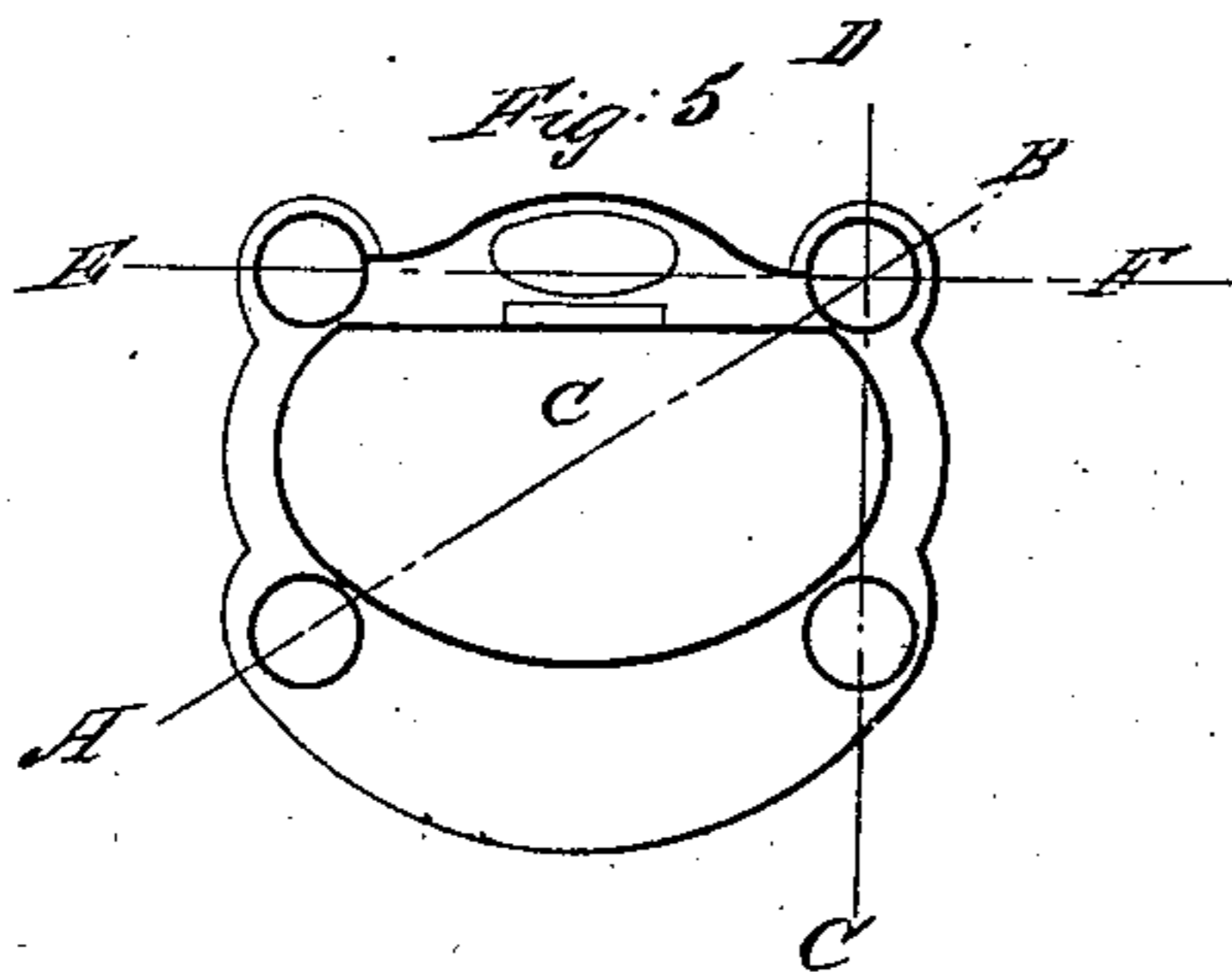
