

(No Model.)

2 Sheets—Sheet 1.

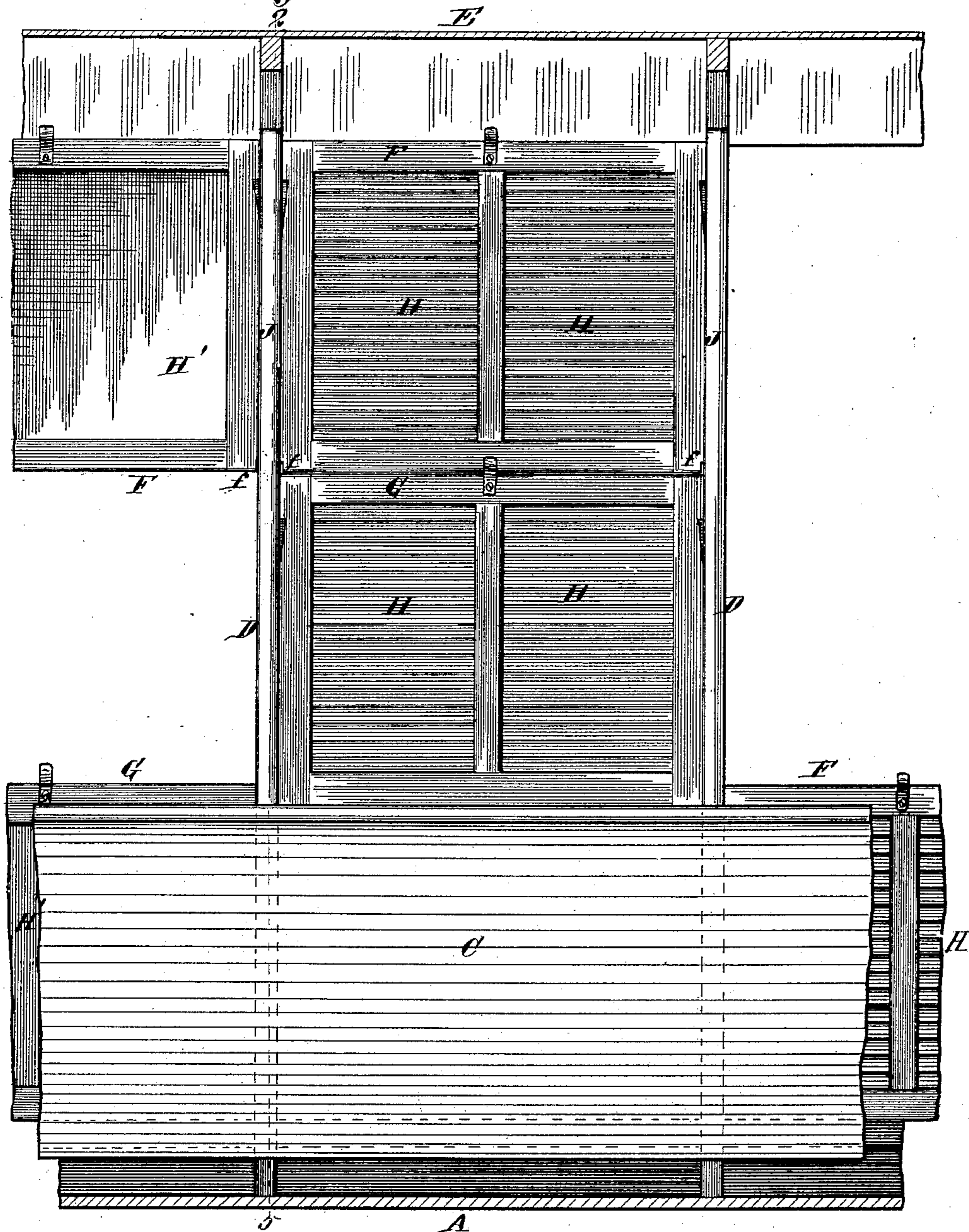
W. SUTTON.

CAR SASH.

No. 364,191.

Patented May 31, 1887.

Fig. 1.



Attest:
Charles Pickles
F. A. No. 1000

Inventor:
William Sutton
By Knight Bros.
Atty.

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Fig. 2.

