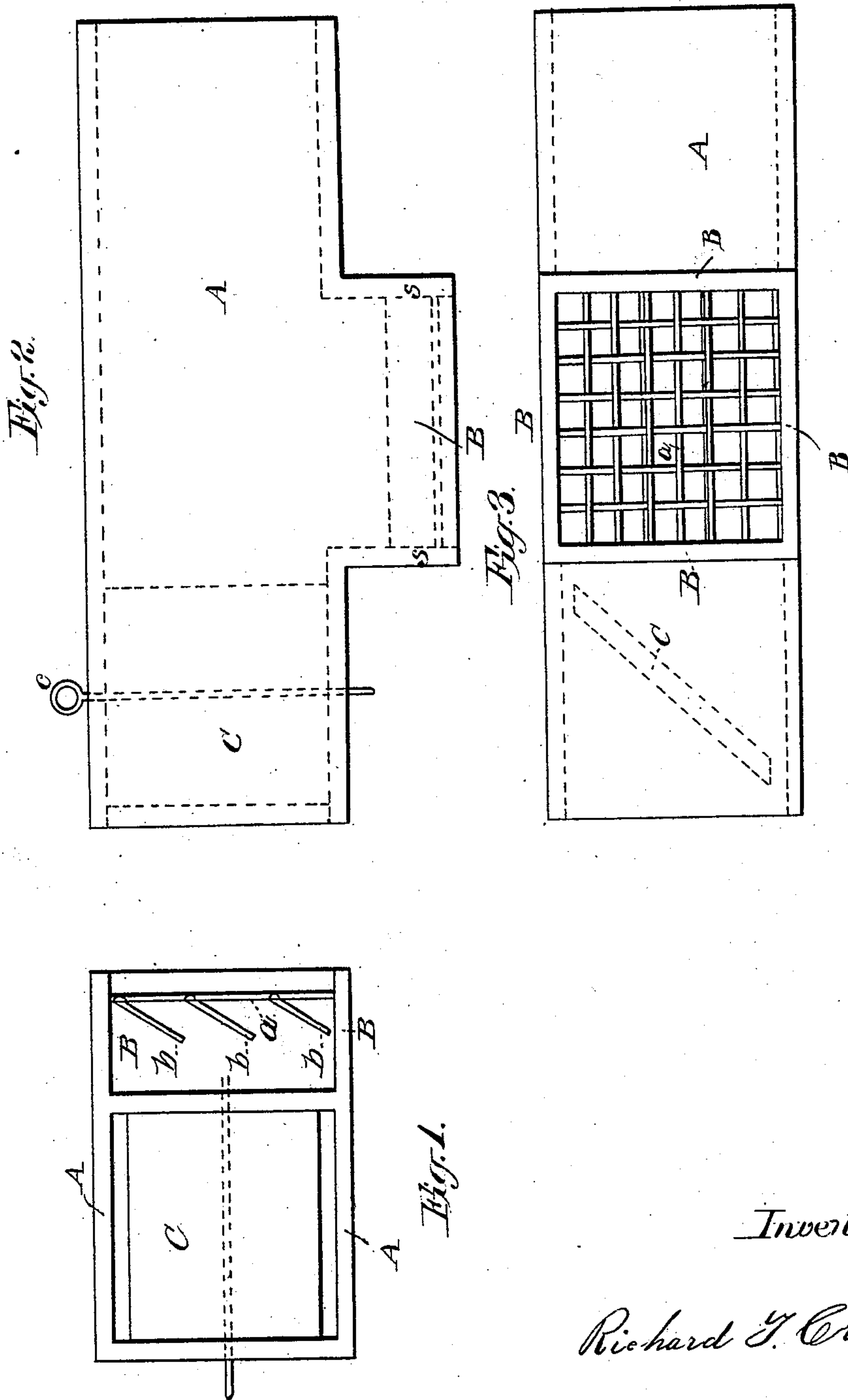


R. T. CRANE.

Ventilator.

No. 76,718.

Patented April 14, 1868.



*Inventor:*

*Richard T. Crane*

*Engine Peellony*  
*E. N. West.* Witnesses:

# United States Patent Office.

RICHARD T. CRANE, OF CHICAGO, ILLINOIS.

*Letters Patent No. 76,718, dated April 14, 1868.*

## IMPROVEMENT IN VENTILATORS.

*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, RICHARD T. CRANE, of the city of Chicago, Cook county, State of Illinois, have invented certain new and useful Improvements in Ventilating Buildings, buildings warmed by steam; and I do declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a cross-section.

Figure 2, a top view.

Figure 3, a side view.

This invention is especially designed to be used for buildings or rooms which are warmed by hot air, heated by steam in a chamber prepared for that purpose, before being introduced to the room; and the object of my invention is to provide for the ventilation of such room when the supply of cold air to the heating-chamber is cut off.

A represents a box or tube, through which pure cold air is conveyed to the heating-chamber. C is a valve, connected at *c* with the working parts of the engine, automatically operated in the usual manner, being open when the pressure of steam in the boiler is high, and closed when the steam is low. B is a projection from the side of the box A, provided with a wire netting, *a*, as shown. To the netting, on the inside thereof, I attach longitudinally one or more small cloth curtains, or valves *b*. These are attached at only one edge, the other being free. This projection is placed between the valve C and the heating-chamber.

The operation of this device is as follows: When the valve C is open, a current of cold air passes through the pipe A, and by this current of air the curtains or valves *b* are driven against the wire netting *a*, and no air can pass through the netting into the pipe A; but when the valve C is closed, then a current of air will pass through the netting *a* into the pipe A, and thence through the heating-chamber into the room to be ventilated. The projection B is to be located at any convenient point within the building. It is not the purpose of this invention to furnish complete ventilation at all times, but it is useful to furnish partial ventilation when the valve C is closed. This device can, when desired, be used in connection with heating-apparatus where steam is not used.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The projection and opening B, provided with the netting *a*, and curtains or valves *b*, in combination with the pipe A, substantially as and for the purposes specified.

Witnesses:

EUGENE P. MOORE,  
E. A. WEST.

RICHARD T. CRANE.