(No Model.)

J. ECKERT.

STOVE.

No. 292,475. Patented Jan. 29, 1884.

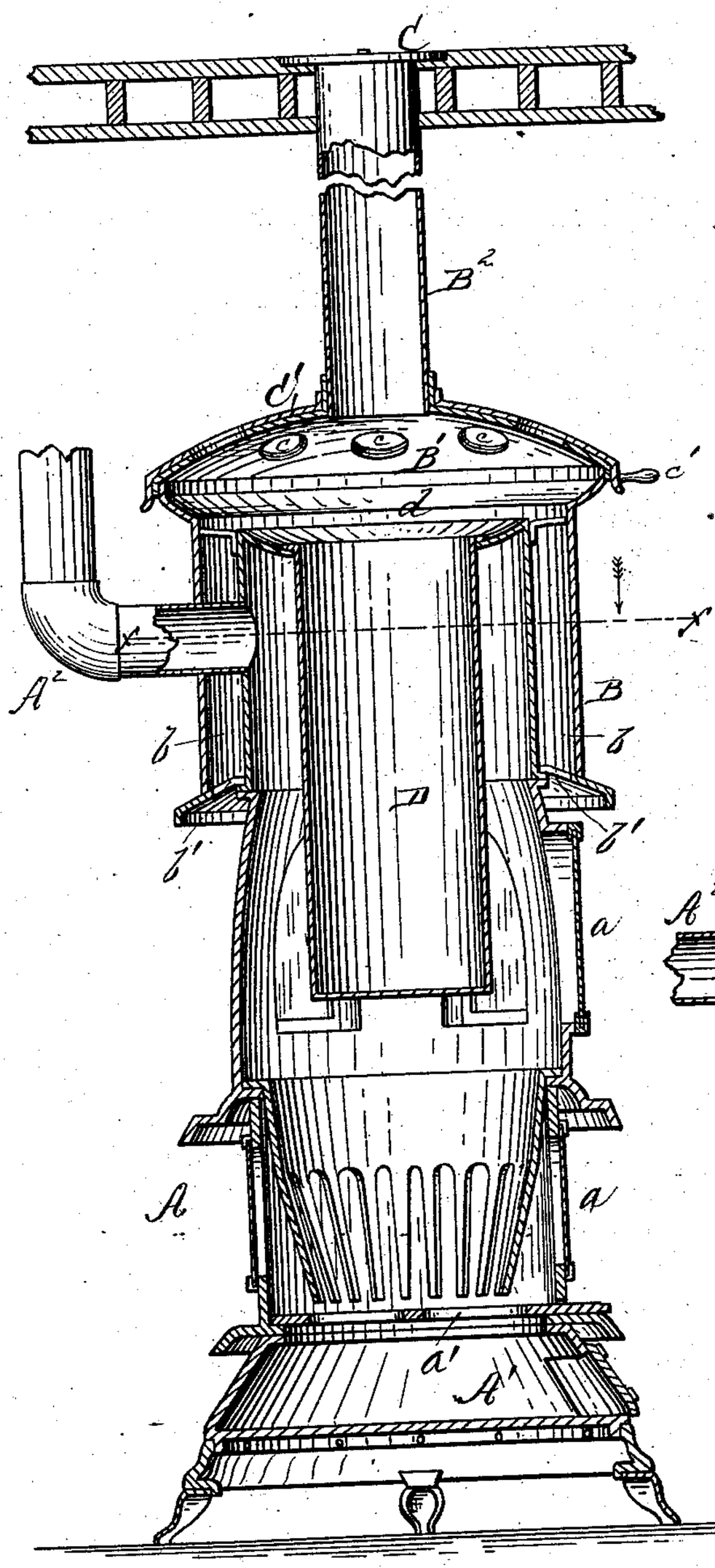
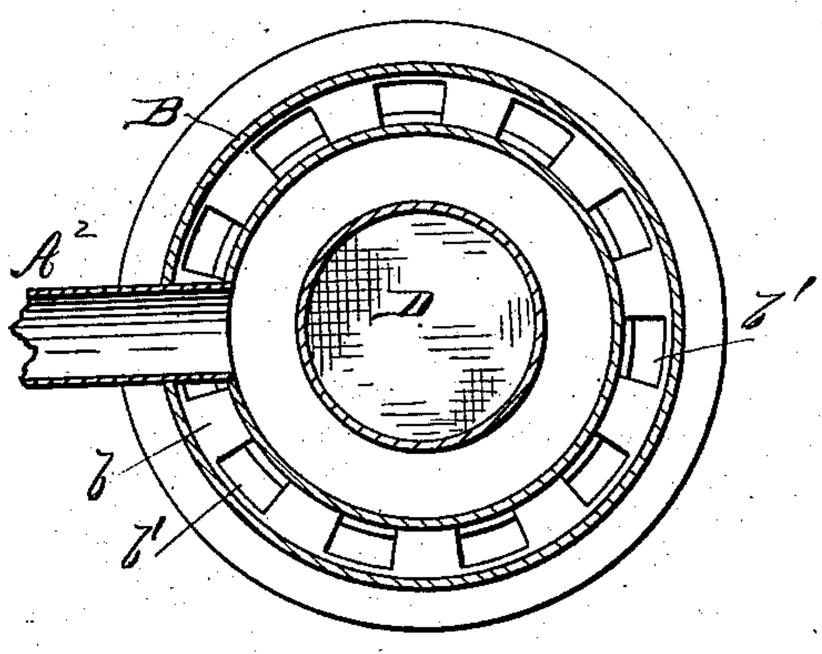