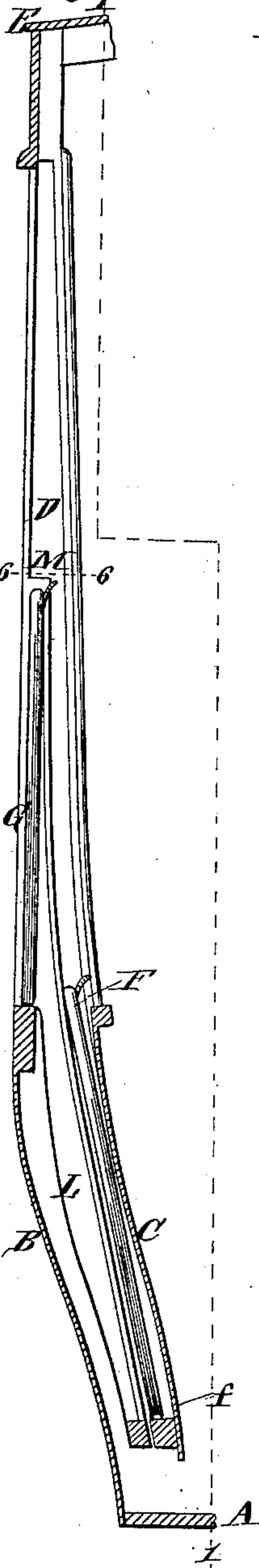


Fig. 3.

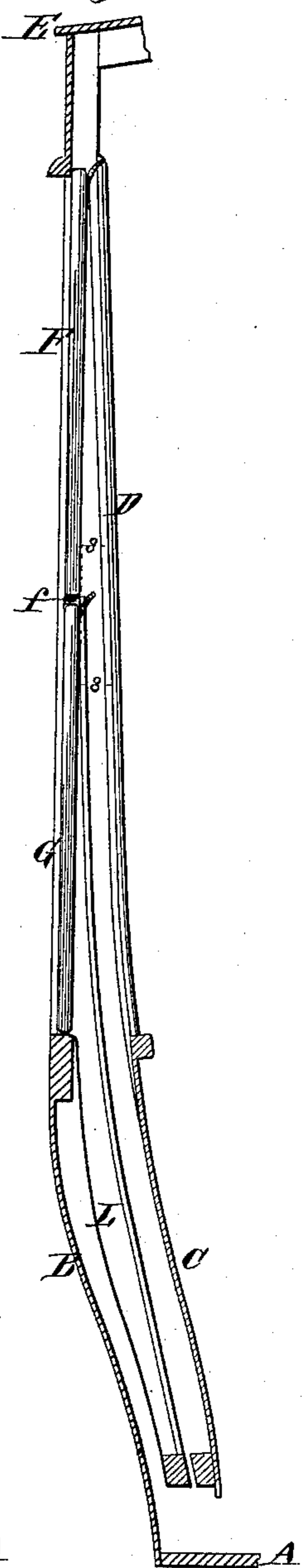


Fig. 4.