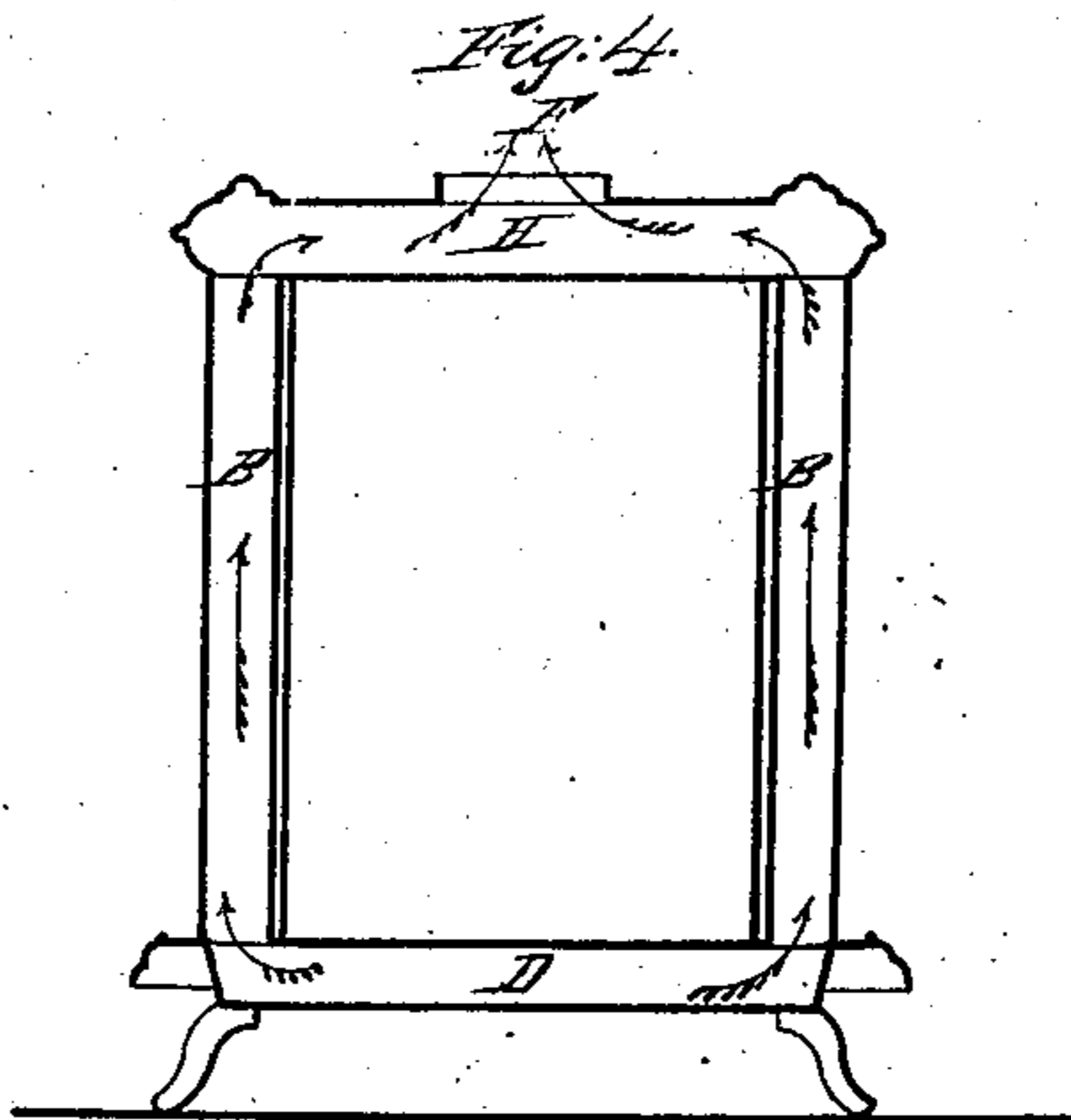
