No. 829,041. PATENTED AUG. 21, 1906.

Z. L. TRAINHAM.

WINDOW.

APPLICATION FILED DEC. 4, 1905.

Fig. 1.

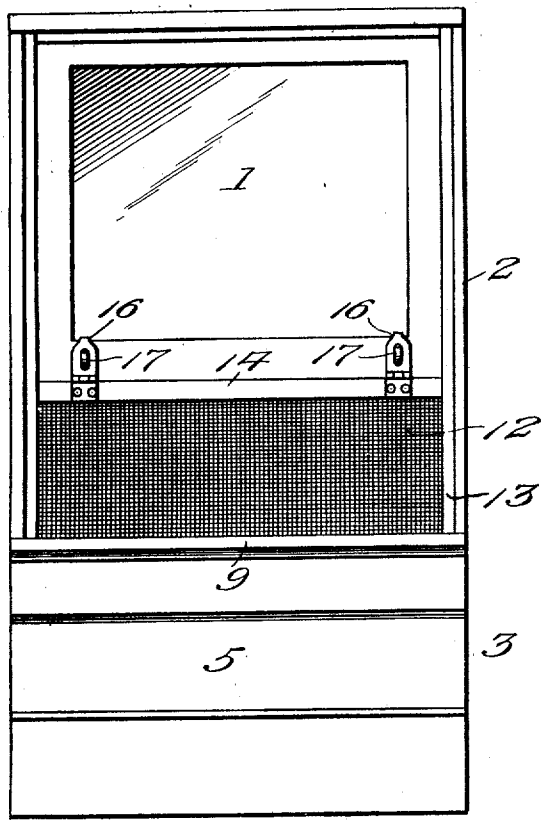


Fig. 2.

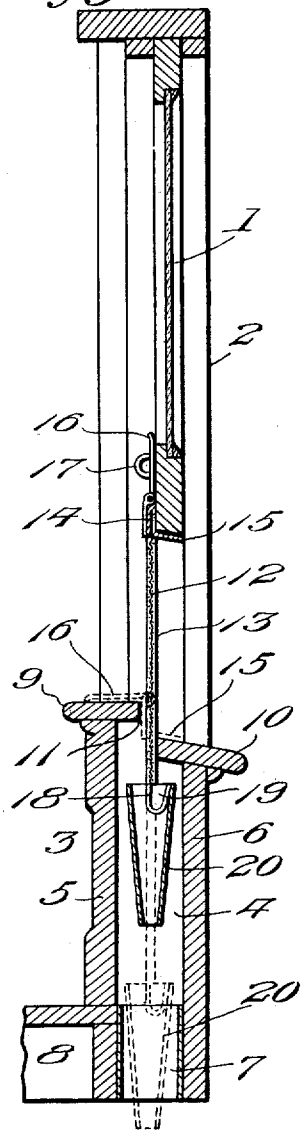
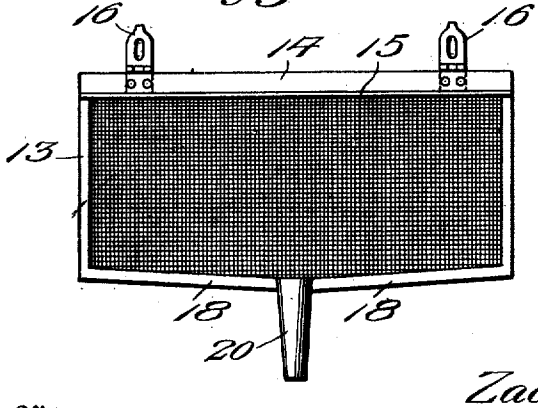


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

ZACHARIAH L. TRAINHAM, OF RICHMOND, VIRGINIA, ASSIGNOR OF ONE-HALF TO THOMAS R. GOOCH, OF RICHMOND, VIRGINIA.

WINDOW.

No. 829,041. Specification of Letters Patent. Patented Aug. 21, 1906.

Application filed December 4, 1905. Serial No. 290,282.

To all whom it may concern:

Be it known that I, ZACHARIAH L. TRAINHAM, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented new and useful Improvements in Windows, of which the following is a specification.

This invention relates to windows designed especially for application to railway-cars, and has for its objects to produce a comparatively simple inexpensive device of this character which may be readily installed for use, one whereby the entrance of cinders into the car when the window is open for ventilation is obviated, and one wherein rain-water falling on the screen-section of the window will be effectually drained therefrom and discharged outside of the car.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is an inner face view of a window embodying the invention. Fig. 2 is a vertical section centrally through the window, showing the same applied to a car. Fig. 3 is a side elevation of the screen-section.

