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J. H. McCONNELL.
VENTILATING AND COOLING APPARATUS.

APPLICATION FILED DEC. 6, 1901.

NO MODEL.

Fig. 1.

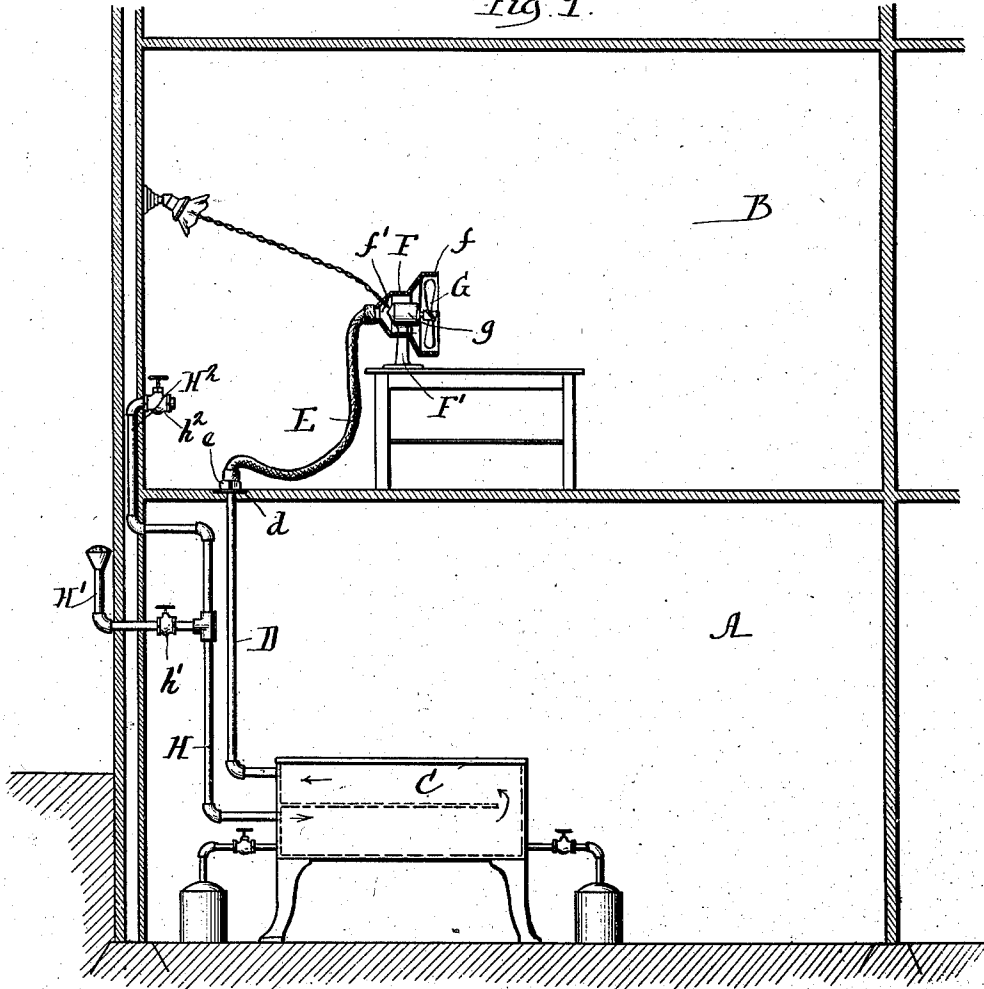
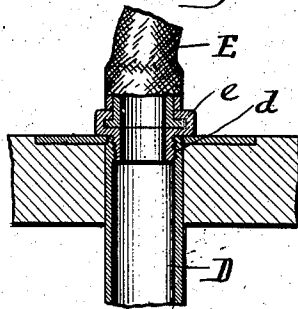


Fig. 2.



Witnesses:

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JAMES H. MCCONNELL, OF EVANSTON, ILLINOIS.

VENTILATING AND COOLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 739,438, dated September 22, 1903.

Application filed December 6, 1901. Serial No. 84,877. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. MCCONNELL, a citizen of the United States, and a resident of Evanston, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Ventilating and Cooling Apparatus, of which the following is a full, clear, and exact description.

This invention has for its object to provide simple and effective means whereby the rooms of dwellings, offices, or the like may be effectively ventilated and cooled; and the invention consists in the improved apparatus hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the claims at the end of this specification.

Figure 1 is a view in vertical section through a portion of a building equipped with my improved apparatus. Fig. 2 is an enlarged detail view showing the preferred manner of coupling the free end of the air-delivery pipe to a permanent fixture by which cooled air is admitted to such pipe.

My present invention contemplates a ventilating and cooling apparatus whereby fresh and preferably cooled air may be delivered to any part of a room or compartment from a source extraneous thereto, and the object of the invention is accomplished by providing a portable air-delivery apparatus comprising a flexible tube or conduit provided at one end with a hood having a blower-fan inclosed therein, the opposite end of the flexible tube or conduit being adapted for connection to a source of fresh-air supply.

