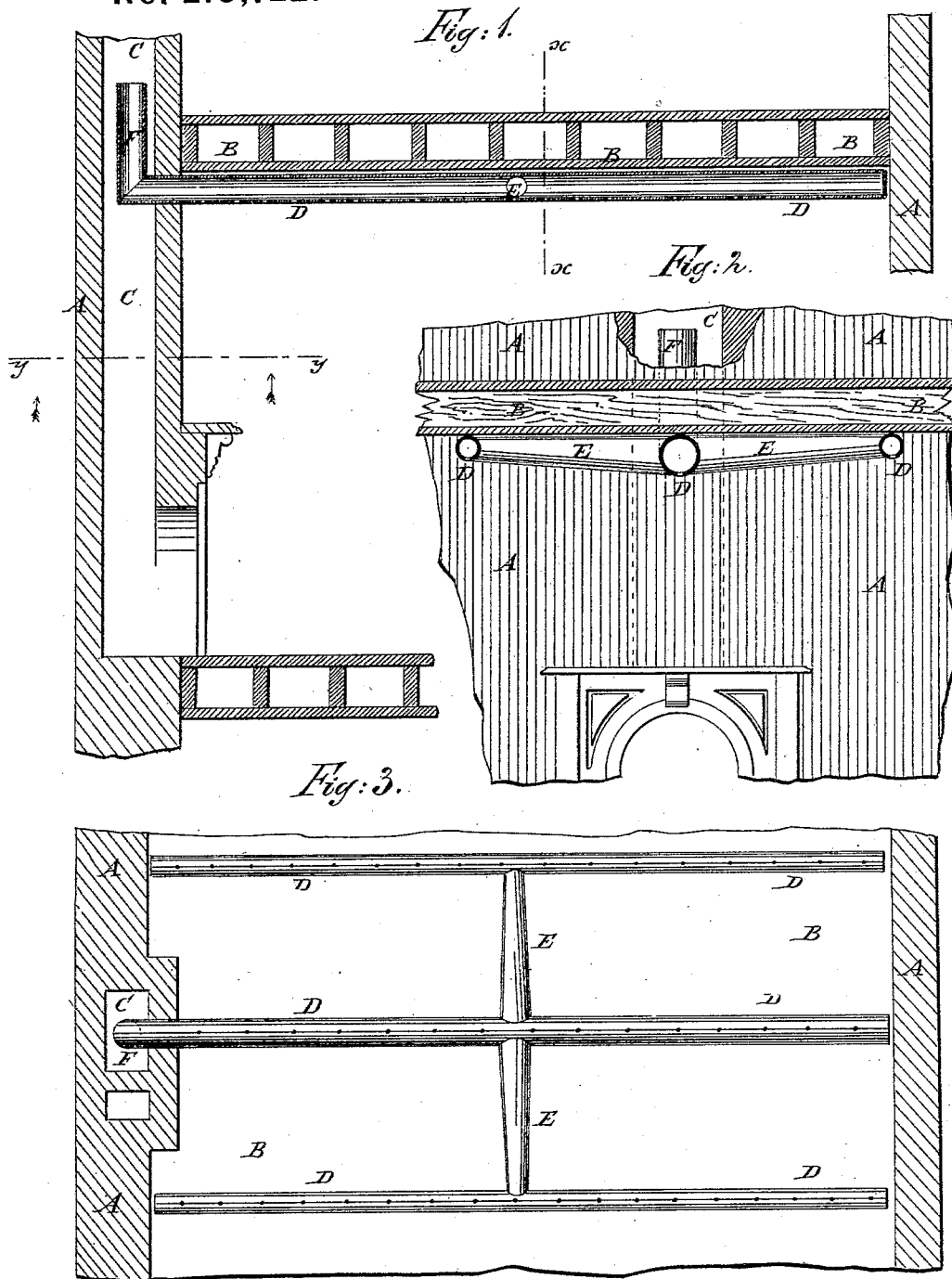


E. G. STERNBERG.
Ventilator.

No. 210,722.

Patented Dec. 10, 1878.



WITNESSES:

Cas. Nida
C. Deidquin

INVENTOR:

E. G. Sternberg

BY

Mumford

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UNITED STATES PATENT OFFICE.

ELIAS G. STERNBERG, OF DEPAUVILLE, NEW YORK.

IMPROVEMENT IN VENTILATORS.

Specification forming part of Letters Patent No. **210,722**, dated December 10, 1878; application filed November 19, 1878.

To all whom it may concern:

Be it known that I, ELIAS G. STERNBERG, of Depauville, in the county of Jefferson and State of New York, have invented a new and useful Improvement in Ventilators, of which the following is a specification:

Figure 1 is a vertical section of a room and chimney-flue with which my improvement has been connected. Fig. 2 is a vertical section of the same, taken through the line *x x*, Fig. 1, looking to the left. Fig. 3 is a horizontal section of the same, taken through the line *y y*, Fig. 1, looking upward.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved apparatus for ventilating the rooms of buildings and other places requiring ventilation, which shall be simple in construction, inexpensive in manufacture, conveniently applied to a room, and effective in operation, carrying off the foul air freely, and preventing it from accumulating in the room.

The invention consists in an improved ventilator, formed of one or more perforated pipes, extending along and secured to the ceiling of a room, and provided with an outlet-pipe, extending into and up through a chimney, a stove-pipe, or other flue, to a point above the level of the ceiling, to which the said perforated pipes are attached, as hereinafter fully described.

A represents the side walls, and B the ceiling, of a room. C represents a chimney-flue, adjacent to the room. D are perforated pipes, of any desired shape and size, which are extended along and are secured to the ceiling B. The perforated pipes D may be arranged to represent paneling, ribbing, or in any other desired way.

When more than one pipe D is used, they may be connected with a central or main pipe,

D, by cross-pipes E, or directly without the interposition of cross-pipes, as may be desired or convenient, reference being had to the arrangement of the said pipes D.

From the main pipe D an outlet-pipe, F, is led into a chimney-flue, C, into a stove-pipe, or into any other convenient flue, and is extended up the said flue until its upper end is higher than the level of the ceiling B, to which the pipes D are attached.

With this construction the heated products of combustion passing up the flue C induce a draft through the pipe or pipes D, and thus carry off the foul air more freely and thoroughly than they would if not thus assisted.

The main pipe D, at or near the point where it enters the flue C, should be provided with a damper, to enable the escape of air from the room to be regulated or prevented, as may be required, which damper is not shown in the drawings.

With this construction the ventilator can be readily attached to a ceiling without tearing it down or even injuring it, and may be so arranged as to be an ornament to the room.

This construction materially lessens the cost of applying ventilation to rooms already built.

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

An improved ventilator formed of one or more perforated pipes, D, extending along and secured to the ceiling of a room, and provided with an outlet-pipe, F, extending into and up through a chimney, a stove-pipe, or other flue, to a point above the level of the ceiling, to which the said pipes D are attached, substantially as herein shown and described.

ELIAS G. STERNBERG.

Witnesses:

S. F. DANFORTH,
O. W. CHEEVER,