W. H. LESH.

AIR MOISTENING VENTILATOR.

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1,183,746.

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Fig. 1.

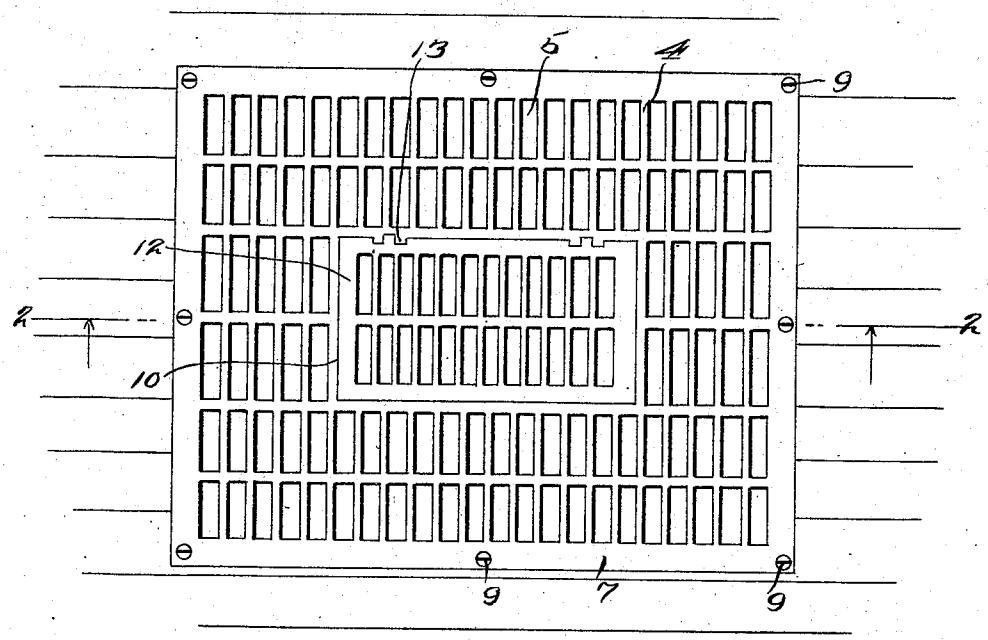
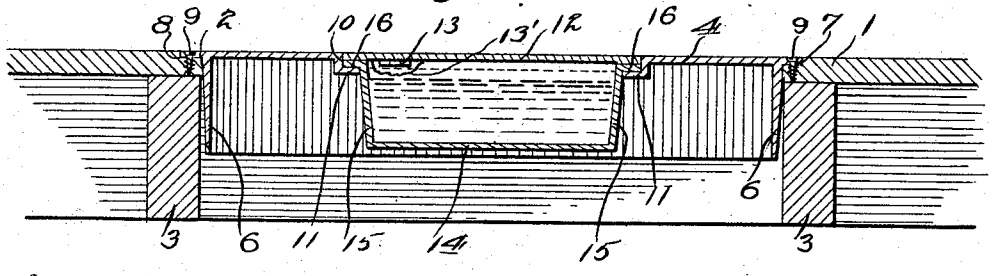


Fig. 2.



Witnesses

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AIR-MOISTENING VENTILATOR.

1,183,746. Specification of Letters Patent. **Patented May 16, 1916.**

Application filed May 14, 1915. Serial No. 28,128.

To all whom it may concern:

Be it known that I, WILLIAM H. LESH, a citizen of the United States, residing at Delphi, in the county of Carroll and State of Indiana, have invented certain new and useful Improvements in Air-Moistening Ventilators, of which the following is a specification.

My invention relates to ventilators, and more particularly to a new and improved grating having an air moistening device associated therewith.

The primary object of my invention is to provide a ventilator of the class above described which is simple in construction, cheap to manufacture, strong and durable and effective in operation.

Another object of my invention is to provide improved means for retaining the ventilator grating in position, and means for supporting a liquid containing tank on the grating.

With the above and other objects in view my invention resides preferably in the construction, combination, and arrangement of parts as hereinafter set forth in the specification and illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of my invention showing the same seated in an opening such as is provided for ventilating purposes. Fig. 2 is a longitudinal sectional view taken on the line 2—2 of Fig. 1 and looking in the direction of the arrow.