Fig. 1.

Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN ECKERT, OF MADISON, INDIANA.

STOVE.

SPECIFICATION forming part of Letters Patent No. 292,475, dated January 29, 1884.

Application filed May 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN ECKERT, a citizen of the United States, residing at Madison, in the county of Jefferson and State of Indiana, have invented certain new and useful Improvements in Stoves, of which the following is a specification, to wit:

This invention relates to an improvement in heating-stoves; and it consists in the construction and arrangement of the several parts, as hereinafter set out and claimed.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a central vertical section of my improved heater, and Fig. 2 is a horizontal section on the line *f f*, Fig. 1.

A represents a heating-stove of any of the usual and well-known forms, provided with the usual doors or windows, *a a*, gate *a'*, and ash-pit A', and having the upper part of its cylinder connected with the stove-pipe A^2, by which the products of combustion escape. This stove is adapted to use either hard or soft coal, and heats the room in which it is placed by radiation in the usual manner.

Around the upper part of the stove is arranged a jacket, B, of any desired form, which is made large enough to leave an air-space, *b*, between itself and the main part of the stove, which space is provided at its down end with a series of openings, *b'*, connecting it with the outer air. This jacket is closed at the top by a cover, B', having a pipe, B^2, leading from its upper side to the room above, where it is provided with the usual register, C, set in the floor, wall, or other convenient location.

C' represents an auxiliary cover arranged upon the cover B', and each of these covers is provided with a series of perforations or openings, *c c*, which are adapted to register or not as the auxiliary cover is turned, it being arranged to revolve around the base of the hot-air pipe B^2, and provided with a small handle, *c'*, by which it is operated. The interior of the upper part of the stove is also provided with a hot-air chamber, D, opening at its upper end into the space *d*, beneath the cover B', and having its lower end closed, as shown.

A fire being built in this stove, the radiation of heat soon warms the room, and the openings in the covers B' C' being closed, air is drawn in at the lower end of the cylinder or jacket B, and heated during its passage upward, and passes through the pipe B^2 into the room above. There is also a circulation into and out of the air-chamber D, which effectually heats the air before passing it on. Should the heat not be required in the second room, the cover C' may be turned to open the holes *c c*, and the first room receives heat by a circulation, as well as radiation. By this arrangement no more fire is required than for the heating of one room, and the lower room is effectually ventilated.

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

The combination of the heating-stove A, provided with pipe A^2, the jacket B, covers B' C', provided with openings *c c*, adapted to register with each other and be operated by a handle, *c'*, the air-space *b*, having supply-openings *b' b'*, air-chamber D, open at top and closed at bottom, air-space *d*, and pipe B^2, all constructed, arranged, and operating substantially as described and shown.

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

JOHN ECKERT.

Witnesses:

EDWIN G. LELAND,

E. KNOWLES.