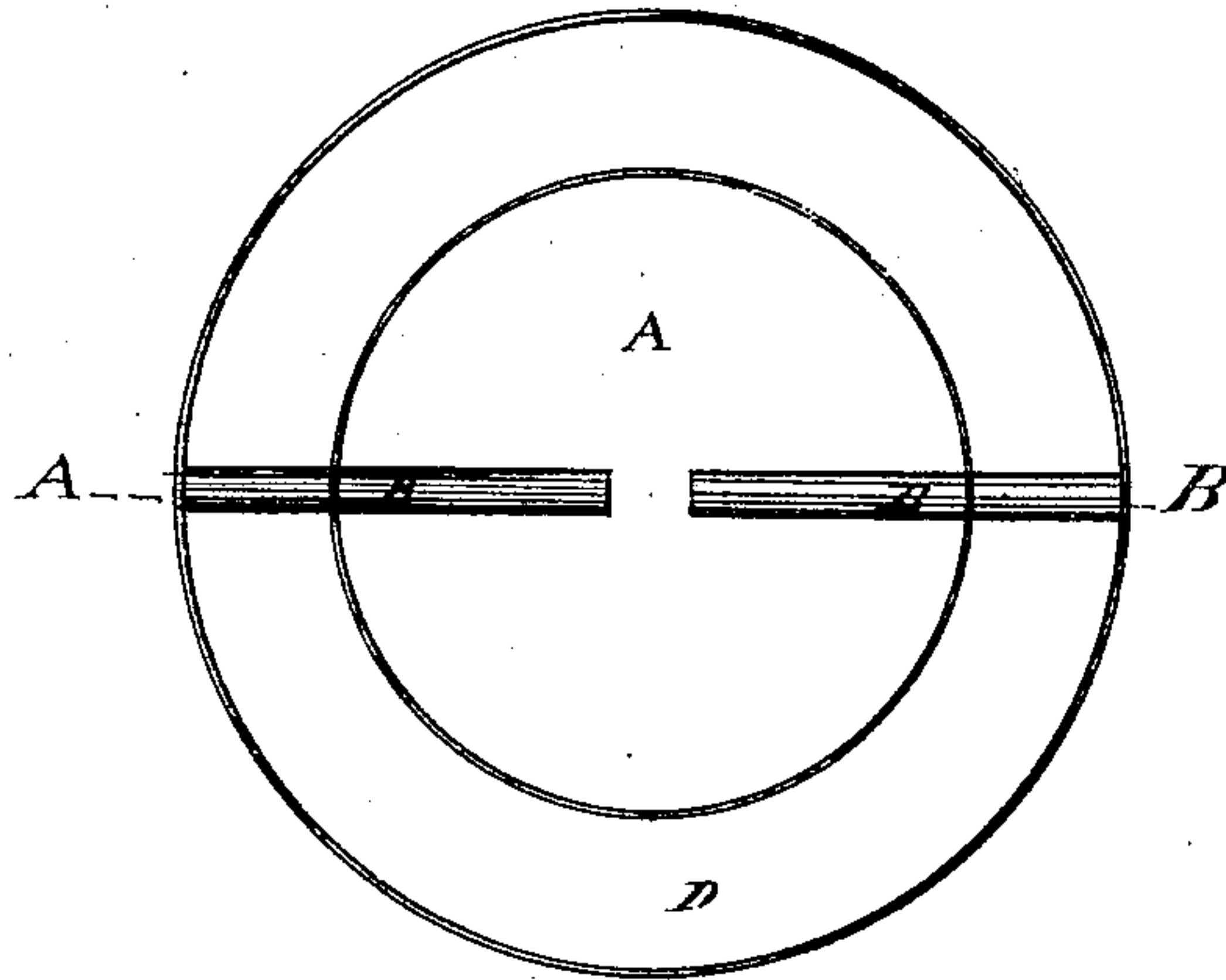
