2 Sheets—Sheet 1.

A. J. BAKER.

HEATING-STOVE.

No. 193,470. Patented July 24, 1877.

Fig. 1.

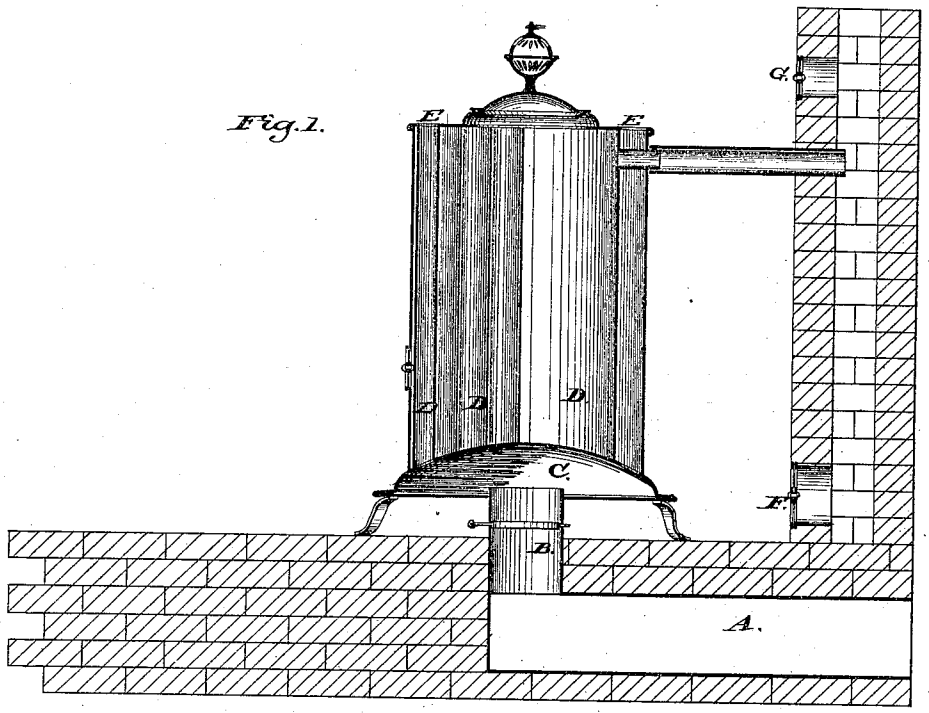


Fig. 2.

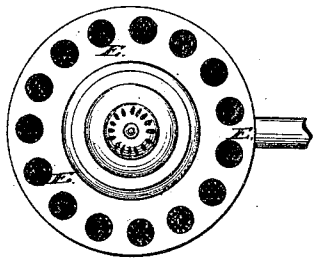
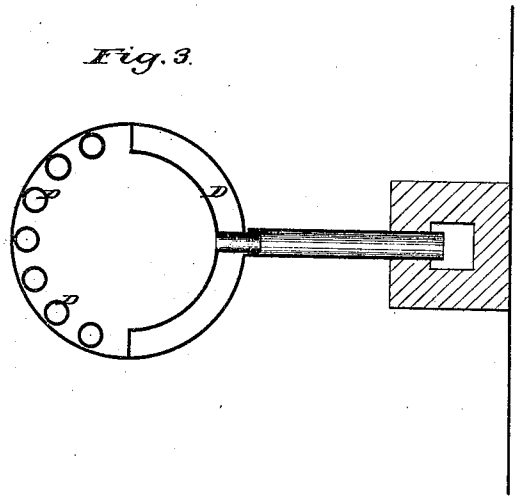


Fig. 3.



