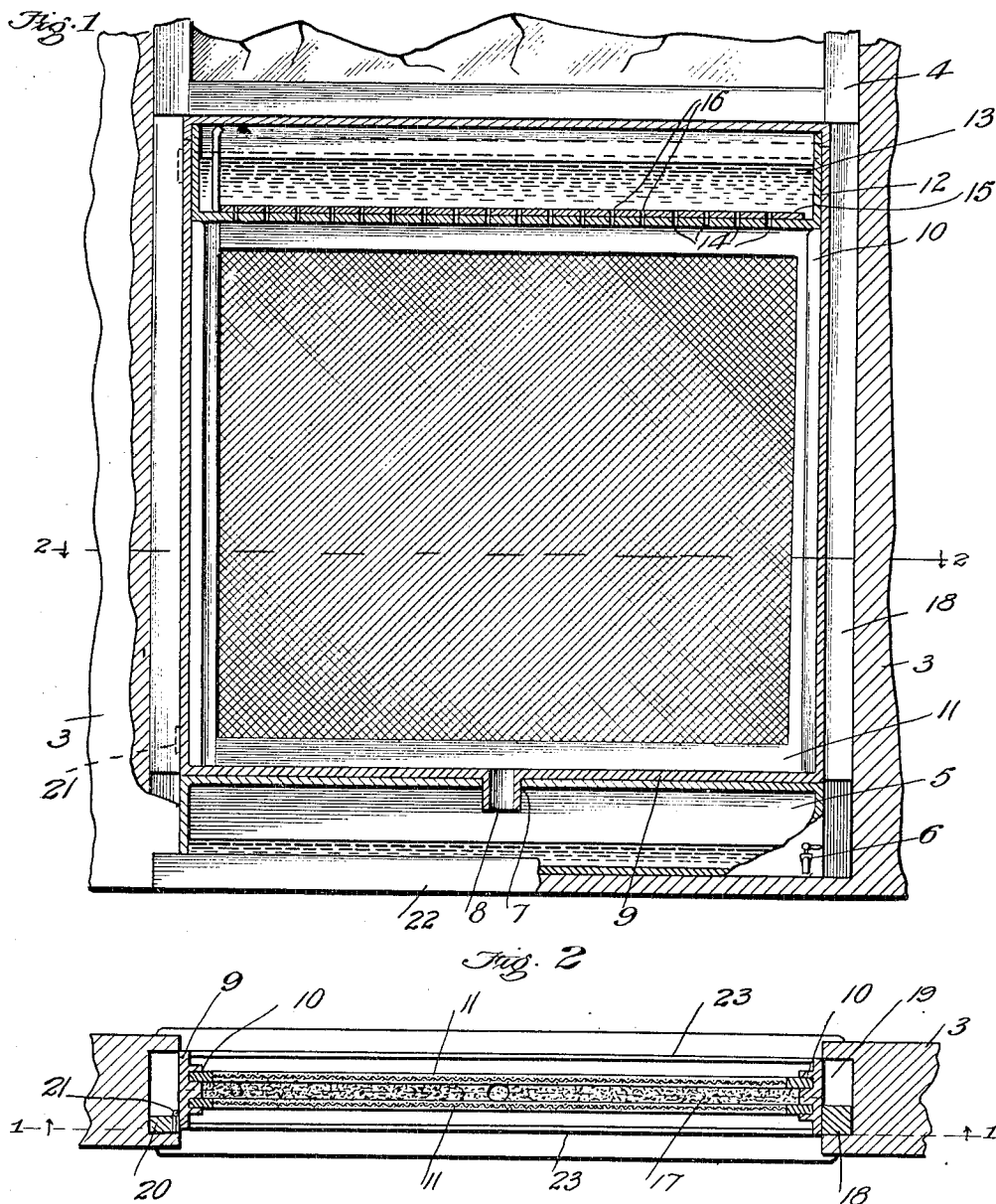


No. 849,568.

PATENTED APR. 9, 1907.