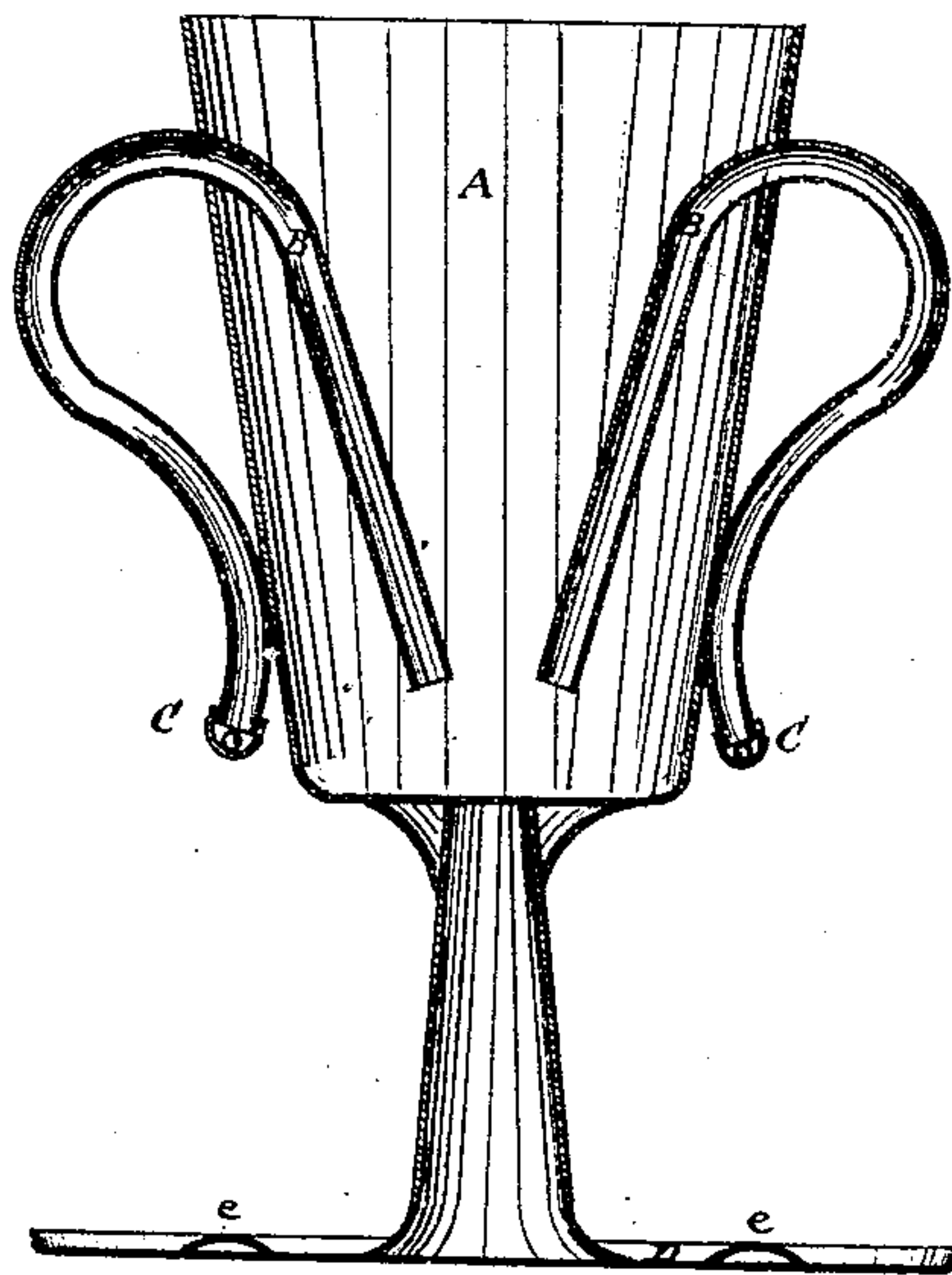


