

A. HANCE.
Car-Ventilator.

No. 168,897.

Patented Oct. 19, 1875.

Fig: 1.

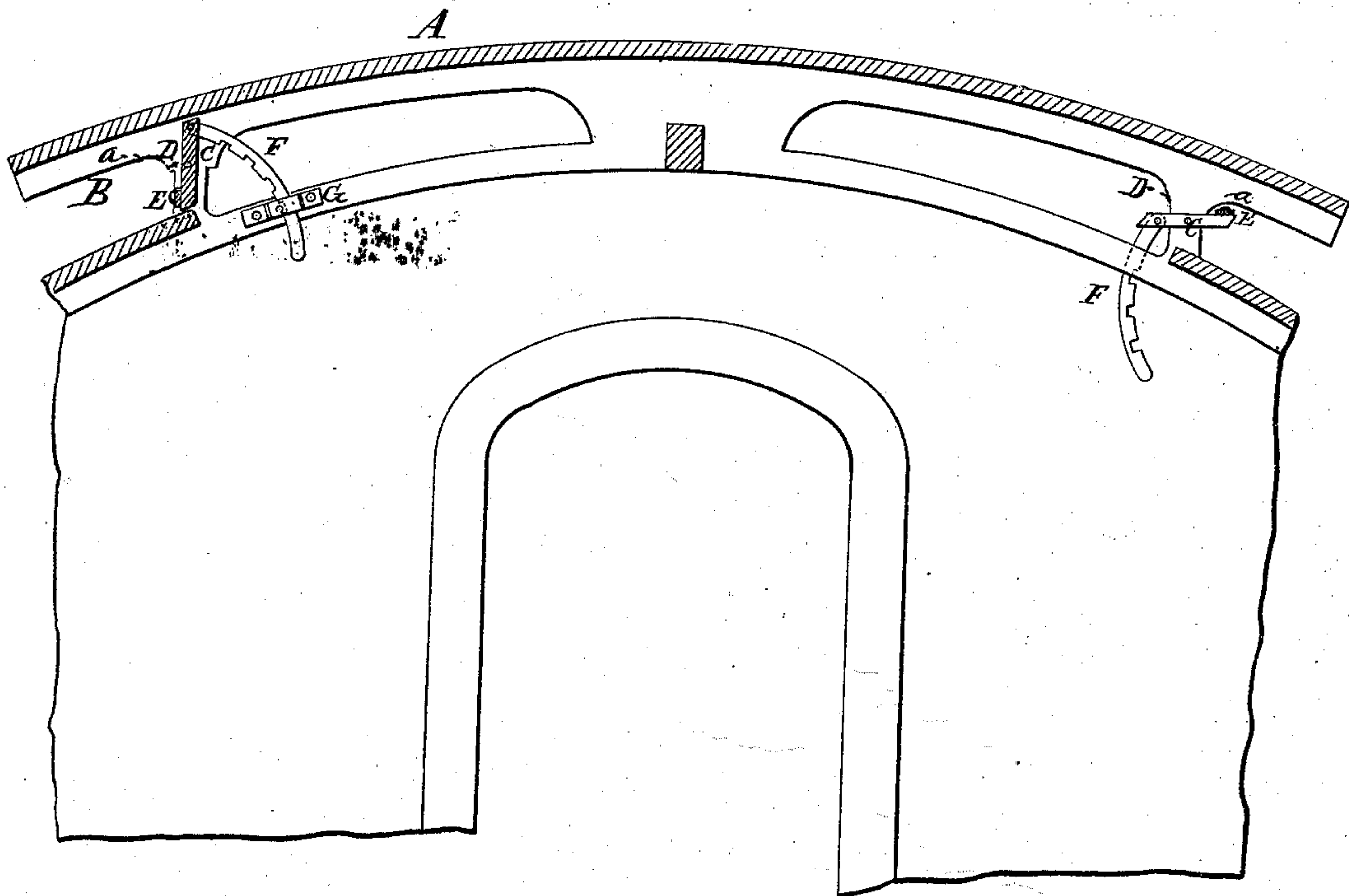
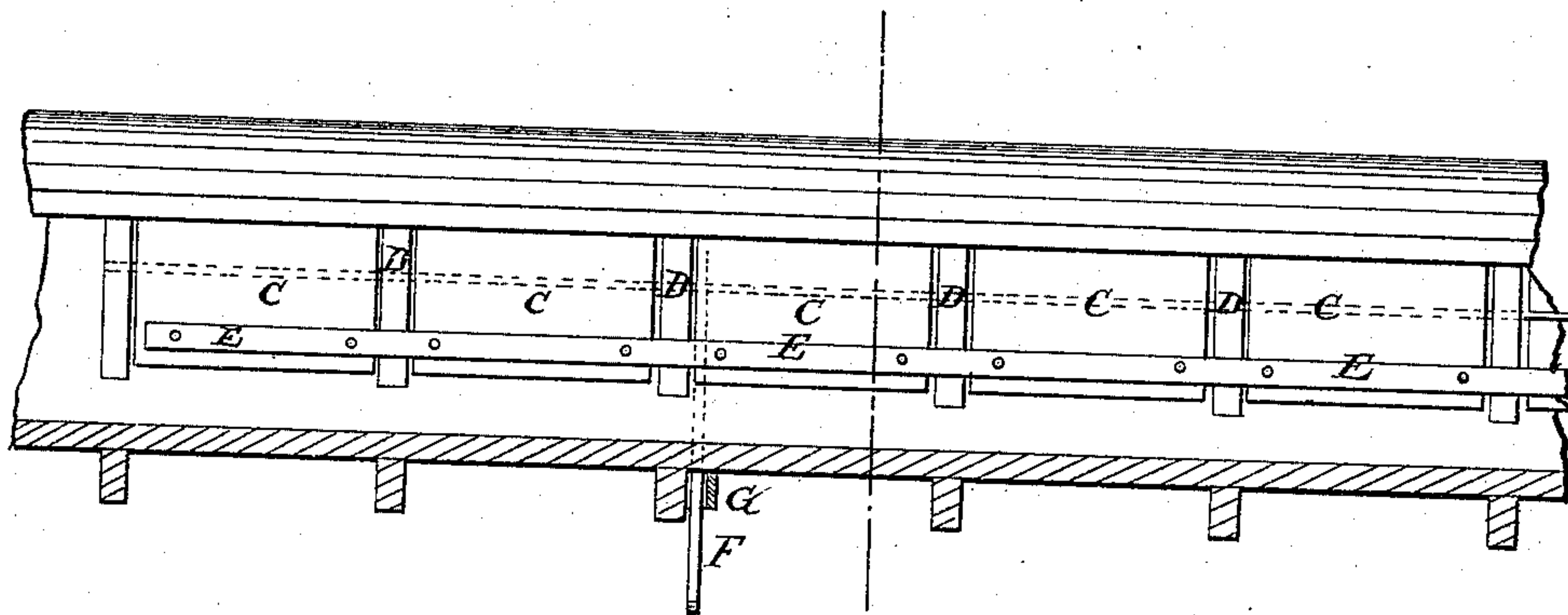


