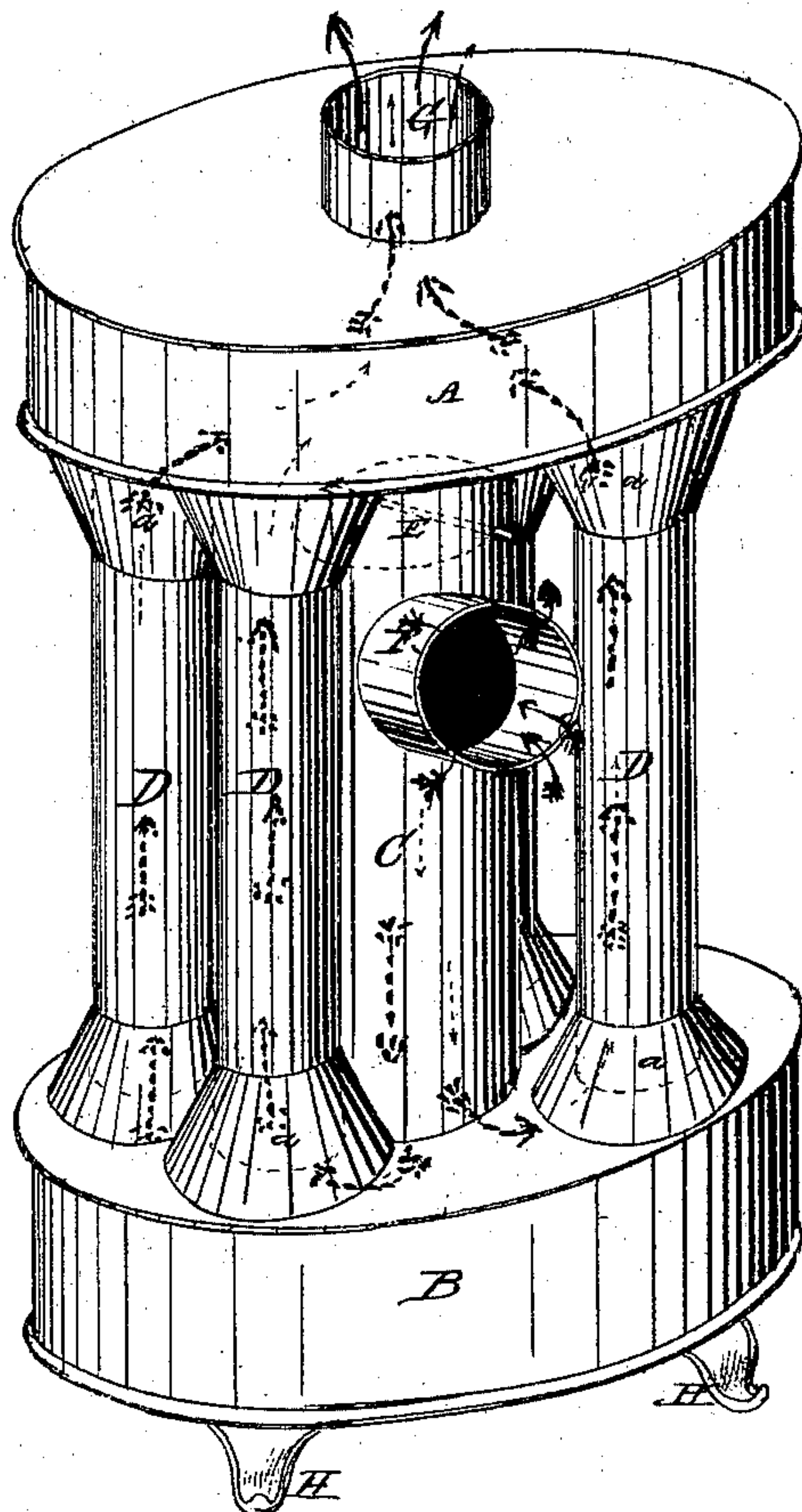


C. FISHER.
Heating Drum.

No. 113,413.

Patented Apr. 4, 1871.



Witnesses.

W. L. Mearns
Chas. D. Moody

Inventor.

Charles Fisher, by
Prindle and Byer
Atty's.

United States Patent Office.

CHARLES FISHER, OF NILES, MICHIGAN, ASSIGNOR TO HIMSELF AND
HENRY N. WILCOX, OF SAME PLACE.

Letters Patent No. 113,413, dated April 4, 1871.

IMPROVEMENT IN STOVE-DRUMS.

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, CHARLES FISHER, of Niles, in the county of Berrien and in the State of Michigan, have invented certain new and useful Improvements in Stove-Drums; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, which drawing is a perspective elevation of my stove-drum. The arrows show the course of the products of combustion when the damper is closed.

The nature of my invention relates to improvements in the construction of stove-drums intended to be used in rooms adjoining that in which the stove is placed, and also in rooms above; and consists in the combination of an upper and a lower radiating-chamber with vertically-arranged connecting-flues, and in the arrangement of the opening for the connecting smoke-pipe upon the upper portion of the central flue between the upper and lower radiating-chambers, all of which as more fully hereinafter set forth.

In the drawing—

A represents the upper radiating-chamber, and
B the lower.

The tops and bottoms of these chambers are similar, and in parallel planes.

The wall of the chamber is a band joined to the top and bottom.

These radiating-chambers are connected by a set of pipes or flues vertically arranged. There is a central larger pipe, C, and surrounding smaller pipes D D D D.

The pipes D D D D have around their tops and bottoms collars *a*, which, in their general form, are similar to the base and cap of a column, and serve to brace and strengthen the pipes.

In the central flue C there is inserted near the upper end and above the connection with the pipe leading from the stove, a damper, E, which permits the products of combustion to pass directly to the chim-

ney when turned in one direction, or indirectly through the radiating-chambers A and B and the flues C and D D D D when turned in the other direction.

Near the upper end of the central flue C and below the damper E is an opening, F, provided with a suitable collar, into which is inserted the pipe leading from the stove, or any intermediate stove-drum.

On the top of the upper radiating-chamber is an exit-pipe or flue, G.

The drum is supported by suitable legs, H.

In operating this stove-drum, if it is desired to increase the draught, or to lessen the heat, the damper E is opened and the products of combustion will pass directly upward through the upper radiating-chambers to the exit-flue. But if, after the fire has become well lighted, it is desired to increase the heat in the room in which the stove-drum is placed, the damper E is closed and the products of combustion are directed downward, as indicated by the arrows through the central flue C; thence through the lower radiating-chamber B; thence upward through the flues D D D D; thence into and through the upper radiating-chamber; and thence out the exit-flue G.

Having thus described my invention,

What I claim as new therein is—

The stove-drum described and shown, provided with the radiating-chambers A and B, the vertical connecting-flues C and D, the smoke-pipe opening F, the damper E, and the exit-pipe G, all constructed and arranged substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of January, 1871.

CHAS. FISHER.

Witnesses:

DAVID BACON,
JOHN KING.