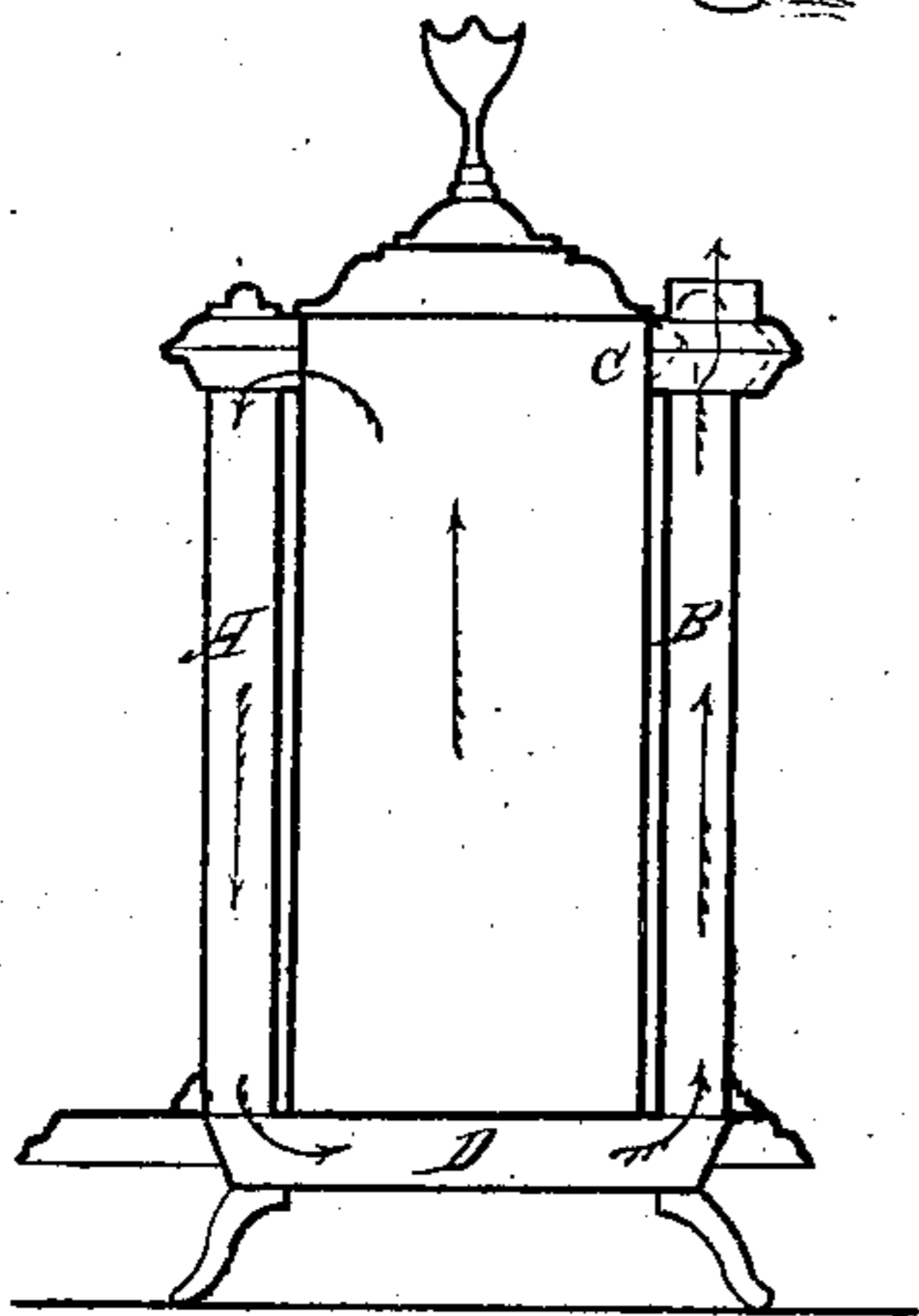