P. J. SCHOPP.  
APPARATUS TO EFFECT THE HYDRATION OF AIR IN HEATED APARTMENTS.  
No. 103,665. *FIG. 1 PLAN* Patented May 31, 1870.



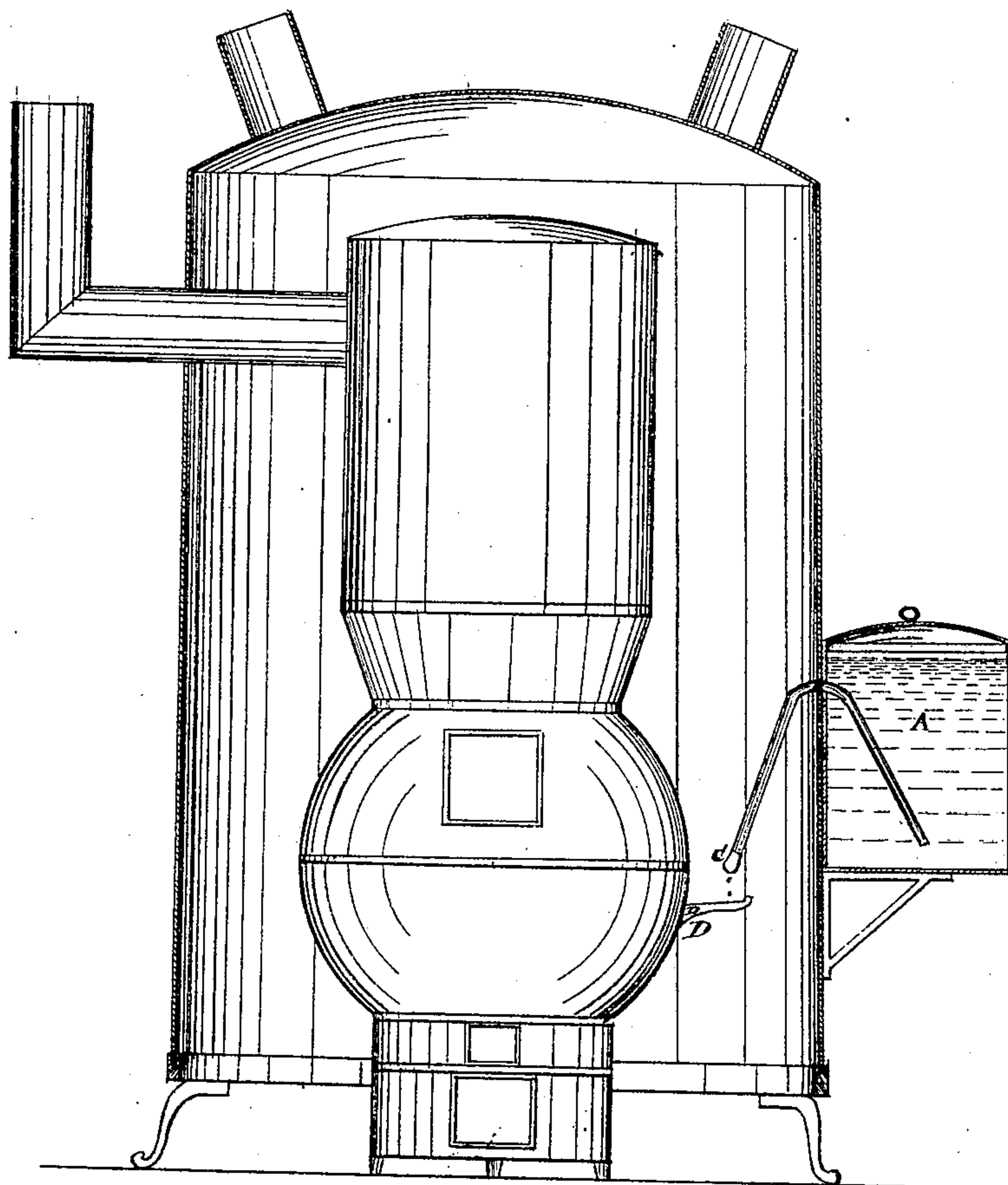
*FIG. 2 SECTION ON A-B*



Witnesses,  
Thos. D. Sedgwick  
August Stein

Inventor,  
Philip J. Schopp

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*Inventor,*  
*Philip J. Schopp*

# United States Patent Office.

PHILIP JACOB SCHOPP, OF LOUISVILLE, KENTUCKY.

*Letters Patent No. 103,665, dated May 31, 1870.*

## IMPROVEMENT IN APPARATUS TO EFFECT THE HYDRATION OF AIR IN HEATED APARTMENTS.

The Schedule referred to in these Letters Patent and making part of the same

Be it known that I, PHILIP JACOB SCHOPP, of Louisville, in the county of Jefferson, State of Kentucky, have invented a new and useful "Apparatus to Effect the Hydration of Air in Closed and Heated Apartments;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, in which—

Figure 1 is a plan;

Figure 2, a transverse section; and

Figure 3, also a transverse section.

The improvement consists of a cup, A, forming a reservoir, in which are permanently inserted one or more curved tubes B in such a way as to act as a siphon.

To the outside end of the siphon is attached, by means of a screw, a mouth-piece, C, with a fine opening; in this mouth-piece, covering the opening partially, is placed a small leaden ball or other obstacle to check the efflux of the water, and allow its egress by drops only, to fall on the bottom plate D. The mouth-piece may be so enlarged as to allow several drop-holes in it, and spread over a larger surface.

Through the siphon a more uniform and slow dropping of the water is obtained than by more direct pipes with full head pressure; the siphon can also be used to advantage in cases where an elevation of the reservoir A above the bottom plate D is not desired; it may simply be attached to a cup, and part of the stove itself used as an evaporating surface.

On the bottom plate D, and under the mouth-piece of the siphon, is placed a little hemisphere, c, or pyramid, or any other projection or incline, on which the water-drop has to fall, part, spread over the surface of the bottom plate D, and be rapidly evaporated on the heated surface of the same.

The upper part of the siphon is to be set below the top of the reservoir A, so as to be under water surface, when the reservoir is filled to its full capacity. For the reservoir or cup itself, or siphons attached, any suitable ornamental form may be adopted; for ornamental purposes the siphon is particularly suited, as it can be used as a handle to the vessel. The cup can be made of metal or earth, and burned, and of any suitable size.

The mode of operation is simply to fill the reservoir A to its full capacity with water. The highest point of the siphon being then under water-level, the water will run through the tube, and force the air out; this done the flow of water will continue until the level reaches the interior opening of the siphon.

The apparatus is to be placed on top of a stove or permanently connected with it; it may also be connected with a hot-air furnace, as shown in fig. 3.

The advantages of my invention, are:

First, it is simple, and can be set in operation by a child.

Second, by dropping in intervals on a heated surface the water is rapidly conveyed into steam to furnish the necessary humidity in closed and heated apartments.

What I claim as my invention, is—

1. The permanent connection of the cup or reservoir A with one or more siphons B, and bottom plate D.
2. The connection of the mouth-piece C with the exterior end of the siphon, when arranged to operate as herein described.

PHILIP JACOB SCHOPP.

Witnesses:

THOS. D. SEDGWICK,  
AUGUST STEIN.