

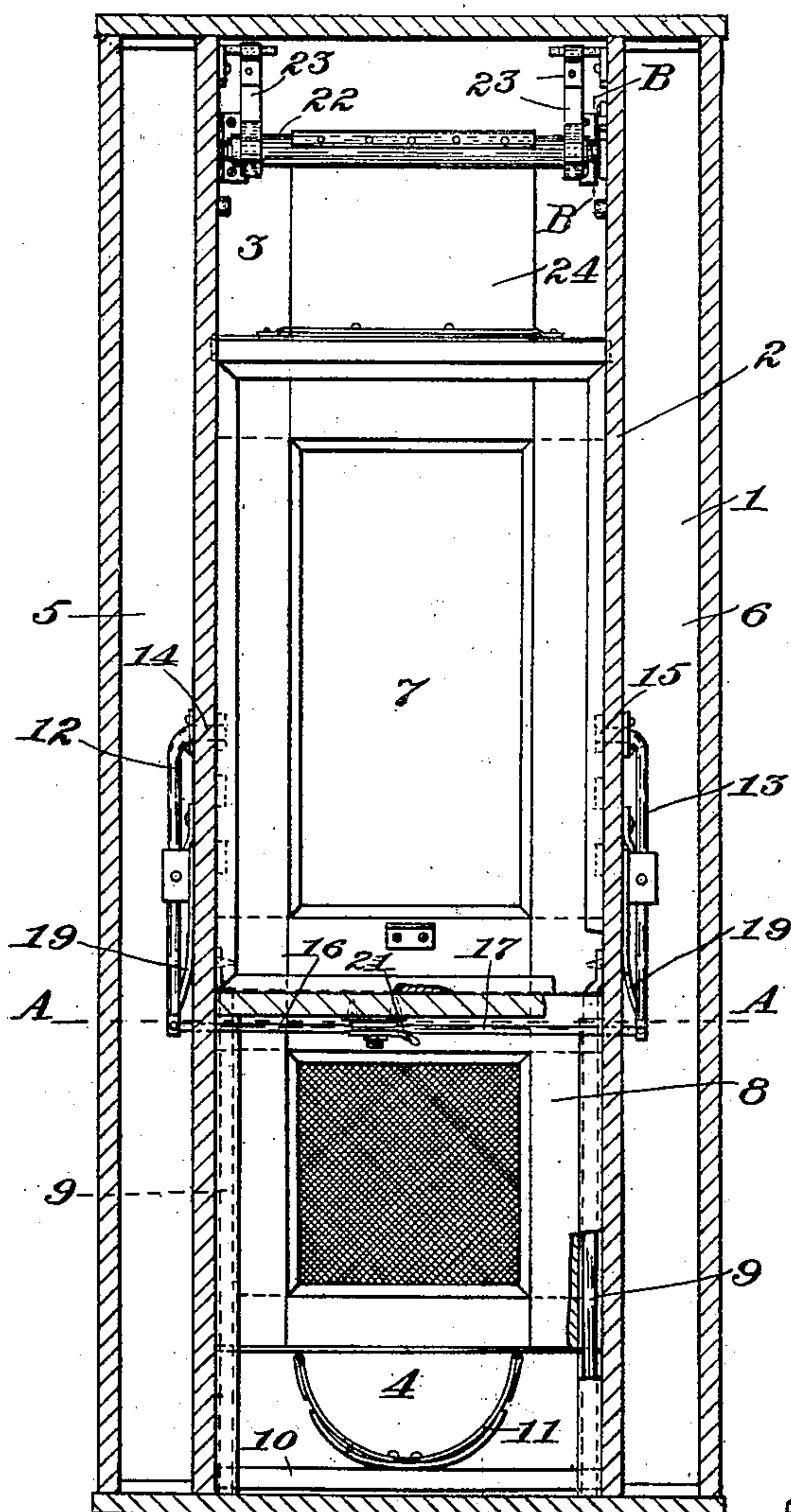
No. 816,539.

PATENTED MAR. 27, 1906.