In the drawings I have shown but two rooms of a building, the lower room A being, for example, the basement, while the room B, above it, may be on the first floor of the building. Within the room A is placed a suitable refrigerating apparatus C, that may be of any ordinary or suitable construction adapted for the cooling of air. I have shown in the accompanying drawings one style of refrigerator; but the refrigerator itself forms no part of the invention, as the cooling of the air may be effected by its passage through a refrigerator containing ice or in which water-sprays are used. In short, any of the familiar air-cooling refrigerators may be used in connection with my invention. From the re-

frigerator C leads the air-supply pipe D; this pipe terminating at a suitable point in the room B—say, for example, at the floor-line, as shown, or if preferred at some point in the side wall of the room. To the air-delivery pipe D will be suitably connected one end of a flexible air-supply pipe or conduit E, the opposite end of which pipe or conduit E is connected to a hood or casing F, that incloses a blower-fan G. The pipe or conduit E is preferably formed of rubber tubing of suitable diameter to supply the air to the casing F, this casing being formed with an opening in its back where it is joined to the pipe or conduit E. Preferably the portable power-driven blower-fan G will be driven by an electric motor of the type commonly used for driving ordinary portable electric fans, and in the preferred form of the invention the motor will be arranged within the hood or casing F. As shown, flexible conductors for the operating current are connected at one end to the actuating electric motor for the fan and may be connected at the opposite end to the ordinary light-fixture, as indicated. As shown, the casing F is mounted upon a base or pedestal F', that may be conveniently set upon a table, bracket, or the like; or, if preferred, the casing F may be provided with suitable means whereby it may be suspended at any desired point of the room.

The casing F is formed with an open-ended expanded portion *f* to receive the power-driven blower fan or wheel, and with a contracted portion or inlet *f'*, to which is connected the end of the air-supply pipe or conduit E. As shown, the fan G is located within the expanded portion *f* of the hood or fan-casing F opposite and in a plane parallel to the enlarged open mouth or outlet of the hood or casing. By this arrangement the fresh cool air is distributed by the fan evenly over a large area. Preferably the end of the pipe E is furnished with a coupling *e*, adapted to engage with a threaded upper portion or coupling *d*, at the end of the air-delivery pipe D. The coupling *e* may be of any suitable type, that shown in the drawings, Fig. 2, being a form of coupling well adapted for the purpose. The flexible pipe E may be of any convenient length, and it will readily be seen that by means of this pipe the portable fan may

be shifted to any desired part of the room or the pipe E may be disconnected from the air-delivery pipe D, and the portable fan and the flexible pipe may be used in another room or compartment to which a similar air-delivery pipe D leads.

From the construction as thus far defined it will be seen that when revolution is imparted to the power-driven blower-fan G air will be drawn from the refrigerator C through the air-supply pipes D and E, the air being cooled by its passage through the refrigerator. Preferably the air will be delivered to the refrigerator C by a pipe H, having a branch H' leading outside the building and having a branch or portion H², that leads to the room to be cooled or ventilated. The purpose of this arrangement is to enable the air to be taken either from outside the building or to be taken from within the building and returned to the refrigerator. The pipes H' and H² will be provided with suitable cocks h' and h², by means of which the volume of air delivered to the refrigerator may be drawn wholly or in part through either of these pipes.

It is manifest that the precise details of construction above set out may be varied without departure from the scope of the invention.

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

1. A portable ventilating apparatus comprising a fan-casing having an enlarged open mouth or outlet and a contracted inlet, a blower-fan located within the casing, opposite and in a plane parallel to the enlarged open mouth or outlet, an electric motor operatively connected to said fan, a portable support whereon said casing, fan and motor are mounted, flexible current-conductors connected to said motor and a flexible air-pipe connected to the inlet of said fan-casing and arranged to be coupled to a suitable source of supply.

2. A portable ventilating apparatus comprising a portable support, a fan-casing having an enlarged open mouth or outlet and a contracted inlet mounted on said support, a rotatable blower-fan mounted within said casing, opposite and in a plane parallel to

said open-mouth outlet, an electric operating-motor for said fan mounted on said portable support, flexible current-conductors connected to said motor, a flexible air-supply pipe connected at one end to the contracted inlet of said fan-casing and a coupling on the opposite end of said flexible air-supply pipe for connecting the same to a suitable source of supply.

3. In a cooling and ventilating means, the combination with an air-cooling apparatus having an air-inlet pipe and an air outlet or supply pipe, of a portable support, a fan-casing having an expanded open mouth or outlet and a contracted inlet, a rotatable blower-fan mounted within said casing, opposite and in a plane parallel to said open mouth or outlet, an electric motor mounted on said portable support and connected to said fan, flexible current-conductors connected to said electric motor and a flexible air-supply pipe connected to the inlet of said fan-casing and to said first-mentioned air-supply pipe.

4. In cooling and ventilating means for the apartments of buildings, the combination with an air-cooling apparatus located in one apartment, a suitable air-inlet pipe opening into said air-cooling apparatus, an air-outlet pipe leading therefrom and opening into another apartment of the building, of a portable support, a fan-casing mounted on said portable support and having an expanded open mouth or outlet and a contracted inlet, a rotatable blower-fan mounted within said casing, opposite and in plane parallel to said enlarged open mouth or outlet, an electric motor mounted upon said portable support and operatively connected to said fan, flexible current-conductors connected to said motor, a flexible air-supply pipe connected to the inlet of said fan-casing and a coupling on the opposite end of said flexible air-supply pipe for connecting the same to the open end of said first-mentioned air-supply pipe.

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Witnesses:

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