

904,420.

P. GRAYSON.  
APPARATUS FOR COOLING ROOMS.  
APPLICATION FILED MAY 29, 1907.

Patented Nov. 17, 1908.

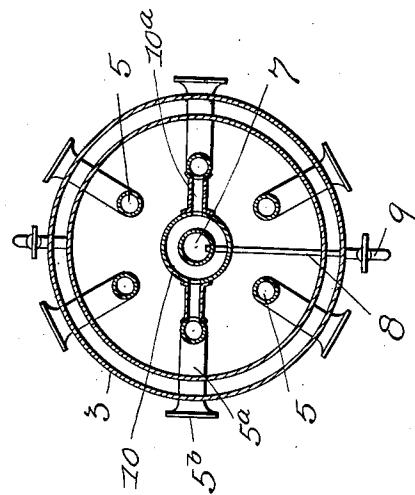
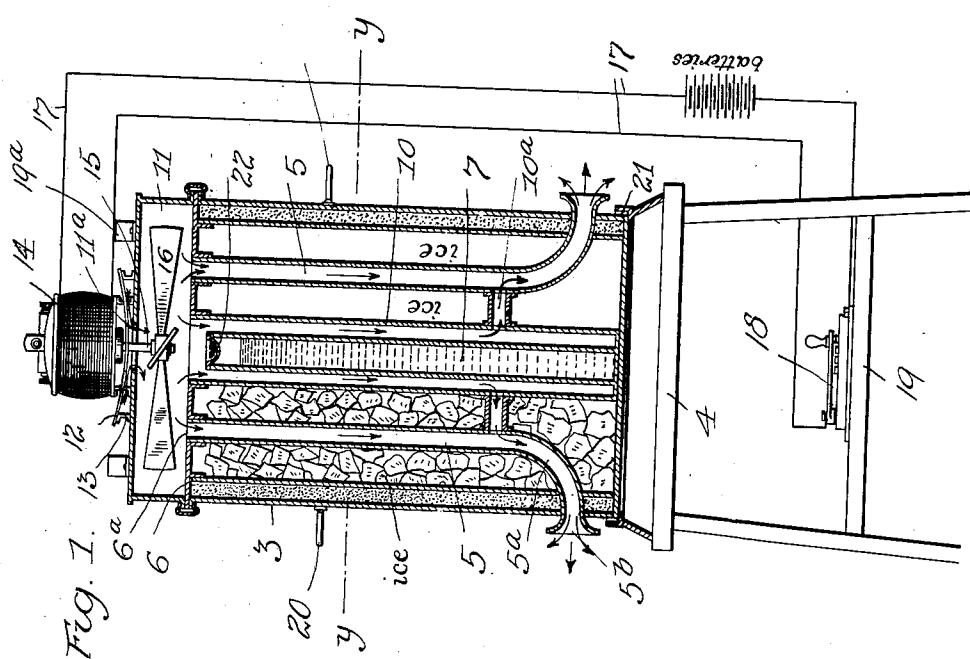


Fig. 2.



Attest:

Edward N. Harton  
Beatrice J. Phillips.

Inventor,

Pauline Grayson.  
By ~~Spencer Muddleton~~ <sup>Daubert</sup> ~~Spencer~~  
Atty.

# UNITED STATES PATENT OFFICE.

PAULINE GRAYSON, OF NEW YORK, N. Y.

## APPARATUS FOR COOLING ROOMS.

No. 904,420.

Specification of Letters Patent. Patented Nov. 17, 1908.

Application filed May 29, 1907. Serial No. 376,344.

To all whom it may concern:

Be it known that I, PAULINE GRAYSON, a citizen of the United States, residing at New York city, New York, have invented 5 certain new and useful Improvements in Apparatus for Cooling Rooms, of which the following is a specification.

My invention relates to improvements in apparatus for lowering the temperature of 10 rooms during the heated season.

I have aimed to provide a simple, economical and efficient device of a portable nature which may be placed in any room where it is desirable to lower the temperature thereof 15 and which will not only cool the room but will produce a refreshing circulation of the air, such a device being of special value for use in sick rooms during the heated season.

I have further aimed to provide an apparatus which will have somewhat the appearance of an ordinary water cooler, requiring small space and capable of being as easily manipulated, and also serving the purpose of the ordinary cooler kept for supplying ice water for drinking purposes.