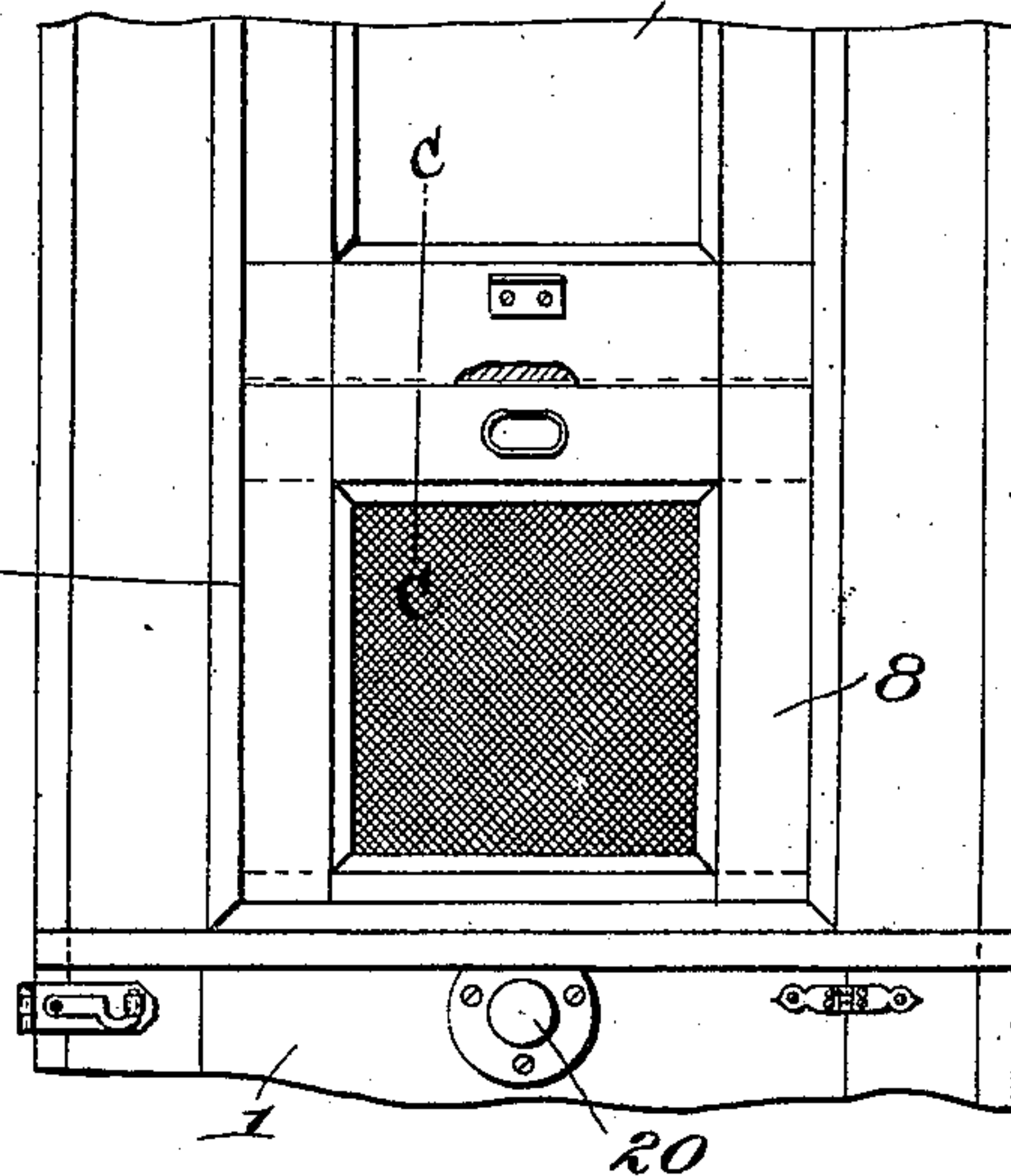
H. F. DIETZ.  
CAR WINDOW.

APPLICATION FILED MAY 20, 1904.

