

Samuel Darling.

106558

PATENTED AUG 23 1870

Car-Window.

Fig 1

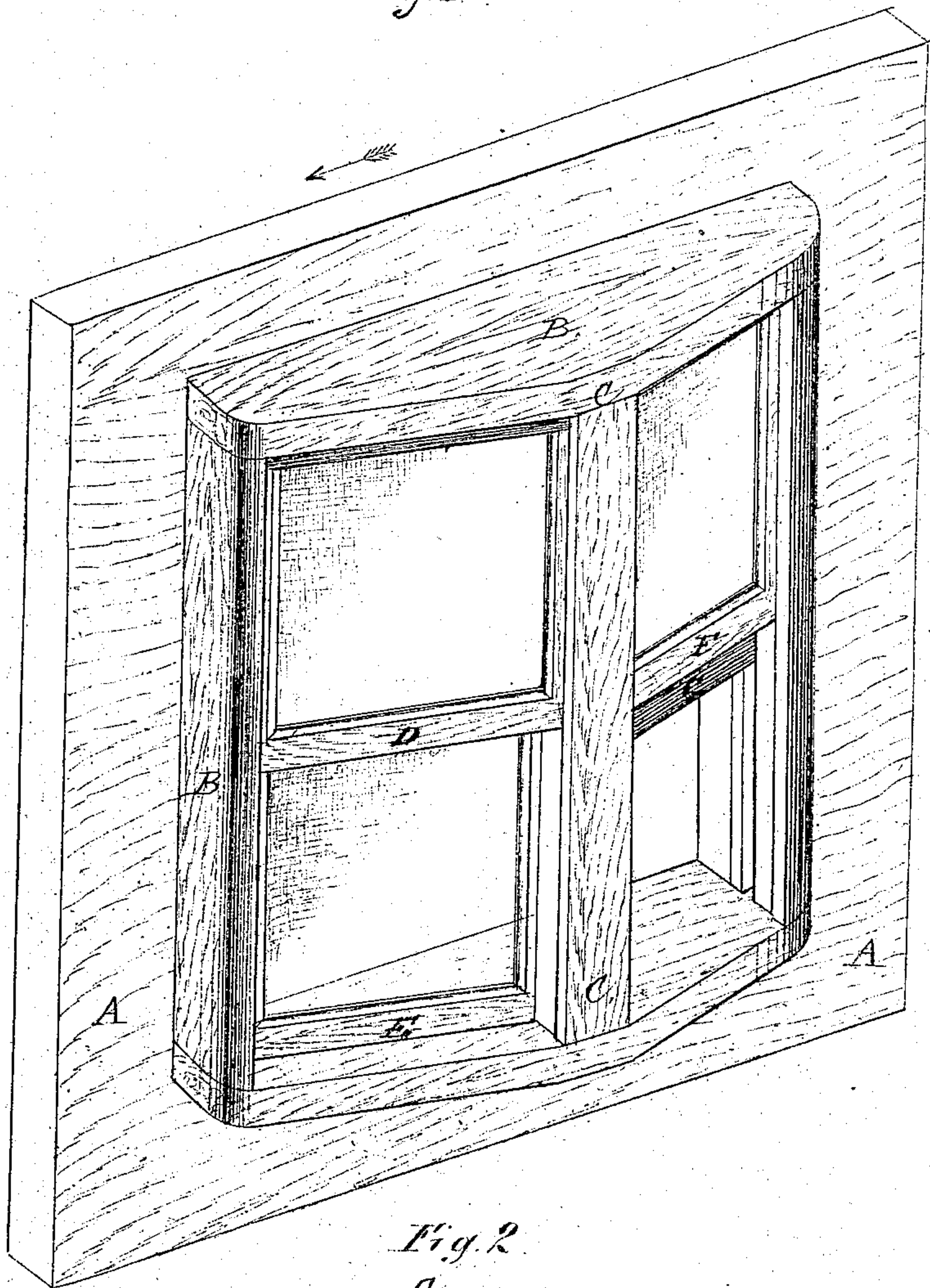
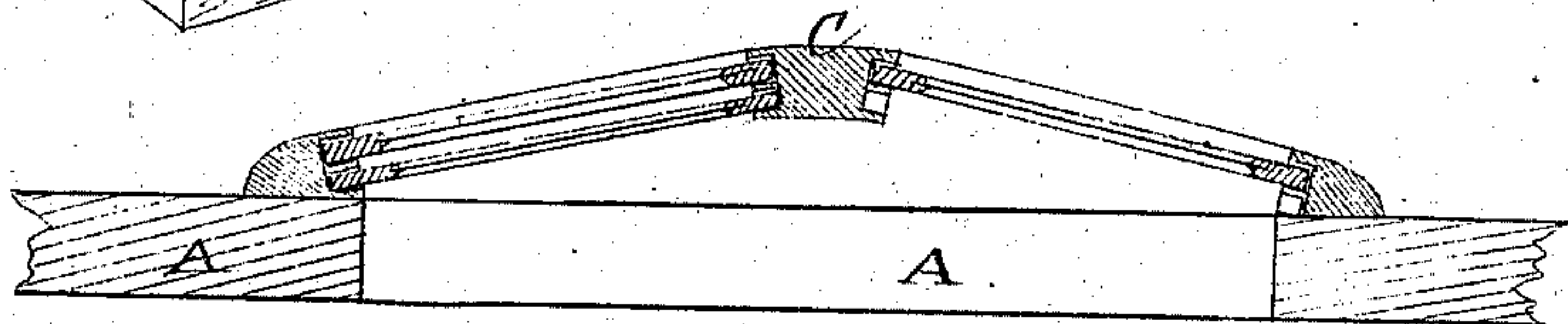


