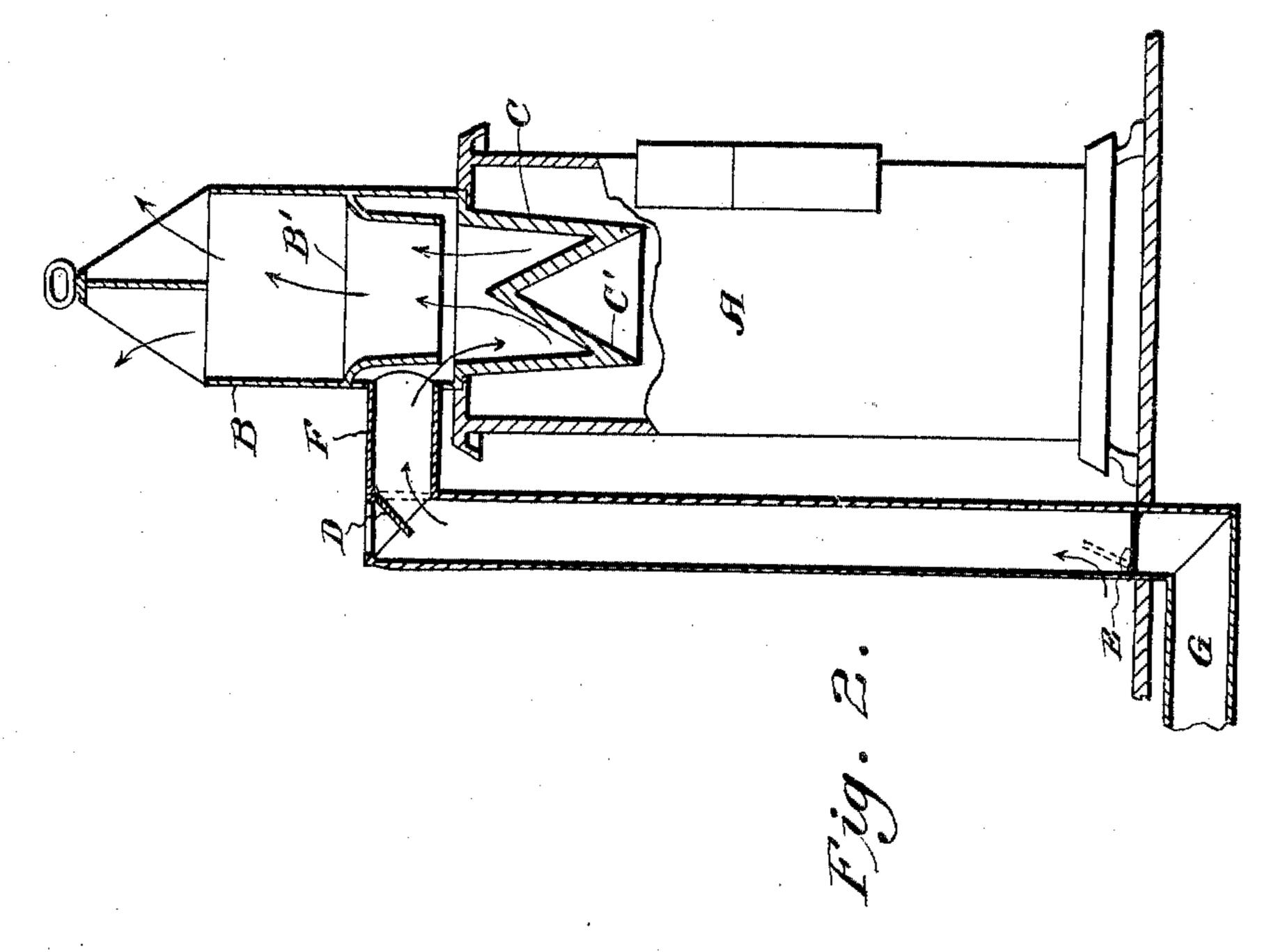
