

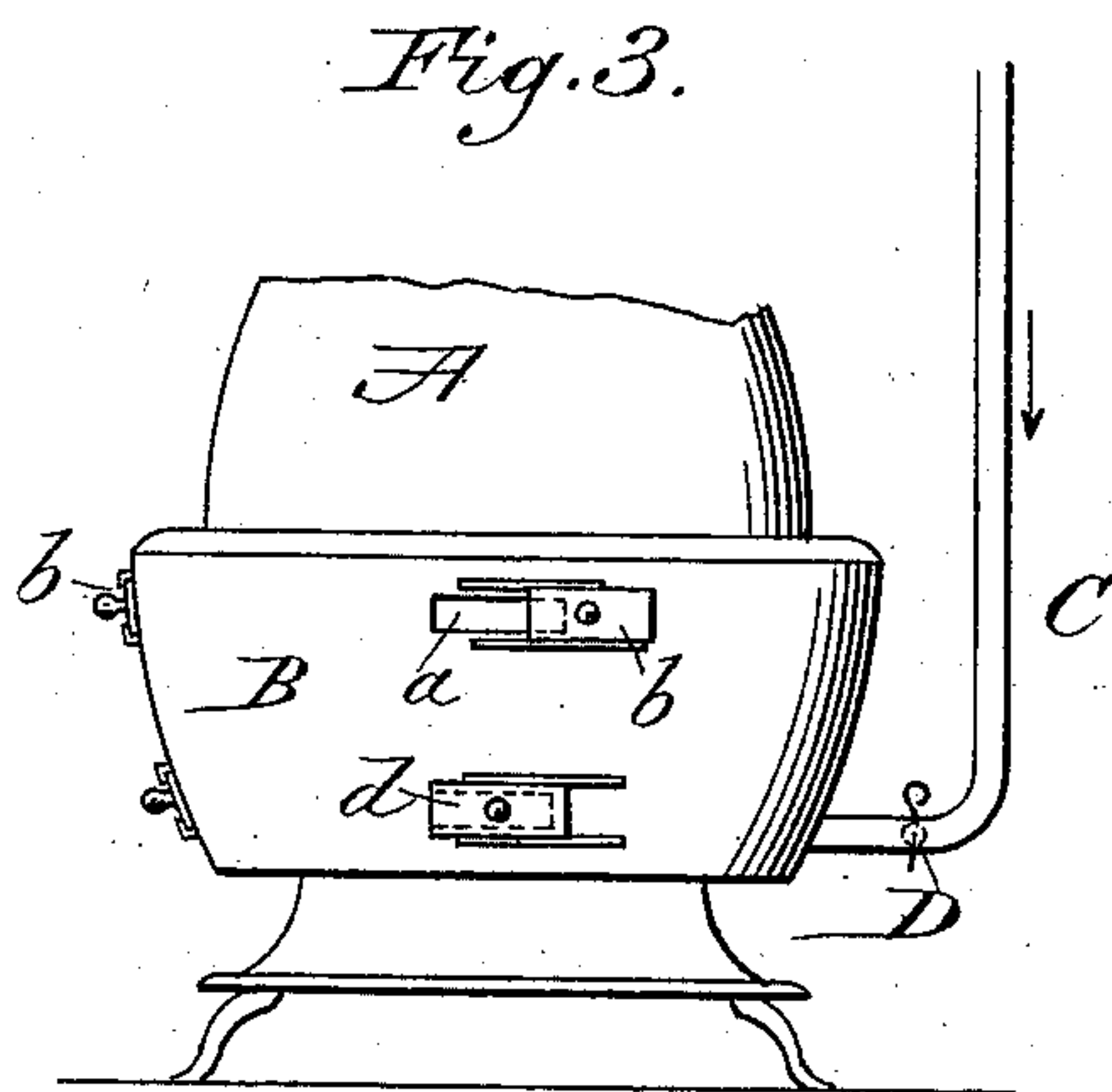
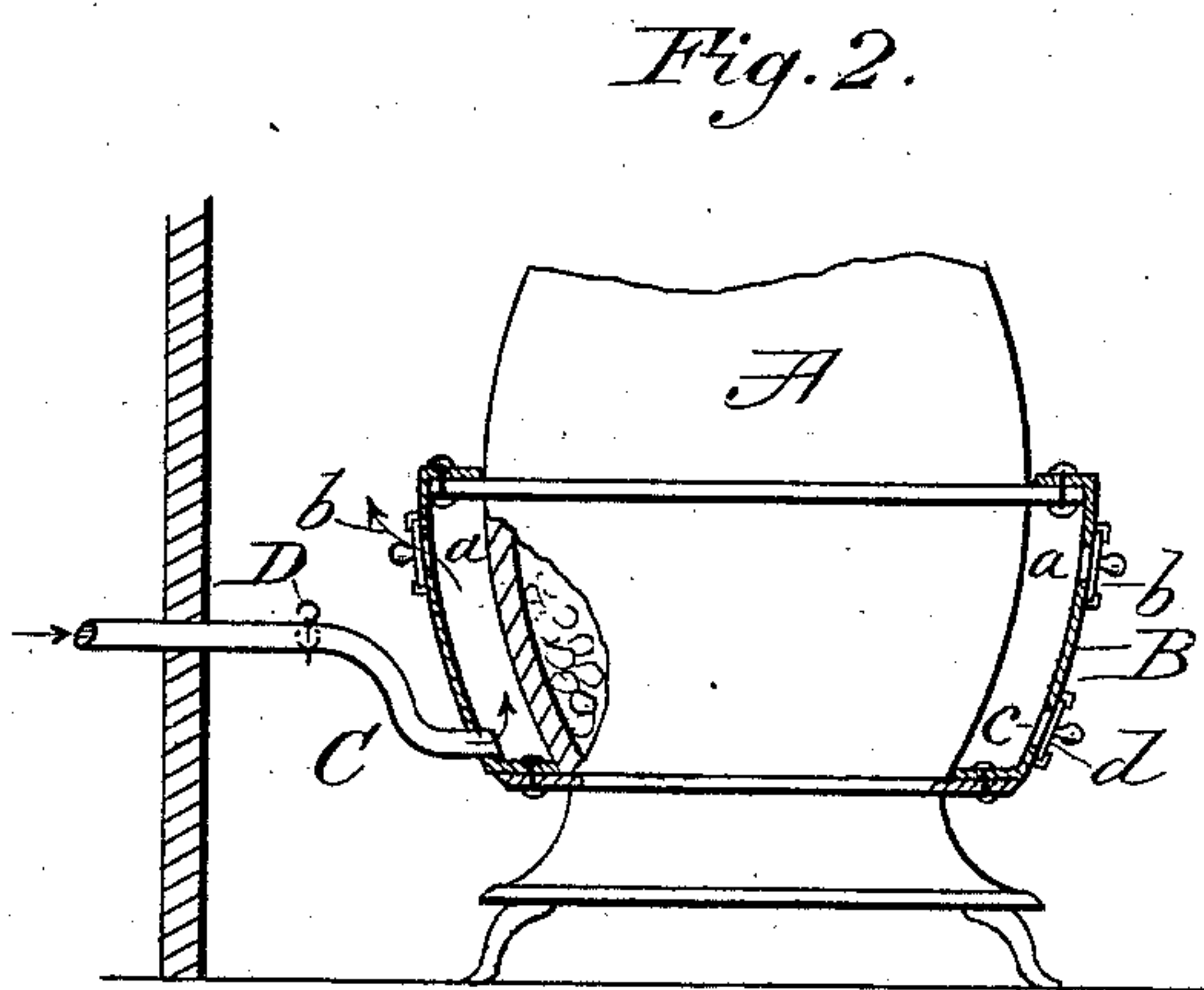
