

W. H. FLETCHER.  
Means of Excluding Cinders and Light from  
Railroad-Cars.

No. 151,582.

Patented June 2, 1874.

Fig. 1.

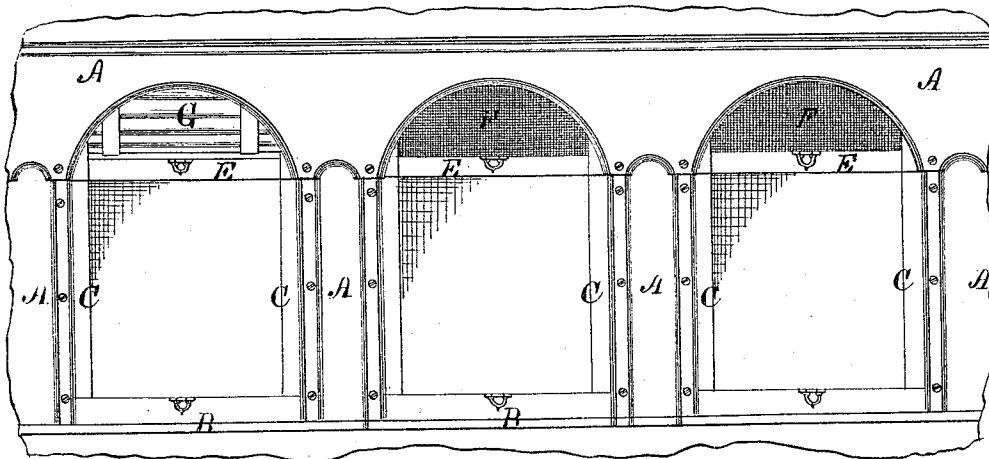
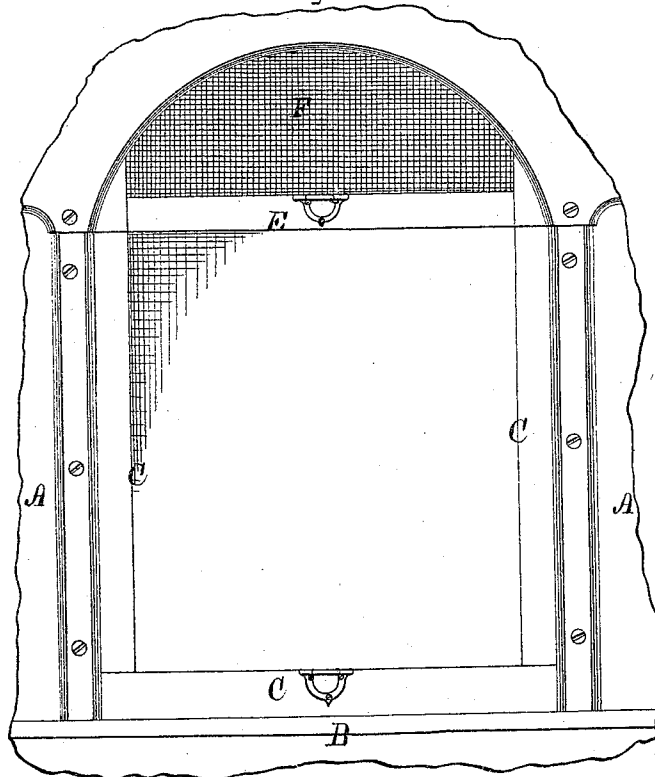


Fig. 2.



WITNESSES=

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John R. Young

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Orindle and Crane, his Attys