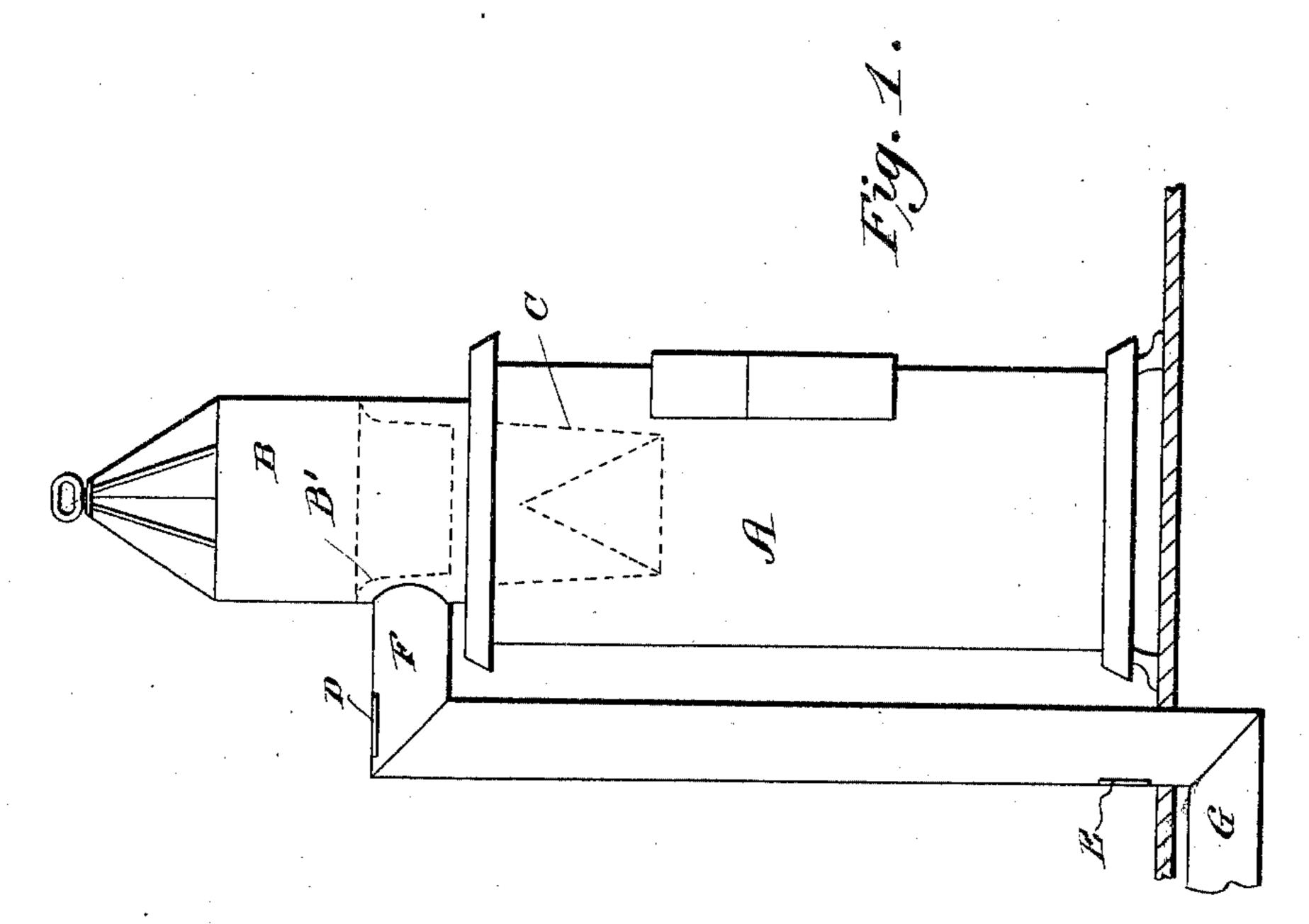
P. K. McMINN.

