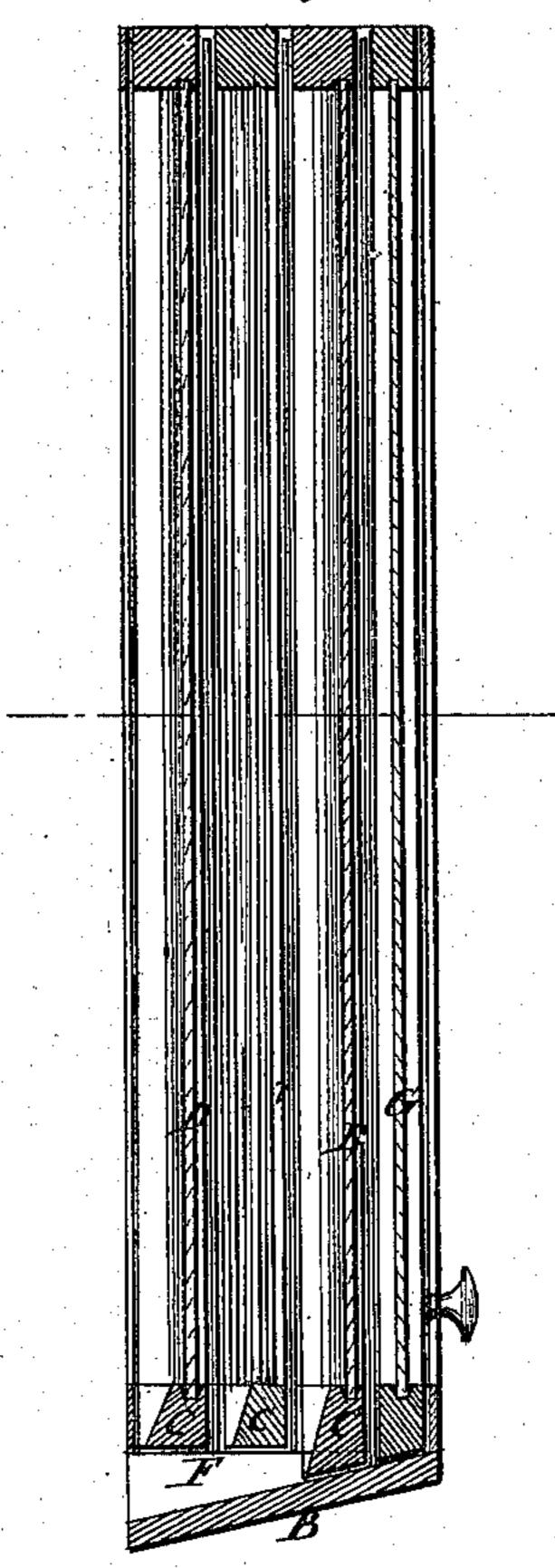
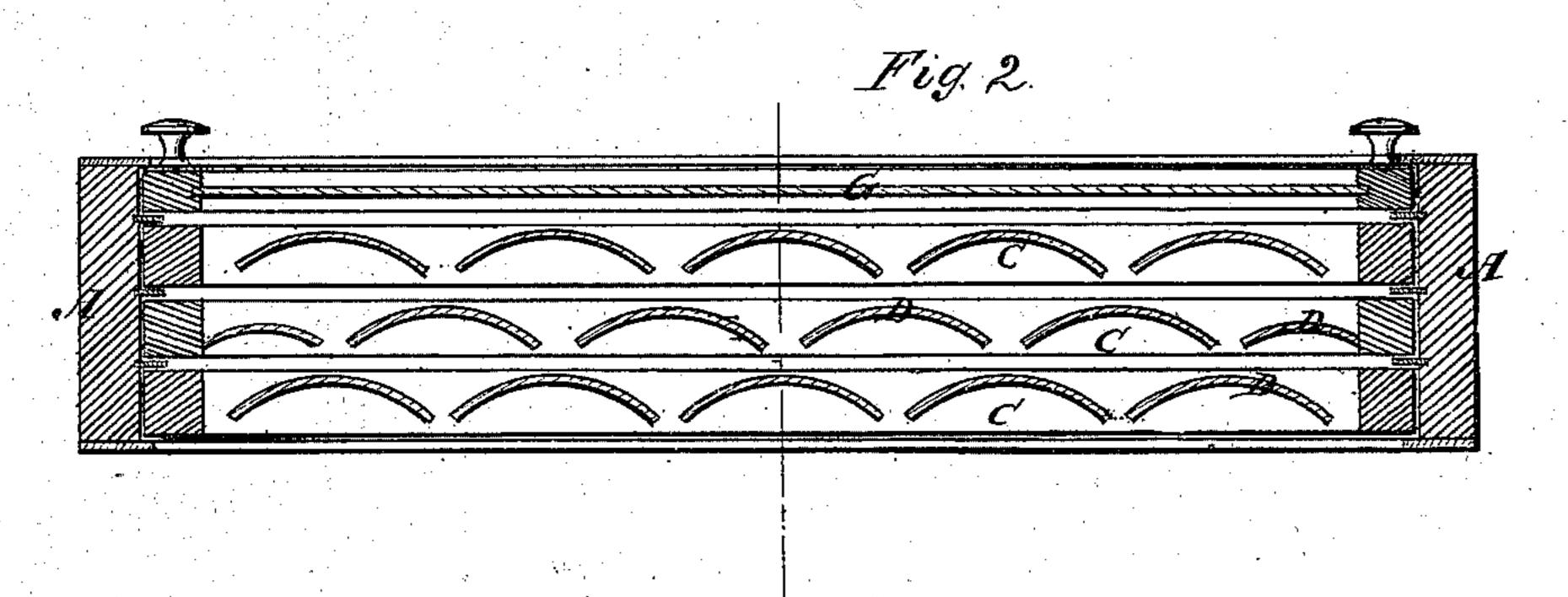
M. C. MURPHY. VENTILATING WINDOW FOR RAILROAD CARS.