Similar reference characters indicate similar parts throughout the various views of the drawings.

Referring more particularly to the drawings in which the preferred embodiment of my invention is illustrated, the floor of a dwelling or the like is designated 1, said floor having a substantially rectangular opening 2 therein and transverse strengthening beams 3 adjacent said opening for a purpose which will hereinafter appear.

My invention includes a grating member comprising a plate 4 having a plurality of elongated apertures 5 therein, such as is common in ventilators, said plate having a downwardly extending tapered flange 6 formed integral therewith. A laterally extending flange 7 is provided on the plate 4 and is receivable in the countersunk portion 8 formed adjacent the opening 2 in the floor 1. The flange 7 is provided with a plurality of apertures through which screws 9 or similar fastening means are inserted to permanently secure the ventilator structure in the opening 2. The plate 4 is provided with a relatively large rectangular opening 10 preferably located centrally of the plate as shown to advantage in Fig. 1. The plate 4 is provided with a flange 11 adjacent the opening 10 and forming a supporting means for a purpose which will hereinafter appear. A perforate cover 12 is hinged at 13 to the plate 4 and serves as a protecting cover for the opening 10.

The moistening device of my invention comprises preferably a liquid receiving tank 14, the walls thereof being slightly tapered as indicated at 15, said tank being receivable in the opening 10. The upper marginal edges of the walls 15 of the tank 14 are provided with laterally extending flanges 16 which are adapted to seat on the flange 11, as shown to advantage in Fig. 2. When the tank 14 is dropped into the opening 10 and seated on the flange 11 the cover 12 may be closed, this serving both to protect the tank 14 and to allow persons to walk upon the ventilator. It also retains the tank in the position shown in Fig. 2. It will be noted that the flanges 6 formed on the plate 4 are receivable in the opening 2 and serve to prevent lateral displacement of the ventilator. The tank has been broken away in Fig. 2, as shown at 13′, in order to illustrate to advantage one of the hinges 13.

Particular attention is called to the peculiar manner of securing the tank 1 in position, as well as the manner in which the opening 10 is disposed in the plate 4, and the provision of the flanges 6.

It is desired that it be understood that the ventilator structure shown need not be placed in the floor of a dwelling but may be placed in the walls thereof, it being, of course, necessary to provide a deflecting channel or air conveying duct extending from the wall which will support the ventilator in a horizontal plane. The peculiar structure allows of quick removal of the tank for cleaning and replenishing of the liquid and in cold weather the tank may be removed and the ventilator used as a heat register. Of course, it will be understood that when using the same as a heat register, the tank may be left in position and the same filled with liquid to moisten the warm air passing therearound.

While I have shown and described my invention as possessing a peculiar form and construction, it is desired that it be understood that I may make such changes in the details thereof that do not depart from the spirit and scope of the invention as claimed.

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

1. A ventilator and air moistener, including a perforate plate having a relatively large central opening, a supporting flange adjacent the opening and a liquid receptacle receivable on the flange and within the opening.

2. A ventilator and air moistener, including a perforate plate having a relatively large central opening, a liquid receptacle supported in the opening, and a perforate cover over the opening for protection of the receptacle and retention in position of the latter.

3. A ventilator and air moistener, including a perforate plate having a relatively large central opening and a downwardly directed tapered flange, a supporting flange adjacent said central opening, a perforate hinged cover therefor, a tank having laterally extending flanges receivable in said opening and adapted to seat on the supporting flanges, said cover being adapted to protect the receptacle and retain the same in position.

4. A ventilator and air moistener, including a perforate plate having a downwardly extending tapered flange, said plate having a relatively large central opening, a perforate cover for the opening, a tank, a supporting flange on the plate adjacent the relatively large opening, and lateral flanges on the upper marginal edges of the walls of the tank receivable between said supporting flanges and the hinged cover, whereby to retain the tank in position and allow the cover to lie flush with the upper face of the plate.

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

WILLIAM H. LESH.

Witnesses:

D. E. ALLBAUGH,

B. B. LESH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."