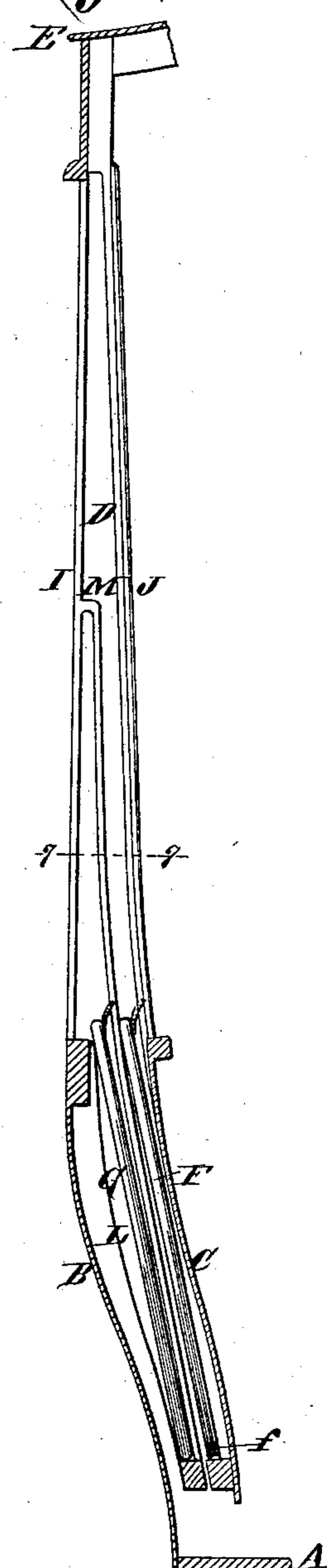


Fig. 5, Fig. 10

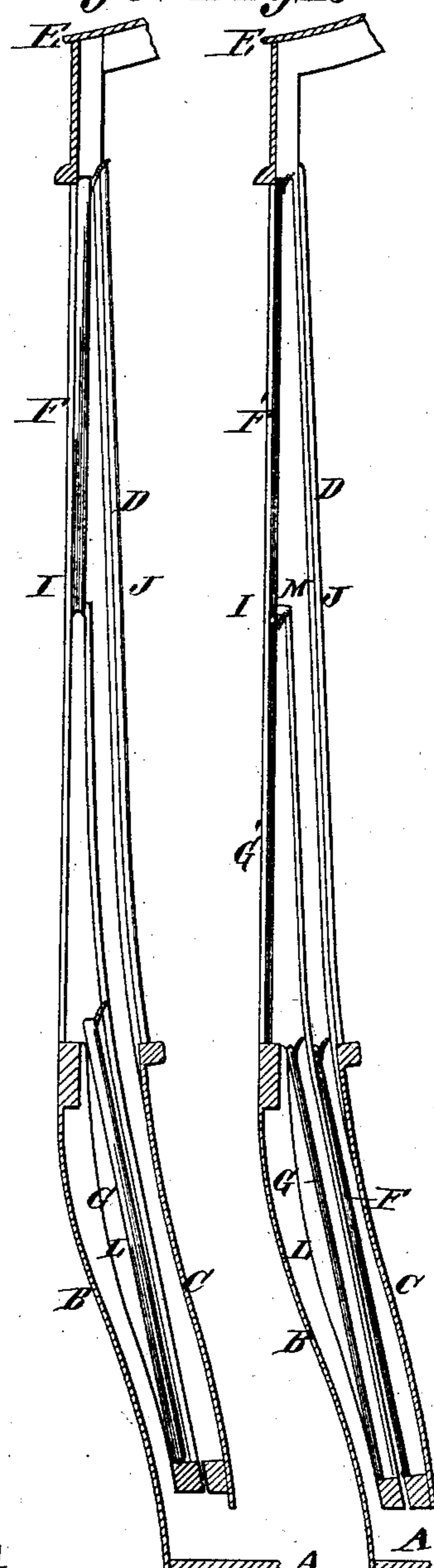


Fig. 6.

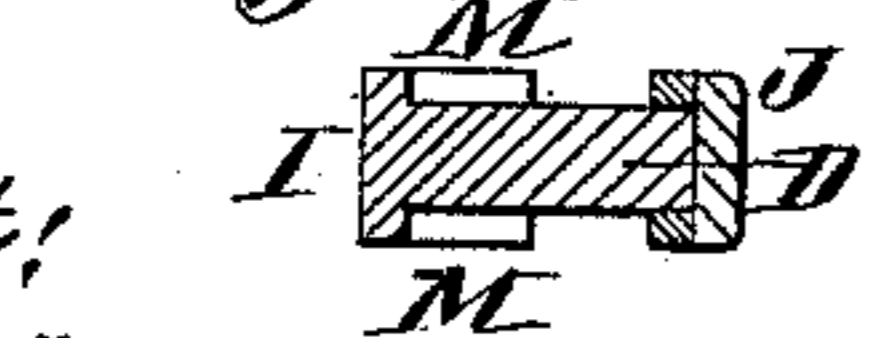


Fig. 7.



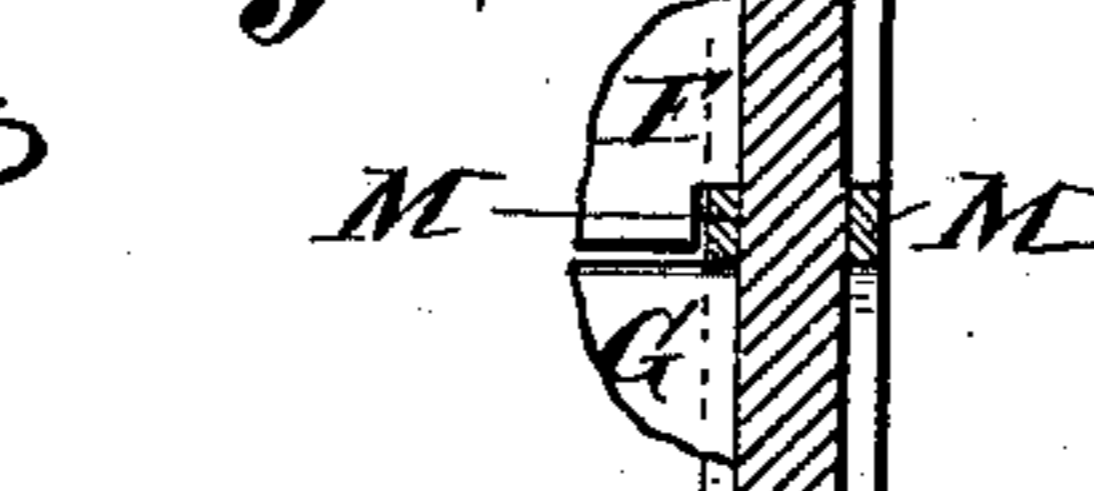
Fig. 9.

