

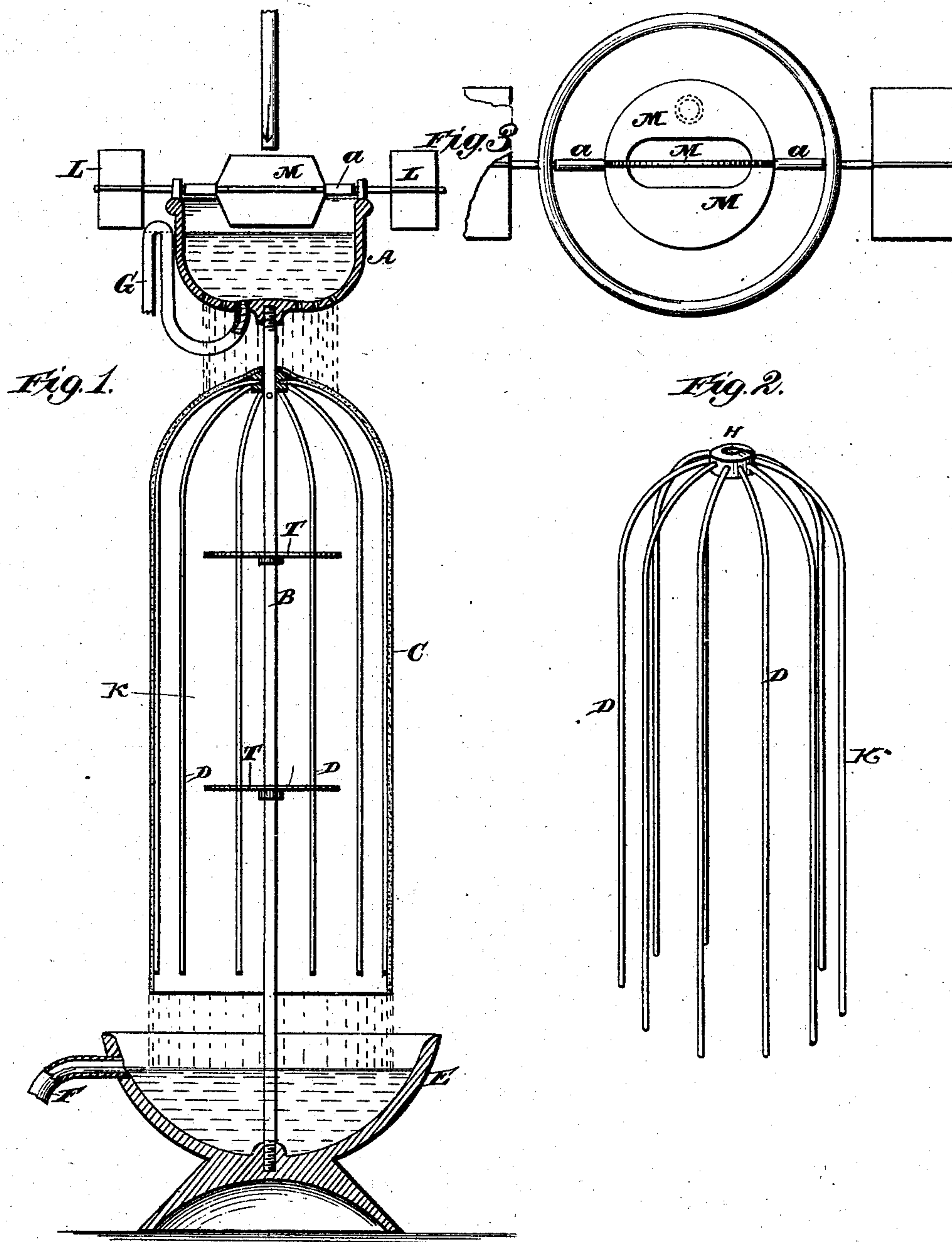
(No Model.)

C. A. VON CORT.

APPARATUS FOR COOLING AND VENTILATING BUILDINGS.

No. 282,474.

Patented July 31, 1883.



Witnesses.

Robert Everett.

Charles S. Byer.

Inventor.

Charlotte A. Von Cort.

By

James L. Norris.

Atty.

UNITED STATES PATENT OFFICE.

CHARLOTTE A. VON CORT, OF NEW YORK, N. Y.

APPARATUS FOR COOLING AND VENTILATING BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 282,474, dated July 31, 1883.

Application filed June 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLOTTE A. VON CORT, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Apparatus for Cooling and Ventilating Buildings, of which the following is a specification.

My invention relates to an improved device or apparatus for cooling and ventilating apartments, and is designed more particularly for use in large halls, dining-rooms, hotels, hospitals, and other like buildings; but it is equally applicable for use in any other structure or building where a supply of cool fresh air is desired.

