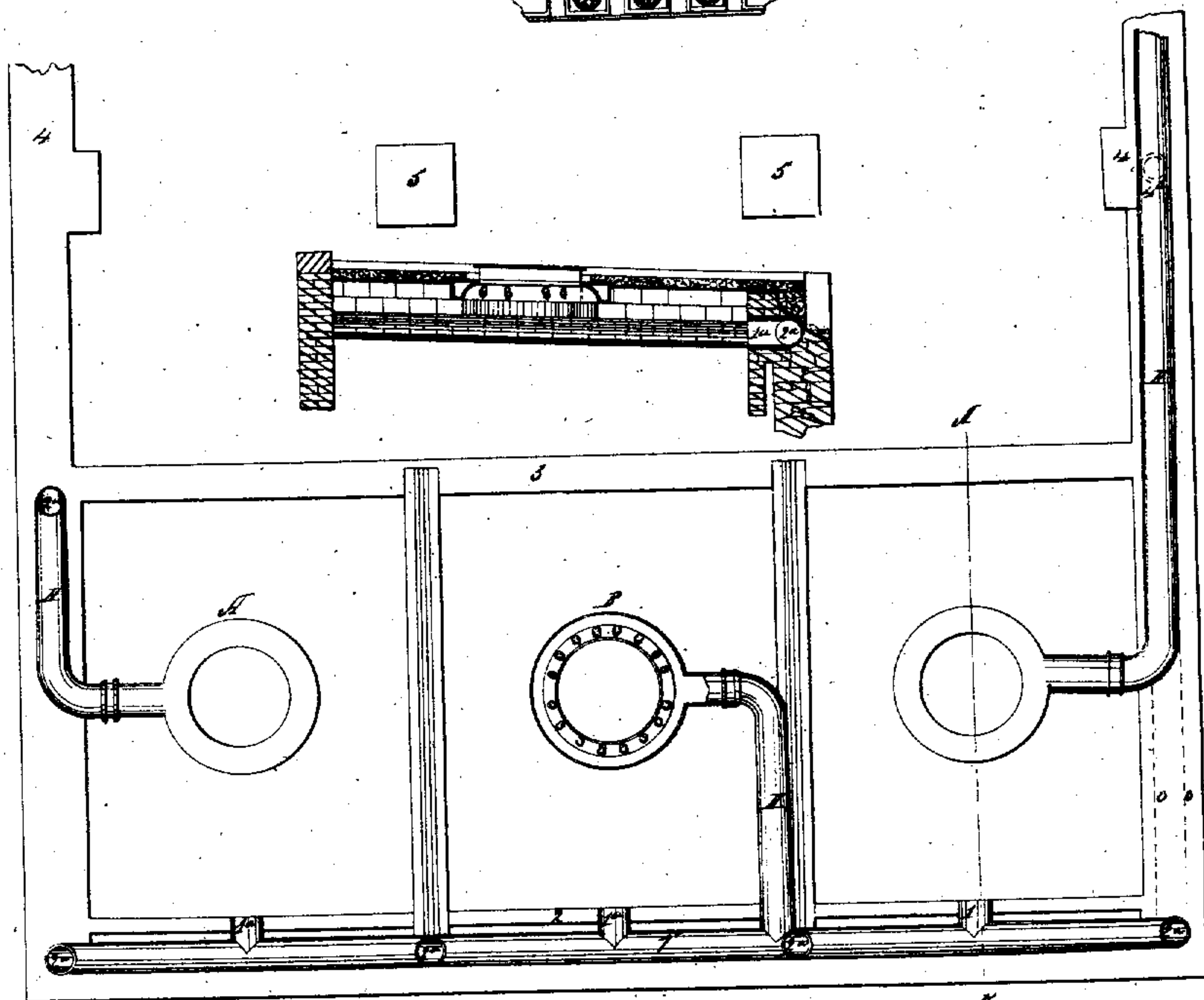
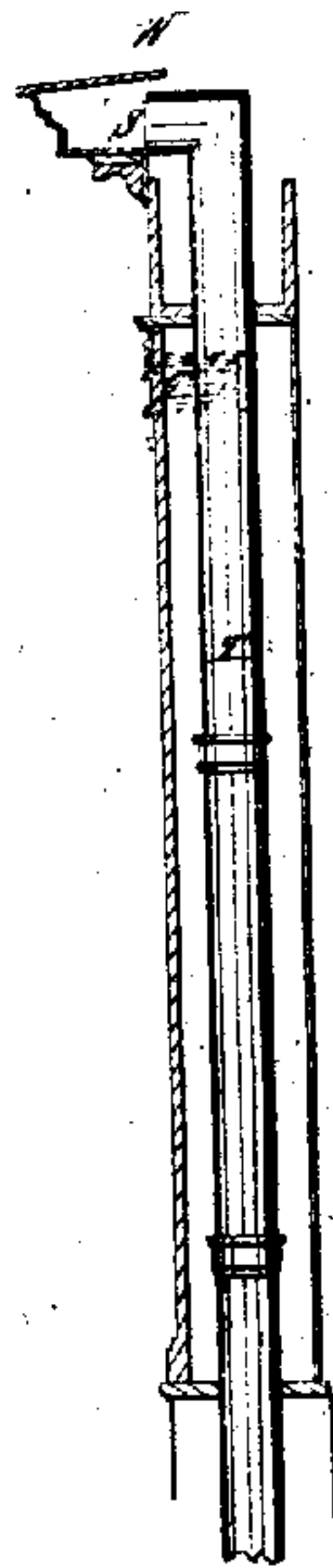