L. F. PAWLEY.  
AIR FILTER AND COOLER.  
APPLICATION FILED DEC. 19, 1905.



Witnesses  
*Edmund A. Shaw*  
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# UNITED STATES PATENT OFFICE.

LUCY F. PAWLEY, OF LOS ANGELES, CALIFORNIA.

## AIR FILTER AND COOLER.

No. 849,568.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed December 19, 1905. Serial No. 292,516.

*To all whom it may concern:*

Be it known that I, LUCY F. PAWLEY, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Air Filters and Coolers, of which the following is a specification.

My invention relates to means for filtering the air to free it from dust and other impurities and for cooling the same as it passes into a car or a house or other receptacle; and the object thereof is to provide a simple and efficient device for that purpose which can be readily removed, if desired, and which can be quickly and easily cleaned. I accomplish this object by the device described herein and illustrated in the accompanying drawings, in which—

Figure 1 shows my device applied in the window of a dwelling and in section on the line 1 1 of Fig. 2. Fig. 2 is a cross-section on the line 2 2 of Fig. 1.

In the drawings, 3 is the window-casing of usual construction in which the sash 4 has the usual vertical motion. My air filtering and cooling device is composed of the waste-water pan 5, having a cock 6, through which the water may be drawn off when desired. In the top of the waste-water pan is an opening or port 7, through which projects a spout 8, that is secured to the bottom of the frame 9. In the sides of the frame are guideways 10, in which are received the screen-frames 11, made of wire-cloth in the usual manner. The guideways terminate a short distance from the top of the frame and support reservoir 12, in which is placed a suitable quantity of water 13. In the bottom of the reservoir are ports 14, which are controlled by the slide-valve 15, having ports 16 therein, which register with the ports 14. By means of this slide-valve ports 14 can be partially or entirely closed to regulate the amount of water which shall pass therethrough and to prevent it entirely passing therethrough when desired. Between the screen-frames is the filtering material 17 which may be of any porous absorbent material which will permit the air to pass therethrough, but which will not allow dust to pass through it. A sheet of sponge or cotton cheese-cloth forms very good material for that purpose.

As shown in the drawings, the main body of the filtering device is of a width to snugly fit inside of the window-casing and at one side

thereof is provided with a ledge or lug 18, which fits into runway 19 of the window-casing, which forms the guideway or runway of the sash. A similar lug or ledge 20 is secured to the other side of the frame by hinge 21, so that it can be turned on the hinge to permit of the device being inserted into the opening and then brought to the position shown in Fig. 2, when it will be moved downwardly until the lower part of the waste-pan rests below the window-sill 22, when the device will be held securely in place. The window-sash is then brought down upon the top, as shown in Fig. 1, which closes the opening, and the air which passes into the room is filtered from all impurities. When the weather is very warm, the reservoir can be filled with ice or with water, as desired. The ice as it melts, or the water in the reservoir, flows through ports 14 upon the filtering material between the screens, and thereby cools the air, as well as filters it from impurities. At each side of the bottom is a ledge 23, which causes the excess of moisture which passes through the filtering material to flow through the spout 8 into the waste-pan.

As my device is very compact and easily put into place it forms a very desirable means for filtering the air which passes through the air-windows, especially in hot dusty weather and also at night, as thereby the traveler in his berth may secure for himself a supply of fresh pure air which is not possible, so far as I am aware, with any of the devices now in use. Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A portable air-filtering device comprising a frame; two removable wire screens in said frame; filtering material between said screens; a reservoir resting upon the upper ends of the guideways for the screens having ports in the bottom thereof in the top of said frame; a slide-valve in the bottom of said reservoir controlling said ports; a waste-pan below said frame and communicating therewith; and lugs secured to the side of said frame, one of said lugs being secured thereto by a hinged connection.

In witness that I claim the foregoing I have hereunto subscribed my name this 14th day of December, 1905.

LUCY F. PAWLEY.

Witnesses:

G. E. HARPHAM,  
HENRY T. HAZARD.