes are moved to and from the

deck compartments.

Figure I is an elevation of part of a railway car containing my improvements and looking at the parts at the interior of the car. Fig. II is an enlarged vertical section taken on line II—II, Fig. I. Fig. III is an enlarged vertical section taken through the lower and upper sashes shown in the positions assumed when they are in the deck compartment. Fig. IV is an enlarged elevation of a fragment of an upper sash, the guide and catch members carried by said sash and the lower end of one of the guide rods on which the sash carried guide members operate. Fig. V is a vertical cross section taken on line V—V, Fig. IV.

In the accompanying drawings: A designates the lower deck of a railway car and B the lower deck ceiling between which and the deck is a sash receiving compartment C.

D is a vertical side member of the car, such as the letter board, and which is located be-

50 neath the outer edge of the deck A.

E are the window posts which are provided with sash runways that are continued to the deck sash receiving compartment C in order that the sashes mounted between the posts

may be elevated directly into said compart- 55

F designates a lower sash that is provided with sash holders G and H is an upper sash provided at its inner face with pocket strips I preferably of channel shape and into which 60 the lower sash may be elevated.

1 designates a pair of guide rods located in the sash receiving compartment C and which curve upwardly from the lower end of said

compartment to the upper end of the com- 65 partment in a direction corresponding to the

curvature of the deck A.

2 designates traveler plates that are attached to the upper ends of the upper sash H. These plates are provided with upwardly 70 extending arms 3 in which are mounted rollers 4 that are adapted to operate upon the guide rods 1 when the upper sash is elevated in the sash receiving compartment C and lowered from said compartment. The carrier plates are further provided with lips 5 that extend inwardly from the faces of the plates and which are adapted to be engaged by the lower sash F when said lower sash is

elevated relative to the upper sash. The construction just described provides for the elevation of the upper sash with the lower sash to move said sashes jointly into the sash receiving compartment C and for the guiding of these sashes into said compart- 85 ment through the coöperation of the rollers 4 in the traveler plates 2 with the guide rods 1. After the sashes have been jointly elevated into the sash receiving compartment to the positions shown in dotted lines Fig. II, they 90 are maintained in such position by the engagement of the sash holders G with the side walls of the sash receiving compartment for which purpose any suitable openings to receive the sash holder bolts may be furnished 95 in said walls.

6 designates pocket plates secured to the upper ends of the lower sash F and provided with pockets 7, see Fig. III.

8 are dogs pivotally mounted in the traveler plates 2 alongside of the arms 3 of said
plates. These dogs are provided with lower
short arms 9 and upper long arms 10, the latter of which terminate in noses 11 which are
adapted to enter the pockets in the pocket
plates 6. When the lower and upper sashes
are elevated jointly into the sash receiving
compartment C and move into an inclined

position in said compartment, the upper long arms of the dogs 8 fall downwardly toward the pocket plates 6, whereby their noses are caused to enter into the pockets of said plates 5 to remain therein while the sashes are present in said compartment. When the lower sash is lowered from said compartment into the guide ways in the window posts E the dogs, by their engagement with the pocket plates 10 6, cause the upper sash to be drawn downwardly with the lower sash and as a consequence the traveler plates 2 are moved downwardly in the compartment C with their rollers 4 riding upon the guide rods 1. The two 15 sashes move downwardly together until the upper sash has passed into a vertical position in the guide ways of a window post, but just previous to the completion of the downward movement of the upper sash the lower arms 20 of the dogs 8 come into contact with bearing plates 12 at the inside faces of the fixed vertical parts D of the car wall and the dogs are

moved into vertical positions by such engagement with the result of withdrawing their noses from the pocket plate 6 of the 25 lower sash, thereby permitting the continued downward movement of said lower sash.

I claim:

The combination, with a car body having sash runways, a deck sash receiving compart- 30 ment, a guide rod in the compartment, an upper sash and a lower sash; of a traveler plate formed with upwardly extending arms, and a forwardly projecting lip at one side of the traveler plate, and secured to the upper 35 sash, a roller mounted in the arms, and traveling upon the guide rod, a dog pivoted to the other side of the traveler plate, and a pocket plate, secured to the lower sash, and with which the dog is adapted to engage.

EDWARD T. ROBINSON.

In presence of— A. Diekmann, M. C. Murphy.