HEATING AND VENTILATING SYSTEM.

APPLICATION FILED FEB. 5, 1904.

NO MODEL.





Witnesses Machinedh Gw. E. Tew. Inventor Freston K. M: Minn by Milo 13 Stevens r Co Attorneys

United States Patent Office.

PRESTON K. McMINN, OF CHICAGO, ILLINOIS.

HEATING AND VENTILATING SYSTEM.

SPECIFICATION forming part of Letters Patent No. 777,127, dated December 13, 1904.

Application filed February 5, 1904. Serial No. 192,188. (No model.)

To all whom it may concern:

Be it known that I, Preston K. McMinn, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Heating and Ventilating Systems; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention comprises a hot-air heater or attachment designed to be used in connection with heating or cooking stoves for the purpose of heating air and also for the purpose of ventilation. Its object is to produce an improved device of the kind stated, as will more fully appear from the following description and the accompanying drawings.

In the drawings, Figure 1 is a side elevation of a stove supplied with the attachment. Fig. 2 is a view similar to Fig. 1, certain parts being shown in section.

Referring specifically to the drawings, A indicates a stove of ordinary or preferred construction. This may be a common heating-30 stove burning either wood or coal or it may be a cooking stove or range, the only requisite being that it have an opening or hole in the top into which the heating attachment may be inserted. Said heating attachment 35 includes a cylindrical vessel B, preferably formed of sheet-iron. This is open at the top for the escape of heated air. At the bottom it is joined to a cast-iron base C, whose bottom is conical, as at C', to give more heating-40 surface. Within the cylinder B is an annular baffle plate or ring B', which is joined to the sides of the cylinder above the outlet of the air-feeding pipe F and projects thence downwardly within the cylinder toward the base, 45 the intent being to cause the air fed through

the pipe F to flow downwardly to contact with

the base portion C, after which it passes upwardly through the ring B' and out through the top of the cylinder.

The air-feeding pipe F is located outside the 50 stove and extends from the floor to the cylinder B. At the elbow it has a damper D for the purpose of throwing cold air into the room, if desired. Said pipe opens through the floor into the cold-air-supply pipe G, which 55 may be conveniently made to extend outside the house or building. At the floor the pipe has a damper E, which is adjustable to either open the connection with the pipe G or to close said connection and open the pipe above the 60 floor.

In use the cylinder B is placed upon the stove with the base C projecting down through. the hole directly above the fire-pot of the stove, where it is thus exposed to the greatest heat. 65 By the feed-pipe F cold air is drawn either from the floor or from the outside duct G, according to the position of the damper E, and thus the air in the room is constantly reheated, or a current of pure hot air from the outside 70 is thrown into the room. Should the room become overheated, it is only necessary to open the damper D, in which case the cold air will be drawn through the pipes G and F and out at the damper D, thus affording means 75 for quickly and safely reducing the temperature. In this connection it is to be noted that the cold current is admitted directly above the stove or point of greatest heat and is gradually diffused through the room without 80 the danger of drafts usually incident to admitting cold air into a heated room.

It will be seen that the device is quite simple and inexpensive and in addition to economizing fuel has obvious advantages as a ven-85 tilator. It is capable of attachment to many existing stoves and requires no special apparatus for its production.

What I claim as new, and desire to secure by Letters Patent, is—

1. An air-heater to be applied to stoves, comprising a vessel adapted to be placed upon a

stove, an air-inlet pipe to the side thereof, extending upwardly from the floor, and a damper-controlled outlet-opening in the pipe, near

the top thereof.

2. The combination with a heating vessel, of a cold-air pipe leading upwardly thereto, said pipe having outlet-openings above and below the floor at its lower end, and a cold-air-outlet opening between the inlet-openings and

the heating vessel, and dampers controlling said openings.

In testimony whereof I have affixed my signature in presence of two witnesses.

PRESTON K. McMINN.

Witnesses:

SIGNA FELTSKOG, H. G. BATCHELOR.