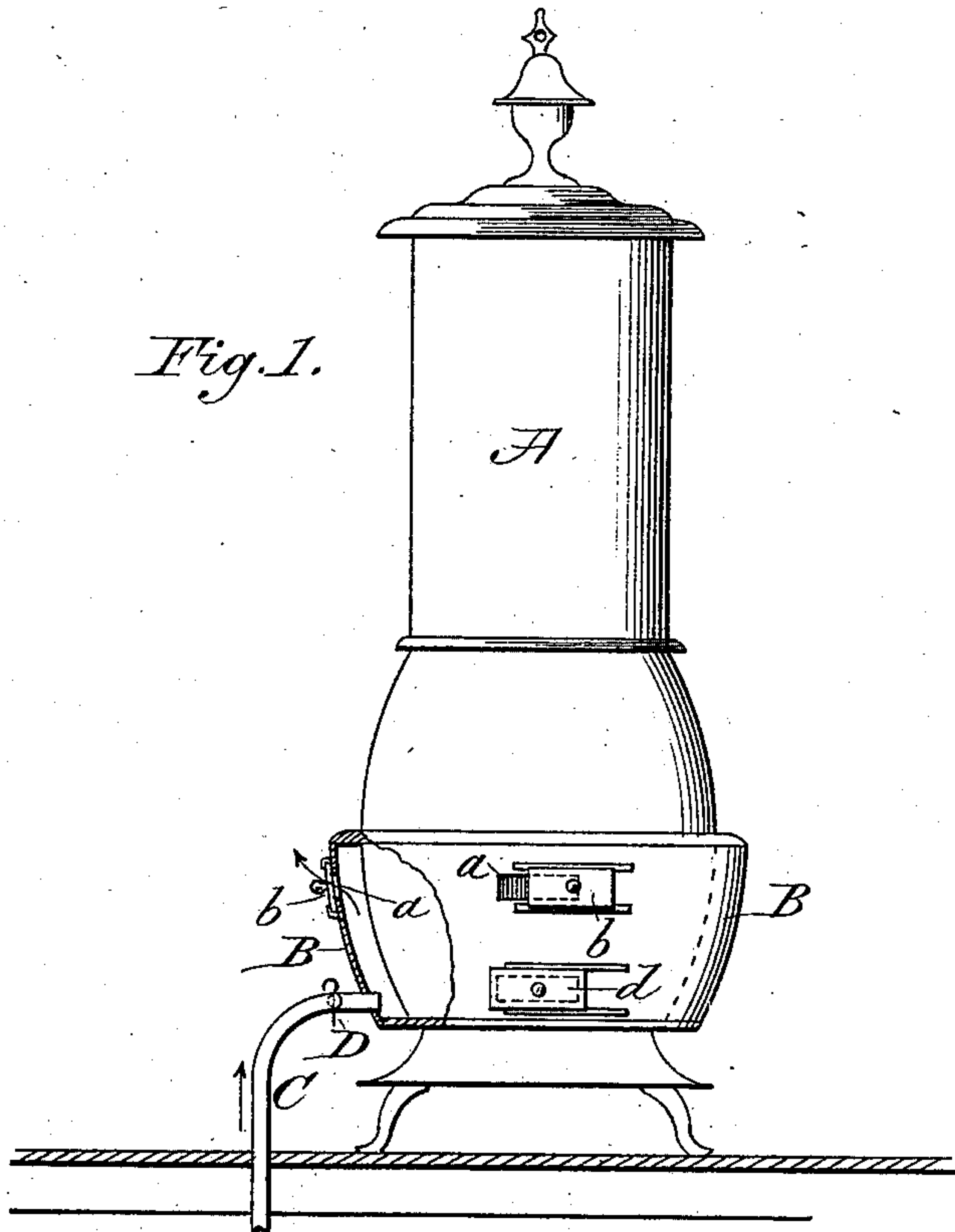
(No Model.)