Fig 2



Witnesses.

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SAMUEL DARLING, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 106,558, dated August 23, 1870.

VENTILATING-WINDOW FOR RAILROAD-CARS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, SAMUEL DARLING, of the city of Providence and State of Rhode Island, have invented an Improved Window for Railway-Cars and similar vehicles; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The object of my invention is the ready ventilation of a railway-car while in motion, without liability of admitting dust or cinders.

A represents the side of a car, and

B, a window applied thereto, in accordance with my invention, such a window being intended for each seat in the ordinary traveling cars as now made.

Instead of inserting the sash which is in line with the sides of the car, I use, for each window, a double frame, having sashes placed at an obtuse angle to each other, outside the car, as seen at C. Each half of the frame has its own sash, or pair of sashes, the lower one of which is made to slide up and down, and to be kept open, when desired, in the same manner as ordinary sashes.

In the drawing—

D and E indicate the sashes of one-half the window, and F G those of the other half. The upper sashes, D F, may be made to slide upward, by making the frame higher, or they may be adapted for sliding downward in their frame, or they may be dispensed with altogether. In the latter case, the lower sashes may be made proportionately higher.

By reason of the outward inclination given to the sashes, the traveler has very perfect control of ventilation and avoidance of dust, while, at the same time, he can do this without annoying the passengers immediately behind him with currents of air and dust; and the mode of construction also allows him to view the country in advance of the train, without putting his head out of a window.

Supposing the train of cars to be moving in the di-

rection of the arrow, and it be desirable to open a window, the passenger opens a sash or sashes, F G, and leaves closed the sashes D E. The currents generated by the swift-moving train strike upon the outward incline of the forward sash and glass without entering the car, and the dust and cinders do likewise, the passenger not being disturbed by any of them, the interposed glass forming an absolute barrier. The direction thus given to these currents continues as it passes the space left open by the raising of the rear sash, and has no opportunity to be turned inward toward the car, but, on the contrary, keeps its inclined route, and draws along with it out of the open portion of the window, the close or warm air from within the car, thus, at the same time, purifying the atmosphere in a positive manner without subjecting travelers to streams of cold or damp air directly upon the person. When the train is moving in the opposite direction, the order is reversed, the closed sash being opened, and the open one closed, the action being then precisely the same as above described.

If desired, a single sash, of a height equal, (or thereabout,) to that of the upper and lower sash, may be employed for each half of the window, with corresponding frames or guides, to permit their rise and fall, as above. This would double the amount of ventilation.

My improvement is equally adapted to street-cars, and has the great advantage of simplicity, being operated the same as an ordinary window, and it is inexpensive, and easily understood by all.

I claim—

A car-window, composed of sashes placed at an angle with the outside of the car, and at an angle with each other, those of each part being arranged to be run up or down independently of those of the other part, substantially as shown and described.

SAMUEL DARLING.

Witnesses:

JAMES C. COLLINS,
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