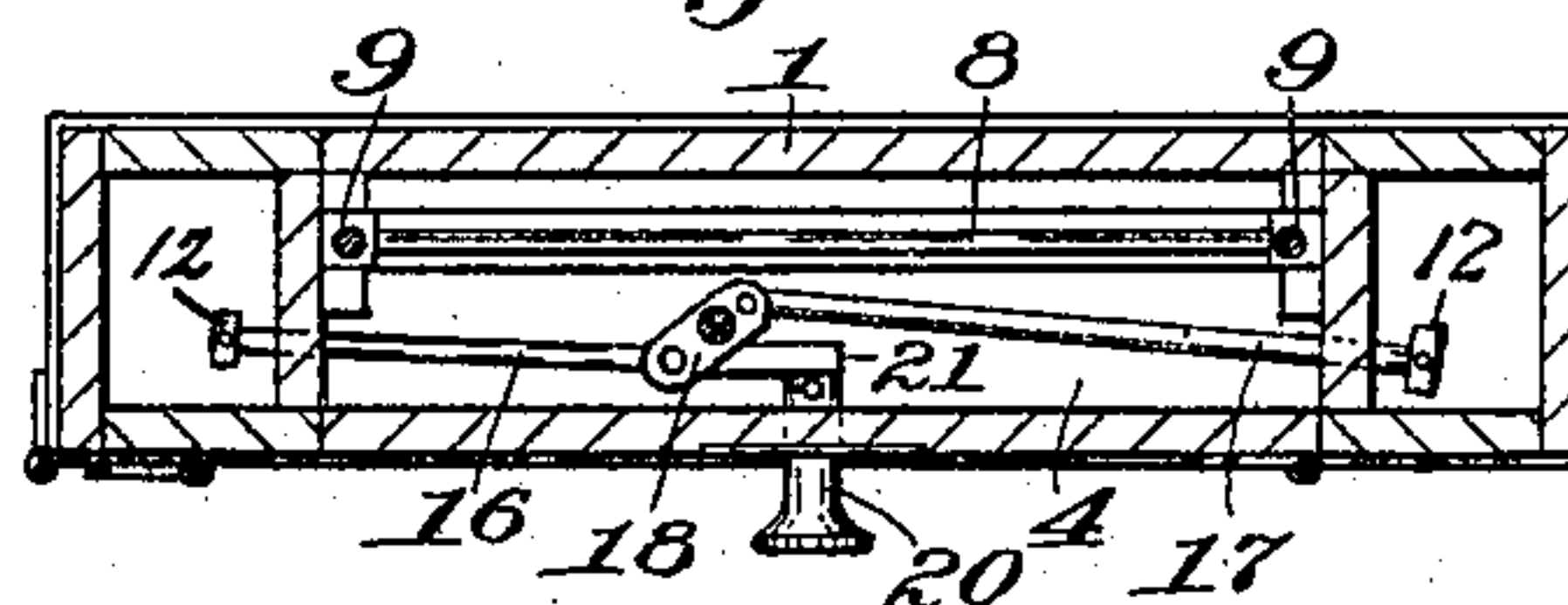
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

