

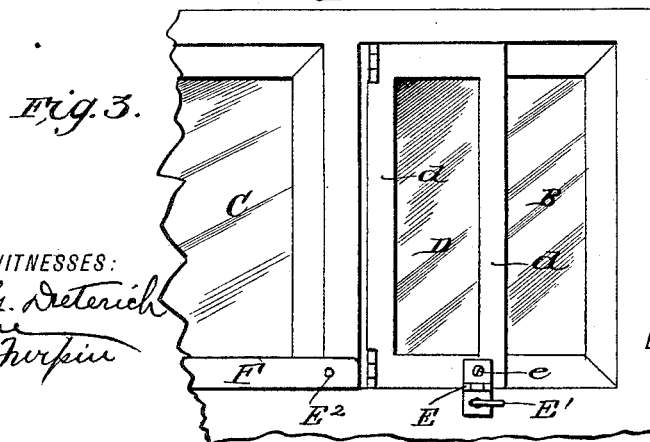
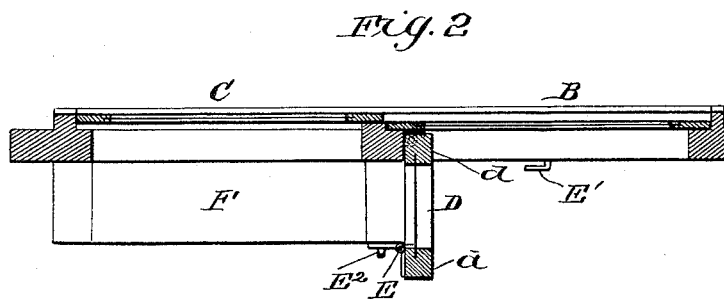
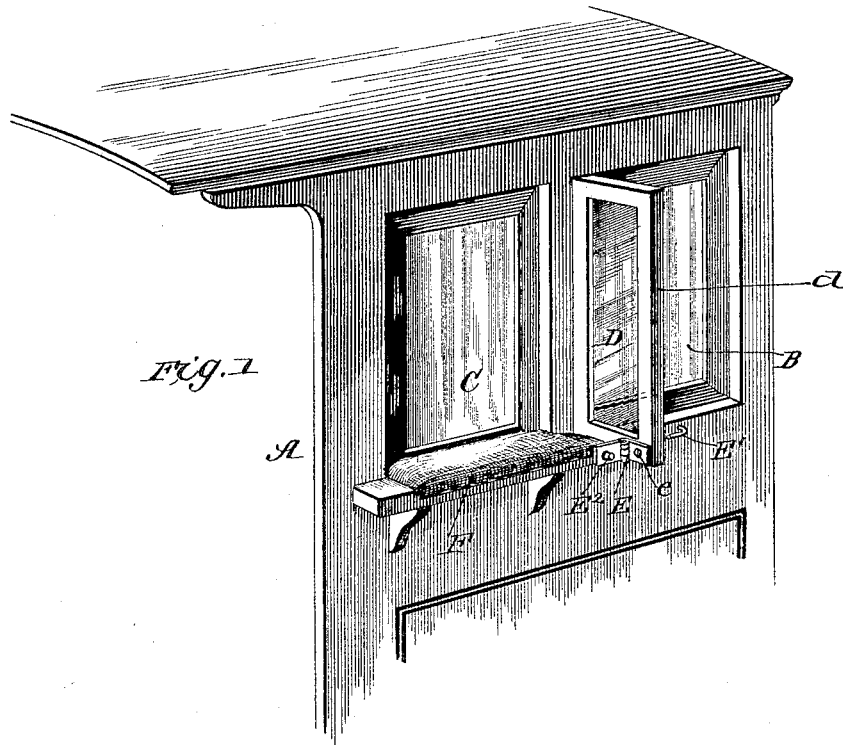
(No Model.)

F. C. BOND.

DUST GUARD FOR LOCOMOTIVE CAB WINDOWS.

No. 458,939.

Patented Sept. 1, 1891.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

FRANK C. BOND, OF PORT JERVIS, NEW YORK.

