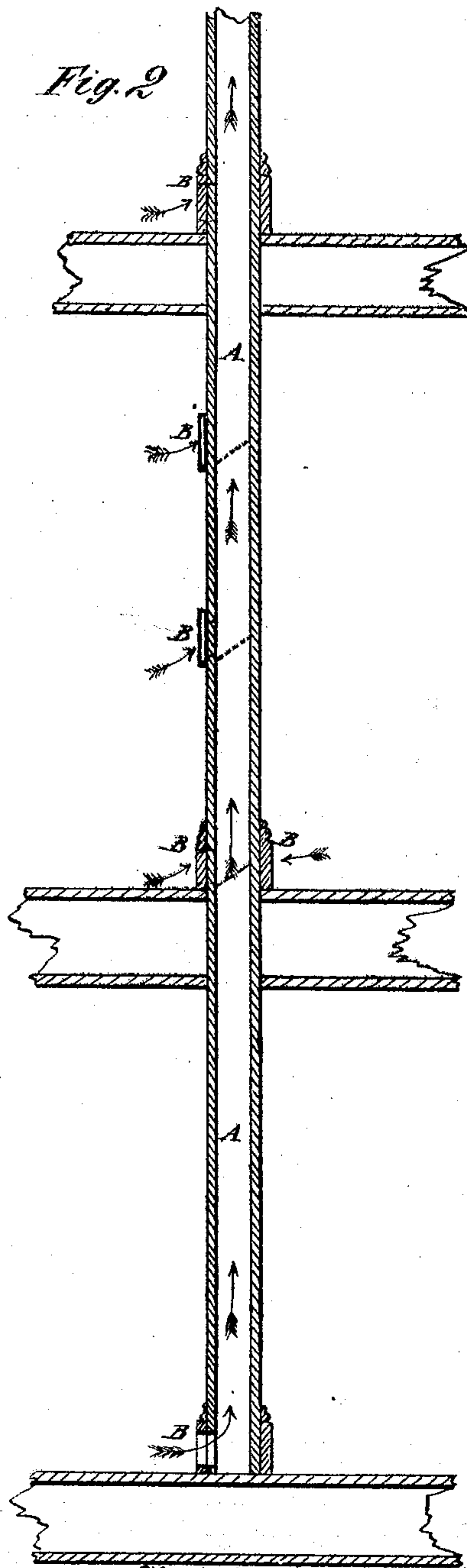
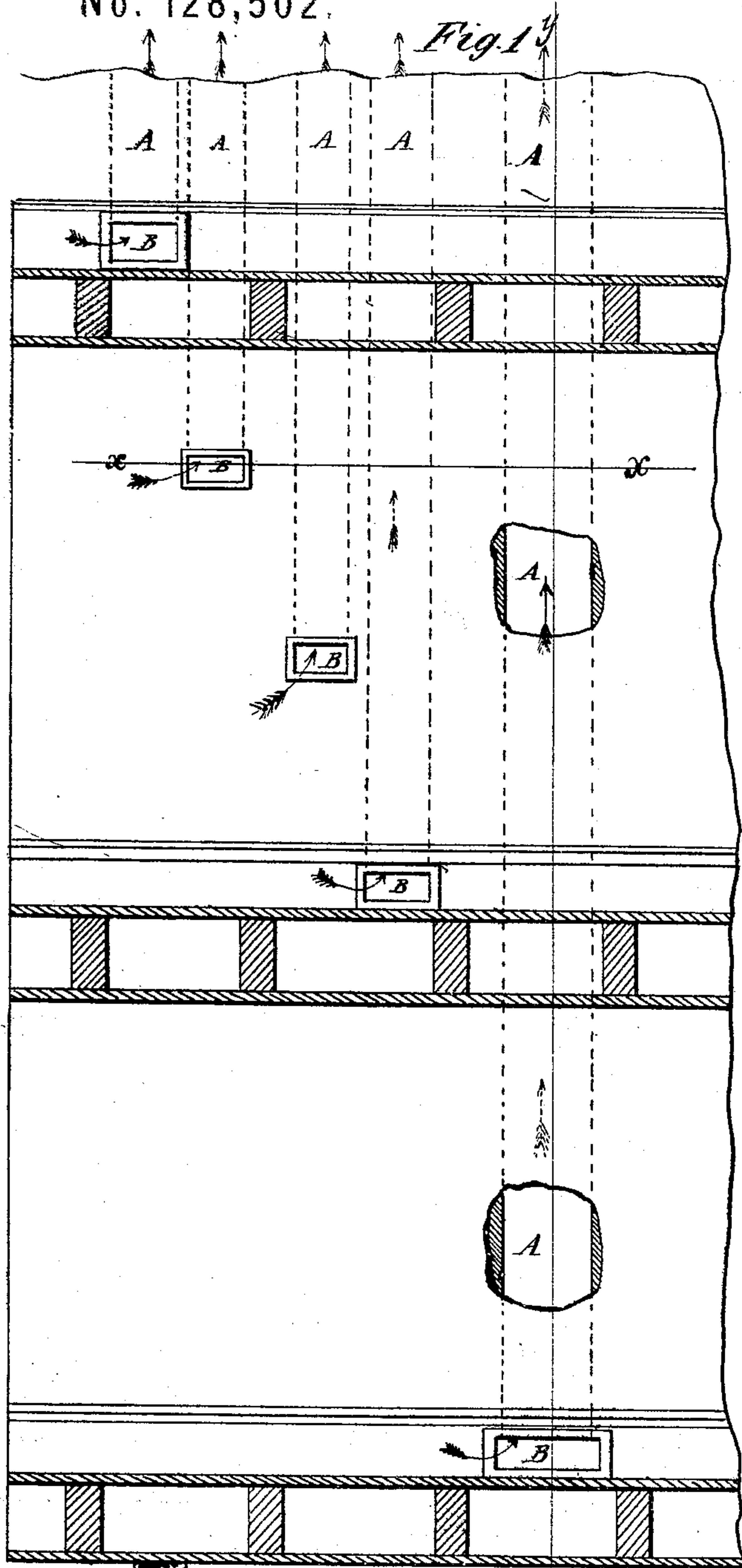