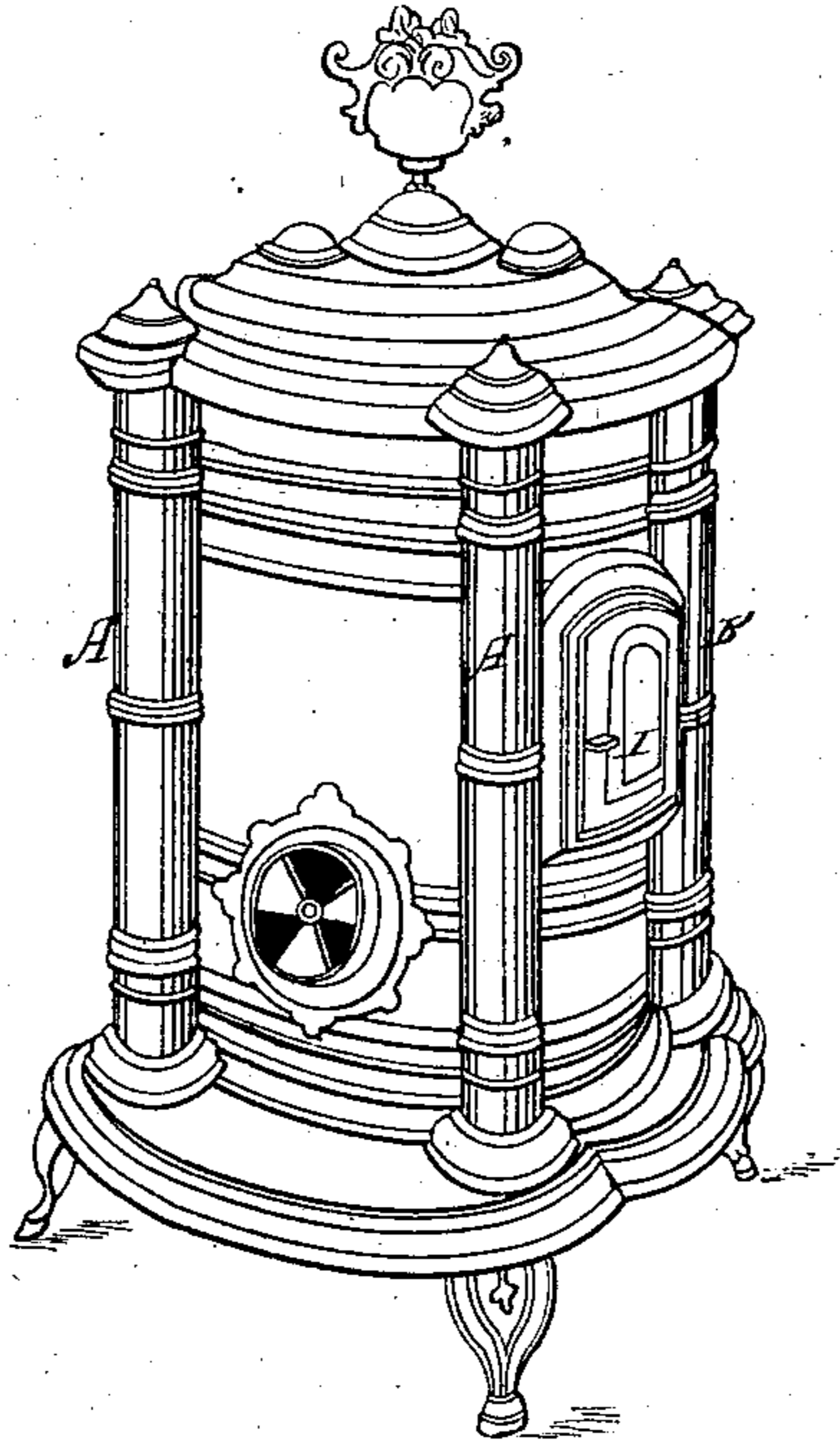
