(No Model.)

J. F. ADAMS.

CINDER SHIELD.

No. 588,739. Patented Aug. 24, 1897.

Fig. 1.

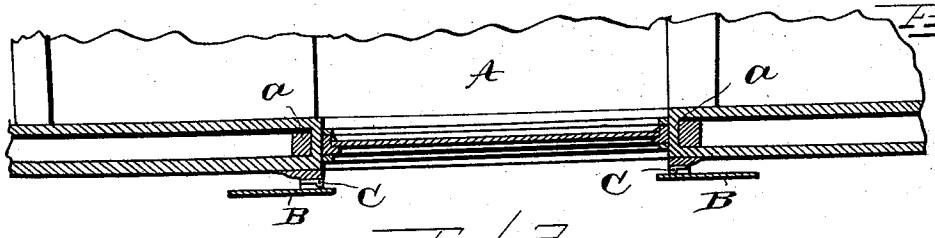


Fig. 2.

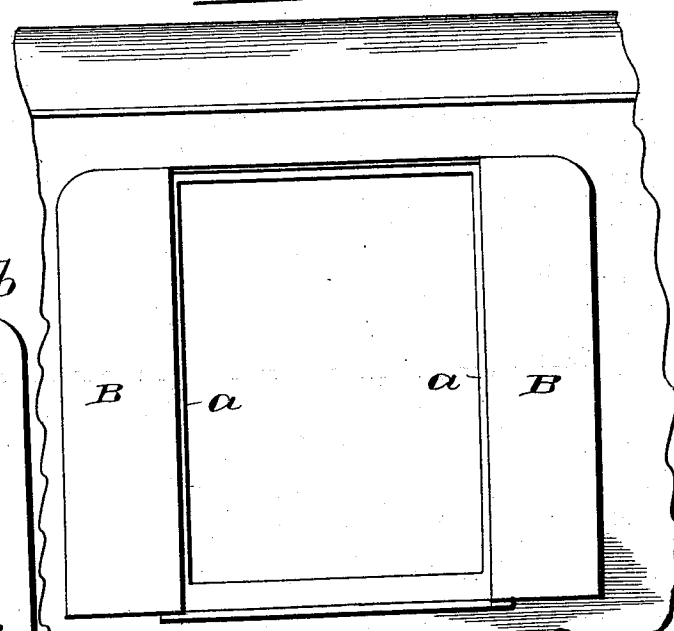


Fig. 3.

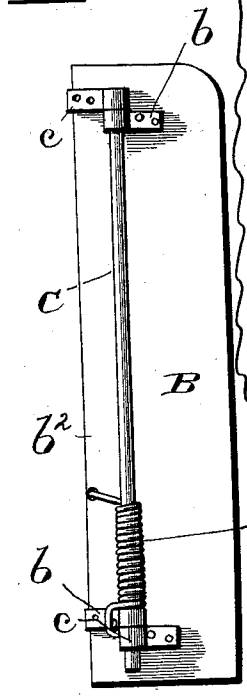


Fig. 4.

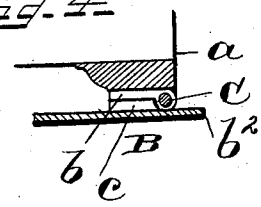
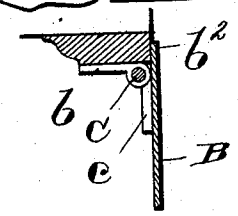


Fig. 5.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES F. ADAMS, OF HUBERT, GEORGIA.

CINDER-SHIELD.

SPECIFICATION forming part of Letters Patent No. 588,739, dated August 24, 1897.

Application filed October 19, 1896. Serial No. 609,305. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. ADAMS, a citizen of the United States, residing at Hubert, in the county of Buloch and State of Georgia, have invented certain new and useful Improvements in Cinder-Shields; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists in the novel features hereinafter described, reference being had to the accompanying drawings, which illustrate one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

Referring to the said drawings, Figure 1 represents a horizontal sectional view of a portion of the side of a car, showing the window with my improved cinder-shields applied thereto. Fig. 2 is a side view of a car-window provided with said cinder-shield. Fig. 3 is a detail view of one of said shields. Fig. 4 is a top plan view of one of said shields in closed position, and Fig. 5 is a similar view showing the position of the shields when the car is in motion.

The object of my invention is to provide cinder-shields for car-windows which will lie close to the side of the car when the car is stationary and which will be forced into a position perpendicular to the side of the car when the car is in motion by means of the resistance of the air.

In the drawings, A represents a car-window, and *a a* the side portions of the window-casings, to which the cinder-shields are attached.

B represents one of my improved shields, which consists of a thin plate or sheet of wood, metal, or other preferred material of a length substantially equal to the height of the window-opening when the sash is raised to its fullest extent. The plate B is pivotally connected at one edge to the window-casing *a* and is provided with a spring which holds the said plate normally close to the side of the car and substantially parallel therewith. In this instance I have shown a vertical rod C, provided with brackets *c*, adapted to be attached to the window-casing by means of screws. The plate B is provided with hinge-sections *b*, which engage the rod C, and a spring *b'* encircles said rod and is connected at one end thereto and at the other end to said plate, so as to hold the latter in proper position. I also provide a stop to limit the outward movement of the plate under the action of the air, and in this instance I have shown the hinges of the plate B located a short distance back from the edge of the plate, thus leaving a part b^2, which engages the window-casing when the plate is forced outwardly by the air, thus serving as a stop, as shown in the drawings.

In practice I attach one of these cinder-shields at each side of each window of the car. When the car is not in motion, the said shields will lie close to the side of the car, so as to avoid interfering with the view forward or backward from the window. When the car is in motion, the shield on the side of each window toward the engine will be forced backward by the resistance of the air until it is checked by the stop, as shown in Fig. 5, thereby forming a shield against which the cinders, dust, &c., will strike, thus protecting the passengers therefrom. As soon as the car stops the springs will restore the shields, which have been turned outwardly, to their normal position.

It will be noticed that by forming the plate B with the part b^2, which engages the window-casing, extending the entire length of the plate, said part b^2 will close the crack which would otherwise be left between the edge of the plate and the window-casing, forming a dust-tight joint when the plate is forced outwardly and preventing cinders and dust from penetrating between the plate and the casing when the car is in motion.

What I claim, and desire to secure by Letters Patent, is—

1. A cinder-shield comprising among its members a plate provided with hinge connections adapted to be secured to a car-window casing, said plate having an integral portion on the inner side of said hinge connections extending the entire length of the plate and in the plane of said plate for engaging a portion of the window-casing disposed angularly to the car to form a dust-proof joint and to limit the outward movement of said plate,

and a retracting-spring for said plate, substantially as described.

2. The combination with a car-window casing having a vertical strip at each side of the window-opening provided on its inner side with a face perpendicular to the side of the car, of vertical plates hinged to each of said strips, said plates having each an integral portion in the plane of said plate extending into position to engage the said perpendicular face to limit the outward movement of said plate and a spring secured to each plate for holding it away from the window-opening and substantially parallel with the side of the car whereby one of said plates will be operated when the car is moving in either direction, substantially as described.

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

JAMES F. ADAMS.

Witnesses:
L. P. WHITAKER,
J. D. KINGSBERY.