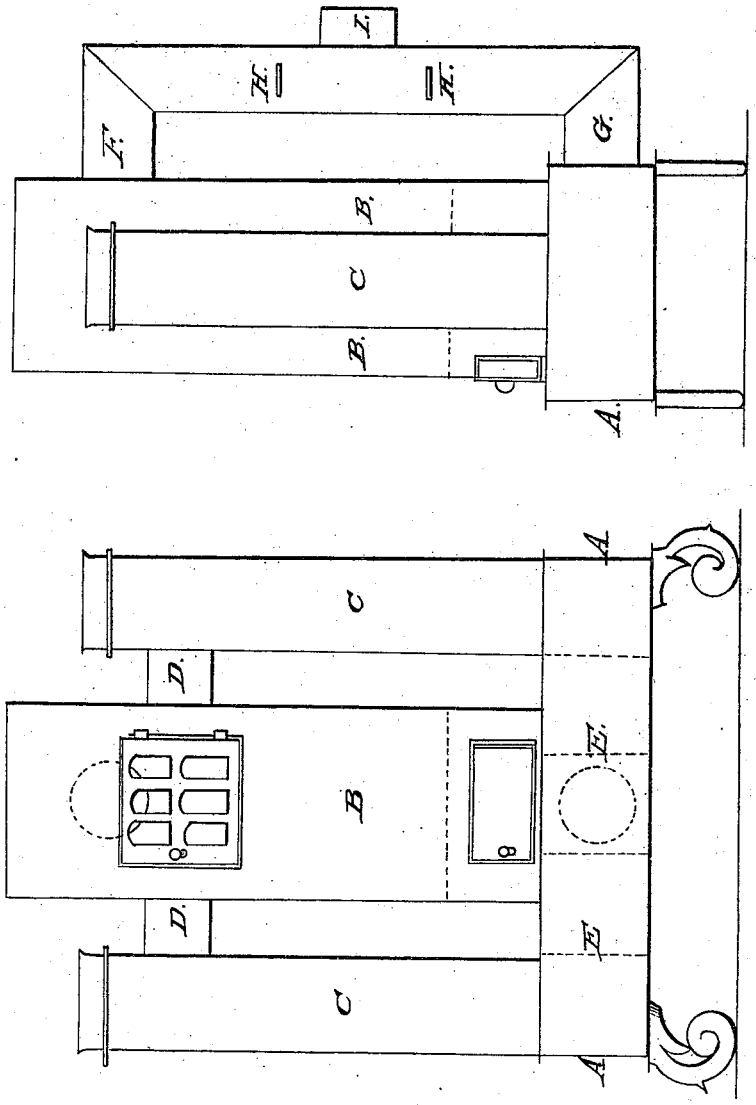
P. WILLCOX.

Heating Stove.

No. 335. Patented July 31, 1837.



UNITED STATES PATENT OFFICE.

PHILIP WILLCOX, OF SPRINGFIELD, MASSACHUSETTS.

STOVE FOR HEATING APARTMENTS.

Specification of Letters Patent No. 335, dated July 31, 1837.

To all whom it may concern:

Be it known that I, PHILIP WILLCOX, of Springfield, Hampden county, in the State of Massachusetts, have invented an Improvement in Stoves for Heating Apartments by Means of Anthracite or other Fuel; and I do hereby declare that the following is a full and exact description thereof.

I make a stove in the ordinary manner in which those are made that are to have anthracite burnt in them, the fire-brick lining, grate, doors, ash pit, &c., being the same as usual; the cylindrical form is, in general, preferred by me, in this part. This stove B, I set upon a pedestal A, adapted to its size, and sufficiently long to receive a round, or other formed, column C, C, upon each side of it, which are separate from, but rise to a height nearly equal to that of the stove, or furnace part; these columns are closed at top, but are open at bottom, where they communicate with the interior of the hollow pedestal, the upper plate of which is perforated for that purpose; a smoke flue, D, D, connects each of these columns with the furnace, in the space above the fire, allowing the draft to pass through them, and down into the pedestal, whence it escapes, through a pipe G at its back. I do not, however, allow the draft from the columns to pass in a direct line through the pedestal to the escape pipe; but across its interior I place four, or more, vertical partitions, E, E, dividing it into five, or more chambers, having an opening through the opposite ends of each alternate partition, for the passage of the gaseous products of combustion, by which means a large amount of heat is saved.

From the upper part of the stove, at the back part thereof, there proceeds another pipe, F, in the usual situation of the ordinary stove pipe, and this is connected with the pipe from the pedestal by making an elbow to each, and uniting them by a sufficient length of intermediate pipe. From the middle, I, or any other convenient part, of this back pipe, proceeds that which leads into a chimney, or flue, for the final escape of the smoke and gases. Within the pipe, which connects the upper part of the stove with the pedestal, I insert two valves, or dampers, H, H, one above, and the other below the final escape pipe, which valves complete the apparatus necessary to the proper action of the stove; the opening of one, and the closing of the other of these valves determining whether the draft shall proceed immediately from the fire into the final escape pipe, or descend through the side columns into the hollow pedestal, and pass thence to the escape pipe.

What I claim as my improvement, is—

The entire combination and arrangement of the parts by which I, when desired, conduct the heated air down into, and through, the various compartments of the pedestal, as herein set forth. I do not claim the putting of two dampers into the back pipe, merely to change the course of the draft, this having been used for the purpose of making a downward draft through the burning fuel; but this it is not my desire to effect; nor can it be effected under my arrangement; but I confine myself to the combination of the respective parts with each other, as a whole, substantially as herein set forth, without intending to limit myself to any precise form, or situation, of those parts, provided the same result is attained by analogous means.

PHILIP WILLCOX.

Witnesses:

THOS. P. JONES,

W. THOMPSON.