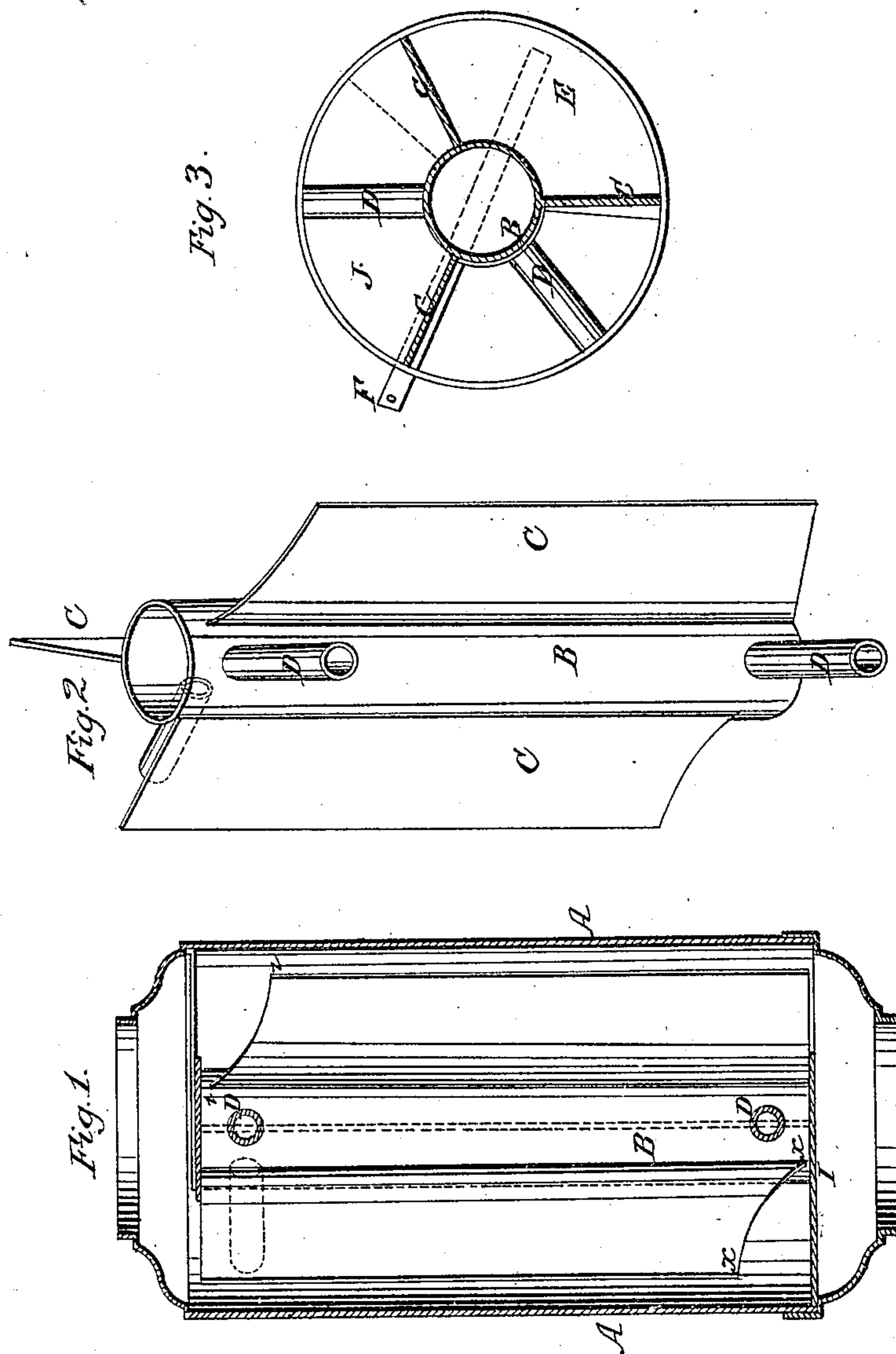


J. F. BECKWITH.
STOVEPIPE DRUM.

No. 67,251.

Patented July 30, 1867.



Witnesses:
A. W. Marr.
V. D. Stockbridge.

Inventor.
J. F. Beckwith
per
Alexander Mason
Attys

United States Patent Office.

JAMES F. BECKWITH, OF ALBION, NEW YORK.

Letters Patent No. 67,251, dated July 30, 1867.

STOVE-PIPE DRUM.

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, JAMES F. BECKWITH, of Albion, in the county of Orleans, and in the State of New York, have invented certain new and useful Improvements in Heat Radiators; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon. In the annexed drawings making part of this specification—

A represents a cylinder made of sheet metal, and provided at each end with caps, which caps are formed so that they will receive into them the ordinary stove pipe. By opening a joint in the pipe this cylinder may be placed between, and the two ends of the pipe inserted in the opening in the caps. Within the cylinder A is placed a pipe, B, which is about one-third of its diameter. This pipe is closed at both ends, and is provided with three wings or flanges C, which run longitudinally of it, which are equidistant apart, and extend out to and connect with the case or cylinder A. One of the flanges has a portion of its bottom cut away, as seen at *x x*, fig. 1, and another has a portion of its top cut away, as seen at *z z*, fig. 1. The object of this is that the products of combustion may be passed up one of the flues formed by these three flanges, then through the opening formed by cutting away a portion of the flange, down another flue, and then, through the other opening in the flange, up the third flue, and to the pipe above. A damper, E, closes one of the flues when desirable. Should the damper E be opened the products of combustion would pass directly through the cylinder to the smoke pipe above. A plate, I, covers two of the flues at their bottoms, so that there is no communication between them except through the flange from *x* to *z*. A plate, J, covers one of the flues at its top, while the damper E regulates one of the others.

It will be seen that when the damper E is open a direct draught is had, and when the said damper is closed the heat is passed three times through the cylinder before it escapes. The pipe B is closed at both ends and is intended to carry the heat to the outside cylinder that it may be thrown into the room through the small tubes D D D.

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

The cylinder A, provided with vertical pipe B, bevelled flanges C C, air-tubes D D D, damper plate E, and cap I, all being constructed, arranged, and used in the manner and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of April, 1867.

JAMES F. BECKWITH.

Witnesses:

J. PHELPS,

CHARLES BECKWITH.