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ARCHIBALD HANCE, OF NEW YORK, N. Y.

IMPROVEMENT IN CAR-VENTILATORS.

Specification forming part of Letters Patent No. **168,897**, dated October 19, 1875; application filed January 25, 1875.

To all whom it may concern:

Be it known that I, ARCHIBALD HANCE, of the city, county, and State of New York, have invented a new and useful Improvement in Car - Ventilators, of which the following is a specification:

The invention consists in a series of pivoted ventilators or valves connected at one side or edge by means of a strap or bar, so that they may be operated simultaneously by means of a curved pivoted rack-bar. Another (and the main) function of the valve-connecting bar is to act as a stop for the valves when opened, or being opened, as hereinafter described.

In the accompanying drawing, Figure 1 represents a cross-section of the roof of a street-car, showing the construction of the ventilator-valves and mode of operating them. Fig. 2 is a side view of the roof, giving an outside view of the ventilating-valves on one side of the car.

Similar letters of reference indicate corresponding parts.

A is the car-roof. B is the offset from the roof, in which offset the ventilators are placed. C represents the ventilators or valves, which are placed so as to be nearly vertical when closed; but they may be in an inclined posi-

tion. These ventilating-valves are attached to their several openings by pivots in the center of their ends, which enter the timbers D, by which the valves are separated. E is a strip or bar of metal or other material, which is attached by nails or screws to the lower portions of the outsides of the valves. This strip or bar of metal forms a stop against the timbers D when the valves are closed, and, connecting, as it does, all the valves together, it allows them all to be operated at the same time.

I do not claim, broadly, a series of pivoted ventilating-valves so connected by a bar as to be capable of simultaneous operation; but

I claim—

In a car-ventilator, the valves C, pivoted centrally on a horizontal axis between the vertical posts D and the strip or bar E, attached to their lower edges, in combination with the car-roof having the construction shown, whereby said strip or bar acts as a stop, and holds the valves horizontal, or nearly so, when open, as shown and described.

ARCHIBALD HANCE.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.