No. 104,486.

Figz Patented June 21, 1870.





Witnesses:

Murshy Myn

Anited States Patent Office.

MICHAEL C. MURPHY, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 104,486, dated June 21, 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, MICHAEL C. MURPHY, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Dust-proof Ventilating-Windows; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention relates to that class of window devices which has for its object to ventilate cars and other apartments, and yet prevent the ingress of cinders or or dust.

It consists in two improvements upon those now in use, namely:

First, in constructing the glass sashes with apertures at the bottom, and resting them upon a sloping surface, so as to discharge the dust and cinders.

Second, in combining with a series of ventilatingsashes, a plain glass window to check the draught of air if too strong, (which is often the case, particularly in winter.)

Figure 1 is a transverse, and

Figure 2 a horizontal section of a ventilating-window.

A A are sides of the window-frame;

B, the bottom;

C, the sashes; and

D, the ventilating-glass strips.

F is a chamber in the lower part of the window frame, whose lower surface slopes.

G is a plain glass window.

Each sash C has downward slopes on its lower edges, which terminate abruptly, and do not connect with the adjacent sashes. This leaves an aperture at the bottom of each glass strip D, which provides an outlet for the dust and cinders into the receiving and discharging-chamber F.

Each sash C is constructed independently of the rest, so that it may be conveniently handled and readily removed.

Having thus described all that is necessary to a clear understanding of my invention,

What I claim as new, and desire to protect by Letters Patent, is—

1. The ventilating-sashes C, provided with sloping bottoms and apertures thereat, to allow of the escape of dust and cinders.

2. The combination, with sashes C, having apertures between them at the bottom thereof, of the chamber F, provided with sloping lower surface, to discharge the dust and cinders.

3. The combination, with a series of ventilating-sashes, C, of a glass window, G, located as described, for regulating the current of air admitted.

MICHAEL C. MURPHY.

Witnesses:

JOHN C. MURPHY, JAMES MURPHY.