Referring to the drawings, 1 designates a window arranged for vertical sliding movement in a frame 2, included in a car or other structure 3 and having therebeneath a compartment or well 4, formed between the inner wall 5 and outer wall 6 of the structure and provided at its lower end with a discharge opening or port 7, suitably formed in the sill 8 of the structure, there being provided at the bottom of the frame 2 an inner sill 9 and an outer inclined sill 10, sustained, respectively, on the walls 5 and 6 and having their inner adjacent edges spaced to provide a guide opening or way 11, communicating with the compartment 4 and at the upper end of the latter.

Mounted for vertical movement in the guide-opening 11 and adapted to be housed within the well or compartment 4 is a reticulated window section or screen 12, the frame 13 of which has formed upon its upper bar or rail 14 an outwardly-extending substantially horizontal flange 15, adapted to engage the sill 10 for limiting the downward movement of the screen into the compartment 4 and to bear beneath the lower edge of the window 1, to which the screen may be coupled by means of coupling members or hasps 16, hinged to the bar 14 and adapted for engagement with members or staples 17, carried by the frame of the window 1, the hasps 16 being adapted to fold downward to the position indicated by dotted lines in Fig. 2 and bear upon the sill 9 when the screen is housed within the well 4.

Provided on the lower bar 18 of the screen-frame 13 is a trough or gutter 19, adapted to communicate with a tubular discharge member or spout 20, carried by and positioned at the longitudinal center of the bar or rail 18, the gutter 19, which is preferably formed integral with and by suitably bending the bar 18 into shape, being inclined from its ends downwardly toward its point of communication with the spout 20, whereby water received in the gutter will be freely discharged into the spout, the lower end of which is positioned over and for discharge through the port 7.

In practice the screen 12 normally occupies the dotted-line position illustrated in Fig. 2, housed within the compartment 4, under which conditions the flange 15 will rest upon the sill 10 and the spout 20 project downward through the opening or port 7, it being noted in this connection that the window 1 is considerably shorter than its frame 2 to insure proper ventilation of the car or other apartment. When it becomes necessary or desirable to bring the screen into use for preventing the entrance of cinders or the like through the opening or space between the lower edge of the window 1 and the bottom of frame 2, the coupling members 16 are engaged with the staples 17, thus connecting the screen for movement with the window, the screen being under these conditions drawn out of the well 4 to the position indicated by full lines in Fig. 2. In the event of rain falling on the screen 12 the water will drain from the latter into the gutter 19 and thence through the spout 20 and port 7 to the outside of the car or other structure 3, it being noted that when the screen is in normal position the flange 15 will in bearing on the sill 10 effectually prevent the entrance of rain, dust, or the like into the well 4.

From the foregoing it is apparent that I produce a simple device admirably adapted for the attainment of the ends in view, it be-

ing understood that minor changes in the details herein set forth may be resorted to without departing from the spirit of the invention.

Having thus fully described my invention, what I claim as new is—

1. In a device of the class described, a window-frame having a well therebeneath, a sash arranged for vertical movement in the frame, a screen movably disposed in and adapted to be housed within the well, an outwardly-projecting, substantially horizontal flange formed on the upper bar of the screen-frame, said flange being adapted to overlap the window-frame sill for effectually closing the well when the screen is housed in the latter and also to bear beneath the lower edge of the sash for holding the frame firmly in relation thereto, and means for detachably coupling the screen to the sash for movement therewith.

2. In a device of the class described, a window-frame having a well therebeneath provided with a discharge-port, a sash arranged for vertical movement in the frame, a screen movably disposed in and adapted to be housed within the well, an outwardly-projecting, substantially horizontal flange formed on the upper bar of the screen-frame, said flange being adapted to overlap the window-frame sill for effectually closing the well when the screen is housed in the latter and also to bear beneath the sash for holding the screen rigid thereon, a gutter formed directly on the lower bar of the screen-frame by suitably bending said bar into shape, a discharge-spout arranged over the port and connected at its upper end to the screen-frame for communication with the gutter, the latter being inclined downwardly toward the spout, and means for detachably coupling the screen to the sash for movement therewith.

In testimony whereof I affix my signature in presence of two witnesses.

ZACHARIAH L. TRAINHAM.

Witnesses:

F. S. COLEMAN,

P. C. OMOHUNDRO.