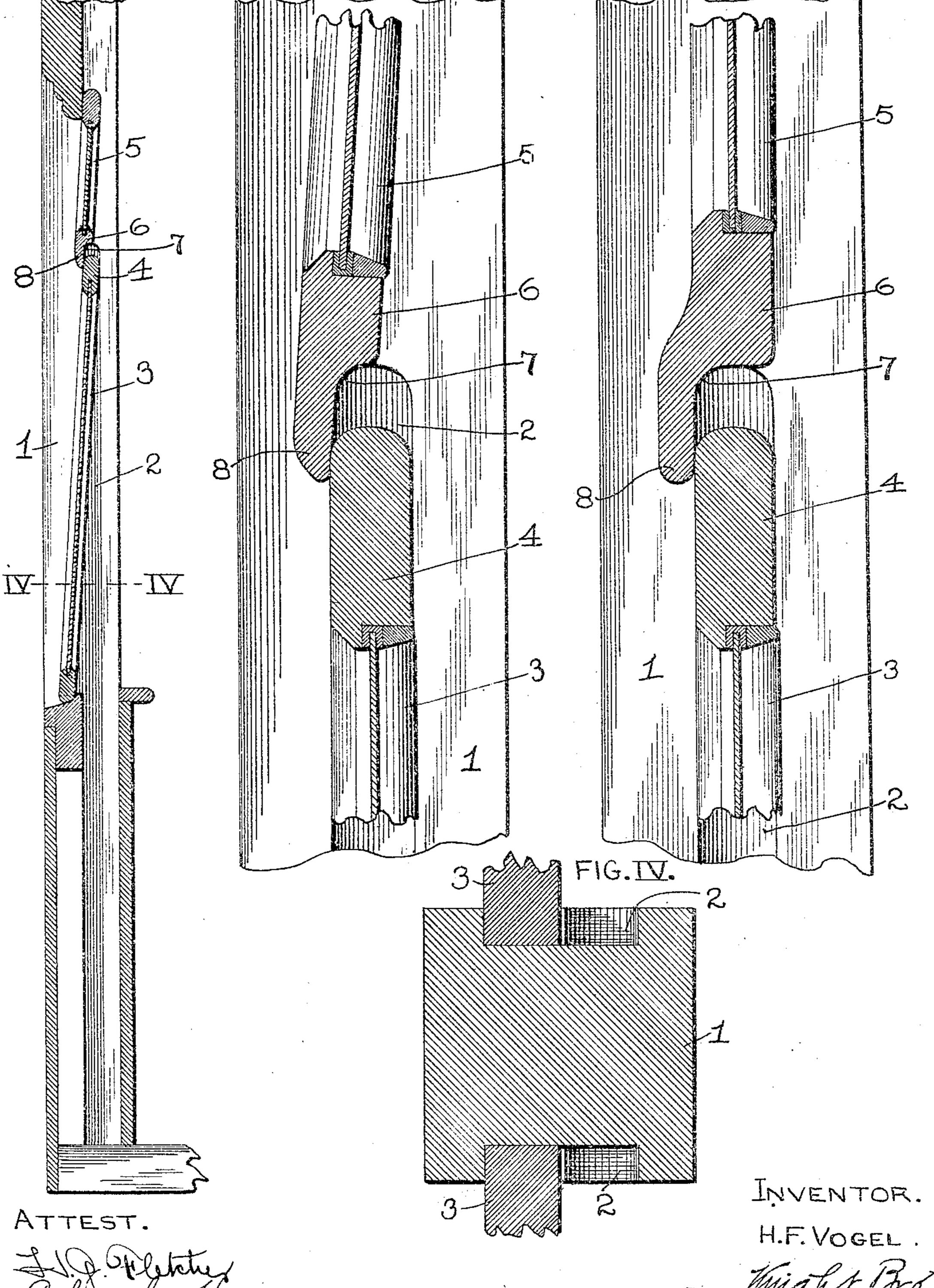
## H. F. VOGEL. CAR WINDOW. PPLICATION FILED MAR. 25, 1904

FIG.I. FIG.II. FIG.II.



Blanche Hogan.

By. Might Bro

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## United States Patent Office.

HENRY F. VOGEL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ST. LOUIS CAR COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION.

## CAR-WINDOW.

SPECIFICATION forming part of Letters Patent No. 778,517, dated December 27, 1904.

Application filed March 25, 1904. Serial No. 199,893.

To all whom it may concern:

Be it known that I, Henry F. Vogel, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented ed certain new and useful Improvements in 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 the construction of car-windows, and has for its object to provide an arrangement whereby dust, air, and moisture may be more effectually excluded from the interior of street-railway cars than by the windows of such cars

as heretofore made.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claim.

Figure I is a vertical transverse section taken through a car-window. Fig. II is an enlarged vertical section taken through the upper portion of a lower window-sash and the lower portion of an upper window-sash. Fig. III is a similar view to Fig. II, showing the upper window-sash in the same vertical plane as the lower sash instead of being set at an angle thereto. Fig. IV is an enlarged horizontal

section taken on line IV IV, Fig. I.

1 designates a window-post having the sash-

runway 2.

3 designates a lower sash the stiles of which

operate in the runway 2 and a corresponding runway in the opposing window-post.

4 is the upper rail of the sash 3. The en- 35 tire lower sash may be of any common shape.

5 designates the upper window-sash. This upper sash has a lower rail 6, that when the window-sashes are in elevated positions mainly surmounts the upper rail of the lower 40 sash 3. The upper-sash lower rail is cut away at 7, thereby providing a tongue or lip 8, that juts downwardly beyond the top edge of the lower-sash upper rail at its exterior face, thereby preventing the passage of air, 45 dust, or moisture between the opposing sashrails to gain ingress into the car to which the sashes are applied. The upper sash may be set at an angle to the lower sash, as shown in Figs. I and II, or it may be in the same vertical 50 plane as the lower sash, as shown in Fig. III.

I claim as my invention—
In a car-window, the combination with the lower sash, its sashway and upper rail, of the upper sash having in the inner side of its lower 55 rail a cut of a shape corresponding to the shape of the upper part of the sashway for the lower

sash, said cut forming in said lower rail a tongue adapted to overlap the upper rail of the lower sash when the window is closed.

HENRY F. VOGEL.

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