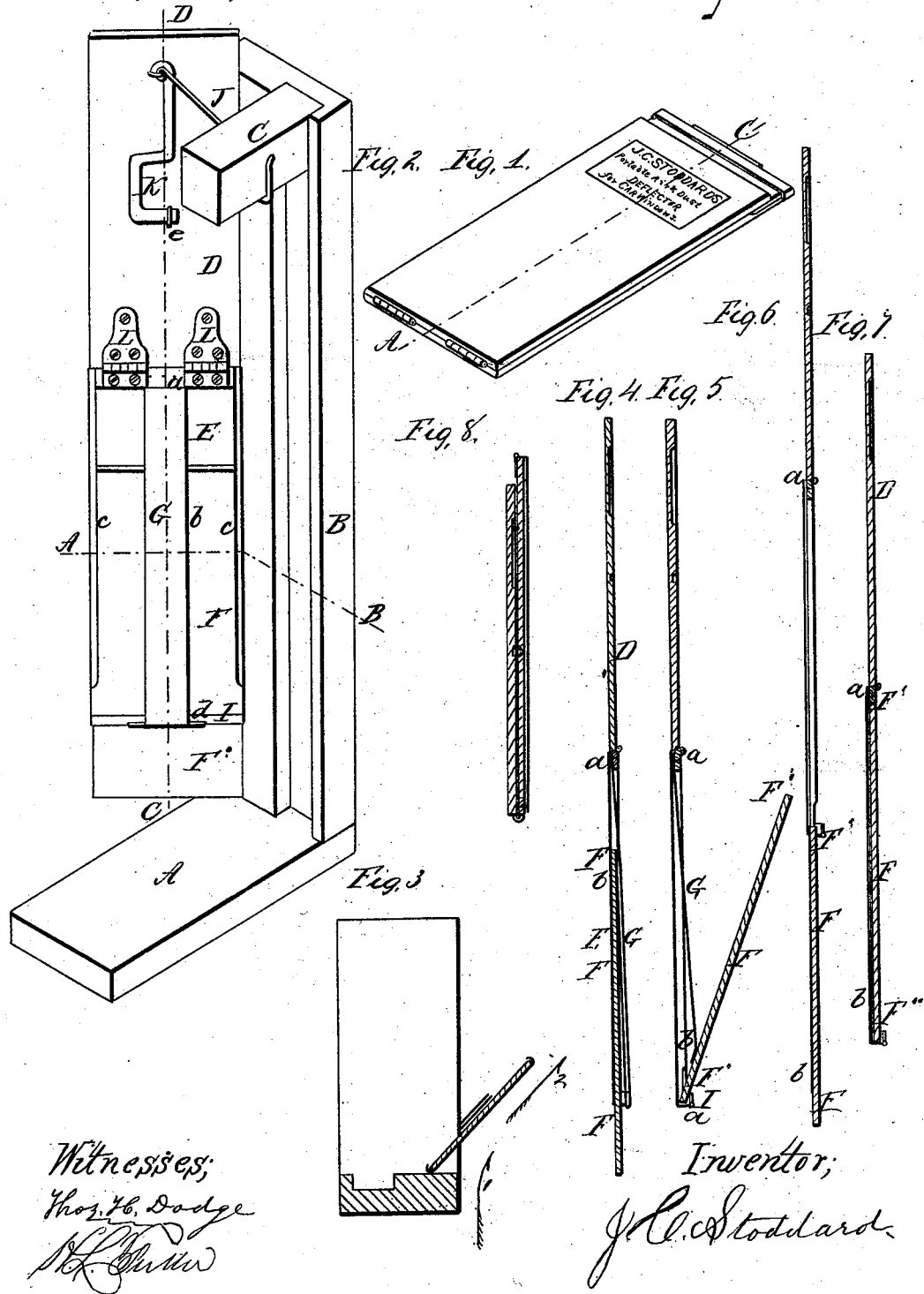


J. C. Stoddard,

Car Ventilator,

No 54,436,

Patented May 1, 1866.



UNITED STATES PATENT OFFICE.

J. C. STODDARD, OF WORCESTER, MASS., ASSIGNOR TO J. B. KNOX.

PORTABLE DEFLECTOR FOR CAR-WINDOWS.