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Fig. 4-

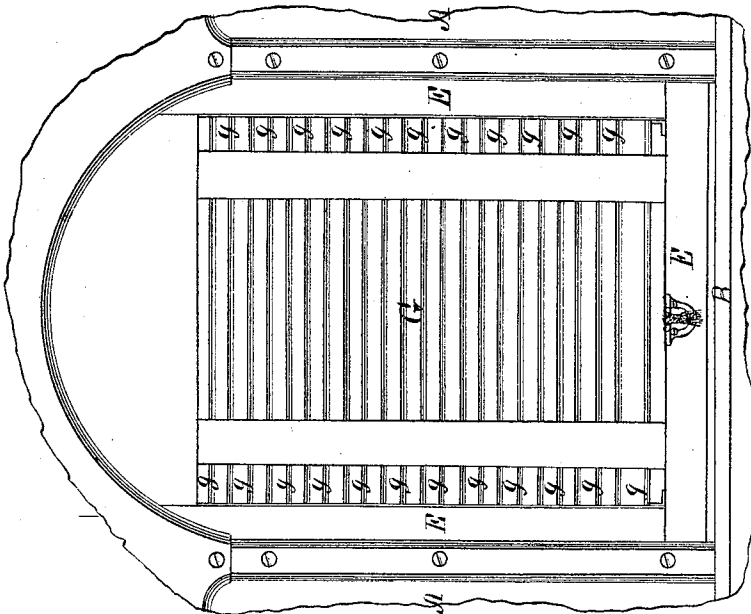
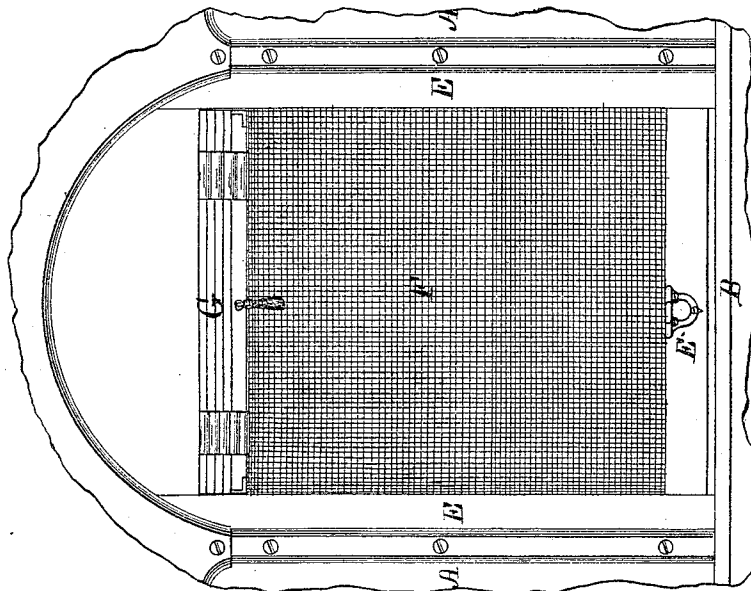


Fig. 3.



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Fig. 5.

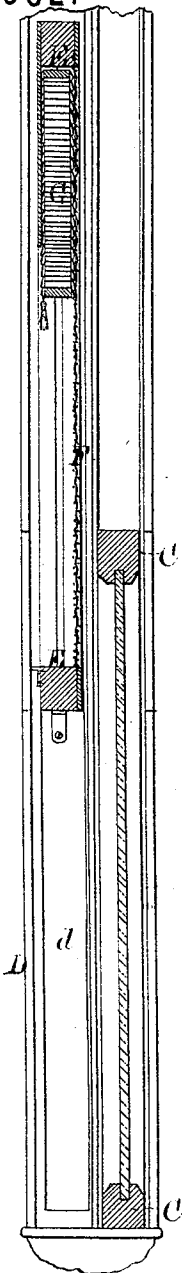


Fig. 6.

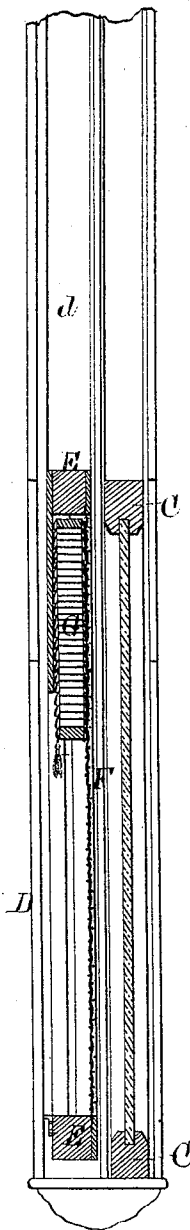
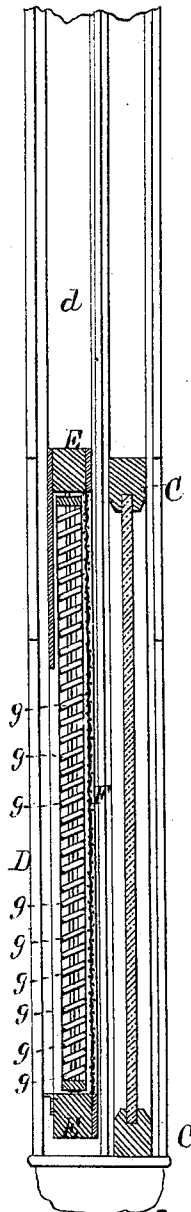


Fig. 7.