I have further aimed to provide an apparatus of the class described with means whereby the passage of air through the same may be varied and thus the operation of the 30 device regulated to suit the temperature desired, and I have also provided it with various improved features of construction which will hereinafter appear.

With these various objects in view the invention includes the novel construction and arrangement and combination of parts hereinafter described and particularly set forth in the appended claims.

The invention is illustrated in the accompanying drawing, in which,—

Figure 1 is a central vertical section; Fig. 2 a horizontal section on line  $y-y$  of Fig. 1.

Referring by reference characters to this drawing, the numeral 3 designates the body 45 of the device which is preferably of cylindrical form and in the shape of an ordinary ice cooler, such as is commonly used for supplying drinking water and which is mounted upon a portable stand or support indicated at 4. The body 3 may have its wall formed 50 in any suitable manner of either plain sheet metal, or sheet metal with a non-conducting layer applied thereto, or in fact may be constructed in any manner common in refrigerator constructions. It is provided on the inside with a plurality of vertically disposed

air tubes 5, preferably concentrically arranged, six of these being shown for convenience in the accompanying drawing, though of course the precise number is immaterial. 60 These tubes are curved outwardly at their lower ends as shown at 5<sup>a</sup> where they pass through the annular wall of the body, and may conveniently be provided with flaring mouths 5<sup>b</sup>. The tubes extend to the top of 65 the body portion which is provided with a removable diaphragm or cover 6, which has holes 6<sup>a</sup> corresponding in size and location to the upper ends of the tubes 5.

Centrally within the body 3 is located a 70 vertical tube or receptacle 7, which is closed at its lower end excepting for a pipe 8 which extends through the wall of the body and is provided with a faucet 9, this central receptacle 7 being intended for holding ice water 75 which may be drawn from the faucet in the ordinary manner. Encircling this tube or receptacle 7 is a concentric tube 10, which is connected by a branch 10<sup>a</sup> with one or more of the air tubes 5. Carried upon the top of 80 the body is a cylindrical cap 11, which has a central opening 11<sup>a</sup>, above which is located a deflector plate 12 held spaced therefrom by brackets or connecting members 13. This deflector plate is designed to keep the air passing into the apparatus from absorbing the heat which is necessarily generated by the motor. Mounted upon this deflector plate is an electric motor 14, the rotor of which has a shaft 15 depending through the opening in 85 the cap and carrying a fan 16 for producing the circulation of air. The current to the motor is supplied from any suitable source from the conducting wires 17, and I provide in this connection a rheostat or controller 18 90 which may conveniently be located upon a shelf 19 of the stand and by which the supply of current to the motor may be varied and hence the speed of the fan regulated as desired. Thus as the fan is rotated air will 95 be drawn down beneath the deflector plate by the fan and forced downward through the tubes and out through the mouths 5<sup>b</sup> thereof and across the room horizontally in all directions. The space surrounding the 100 tubes within the body 3 is packed with ice and as the tubes are constructed of conducting material the air in its passage through the tubes will be cooled or chilled, and thus a cooling and refreshing circulation of air 105 will be produced in all parts of the room. The cover is preferably provided with han-

dles 19<sup>a</sup> and the body may likewise be provided with handles 20 for convenience of manipulation. The base is also preferably provided with annular channel 21 for collecting any water of condensation which may form on the exterior surface of the body.

5 A receptacle may be provided in the shape of a hollow cover which will serve as a cover for the water tank and at the same time may hold a perfume or disinfectant so that the air which passes through the annular air passage may be perfumed or disinfected, such a receptacle being shown at 22.

10 15 Having thus described my invention what I claim is:—

1. An apparatus of the class described, comprising an ice receptacle, a plurality of vertically disposed air tubes therein with 20 means for producing a current of air

through the same, a central water container, an annular air chamber surrounding the water container, and an air passage leading from said annular chamber to one of the air tubes, substantially as described.

2. An apparatus of the class described comprising an ice receptacle having a plurality of vertically disposed tubes, a hollow cap surmounting the receptacle, an electric motor mounted upon the cap, a fan within the cap operated by the motor, said cap having an opening for the passage of air, and a deflector between said opening and the motor, substantially as described.

10 15 20 In testimony whereof I affix my signature in presence of two witnesses.

PAULINE GRAYSON.

Witnesses:

C. F. W. JOHANING,  
Mrs. CHAS. P. FARRINGTON.