

(No Model.)

H. ILIOWIZI.

AIR MOISTENING AND PURIFYING ATTACHMENT FOR HOT AIR REGISTERS.

No. 544,175.

Patented Aug. 6, 1895.

fig. 1.

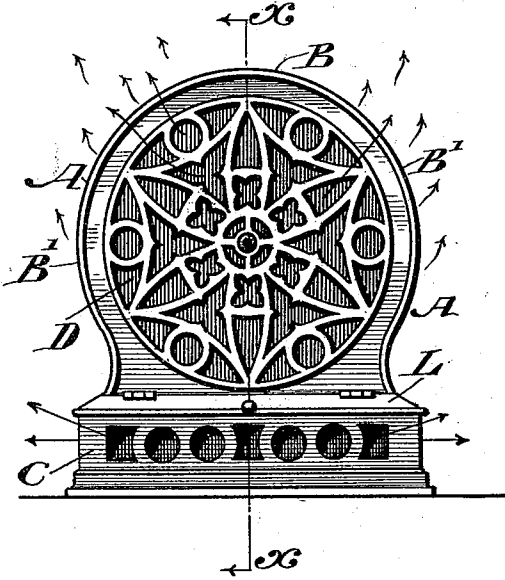


fig. 2.

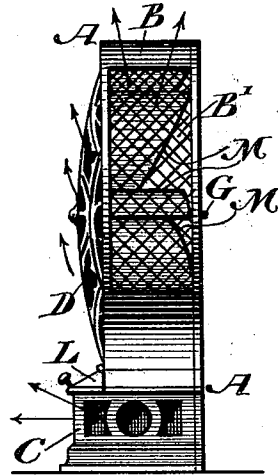


fig. 3.

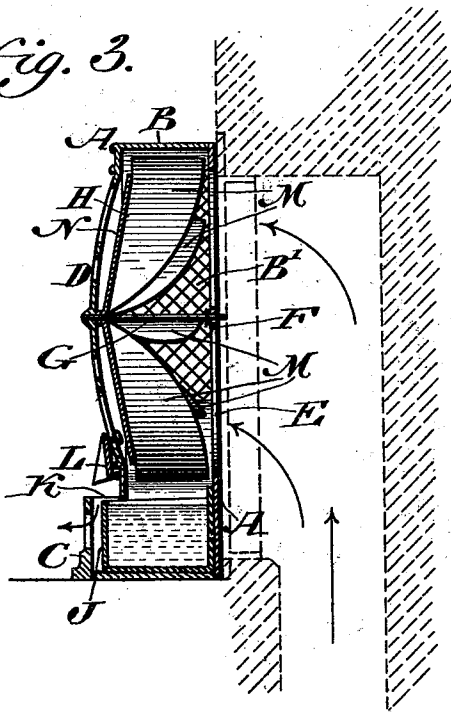


fig. 4.

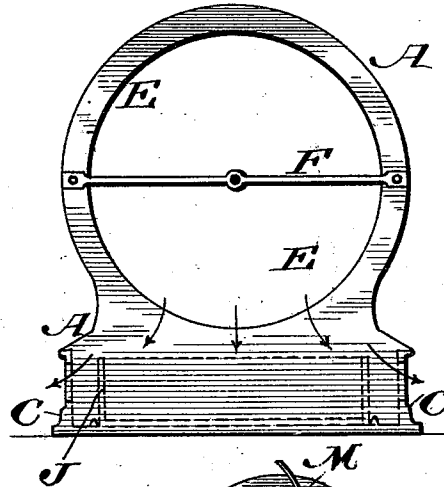
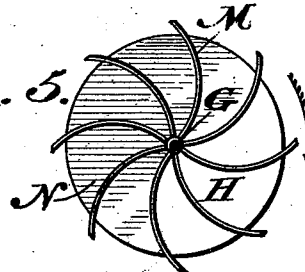


fig. 5.



Witnesses
L. Dowille,
P. F. Hagler.

Inventor
Henry Iliowizi.
By his Attorney
H. A. W. Dersheim

UNITED STATES PATENT OFFICE.

HENRY ILIOWIZI, OF PHILADELPHIA, PENNSYLVANIA.

AIR MOISTENING AND PURIFYING ATTACHMENT FOR HOT-AIR REGISTERS.

SPECIFICATION forming part of Letters Patent No. 544,175, dated August 6, 1895.

Application filed September 12, 1894. Serial No. 522,774. (No model.)

To all whom it may concern:

Be it known that I, HENRY ILIOWIZI, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Air Moistening and Purifying Attachments for Hot-Air Registers, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of improvements in air moistening and purifying attachments for hot-air registers and flues, the same embodying a casing, a tray or pan adapted to contain water or other fluid, and a peculiarly-formed fan in said casing, as will be hereinafter set forth.

Figure 1 represents a front view of an attachment embodying my invention. Fig. 2 represents a side elevation thereof. Fig. 3 represents a vertical section thereof on line x , Fig. 1. Fig. 4 represents a view of the rear plate of the casing of the attachment. Fig. 5 represents a front view of the fan of the attachment.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a casing formed of the closed top B, the open sides B', the base C, the partly-open front D, and the open back E. Connected with the sides of the casing at the rear thereof is a cross-bar F, which with the front wall D forms the bearing for the axle or axis G of the fan H, it being noticed that said axis is horizontal, so that said fan rotates in the direction of the arrows, Fig. 5.

In the base C is a tray or pan J for containing water or other desirable fluid, said pan thus being below the fan H, as will be seen more particularly in Fig. 3. At the top of the front portion of the base is an opening K, whereby access may be had to the pan for replenishing the same or for other purposes, said opening being covered by a door or lid L, which is hinged to a proper part of the wall of the casing or otherwise retained in place.

The fan H consists of the curved blades M and the closed head or plate N, to which said blades are attached, said head forming a deflector for preventing the direct escape of

heat through the fan and casing, it being noticed that said head is at the rear of the front plate D of the casing A. The blades widen from the center of the head to the periphery of the same, so that as the heated air strikes the rear of the fan and impinges against the blades the latter present gradually-increasing surfaces to the action of the air, so that as air impacts against the head it exerts its power against the blades, said power increasing from center to periphery, whereby the fan is effectively rotated, and the heated air is driven by the same against the fluid in the pan J, whereby it is moistened and purified, in which condition it escapes through the casing through the openings therein, and so enters the apartment, as indicated by the short arrows in the several figures.

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

1. In a device of the character described, a casing having an open back, a closed top and openings in its sides and front, a pan suitably supported, a fan rotatably mounted within said casing, above said pan, and having a closed head adjacent the front of said casing and curved blades, which increase in width from the center to the periphery, said parts being combined substantially as described.

2. An air moistening and purifying device, consisting of a casing having a pan in the base thereof, a fan mounted in the casing above said pan, and hot air inlets and outlets, said fan consisting of a closed head and blades of curved form increasing in width from center to periphery, substantially as described.

3. In an air moistening and purifying device, a casing having a pan in the lower portion thereof, a fan rotatably mounted above said pan, said fan consisting of a closed head and curved blades, increasing in width from center to periphery, in combination with suitable means for gaining access to the interior of said casing, substantially as described.

HENRY ILIOWIZI.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. JENNINGS.