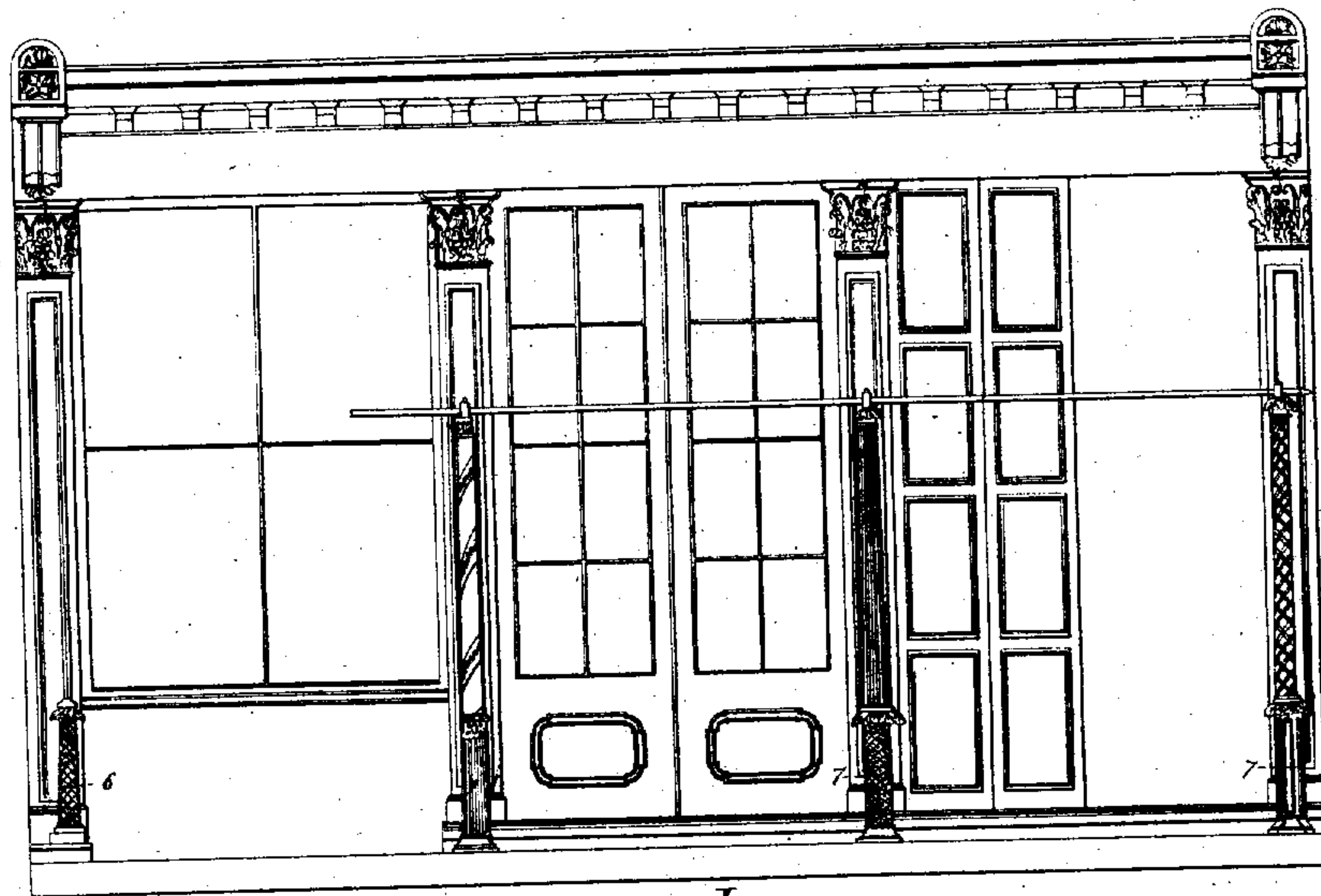


