March 1, 1927. L. J. LÉVESQUE ET AL 1,619,425

HEATER

Filed May 6, 1926

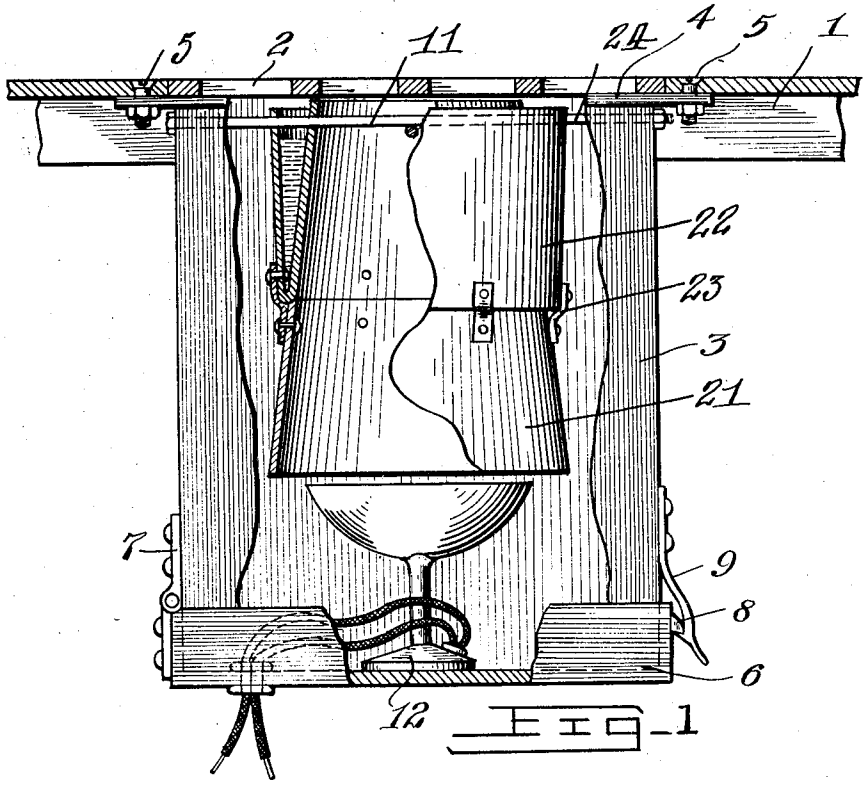


FIG-1

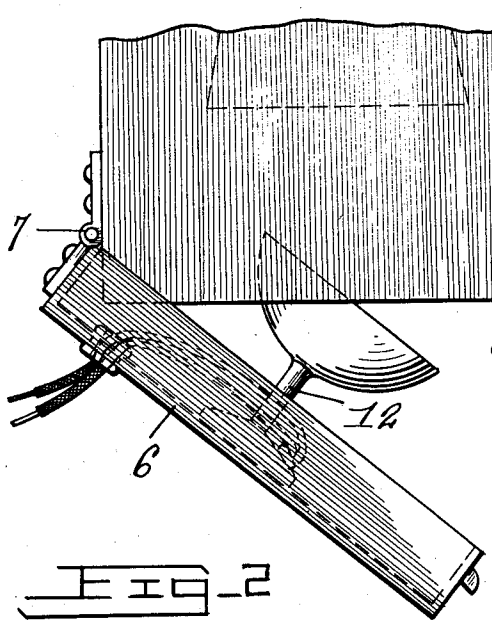


FIG-2

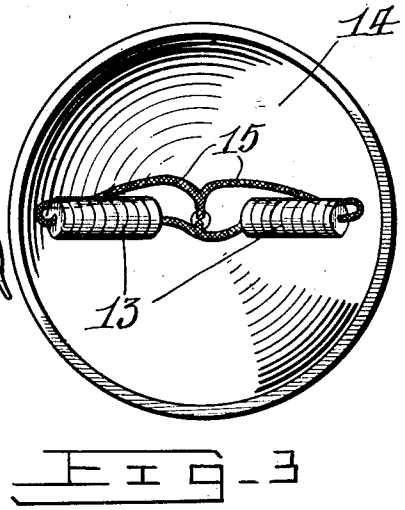


FIG-3

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UNITED STATES PATENT OFFICE.

