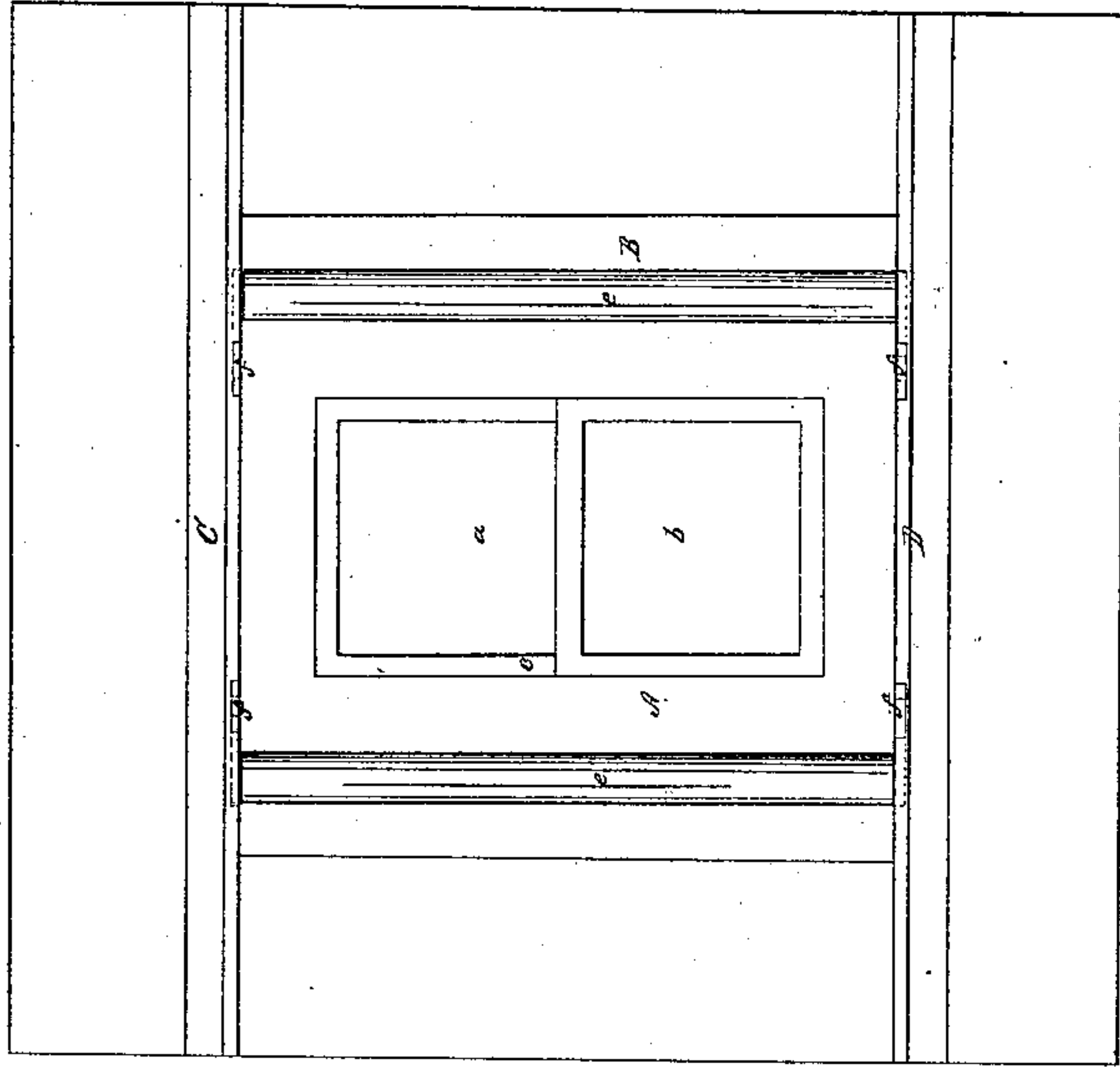


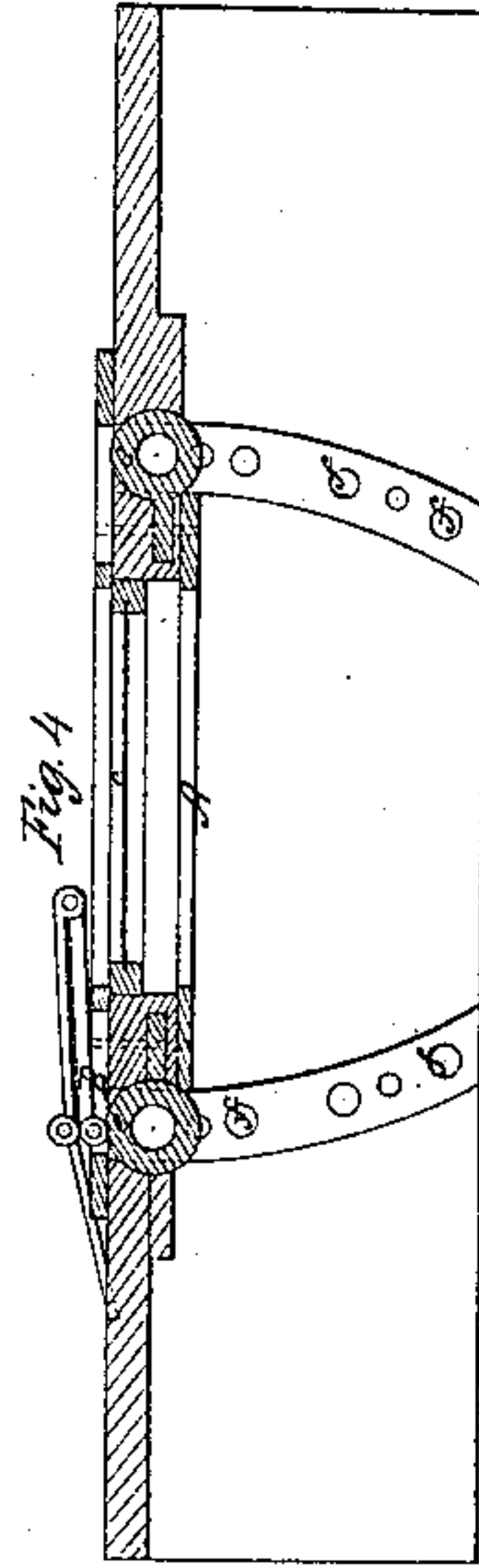
*J. Beetle,*  
*Car Ventilator,*

*Nº 14,945,*

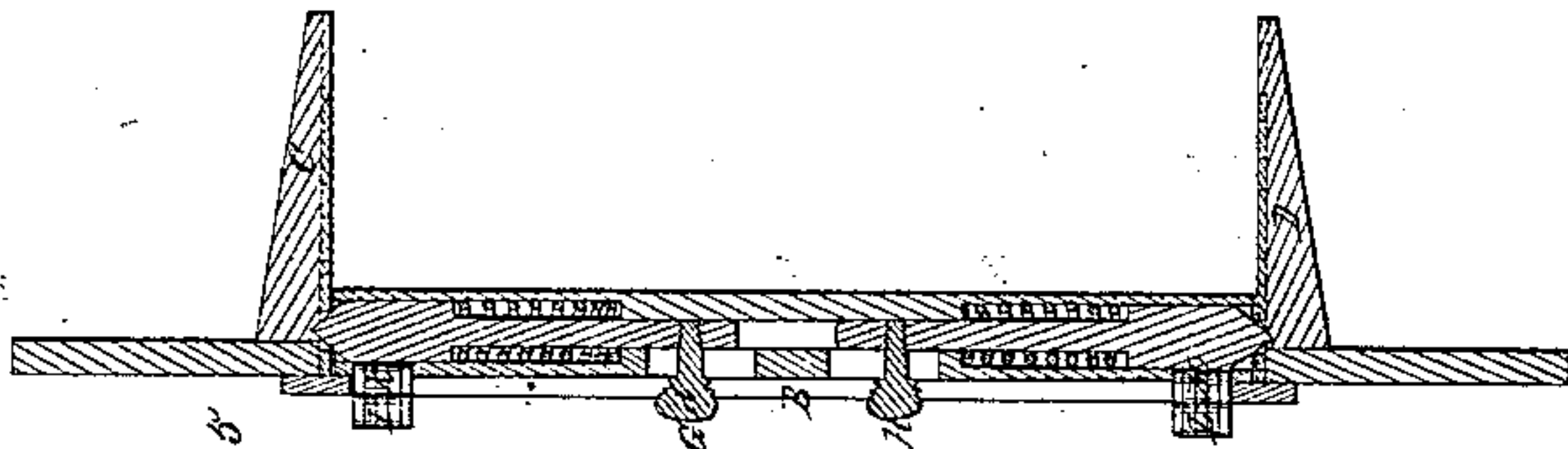
*Patented May 27, 1856.*



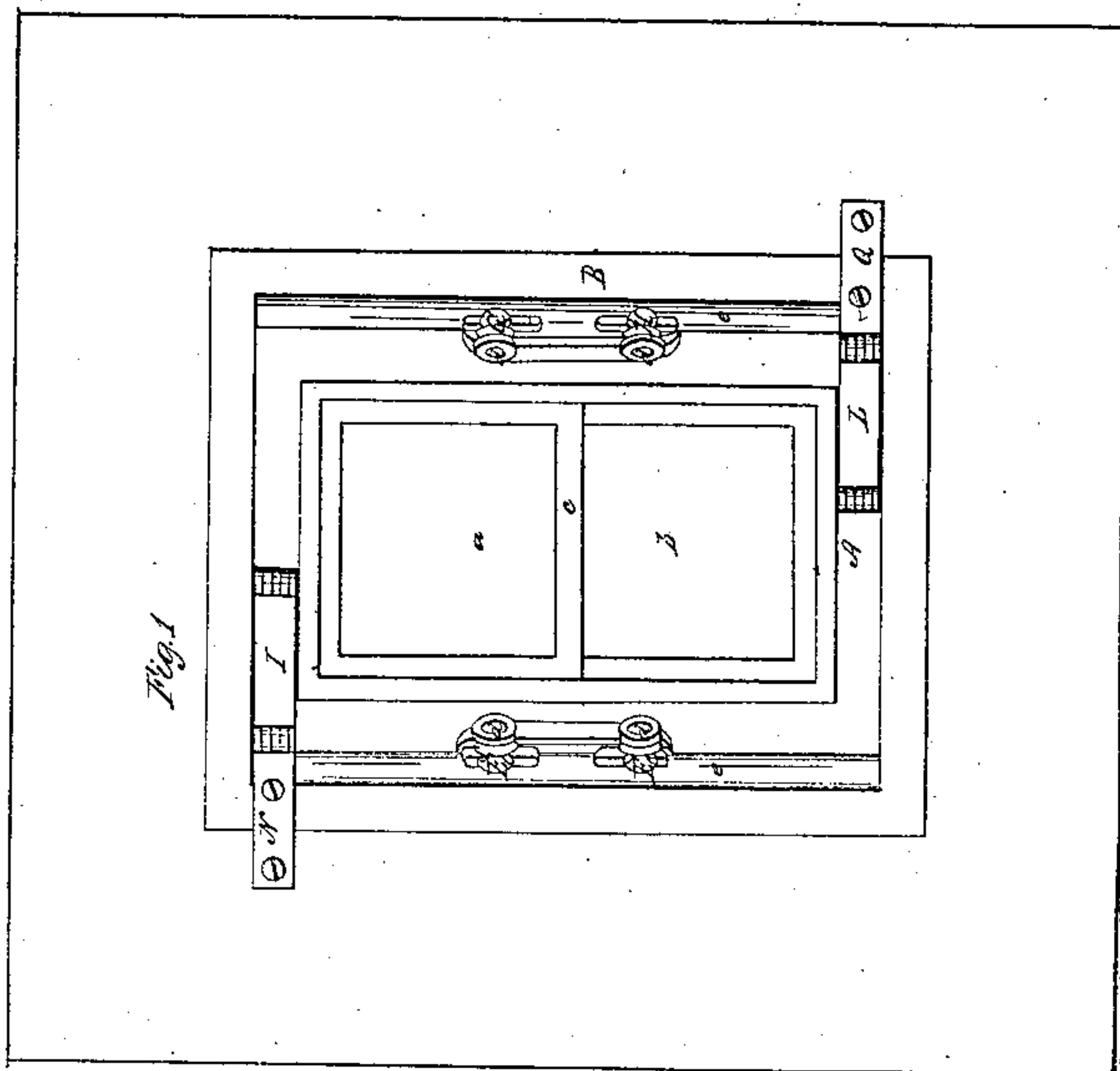
*Fig. 3*



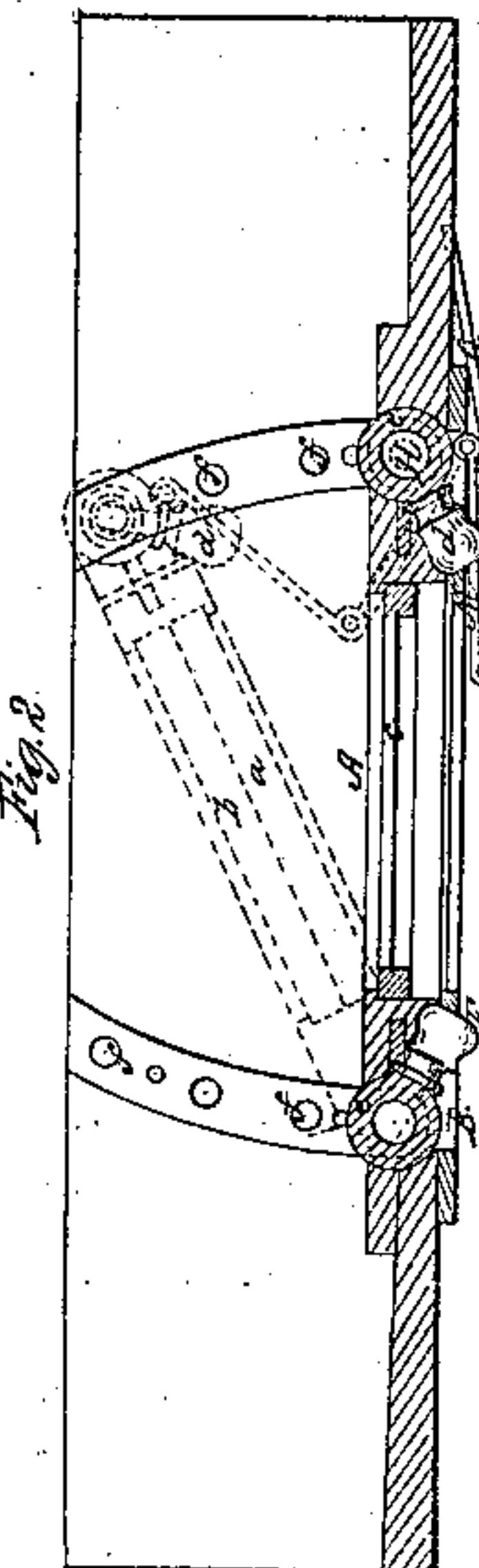
*Fig. 4*



*Fig. 5*



*Fig. 1*



*Fig. 6*

# UNITED STATES PATENT OFFICE.

JAMES BEETLE, OF NEW BEDFORD, MASSACHUSETTS.

## CAR-WINDOW.

Specification of Letters Patent No. 14,945, dated May 27, 1856.

*To all whom it may concern:*

Be it known that I, JAMES BEETLE, of New Bedford, in the county of Bristol and State of Massachusetts, have invented an  
5 Improved Ventilating-Window for Railway or other Carriages; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—  
10 Figure 1, is an inner side view of said window. Fig. 2, a horizontal section of it. Fig. 3, an outside elevation. Fig. 4, a horizontal section taken so as to show the underside of the upper rest board or cap. Fig. 5,  
15 a vertical section taken through two adjacent spring bolts.