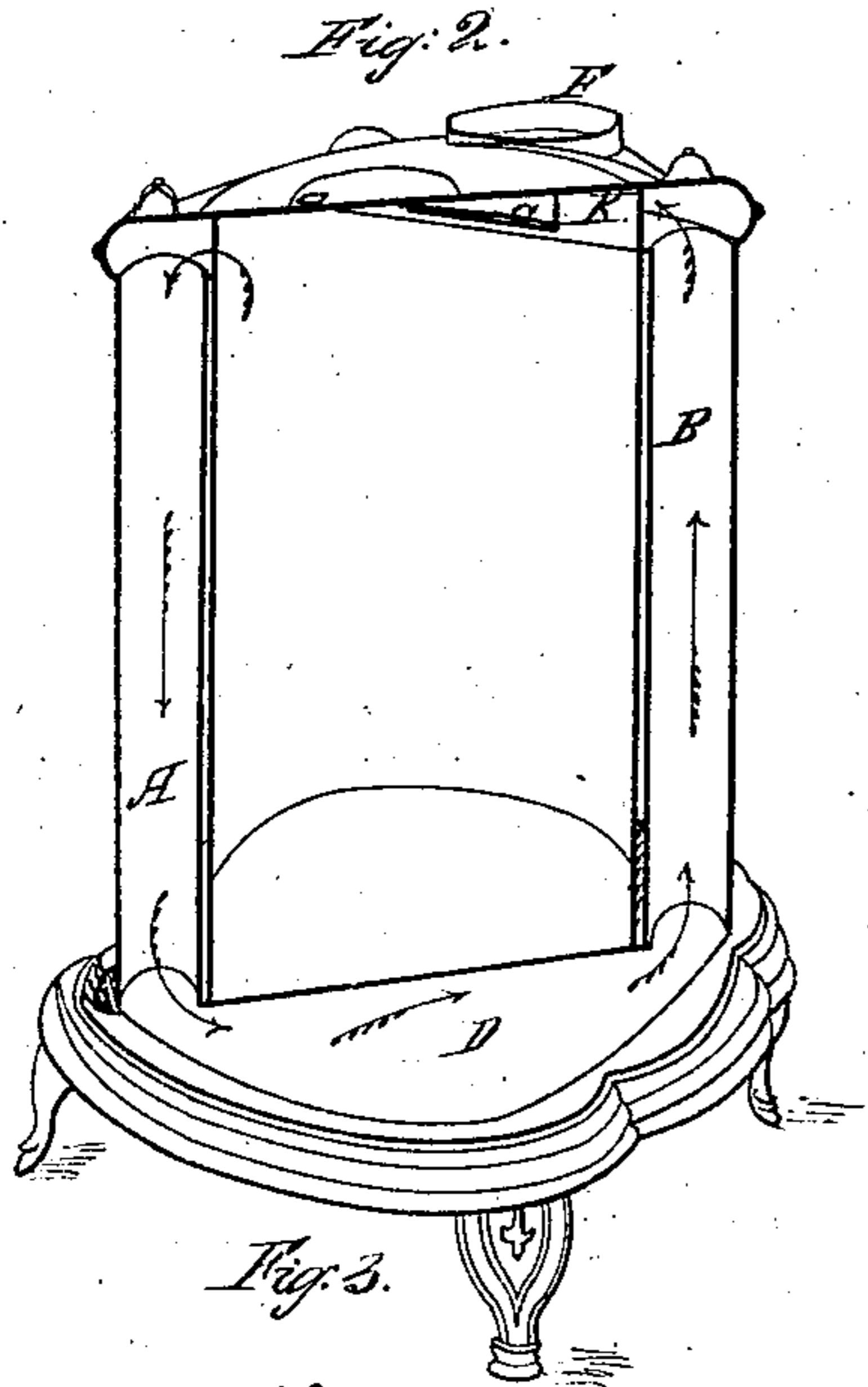