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Fig. 8.



UNITED STATES PATENT OFFICE.

WILLIAM SUTTON, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE LA CLEDE
CAR COMPANY, OF SAME PLACE.

CAR-SASH.

SPECIFICATION forming part of Letters Patent No. 364,191, dated May 31, 1887.

Application filed January 14, 1886. Serial No. 188,580. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SUTTON, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Car-Sashes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This is an improvement intended especially for the class of convertible cars for summer and winter use.

The improvement relates to those window-frames provided with sashes which descend into parallel position in a pocket of the car-body, and which can be raised one above the other, and occupy together the whole window-space.

Figure 1 is a detail longitudinal section of a car-body at 1 1, Fig. 2. Fig. 2 is a detail transverse section at 2 5, Fig. 1, showing the edges of the sashes in elevation, the inner sash being down and the outer sash raised. Fig. 3 is a section at 2 5 showing both sashes raised. Fig. 4 is a section at 2 5 showing both sashes down. Fig. 5 is a section at 2 5 showing the inner sash raised and the outer sash down. Fig. 6 is a detail horizontal section at 6 6, Fig. 2. Fig. 7 is a detail horizontal section at 7 7, Fig. 4. Fig. 8 is a detail vertical section at 8 8, Fig. 3. Fig. 9 is an enlarged detail vertical section at 9 9, Fig. 1; and Fig. 10 is a section showing a modification.

At A is shown the bottom of a car-body, at B the outside wall, and at C the inside wall or lining.

D are the stiles or posts, and E the top.

F and G are respectively the inner and the outer sashes, the outer sash being the lower sash when they are both raised.

The object of the improvement is to have large window-openings, which may be completely closed or partly closed by the sashes, the construction being such that either or both of the sashes may be up or down. The sashes are shown with slats H; but in place of the slats in either or both of the sashes there may be a pane or panes, H', of glass, the slats being generally preferable in one or both of the sashes for summer use, and glass being preferable for use in cold weather. In addition to the ordinary guide ribs or cleats, I and J, there is a rib or cleat, K, upon each side,

extending down into the pocket L, and which form bearing for both sashes. At its upper end each cleat K is connected to the outer cleat, I, by a stop-piece, M, which serves two purposes--namely, to arrest the ascent for the outer (and lower) sash, and to form a support for the inner (and upper) sash when this sash is up. The upper sashes are notched out at the lower corners, f, to make place for the supports M, so that the lower edges of the upper sashes between the supports M may rest upon the upper edges of the lower sashes. I prefer to groove out the lower edges of the upper sashes, so that they will fit the rounded upper edges of the lower sashes and form a rain-tight joint, beside making a neat finish and serving to hold the upper sashes in position when both sashes are raised.

As a modification, the car may have, in addition to the two or more sashes F G to each window, two or more additional sashes, F' G', as shown in Fig. 10, the sashes F G containing slats and the sashes F' G' containing glass, or vice versa.

I claim as my invention--

1. In combination with the frame of a car-window having a receptacle below the sill for the reception of the sashes, two sashes, an upper and a lower, suitable means for supporting the latter, and a ledge extending from the window-frame for supporting the former, each independent of the other, and both in a vertical plane, whereby either may be lowered without disturbing the other, substantially as set forth.

2. The combination of two or more sashes, as F G, the window-stiles of a car, and the central guide-cleat, K, with stop-piece or rest M, substantially as and for the purpose set forth.

3. The sash F, having a grooved lower edge, in combination with the sash G, having an upper edge adapted to enter the said groove, for the purpose set forth.

4. The combination of stiles D, guide-cleats I J K, the stop-piece or rest M, the lower sash, G, and the upper sash, F, recessed at f to receive the rests M, as set forth.

WM. SUTTON.

In presence of--

SAML. KNIGHT,
BENJN. A. KNIGHT.