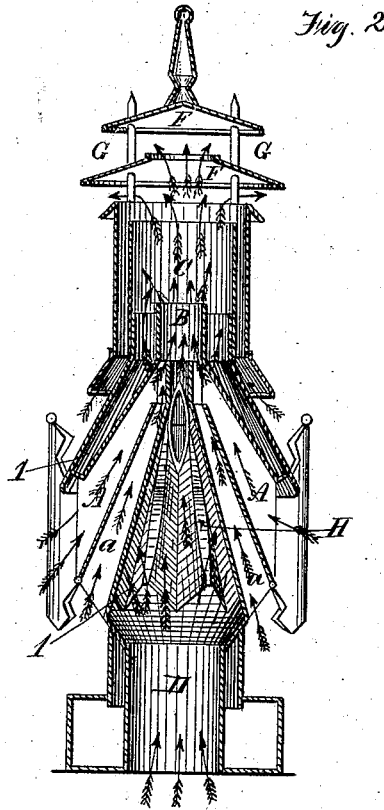
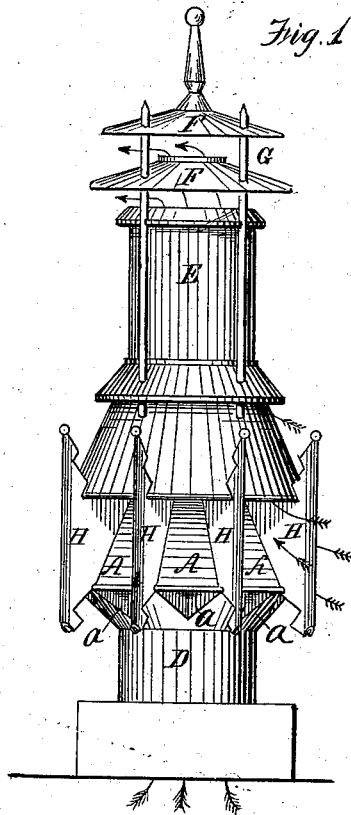


A. B. BROWN.  
ATMOSPHERIC EXHAUSTERS.

No. 194,764.

Patented Sept. 4, 1877.



Witnesses;  
P. H. Smith  
Dexter Rice

Inventor  
A. B. Brown.

# UNITED STATES PATENT OFFICE.

AARON B. BROWN, OF WORCESTER, MASSACHUSETTS.

## IMPROVEMENT IN ATMOSPHERIC EXHAUSTERS.

Specification forming part of Letters Patent No. **194,764**, dated September 4, 1877; application filed January 31, 1877.

*To all whom it may concern:*

Be it known that I, AARON B. BROWN, of the city of Worcester, in the county of Worcester and State of Massachusetts, have invented an Improvement in Atmospheric Exhausters, known as Ventilators, of which the following is a specification:

My invention is intended to be applied to air-shafts, flues, or chimneys, and to any other place or places from which it may be desirable to exhaust air or gases, or to assist the circulation of the same.

My invention is so constructed as to make use of the natural current of air coming from any point of the compass as a motive power, catching the air in condensers, openings, or avenues which diminish in area toward a common central vertical tube. By this means the air is compressed and increased in velocity, and in passing upward through the main shaft, on the well-known injector principle, removes the air with such rapidity that it tends to create a vacuum, which must be supplied from the space needing ventilation through the open spaces between the condensers, forming a free connecting passage from the lower to the upper parts of the main shaft or flue.

In the accompanying drawing, Figure 1

shows a vertical cut of my exhauster. Fig. 2 shows a section of the same through the center.

Like letters indicate corresponding parts.

A *a* are the inlets of the condensers. B is the outlet or vertical discharge-tube of the condensers. C is the termination of the main shaft or flue. D is a portion of the shaft or flue below the condensers, from which the air has a free and unobstructed passage into C through the spaces between the condensers marked H H, as shown by the arrows. E is an outer cylindrical cover to C, and F F are storm-hoods, supported on the rods G G.

What I claim as my invention is—

The combination and arrangement of the condensers, as shown at A *a* and B, with the vertical shafts C D, so arranged as to discharge the condensed or compressed air upward into the center of the main shaft C D, as shown at B, in a manner whereby the air is suddenly lifted in the main shaft, substantially as set forth.

AARON B. BROWN.

Witnesses:

P. H. SMITH,  
J. HOWES.