Specification forming part of Letters Patent No. 54,436, dated May 1, 1866.

To all whom it may concern:

Be it known that I, J. C. STODDARD, of the city and county of Worcester, and State of Massachusetts, have invented certain new and useful Improvements in Portable Air and Dust Deflectors for Car-Windows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents my improved device folded in a compact form. Fig. 2 represents the same applied to a car-window, a portion only of the window frame and sash being shown. Fig. 3 represents a cross-section on line A B, Fig. 2. Fig. 4 represents a section on line C D, Fig. 2. Fig. 8 represents a section on line A C, Fig. 1, and Figs. 5, 6, and 7 represent sections to be described hereinafter.

In the drawings, A represents the bottom of the window frame, B the side or jamb, and C so much of the bottom of the window-sash as is necessary to illustrate my invention.

D represents the upper part of my deflector, E the middle or metal part, and F the lower or spring part.

G is an elastic rubber-cloth spring, the upper end of which is fastened to the upper part of E, as seen at *a*, while the other end is fastened to one end of F, as seen at *b*.

The edges of the metal back or middle piece, E, are turned over to form guides for the piece F, as seen at *c c*. These guides *c c* extend nearly to the bottom of piece F, as fully shown in the drawings. A metal band or loop, I, is fastened to the lower end of piece E, with room or space between it and piece E to admit of free passage of the elastic spring G and the piece F.

To the lower edge of the metal loop or band I is fastened a circular piece, *d*, but a small roll may be used in lieu thereof, if preferred.

To apply the device it is unfolded, as shown in Fig. 7, when piece F is drawn down, as shown in Fig. 6, until the end F' is depressed below the flanges *c c*, when said end is inclined outward and allowed to slip up below the flanges *c c* and above the loop I, as seen in Fig. 5. Piece F is now taken entirely out and turned end for end, and end F'' inserted under loop I and forced up under I and flanges *c c*, as seen in Fig. 4. By this arrangement of the parts it will be seen that the elastic spring

G is brought upon the outside of piece F and over the round edge of the loop I, whereby the tendency of spring G, when in such position, is to draw piece F downward. The device is now ready to be applied to the car-window, the sash of which is to be raised the proper distance, and the lower end, F', of the piece F is placed upon the base or bottom of the window-frame, close to the jamb B, and inclined therefrom at an angle of about forty-five degrees, while hook J is turned up to receive the bottom of the window-sash C, as indicated in Fig. 2. The weight of the window, in combination with the pressure of piece F against the bottom of the window-frame, is quite sufficient to detain the deflector in its proper position.

The deflector can be set so as to deflect the air and dust at any angle desired, the greater the angle the greater the deflection.

The device can be applied upon either side of the window with equal facility.

It will thus be seen that any passenger in a rail-car can, when provided with one of my deflectors, protect himself from dust and smoke, while at the same time a current of air is caused to pass out of the window. All who have experienced the discomforts incident to a close car or an open window in warm and dusty weather will readily appreciate my invention.

When the deflector is removed it is easily folded in the compact form shown in Fig. 1 by withdrawing piece F from between loop I and the piece E, and turning it end for end, and inserting end F'' above loop I, as seen in Fig. 5, and then drawing it down until end F' can be slipped under the flanges *c c*, when spring G will draw piece F up, as shown in Fig. 7. The parts D and E are now folded together, as shown in Figs. 1 and 8. Instead of using two hinges, L L, to unite the pieces D and E, one wide hinge might be substituted therefor. Hook J is dropped into a recess, K, cut in the part D, with its point slipped under the staple *e*.

My improved device can be readily carried in the pocket, and may be applied with ease to any of the ordinary car-windows now in use.

Having described my improved portable air and dust reflector for car-windows, what I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. A portable air and dust deflector constructed and operating as set forth.
2. The combination, with the body of the deflector, of a hook at the top and spring at the bottom, for retaining the same in place, substantially as set forth.
3. The combination of the piece F and elastic spring G with the metal back E, flanges c c, and loop I, substantially as shown and described.

J. C. STODDARD.

Witnesses:

THOS. H. DODGE,
H. L. FULLER.