LOUIS JOSEPH LÉVESQUE AND JOSEPH LESSARD, OF BAGOTVILLE, QUEBEC, CANADA, ASSIGNORS TO LE CHAUFFAGE ELECTRIQUE IDEAL LIMITEE, OF BAGOTVILLE, QUEBEC, CANADA.

HEATER.

Application filed May 6, 1926. Serial No. 107,206.

The present invention pertains to a novel heater designed particularly for heating air in dwellings and the like.

The principal object of the invention is the provision of a simple device of this character which may readily be supplied in units of selected size at the particular points where heating is desired. The device is constructed in such a manner that it may readily be supported beneath the usual hot air registers or gratings.

In the accomplishment of this object the device is constructed in the form of a housing secured to the floor directly beneath the grating. The housing has a hinged bottom on which is supported the heating element which is preferably operated by electric current.

From the upper part of the housing is suspended a casing which receives the heating element in its lower portion or is disposed directly over the same. A device is provided within the casing for the purpose of forming an annular channel in which water is contained. As air is circulated and heated within the casing, the water in the channel is vaporized sufficiently to humidify the heated air.

In a modification of the invention the casing consists of a lower asbestos skirt on which is mounted a metallic trough member which constitutes the channel for containing the water. The asbestos skirt, which is separable from the metallic trough, is preferable as a retainer of the heat generated by the heating element.

The invention is fully disclosed in the following description and in the accompanying drawings in which:

Figure 1 is a side elevation of a modified construction, partly broken away and partly in section;

Figure 2 is a fragmentary elevation thereof, showing the bottom lowered on its hinges; and

Figure 3 is a plan view of the heating element.

Reference to these views will now be made by use of like characters which are employed to designate corresponding parts throughout.

In Figure 1 is illustrated a floor 1 in which is inserted a grating 2 in the usual manner. A housing 3 is suspended from the floor by means of flanges 4 extending from the housing and secured to the floor by means of bolts 5. The bottom 6 of the housing is separable and hingedly supported by means of hinges 7. The free end of the bottom carries a lug 8 adapted to be held by a spring latch 9 fixed to the adjacent wall of the housing. By means of this device the bottom is normally held in closed position as shown in Figures 1 and 4.

The heater includes further an annular metallic trough 22 supported in the housing by means of a pair of tie rods 11 passed through the casing. To the lower end of the trough is secured an upwardly tapering asbestos skirt 21 by straps 23. To the bottom 6 is secured a heating element comprising a base 12 and a pair of coils 13 mounted in the reflecting portion 14. Conductors 15 extend from the coils through the bottom 6 and to a supply of current. The trough is designed to contain water which may be supplied through the grate 2. The water which is contained in the trough is slowly vaporized by the heat from the heating element and thus used to humidify the heated air.

In the operation of the device, the air which is circulated through the casing and heated by the heating element is at the same time humidified by the vapour generated in the trough 22. When repairs of the heating element or casing are required, access to the parts may be had by swinging the bottom 6 downwwardly on its hinges as shown in Figure 5.

While specific embodiments of the invention have been illustrated and described, it is to be understood that various alterations in the details of construction may be made without departing from the spirit of the invention as indicated by the appended claims.

Having thus fully described the invention,

what we claim as new and desire to protect by Letters Patent is:

1. A heater comprising a casing, said casing including an asbestos skirt and an annular trough mounted over said skirt, and a heating element disposed beneath said skirt.

2. A heater comprising a casing, said casing including an asbestos skirt and an annular trough mounted over said skirt, a housing enclosing said casing, said housing having a hinged bottom, and a heating element carried by said bottom and in alinement with said casing.

In witness whereof we have hereunto set our hands.

LOUIS JOSEPH LÉVESQUE.
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