Attest:

S. D. Mcneal

Wm. H. Herrick

Inventor:

Albert J. Baker

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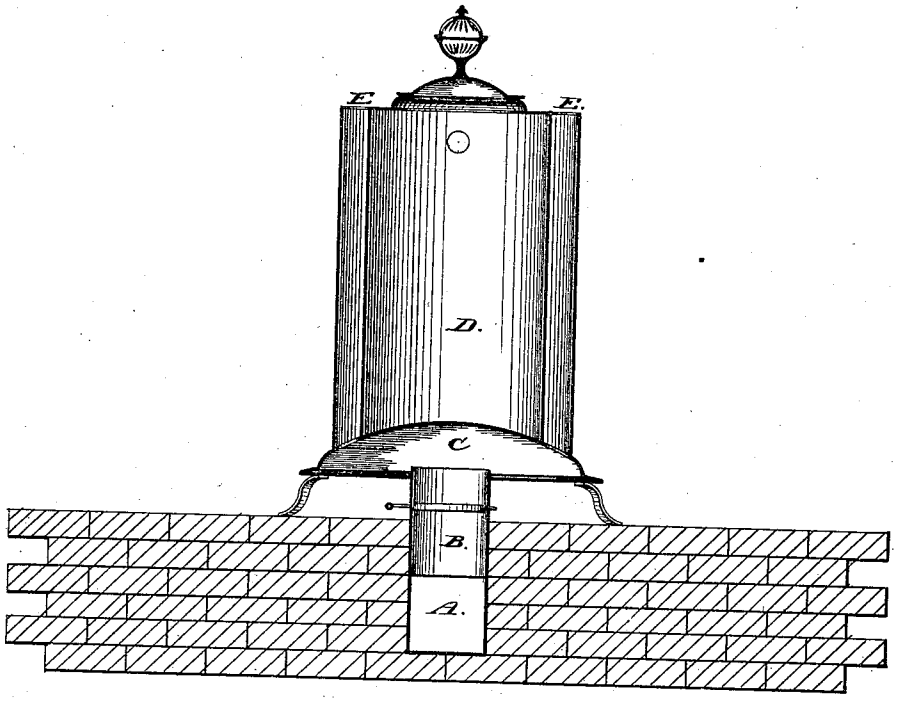
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Fig. 4.



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UNITED STATES PATENT OFFICE.

ALBERT J. BAKER, OF JONESVILLE, MICHIGAN.

IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. **193,470**, dated July 24, 1877; application filed April 6, 1877.

To all whom it may concern:

Be it known that I, ALBERT J. BAKER, of the village of Jonesville, county of Hillsdale, and State of Michigan, have invented a new and useful Improvement in Heating Apparatus; and do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters and figures marked thereon.

This invention relates to that class of heaters which receive a current of outdoor air in a bottom chamber, and conduct the same therefrom up through tubes or passages heated by a fire-box or furnace, said tubes or passages discharging said air into the apartment.

Said invention consists, mainly, in the peculiar construction of the bottom chamber or space and its combination and arrangement with the other parts of the apparatus.

In the accompanying drawings, Figure 1 represents a vertical section of my heating and ventilating apparatus. Fig. 2 is a top view of my heater. Fig. 3 is a top view with cover removed. Fig. 4 is a vertical section of my apparatus.

A designates a passage for conveying outside air to the inside of the building, and communicates, through vertical tube B, with the bottom space or chamber C of my heater. D designates a series of vertical tubes or passages exending upward from said bottom space, and conveying air therefrom to the interior of the room through openings E at the top of the heater. These tubes are arranged around the fire-box, and just within the cylindrical outer casing of said heater. A jacket or partial jacket may be substituted for a part or all of them, as shown in Figs. 1, 3, and 4, and other formal changes made, without departing from the spirit of my invention.

Bottom space or chamber C is dome-shaped, and has no outlet-openings, except in the low parts near the periphery; and its inlet-opening (the upper end of tube B) is arranged centrally with respect to the circumference of said chamber.

The above arrangement and construction compel the air to take a longer path than would be the case if the top of said bottom space was flat, or it if had outlet-openings near its center, and the air is thus subjected more effectually to the heating action of the fire-box above before being further heated during its passage up tubes D.

The warm air from said tubes, escaping into the room, operates to expel through opening or register F the cold air and carbonic-acid gas, which naturally settle about the floor of the apartment, while lighter gases and foul warm air escape through register G.

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

The combination of passage A, tube B, centrally arranged with respect to the bottom space or chamber, dome-shaped bottom space C, circumferentially-arranged vertical air-conductors D, having top openings E, and a central fire-box, all constructed and operating substantially as and for the purpose set forth.

ALBERT J. BAKER.

Witnesses:

S. D. MCNEAL,

WM. H. HERRICK.