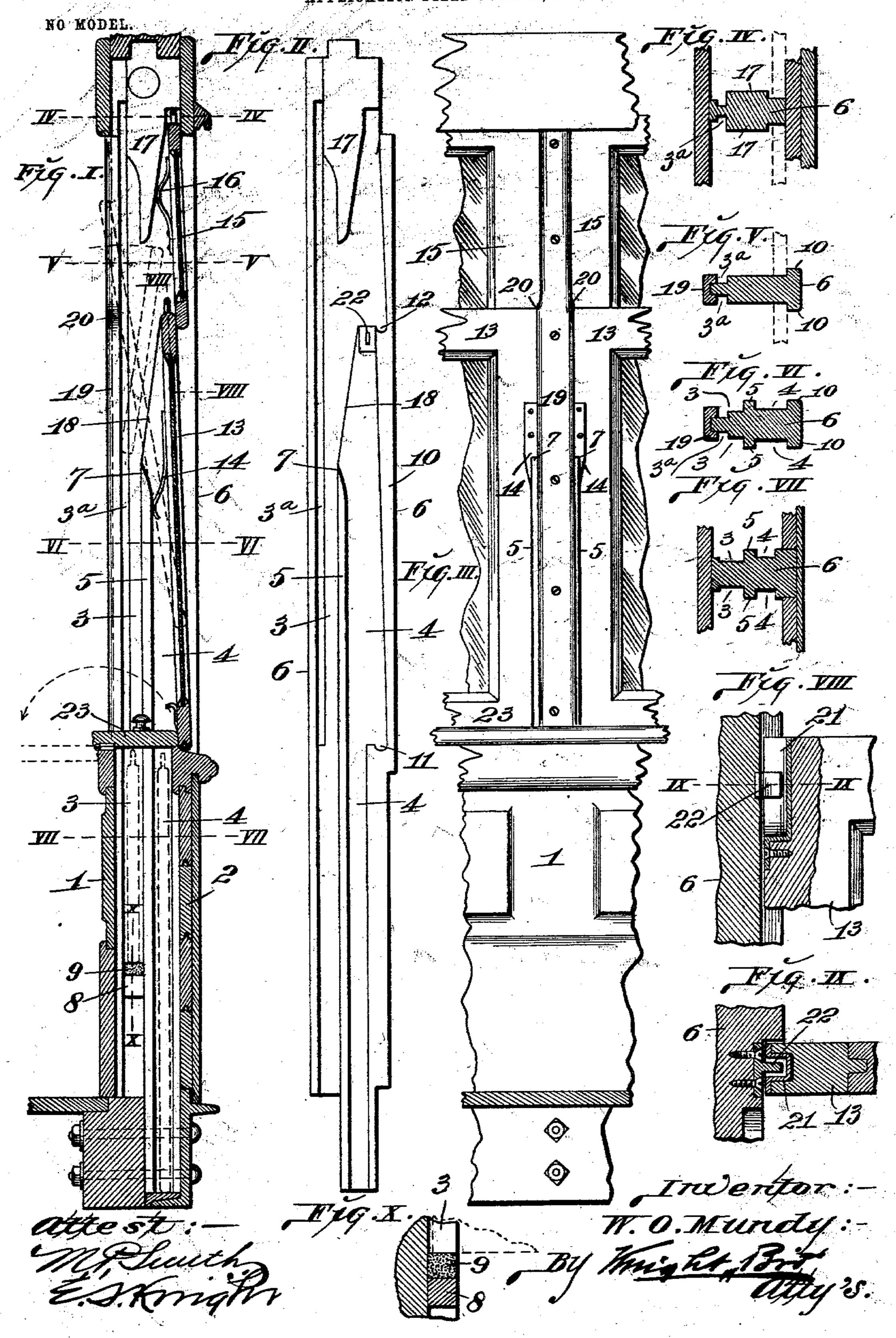
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STREET CAR WINDOW.
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STREET-CAR WINDOW.

SPECIFICATION forming part of Letters Patent No. 745,645, dated December 1, 1903.

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To all whom it may concern:

Be it known that I, WILLIAM O. MUNDY, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have 5 invented certain new and useful Improvements in Street-Car Windows, 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 an improvement in street-car windows, the object of the invention being to provide a construction that will permit of the window-sashes being removed at any time to facilitate repairs or cleaning of

15 the windows.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a vertical section taken through. 20 a car-window constructed in accordance with | from the window-posts and containing at difmy invention. Fig. II is an elevation of one of the window-posts with the facing-strip omitted. Fig. III is an elevation of a portion of a side of a car, showing parts of two 25 adjacent windows. Fig. IV is a horizontal section taken on line IV IV, Fig. I. Fig. V is a horizontal section taken on line VV, Fig. I. Fig. VI is a horizontal section taken on line VI VI, Fig. I. Fig. VII is a horizontal 30 section taken on line VII VII, Fig. I. Fig. VIII is a vertical section taken on line VIII VIII, Fig. I. Fig. IX is a horizontal section taken on line IX-IX, Fig. VIII. Fig. X is a vertical section taken on line X X, Fig. I.