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# UNITED STATES PATENT OFFICE.

WILLIAM H. FLETCHER, OF WASHINGTON, D. C.

## IMPROVEMENT IN THE MEANS OF EXCLUDING CINDERS AND LIGHT FROM RAILROAD-CARS.

Specification forming part of Letters Patent No. **151,582**, dated June 2, 1874; application filed May 25, 1874.

*To all whom it may concern:*

Be it known that I, WM. H. FLETCHER, of Washington, in the county of Washington and in the District of Columbia, have invented certain new and useful Improvements in Means for Excluding Cinders and Light from Railway-Cars; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is an elevation of the inner side of a car containing my improvements. Figs. 2, 3, and 4 are like views of windows containing said improvements, showing, respectively, the screen raised, the screen dropped, and the blind raised, and both screen and blind lowered; and Figs. 5, 6, and 7 are vertical sections upon lines  $x x$ ,  $z z$ , and  $z' z'$ , respectively, of Figs. 2, 3, and 4.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to furnish means whereby light and dust may be excluded from a railway-car without interfering with the free admission of air; and to this end it consists in combining, with a sash arranged to move vertically over the window of a car, a reticulated diaphragm placed over the outer face of said sash, and a slatted blind arranged within the opening of the latter, made vertically adjustable with relation to the same, and having its slats suspended or pivoted, so as to be capable of being turned, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A represents the side of a car provided with a number of windows, B and B, which are closed, when desired, by means of glazed sash C and C, all in the usual manner. Within suitable grooves  $d$  formed in the sides of the window-frame D, immediately inside of the sash C, is placed a frame or sash, E, which corresponds in vertical and lateral dimensions with the like features of said sash C, and is capable of being raised to the position shown in Fig. 2, so as to uncover the window, or of being lowered to the position shown in Figs. 3

and 4, so as to come opposite to said window. The opening within the sash E is covered by means of wire-cloth F, which is placed upon the outer face of the latter, while within said opening, between said wire-cloth and the inner face of said sash is placed a venetian blind, G, the slats  $g$  of which are capable of being placed in a horizontal position, so as to admit light and air freely, or of being turned until their edges overlap, and both light and air are excluded.

The blind G is arranged so as to enable its slats to be closed upward together, as seen in Figs. 2, 3, and 5, when it is desired that the window shall be uncovered, said slats being counterbalanced by weights or springs, so as to cause them to maintain any position between their upper and lower limits.

The device thus constructed is capable of the following use:

When it is desired that the window shall be unobstructed, the sash E is raised to the position shown in Figs. 1 and 5, in which position it is contained within a recess or pocket formed within the car side, in the same manner as an ordinary blind.

When the window is opened and protection is required against cinders and dust, the sash E is drawn downward to its lowest position, as seen in Figs. 3 and 6, by which means the screen F is interposed between the inner and outer sides of the car, and, while admitting air and light freely, affords the desired protection against the discomforts above named.

When it is desired to exclude a portion or the whole of the light, the blind G is drawn downward, and its slats adjusted so as to produce the desired result.

While possessing the conveniences named, my device occupies no more space than is required for the ordinary blind, and can be furnished at a cost but slightly greater than the same.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

In combination with a sash, arranged to move vertically over the window of a car, a

reticulated diaphragm placed over the outer face of said sash, and a slatted blind arranged within the opening of the latter, made vertically adjustable with relation to the same, and having its slats suspended or pivoted, so as to be capable of being turned, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of May, 1874.

W. H. FLETCHER.

Witnesses:

GEO. S. PRINDLE,  
WILLIAM FITCH.