## DUST-GUARD FOR LOCOMOTIVE-CAB WINDOWS.

SPECIFICATION forming part of Letters Patent No. 458,939, dated September 1, 1891.

Application filed October 17, 1890. Serial No. 368,490. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK C. BOND, of Port Jervis, in the county of Orange and State of New York, have invented a new and useful Improvement in Dust-Guards for Locomotive-Cab Windows, of which the following is a specification.

My invention is an improvement in locomotive-cabs, and particularly in the construction of the windows, so that the engineer and fireman will be protected from cinders, storm, &c., in looking forward, and so that the protecting window will not become clouded from the variations in temperature between the outside air and the interior of the cab.

The invention consists in certain features of construction and novel combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a part of a locomotive-cab provided with my improvements. Fig. 2 is a horizontal section, and Fig. 3 is a partial side view.

In locomotive-cabs the heat causes the condensation of moisture upon the window-glass, resulting in the clouding of the glass or the formation of frost thereon, so that the engineer and fireman can only see out by opening the windows. In winter this exposes them to the force of the wind and storm, while at all times they are exposed to the dust and cinders. By my invention I provide a protecting or guard window which may be readily adjusted into and out of position for use, may be rigidly secured in either of such positions, and will in both of its positions be free from the influences of the heat in the cab, so that it will not become frosted or clouded in use.

The cab A may in general respects be of ordinary construction, having the fixed forward windows B and the rear windows C, the latter being supported to slide forward alongside the front windows.

In connection with the usual side windows B and C, I employ what, for convenience of reference, I term the "guard-window" D, which is supported to turn when closed into the plane of the cab side or when opened out to a plane at right angles, or approximately

so, to the said cab side, securing devices being arranged to hold the guard-door in both its open and closed positions. In the construction shown the guard-window has a frame *d*, and is hinged at one edge *D'* to the cab side at the rear end of the fixed window B, so that when closed it will turn forward within the frame of the window B and rest flush with the side of the cab. A hinge-like fastening E is pivoted at *e* to the guard-window and has a hinged plate, which in the closed position of the window fits under a catch *E'* and has an opening to receive a pin *E<sup>2</sup>* when the window is open. When opened, the guard-window turns at right angles to the side of the cab and bears directly against the front end of the arm-rest F at the side of the sliding window C. This arm-rest forms a firm support for holding the guard-window when opened, such window being held open by means of the parts E *E<sup>2</sup>*, as before described, or other suitable securing devices.

In operation, if the guard-window be opened, the engineer or fireman can at any time, by opening the sliding window C, look forward through the guard-window, being protected thereby from the wind, cinders, dust, &c., and such guard-window, being so arranged that it is exposed on both sides to the same temperature, will be kept free of frost or the condensation of moisture, by which it is clouded.

By my invention it will be seen that the guard-window may be set open and secured in such position, so that when the slide-window is opened the guard-window is ready for use. It will also be seen that the guard-window can be quickly applied to an ordinary locomotive-cab, requiring no change in the construction of the body of the cab or of its windows. Furthermore, the device is simple in construction and operation and possesses no parts likely to get out of order.

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

1. The combination, with the locomotive-cab having catch *E'* and the arm-rest F, having pin *E<sup>2</sup>*, of the hinged guard-window and the fastening E, pivoted at *e* to the guard-window and having a hinged plate arranged, when

the window is closed, to fit in the catch E', and provided with an opening arranged to fit over the pin E<sup>2</sup> when the window is opened, whereby such window may be secured in both its open and closed positions, all substantially as and for the purposes set forth.

2. In a locomotive-cab, the combination, substantially as herein described, of the forward and rear windows, the arm-rest arranged alongside the rear window, the guard-window arranged outside of and independent of said front and rear windows and hinged at one

edge to the cab side in advance of the arm-rest and arranged to open at right angles to the cab side and to bear when open against the arm-rest, and securing devices by which the said guard-window may be held in both its open and closed positions, all substantially as and for the purposes set forth.

FRANK C. BOND.

Witnesses:

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