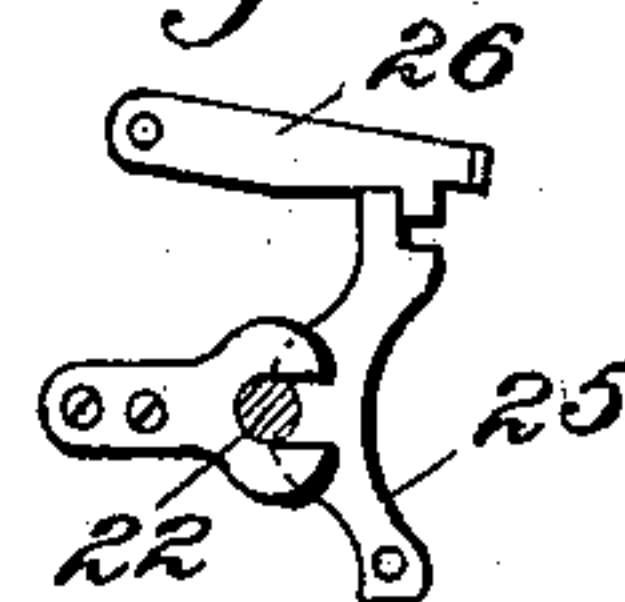
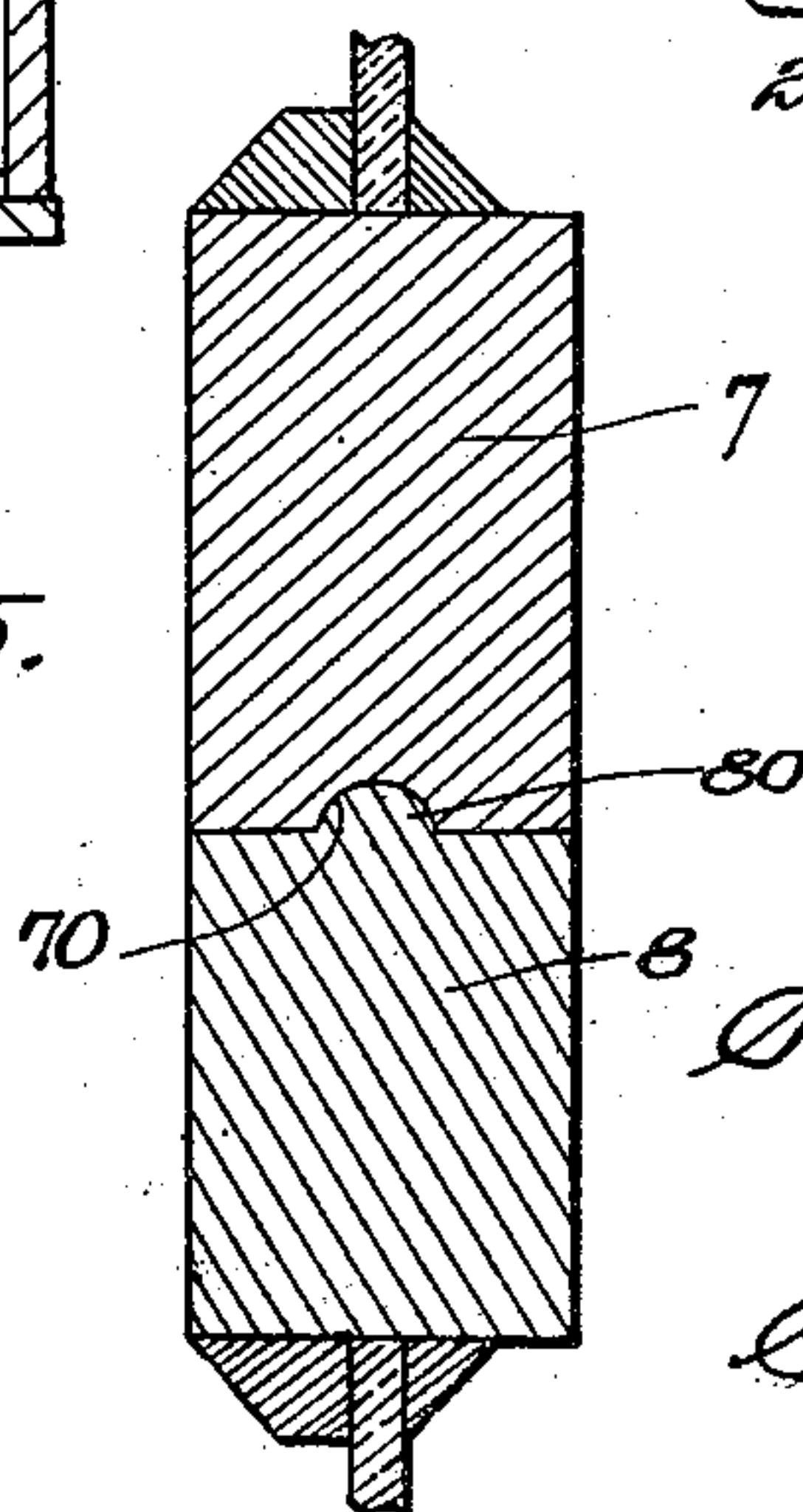


Fig. 5.