J. F. DAVIS.

HEATING AND VENTILATING DRUM FOR STOVES.

No. 294,771.

Patented Mar. 11, 1884.



Attest:

H. H. Schott
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Inventor:

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UNITED STATES PATENT OFFICE.

JOHN FRANKLIN DAVIS, OF ALTOONA, PENNSYLVANIA.

HEATING AND VENTILATING DRUM FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 294,771, dated March 11, 1884.

Application filed June 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. DAVIS, a citizen of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Heating and Ventilating Drums for Stoves; and I do 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 and figures of reference marked thereon, which form a part of this specification.

This invention relates to a heating and ventilating drum or jacket for stoves; and it consists in the construction and arrangement of parts, as hereinafter more fully described and claimed.

In the annexed drawings, illustrating the invention, Figures 1 and 2 are sectional elevations, and Fig. 3 is a side elevation, of a stove provided with my improved heating and ventilating drum or jacket, and illustrating different modes of arranging the air-inlet pipe.

A is a stove, of any suitable or ordinary construction. The fire-pot of this stove is surrounded with a jacket, B, to which cold air is introduced through a cold-air pipe, C, having a valve or cut-off, D, by which the entrance of air is regulated. The jacket B is provided near the top with a series of openings, *a a*, controlled by slides or valves *b b*, and near the bottom of the jacket is a similar series of openings, *c c*, controlled by slide-valves *d d*.

The cold air to be supplied to the drum or jacket B can be taken from a flue or from the exterior of the building or apartment in any convenient manner, and the pipe C may be arranged partly beneath the floor, as shown in Fig. 1; or it can be passed upward, as shown in Fig. 3, to any suitable source of pure air; or it may be passed into a flue, as shown in Fig. 2.

The operation of the device will be readily understood. By opening the valve D of the cold-air pipe C and closing the slides *b b* and *d d* in the jacket B, cold air will be admitted into the jacket, and after having its temperature raised by the heat of the stove it may be admitted to the apartment by opening the upper

slides, *b b*, of the heating and ventilating jacket. When a sufficient quantity of pure and heated air has thus been permitted to enter the room, the valve D can be closed, and, if desired, the lower slides, *d d*, can then be opened, so as to permit a circulation of air through the jacket, cold air entering from the room at the bottom and passing out heated at the top; or, by closing the upper slides, *b b*, and opening the lower slides, *d d*, the heated air can be thrown downward to the feet.

By this simple contrivance a room can be readily and sufficiently ventilated without subjecting its occupants to drafts.

I am aware that the base of a heating-stove has heretofore been provided at its bottom with an opening for the admission of the external air to a hot-air chamber beneath the fire-pot, an air flue or flues being arranged in communication therewith and with the lower air-opening, said air-flues having outlet-apertures for the escape of heated air. The base of such stove has also been provided with an annular flue surrounding the hot-air chamber, and through which the heat and products of combustion are caused to pass for the purpose of heating the upward currents of air that enter and pass through said chamber.

I am also aware that heating and ventilating drums or jackets for stoves are well known, and that such drums or jackets have been provided with registers or valved openings for controlling the escape of heated air, cold air being conducted indirectly to such jackets through suitable pipes. These, however, I do not broadly claim.

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

The combination, with a stove, of the heating and ventilating drum or jacket B, surrounding the fire-pot, and having side openings, *a a* and *c c*, controlled by slides *b b* and *d d*, and the external cold-air pipe, C, having a valve, D, all constructed and arranged as and for the purpose described.

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

JOHN FRANKLIN DAVIS.

Witnesses:

S. H. SMITH,
J. O. STOVER.