In these drawings, A, exhibits a rectangular window frame applied to a window opening, B, which may be supposed to be  
20 made in the side of, a railway car and to be provided with two horizontal rest boards or a sill and cap arranged as seen at C, and D, in the drawings. The window frame may be furnished with glass panes, *a*, *b*, either or  
25 both of which may be fixed in one or more movable sashes, *c*, if desired. To each vertical side of the window frame, I apply two spring bolts E, F, or G, H, each bolt having a small knob *d*, by pressing against which  
30 the bolts may be moved longitudinally in its socket case, *e*. These bolts, when forced outward by their spring project a short distance beyond the end of the window frame A, and respectively enter holes, formed in  
35 four socket bars arranged and applied to the cap and sill, as shown in Figs. 2, 3, and 4, there being a series of such setting holes *f*, *f*, *f*, formed in each of the socket bars, and at equal distances asunder. By means  
40 of such contrivances applied to the window frame A, and its opening B, as described, the window frame may be caused to turn outward into an angle with the plane of the side of the window opening, either as shown  
45 by red lines or blue lines in Fig. 2, the size of the opening being varied as circumstances may require.

While the window is being opened for the purposes of ventilation, it turns on two of

the bolts the object of my invention being 50 to enable the window to be opened at an obtuse angle to the direction in which the carriage may be moving or the wind may be blowing, and so that when the carriage is running through the air, currents of air 55 shall be caused to flow out of the window opening rather than into the same.

In order to maintain the window frame in connection with its opening, or to prevent it from dropping out of place, in case both 60 sets of the bolts should be moved backward, simultaneously, and out of their bolt holes *f*, *f*, I confine the window within or to its frame by means of two sets of hinged arms I, K, or L, M—one set I, K, being applied 65 to one edge of the window and its opening, while the other set is applied to the opposite edge of said window and its opening, as seen in the drawings. The two arms of each set are hinged together and to plates or bars 70 N, O, or P, Q fastened to the window frame and window opening as seen in the drawings. Each set of arms and its fastening bars when so jointed together constituting 75 what may be termed a four leaved hinge.

Having thus described my invention I will remark that I claim—

1. Combining with the movable window frame A, and its socket frame or opening B, four bolts E, F, G, H, and four sets of 80 socket holes, *f*, *f*, *f*, *f*, or bars provided with such holes the whole being arranged so as to operate together substantially in manner and for the purpose as specified.

2. I also claim combining with the win- 85 dow frame A and its socket frame or opening B, made in the side of the carriage, two sets of hinged arms I, K and L, M, applied to opposite sides of the frame and operating essentially in manner and for the purpose as 90 specified.

In testimony whereof, I have hereunto set my signature this twenty second day of April A. D. 1856.

JAMES BEETLE.

Witnesses:

GEO. HOMANA, Jr.,  
CHARLES ALMY.