1 designates the inner facing, and 2 the outer facing, of the lower portion of the side wall of a street-car. The space between these facings serves as a sash-receiving pocket, and the ends of the pocketare formed by window-40 posts 6, which extend upwardly beyond the sash-receiving pocket to constitute the sides of the window-frame. The posts 6 each contain a deep sash-runway 3 and a shallow sash-runway 4, which are separated by a vertical part-45 ing-bead 5, projecting from the sides of said posts. The deep runways 3 of the windowposts are designed to receive a wide upper window-sash to operate therein when it is raised and lowered, and the shallow runways 50 4 receive a lower sash narrower than said up-

per sash, which may be withdrawn across said

the said lower sash from its position between the window-posts in the act of withdrawing it from the window. The parting-beads 5 ex- 55 tend upwardly to a point 7 (see Fig. II) above the sash-receiving pocket hereinbefore referred to, but terminate beneath the upper ends of the sash-runways 3 and 4, thereby leaving a space above the terminations of the 60 beads, through which the window-sashes may be withdrawn from the window. The runway 4 is continued to the bottom of the sashreceiving pocket, so that the long lower sash may descend fully into said pocket, while the 65 runway 3 is discontinued above the bottom of said pocket by the introduction of a crosspiece 8, on which is mounted a cushion 9, that receives the shorter upper sash, as shown in dotted lines, Fig. I.

10 designates the outer beads projecting ferent elevations sockets 11 and 12, that respectively receive the lower and upper sashes when the window is closed.

13 designates the lower sash, which carries springs 14, that are adapted to ride and press against the parting-beads 5 when the sash is moved in the shallow runways 4.

15 is the upper sash, which bears springs 80 16, that rest against tongues 17, projecting from the window-posts, as seen in Fig. I. The upper sash 15 is of greater width than the lower sash to fit in the deep runways 3 in the window-posts, and when it is lowered into 85 its runway 3 it rides downwardly in contact with inclined guideways 18, located immediately above the terminations of the partingbeads 5.

It is of the utmost importance in street- 90 car construction that space be economized to the fullest extent, and with this in view I provide within the runways 3, in which the upper sash of the window operates, curtainrunways 3ª to receive the edges of the street- 95 car curtain and its retaining-rod, so that the curtain may be guided between the windowposts in approximately the same line of movement as the upper sash, which is lowered through substantially the same runway.

19 designates one of the facing-strips secured to the window-post at each side of the window. These strips project beyond the side deep runways 3 when it is desired to remove | faces of the window-posts, as seen in Figs. V

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and VI, and their projecting edges serve as the forward beads of the sash and curtain runways 3 and 3^a, while the upper ends of said facing-strips are narrowed from the point 5 20 (see Fig. III) to permit the removal of the upper sash from the rear of the strips.

21 designates pockets set into the side edges of the lower sash 13 at their upper ends, (see Figs. VIII and IX,) and 22 designates retain-10 ing-tongues secured to the window-posts at the locations occupied by the upper end of the lower sash when it is in closed position. When the lower sash is raised to seat it in its supporting-socket 11, the tongues are there-15 by caused to serve as stops or guards against the withdrawal of the sash from its position between the window-posts, owing to the upward travel of the sash being stopped when the bottoms of the pockets reach the retain-20 ing-tongues, into which they enter, as seen in Figs. VIII and IX. 23 is a door that serves as a guard to the entrance-way of the sash-receiving pocket.

In the ordinary use of a window construct-25 ed in accordance with my invention the lower and upper sashes are readily displaced from their sockets and lowered through their respective runways, being guided and directed in their travel by the beads 5 and 10 and the 30 facing-strip 19, the lower sash being in addition controlled by the retaining-tongues 22 when it is raised.

When it is desired to remove the sashes from the window, this is readily accomplished 35 in the following manner: To remove the lower sash, it is lowered in its runway sufficiently to permit of the pockets 21 being disengaged from the retaining-tongues 22 by pulling the upper end of the sash slightly forward of the 40 vertical lines in which the tongues are positioned. The sash may then be drawn upwardly, as illustrated by dotted lines, Fig. I, and after it has passed the parting-beads 5 it may be drawn straightway forward out of the 45 window, passing between the facing-strips 19. In the removal of the upper sash it is lowered in its runway 3 to a sufficient extent to permit its upper edge to pass beneath the

tongues 17 at the top of the window, as shown by dotted lines, Fig. I. When this is done, the 50 upper end of said sash is drawn forwardly and the sash is lifted out of the window by passing it between the narrowed upper ends of the facing-strips 19.

I claim as my invention—

1. In a car-window, the combination of a pair of posts containing sash-runways open at their upper terminations to permit the withdrawal of a sash, a sash to operate in said runways, and retaining-tongues to limit the 60 upward movement of said sash and prevent its withdrawal from between said posts when the sash is raised in a direct line, substantially as set forth.

2. In a car-window, the combination of a 65 window-sash, posts in which said sash operates, and means for confining said sash having narrowed portions between which said sash may be withdrawn from its position between said posts, substantially as set forth. 70

3. In a car-window, the combination of a window-sash, posts in which said sash operates, and facing-strips applied to said posts for confining said sash; said facing-strips having narrowed portions between which said 75 sash may be withdrawn from its position between said posts, substantially as set forth.

4. In a car-window, the combination of a pair of posts, parting-beads projecting from said posts, lower and upper sashes arranged 80 to operate in runways at opposite sides of said parting-bead, a bead containing sockets in which said sashes are supported, and facing-strips secured to said posts; said facingstrips having narrowed upper ends, substan-85 tially as and for the purpose set forth.

5. In a car-window, the combination of a pair of posts, a sash operating between said posts, pockets carried by said sash, and tongues secured to said posts to enter said 90 pockets, substantially as and for the purpose set forth.

WILLIAM O. MUNDY.

In presence of— E. S. KNIGHT, NELLIE V. ALEXANDER.