**WITNESSES:**

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INVENTOR

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BY

BY  
*Henry Parsons*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

HERMAN F. DIETZ, OF SYRACUSE, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-FOURTH TO JOSEPH SHEHADI AND ONE-FOURTH TO BESHARA SHEHADI, OF SYRACUSE, NEW YORK.

## CAR-WINDOW.

No. 816,539.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed May 20, 1904. Serial No. 208,949.

*To all whom it may concern:*

Be it known that I, HERMAN F. DIETZ, of Syracuse, in the county of Onondaga and State of New York, have invented a certain new and useful Car - Window, of which the following is a specification.

My invention relates to windows, particularly applicable to railway-coaches, and has for its object the production of sash supporting and manipulating means which is especially simple in construction and durable and efficient in use; and to this end it consists in the combinations and constructions hereinafter fully set forth and claimed.

In describing this invention reference is had to the accompanying drawings, in which like characters designate corresponding parts in all the views.

Figure 1 is a vertical sectional view, partly in elevation, of a window embodying a preferable construction of my invention. Fig. 2 is a front elevation, partly in section, of the lower portion of the window. Figs. 3 and 4 are sectional views, respectively, on lines A A and B B, Fig. 1. Fig. 5 is an enlarged sectional view on line C C, Fig. 2.

1 is a window-frame having an opening 2, chambers 3 4 above and below the opening 2 communicating therewith, and chambers 5 6 at opposite sides of said opening. This frame 1 may be of any desirable form, size, and construction.

7 is a sash which normally closes the opening 2, is movable upwardly into the chamber 3, is provided with a longitudinal groove 70 in its lower edge, Figs. 2 and 5, and is also of any desirable form, size, and construction.

8 is a supplemental sash normally arranged in the chamber 4 and movable with and relatively to the sash 7, said supplemental sash 8 lying in the same plane as the sash 7 and being normally in contact therewith. In the illustrated construction of my invention the sash 8 is provided with a central screen and is supported by a suitable carriage movable with the sash 7 and comprising bars 9, depending from the sash 7 into the chamber 4 and spaced a distance apart, and a cross-bar 10 between the lower ends of the bars 9. A suitable spring 11 is mounted on the cross-

bar 10 and engages the lower edge of the sash 8 for holding said sash 8 in its normal position and forcing a lengthwise tongue 80 on the upper edge of said sash into the groove 70 in the lower edge of the sash 7 and for permitting the sash 8 to move relatively to the sash 7 out of its normal position. Whenever the sash 7 is elevated, the sash 8 is simultaneously raised out of the chamber 4 by the parts 9 10 11, movable with the sash 7. Consequently the sash 8 closes the portion of the opening 2 beneath the sash 7 when raised, and thus facilitates the passage of air through the window and prevents the entrance of dust or the projection of passengers' arms or heads through the opening of the window. It will be understood, however, that whenever desired, especially for throwing articles from the coach, the sash 8 may be moved against the action of the spring 11 downwardly and relatively to the sash 7 and the carriage depending therefrom. This spring 11 may, however, be dispensed with and the supplemental sash then fixed to the main sash 7.

In the preferable construction of my invention the sash 7 is raised automatically and is prevented from upward movement by suitable stop-levers 12 13, which, as here illustrated, extend lengthwise of the sash 7, at opposite sides thereof, in the chambers 5 6 in the frame 1 and are pivoted intermediate of their ends to said frame. The upper ends of the levers 12 13 are formed with laterally-extending engaging parts 14 15, fixed thereto and movable into and out of sockets in the side edges of the sash 7, and the lower ends of said levers are respectively connected by links 16 17 to the opposite ends of a lever 18, pivoted intermediate of its ends to the frame 1, said links 16 17, and lever 18 being movable in a substantially horizontal plane beneath the opening 2. These levers 12 13 are normally held in operative engagement with the sash 7 by any desirable springs 19. An actuating member 20, arranged beneath the opening 2 and movable in a direction at substantially right angles to the path of movement of the sash 7, engages a lateral extension 21 of the lever 18 and coöperates therewith for operat-



ing the lever 18 to withdraw the stop-levers 12 13 from operative position against the action of the springs 19.