My invention consists in certain novel combinations and arrangements, which will be hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a central vertical section of an apparatus constructed according to my invention. Fig. 2 is a view of the supporting-ribs of the evaporator detached; and Fig. 3 is a plan view of the basin or reservoir, showing the agitator applied thereto.

Referring to the said drawings, A designates a basin or reservoir receiving a supply of water from a service-pipe or otherwise, and having a perforated bottom to allow of the escape of the water upon the evaporator underneath. This reservoir or basin is mounted upon the upper end of a vertical rod or standard, B, as shown, the lower end of said rod being secured in a bowl or receptacle, E, which receives the surplus water that falls from the evaporator. The lower portion of this receptacle E is of an inverted cup-shaped form, so as to provide a base or support for the apparatus and hold it in a vertical position.

F is a discharge-pipe located in the bottom of the receptacle E for drawing off the water contained therein when desired.

K is the evaporator, which consists of a hub or collar, H, adapted to embrace and slide upon the rod B, and secured in position thereon by means of set-screws, pins, or other suitable devices. This collar or hub is provided

with a series of radially and downwardly projecting-ribs, D, which constitute a frame for the reception of a covering, C, of cloth, felt, cotton, or other suitable material.

In Fig. 3 is shown the agitator for agitating the water contained in the basin A, thus tending to cool the same. This agitator consists of a series of blades or paddles, M, radiating from a common center, and provided with journals *a a*, which have their bearings in the reservoir A. This agitator is so located in the reservoir A that water flowing from the service-pipe will strike the blades M, causing them to revolve, and thus agitate the water as it falls into the reservoir.

L L indicate a series of blades fixed in the shaft of the agitator, which are extended out from each side of the basin A for that purpose. As the agitator is revolved by the water falling upon the same the blades L, constituting a fan, will be revolved, inducing a current of air, which will add to the ventilating effectiveness of the apparatus.

T T indicate a series of trays or shelves mounted upon the vertical rod B, and are designed for the reception of articles of food or other perishable substances. They may consist of disks of wood or metal, secured to said rod in any suitable manner; or they may be composed of a number of wires, bent around said rod and radiating therefrom. Articles of food placed upon these trays or shelves will be kept in a fresh and cool condition.

The basin A may be provided with a siphon overflow-pipe, G, so that in case of an excess of water entering the basin from the supply-pipe it will be siphoned off, and prevented from overflowing at the top of the basin.

The basin or reservoir A and the bowl or receptacle E may be made of wood, metal, porcelain, &c., and the ribs D, composing the frame of the evaporator, may be constructed of wire, wood, whalebone, or other suitable material.

The operation of my apparatus is as follows: Water being introduced into the basin or reservoir A by means of a service-pipe or otherwise, slowly escapes through the perforations in the bottom of the reservoir and falls onto

the evaporator underneath, slowly percolating and saturating the fabric composing the covering thereof, any surplus or excess of water falling into the receptacle E, from which it
5 may be drawn through the escape-pipe F when necessary.

From the foregoing it will be seen that, owing to the large surface presented by the evaporator, the water falling thereon from the reservoir will be rapidly evaporated, inducing a low
10 degree of temperature, which will cool the surrounding atmosphere, and render the apartment pleasant even in the warmest weather.

The apparatus is light, simple, and inexpensive. It may be made in sections, so as to
15 be readily taken apart for transportation and removal, and will be of great value to invalids and to persons who are obliged to live in the large cities and towns during the heated term.
20 It may also be made very ornamental, presenting a pleasing appearance to the eye.

Having thus described my invention, what I claim is—

1. In an apparatus for cooling and ventilating buildings, the combination of the vertical
25 rod B, mounted in the receptacle E, which forms the base or support of the apparatus, and the basin A, and evaporator K, all constructed and arranged substantially as described.

2. The combination of the reservoir A, having
30 perforated bottom, the vertical rod or standard B, evaporator K, and the agitator M, constructed substantially as described, for agitating the water as it falls in the reservoir A,
35 all as hereinbefore specified.

3. The evaporator, in connection with a hub or collar adapted to embrace and slide upon a
40 vertical standard, and having a series of radially and downwardly projecting ribs, and a covering of suitable material, substantially as described.

4. The combination, with an apparatus substantially such as described, of the blades L,
45 mounted upon the journals of the agitator, and constituting fans for inducing air-currents, and means for delivering water upon the agitator to rotate the latter, substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing
50 witnesses.

C. A. VON CORT.

Witnesses:

J. A. RUTHERFORD,
VINTON COOMBS.