*G. R. Jackson*  
*House Ventilator*

*N<sup>o</sup> 17,097.*

*Patented Apr. 21, 1857.*



# UNITED STATES PATENT OFFICE.

GEORGE R. JACKSON, OF RYE, NEW YORK.

## METHOD OF VENTILATING VAULTS.

Specification of Letters Patent No. 17,097, dated April 21, 1857.

*To all whom it may concern:*

Be it known that I, GEORGE R. JACKSON, of Rye, in the county of Westchester and State of New York, have invented a new and Improved Method of Ventilating Apartments Which are Situated Under Street-Pavements; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

I am aware that the attempt has been made to ventilate subterranean apartments by so constructing the covers which let light in said apartments, that they will also allow the air to pass through them while at the same time the said covers exclude water. But these covers are objectionable for the reason that they admit dust and snow as well as air, and therefore they are seldom if ever used.

My method of ventilating the aforesaid apartments consists in connecting the elevated recesses in the ceilings thereof, beneath each of the illuminating covers, directly with hollow ventilating lamp-posts (by means of suitable horizontal tubes H,) or with any of the chimney or other flues of the building which rises above the aforesaid apartments; my invention consisting in connecting the said deep illuminating recesses in the ceilings of the aforesaid underground apartments with outwardly opening vertical tubes, or flues, by means of suitable horizontal tubes located beneath the paving of the side-walk substantially as represented in the accompanying drawings.

When it is considered that the vertical distance between the ceilings of the vaults under street side-walks, and the surface of said side-walks is fully two feet, it will readily be understood that the only perfect manner of ventilating said vaults will be in connecting the deep vault-cover recesses in the ceilings thereof, immediately with the hollow lamp-posts rising from the edge of the side-walk, or with the flues of the building.

In the accompanying drawings "elevation A," shows a store front of usual construction. Plan B, shows vaults and area, and also the piers 5, 5, which support the store front. The annular vault-cover frame A, is connected by means of the tube H, at 3<sup>a</sup>, to ventilating post 6, shown in elevation A. The annular vault-cover frame B is con-

nected by means of tubes H and V, at 2<sup>a</sup>, 2<sup>a</sup>, to posts 7, shown in "elevation A." The vault-cover frame C, is connected by means of the tube H, at 4<sup>a</sup>, to tube T in section W, or to a chimney flue.

What I claim as my invention and desire to secure by Letters Patent, is—

Connecting the aforesaid elevated recesses in the ceilings of subterranean apartments with ventilating lamp-posts, or with the flues of a building, substantially in the manner and for the purpose herein set forth.

GEO. R. JACKSON.

Witnesses:

JAMES J. BURNET,  
EDW. V. BURKE.

DISCLAIMER.

*To the Commissioner of Patents:*

The petition of GEORGE R. JACKSON, of Rye, in the county of Westchester and State of New York, respectfully represents that your petitioner did obtain Letters Patent of the United States, for an improvement in illuminating vault-covers, which Letters Patent bear date the 21st day of April, 1857; and he has reason to believe that through inadvertence and mistake, the claim made in the specification of said Letters Patent is too broad, and is so worded that it apparently includes that of which your petitioner was not the first inventor. Your petitioner, therefore hereby enters his disclaimer to the feature covered by the aforesaid claim, save when it shall be qualified by the following explanation, viz: "but this I only claim when the said glasses and the illuminating cover with which they are combined, are of such a shape that the inclined surfaces of the pyramidal or polygonal portion of the glasses, descend partially or entirely below the under surface of the sash, or metallic portion of said frame, for the purpose of enabling said glasses to widely diffuse the light which may pass through them, substantially as herein set forth," thereby making the claim in my said patent read as follows, to wit:

What I claim as my invention and desire to secure by Letters Patent, is—

Combining glasses of an inverted pyramidal or polygonal form with the sash, or metallic portion of an illuminating vault-