G. G. Wolfe.

Heating Stove.

N<sup>o</sup> 64,616.

Patented May 7, 1867.



Witnesses:

Charles D. Kellogg  
R. D. Reille

Inventor:

G. G. Wolfe

# United States Patent Office.

GURDON G. WOLFE, OF TROY, NEW YORK.

*Letters Patent No. 64,616, dated May 7, 1867.*

## WOOD-BURNING STOVE.

*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, GURDON G. WOLFE, of the city of Troy, in the county of Rensselaer, and State of New York, have invented a new and improved "Wood-Burner;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being hereby had to the accompanying drawings, which form and make a part of this specification.

Like letters represent and refer to like or corresponding parts.

Figure 1 is a perspective view of a stove containing my said improvements, more fully hereinafter described and set forth.

Figure 2 is a section through the dotted lines A B, shown at fig. 5, showing the interior construction of the stove, and also showing the direction of the draught, when the damper C is closed, by means of the arrows, each being more fully hereinafter described and set forth.

Figure 3 is also a sectional view through the dotted lines C D, showing one of the front columns or flues A, and one of the back columns or flues B, also showing the damper C, each being more fully hereinafter described and set forth.

Figure 4 is also a section through the dotted lines E F, (red letters, fig. 5,) showing the two back flues or columns B B, and also the bottom flue or chamber D, and the exit pipe F.

Figure 5 is a top view of a stove containing my improvements, the dotted lines shown thereon indicating the points where the sections are cut, heretofore described and shown at figs. 2, 3, and 4.

The nature of my said invention and improvements consists in the employment of the front descending flues or columns A A, and the back upward flues or columns B B, operating in the manner and by the means substantially as hereinafter fully described and set forth. It also consists in dividing the upper annular flue or chamber H by means of the partition K or its equivalent, for the purpose of closing the entrance to the exit pipe F when it is desired to have a circuitous draught, substantially as hereinafter more fully described and set forth.

To enable others skilled in the art to which my invention relates to make and use the same, I will here proceed to describe the construction and operation of the same, which is as follows, to wit:

The front and back flues or columns A A and B B connect and open into the annular chamber H at the top, and at the bottom open into the flue or chamber D. The said flues may be of any desired shape, size, or capacity desired, and there may be any number of them deemed best. Across the back part of the upper annular chamber H I construct a partition, K, which prevents the heat and products of combustion from passing down the back flues B B, or into the exit pipe F, when the damper C is closed, substantially as hereinafter described. The fuel to be used is put in the stove at the door I, and the damper C being open, the products of combustion pass directly into the chimney through the exit pipe F. After the fire is started the damper C is closed, and in this position the heat or products of combustion pass down the front descending flues A A, and into the flue or chamber D, thence upward through the back flues B B, and into the chimney through the exit pipe F, as aforesaid. By this arrangement I am enabled to secure a greater amount of radiating surface, thereby attaining more heat from the same amount of fuel than has heretofore been done in stoves of this character.

Having thus described the nature of my said invention and improvements, what I claim as my invention, and desire to secure by Letters Patent of the United States of America, is—

1. I claim the employment of the chamber H, divided by means of the partition K, containing the movable damper C, in combination with the rear or back column flues B, by means of which the direct and circuitous draught is had, in the manner substantially as herein described and set forth.

2. I claim the broad-bottom flue D, in combination with the front column flues A, and with the rear or back column flues B, each being arranged in the manner substantially as herein described and set forth.

In testimony whereof I have hereunto set my hand this 17th day of October, A. D. 1866.

GURDON G. WOLFE.

Witnesses:

CHARLES D. KELUM,  
R. H. BEILLE.