The illustrated means for automatically raising the sash 7 comprises a roller 22, suitable coiled springs 23, and a flexible connection 24 between the sash 7 and the roller 22. A portion of the roller 22 is journaled in a bearing having an open-sided bearing-opening and is held in said opening by a pivoted part 25, Fig. 4, engaging the roller 22, and a pivoted catch 26, detachably engaging the free end of said part 25.

The construction and operation of my window will now be readily understood upon reference to the foregoing description and the accompanying drawings, and it will be apparent to those skilled in the art that more or less change may be made therein without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a window, the combination of a movable sash, means for moving the sash, pivoted stop-levers arranged at opposite sides of the sash and having corresponding ends movable into engagement with the sash for limiting the movement thereof, a lever pivoted intermediate of its ends and having its ends connected respectively to the other ends of the stop-levers, said lever being provided with a lateral extension, and an actuating member cooperating with the lateral extension for operating the lever, substantially as and for the purpose described.

2. In a window, the combination of a frame having an opening, a movable sash for normally closing the opening, means for moving the sash, pivoted stop-levers movable into engagement with the sash for limiting the movement thereof, a lever pivoted intermediate of its ends and having its ends connected respectively to the stop-levers, and an actuating member for the lever, arranged beneath the opening and movable in a direction at right angles to the path of movement of the sash, substantially as and for the purpose specified.

3. In a window, the combination of a frame having an opening, a movable sash for normally closing the opening, means for moving the sash, pivoted stop-levers extending lengthwise of the sash at opposite sides thereof and having corresponding ends provided with laterally-extending engaging parts fixed thereto and movable into engagement with the sash for limiting the movement thereof, a lever pivoted intermediate of its ends and having its ends connected respectively to the other ends of the stop-levers, and an actuating member for the lever, arranged beneath the opening and movable in a direction at right angles to the path of movement of the

sash, substantially as and for the purpose set forth.

4. In a window, the combination of a frame having an opening, a movable sash for normally closing the opening, means for moving the sash, pivoted stop-levers extending lengthwise of the sash at opposite sides thereof and having corresponding ends provided with laterally-extending engaging parts fixed thereto and movable into engagement with the sash for limiting the movement thereof, a lever pivoted intermediate of its ends and having its ends connected respectively to the other ends of the stop-levers, said lever being provided with a lateral extension, and an actuating member cooperating with the lateral extension for operating the lever, said actuating member being arranged beneath the opening and movable in a direction at right angles to the path of movement of the sash, substantially as and for the purpose described.

5. In a window, the combination of a movable sash, a carriage movable with the sash, and a supplemental sash supported by the carriage and movable therewith and relatively thereto, substantially as and for the purpose described.

6. In a window, the combination of a movable sash, a supplemental sash lying in the same plane as the first-mentioned sash and normally in contact therewith, and a spring for holding the supplemental sash in its normal position and for permitting movement thereof relatively to the first-mentioned sash out of its normal position, substantially as and for the purpose set forth.

7. In a window, the combination of a movable sash, a carriage movable with the sash, a supplemental sash supported by the carriage and movable therewith and relatively thereto, and a spring supported by the carriage for moving the supplemental sash relatively to the carriage, substantially as and for the purpose set forth.

8. In a window, the combination of a frame having an opening and a chamber extending beneath the opening and communicating therewith, a movable sash for normally closing the opening, a carriage movable with the sash and comprising, bars depending from the sash into the chamber and spaced a distance apart, and a cross-bar between the lower ends of the depending bars, a supplemental sash normally arranged in the chamber and guided on the depending bars, and a spring mounted on the cross-bar for forcing the supplemental sash toward the first-named sash, substantially as and for the purpose described.

9. In a window, the combination of a frame, a sash, a bearing formed with an open-sided bearing-opening, a roller having a bearing in said opening, a flexible connection between



the sash and the roller, a pivoted part for holding the roller in said bearing-opening, and a catch for detachably engaging said pivoted part, substantially as and for the purpose specified.

5 In testimony whereof I have hereunto signed my name, in the presence of two at-

testing witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 23d day of November, 1903.

HERMAN F. DIETZ.

Witnesses:

D. LAVINE,  
S. DAVIS.