J. O'NEIL.
Ventilators for Buildings.

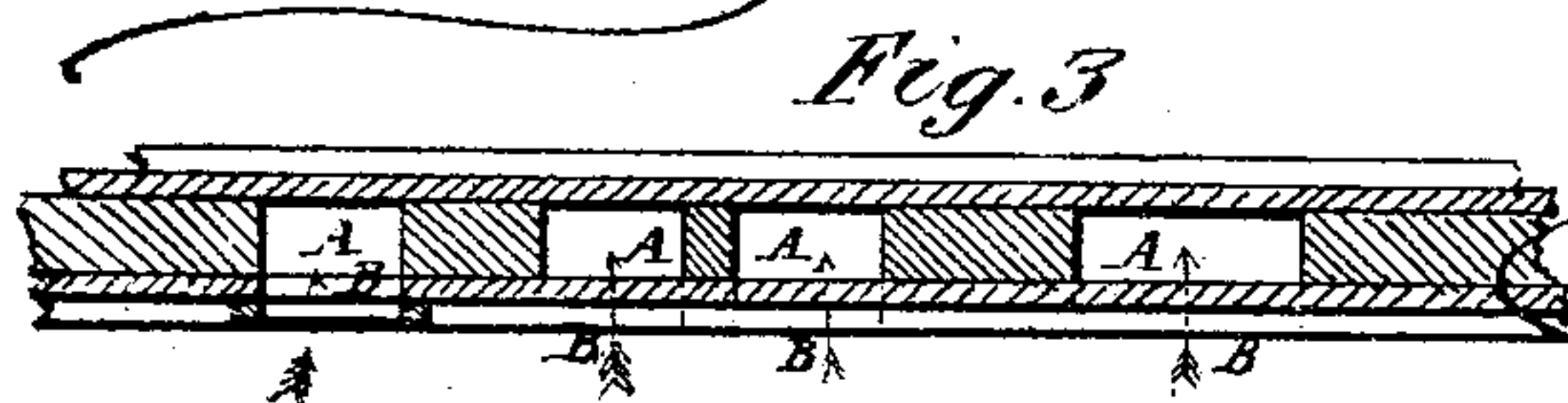
No. 128,502.

Patented July 2, 1872.



Witnesses:
A. W. Almquist
H. A. Graham

Inventor:
John O'Neil
PER *Mumford*
Attorneys.



UNITED STATES PATENT OFFICE.

JOHN O'NEIL, OF NEW YORK, N. Y.

IMPROVEMENT IN VENTILATORS FOR BUILDINGS.

Specification forming part of Letters Patent No. 128,502, dated July 2, 1872.

Specification describing a new and useful Improvement in Ventilating Buildings, invented by JOHN O'NEIL, of New York city, in the county and State of New York.

In the accompanying drawing, Figure 1 is a detail vertical section of a building to which my improved ventilators have been applied taken through a plane parallel with a partition-wall. Fig. 2 is a detail vertical section taken through the line *y y*, Fig. 1. Fig. 3 is a detail cross-section of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the ventilation of houses and other buildings having inner or partition walls, so that the foul or vitiated air may be carried off and discharged into the open air, and at the same time in such a way as to take up no extra space and cause but little extra expense; and it consists in the mode of ventilating through the partitions, as hereinafter more fully described.

This mode of ventilation is applicable to all buildings which have inner or partition walls extending vertically from the lower floors to the roof or garret. These inner or partition walls are constructed in the ordinary manner by attaching laths and plastering or boards to the opposite sides of studs, thus forming as many vertical flues or spaces *A* as there are studs, less one. I use not less than three of these flues in each apartment to be ventilated, forming an opening, *B*, into each—into one through the base-board, into another at a point about five feet above the floor, and into the third at or near the ceiling of the room, as shown in Figs. 1 and 2 of the drawing. These openings should be provided with ordinary registers. I have found a great advantage in practice in the use in the same room of open-

ings at different heights connecting with independent flues.

Care should be taken that no two openings, *B*, either upon the same side or upon the opposite side of the partition-wall, or upon the same floor or upon different floors, lead into the same flue or duct *A*. Where beams are encountered the ducts must be made continuous by forming holes through them.

At the garret all the ducts or flues *A* of the same partition or of the same part of the building may be led into a common duct passing out through and rising to a suitable height above the roof of the building. This common duct or flue may be made of boards or other suitable material, and its upper end should be provided with a cap or cover made of galvanized iron or other suitable material, and so constructed as to prevent the entrance of rain or wind, while allowing the foul air to escape freely.

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

The mode of ventilation herein shown and described—that is to say, by using the spaces between the studs and laths as air-ducts, three, at least, of said ducts being used for each apartment, so that there may be three openings leading from the apartment into said ducts—one into each, one being placed near the floor, one near the ceiling, and a third at an intermediate point about five feet from the floor, and the whole connected with a proper chimney or exit-flue at the top of the house and with suitable ingress-passages for fresh air, in the manner and for the purpose shown and described.

JOHN O'NEIL.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.