

(No Model.)

M. L. RICH.
VENTILATOR.

No. 591,880.

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Fig. 1.
B

Fig. 2.

WITNESSES
C. D. Hester
J. Appan

INVENTOR
Muzo L. Rich.
By John Wedderburn
Attorney

UNITED STATES PATENT OFFICE.

MENZO L. RICH, OF ADDISON, NEW YORK.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 591,880, dated October 19, 1897.

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To all whom it may concern:

Be it known that I, MENZO L. RICH, a citizen of the United States, residing at Addison, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Ventilators; and I do hereby 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.

This invention relates to improvements in ventilating apparatus, and has more particular relation to such apparatus as employ a forced draft.

The invention consists of certain novel constructions, combinations, and arrangements of parts, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents a central vertical section through the devices embodying my invention, and Fig. 2 represents an end elevation of the same.

A in the drawings represents the fan-casing; B, the main distributing-pipe; C, the branch pipes; D, the supply-pipe communicating with the fan-casing. The fan A', mounted within the casing A, is preferably of the rotatable type, and is mounted upon a shaft a , provided at one end with a belt-wheel a' , by means of which motion is given to said fan from any suitable motor.

The inlet-pipe D for the casing A enters the same through a central passage a^2 , as is usual in this class of fans. The lower part of the casing A is extended downwardly, as at a^3 , to form an ice-chamber a^4 . A vertically-movable ice-supporting platform a^5 is mounted within this chamber, and supported in position by arms a^6 , that pass through suitable slots a^7 in the walls of said chamber, and are guided in vertical standards a^8 , mounted upon the base of the apparatus or the floor beneath the same. The said supporting-platform a^5 is normally held up by coil-springs a^9 , mounted in the guides a^8 below its extended arms a^6 .

It will be observed from the above that when a cake of ice is placed upon the platform a^5 the same is depressed against the tension of the springs a^9 , and thus as the ice

melts it is gradually forced upward, being limited in said upward movement by suitable projections a^{10} , mounted upon the interior of the casing A. The said casing A communicates with the main supply-pipe B, which in turn communicates with distributing-pipes c by means of branch pipes C. These pipes c and the branch pipes C are preferably brought down through the ceiling of the room in which the ventilation is desired, and discharged in proximity to said ceiling. The commingling of the supply of cold air within the room arises from the peculiar diverging formation of the pipes c , and thus the air of the room is thoroughly cooled without creating any continuous drafts or currents of air.

If so desired, the pipes c may be made adjustable, so that they may be lowered at will to bring their discharge ends into any desired position within the room.

By means of my peculiar construction of the fan-casing, with the ice-supporting platform therein, the air drawn into said casing is first caused to pass over the surface of the ice, and is thus moistened and cooled by one and the same operation.

The location of the cake of ice within the fan-casing is a great advantage, as none of the cold-air currents are permitted to escape except by way of the discharge-pipes. The quantity of the supply of this air to any desired room is regulated by the speed of the fan, and is thus fully under control.

If so desired, chambers may be applied in any of the branch pipes C to cut them out at will.

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

1. In a ventilating apparatus, the combination with a fan-casing, of distributing-pipes connected to the same, a fan within said casing, an ice-supporting platform also mounted within said casing, and means for automatically moving the platform toward the fan as the ice melts, substantially as described.

2. In a ventilating apparatus, the combination with suitable distributing-pipes, of a fan-casing, a fan within said casing, an ice-supporting platform also within said casing and spring-supports for said platform adapt-

ed to hold the same normally up, substantially as described.

3. In a ventilating apparatus, the combination with suitable distributing-pipes, of a
5 fan-casing communicating therewith, a fan within said casing, an ice-supporting platform also mounted within said casing and having projecting ends, vertical guides for said ends and spiral springs mounted within
10 said guides and under said projecting ends

for holding the platform normally up, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

MENZO L. RICH.

Witnesses:

W. R. SANFORD,

CHARLES W. RICH.