Feb. 11, 1936. L. V. ROBERTS ET AL 2,030,155

HUMIDIFIER

Filed July 8, 1935

FIG. 1.

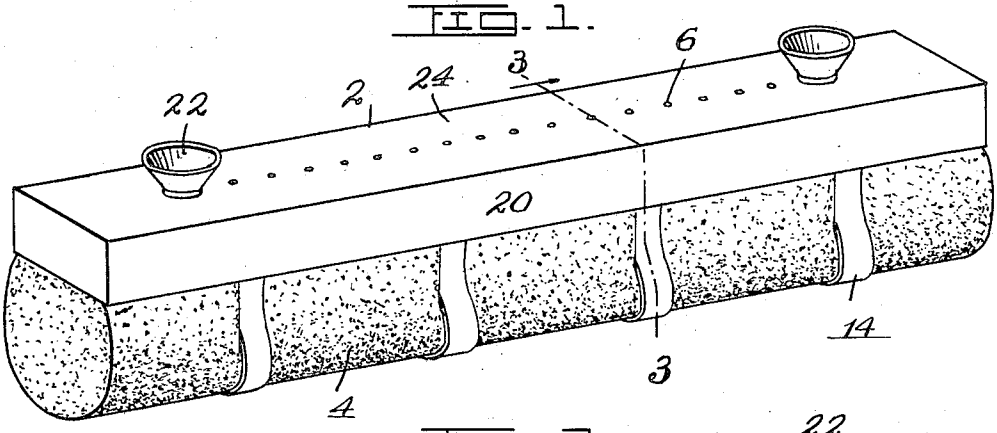


FIG. 2.

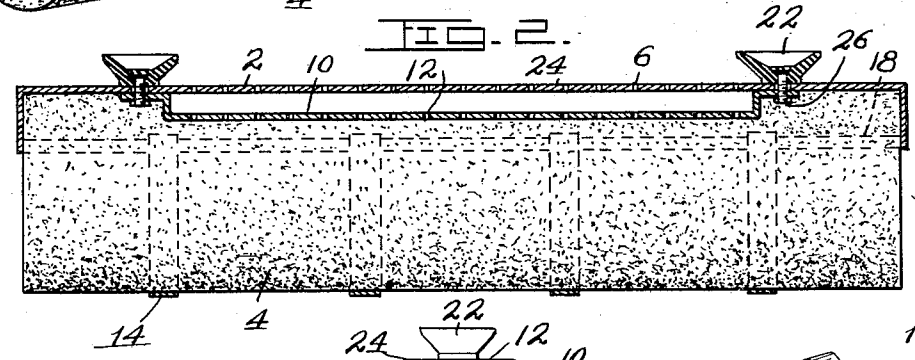


FIG. 3.

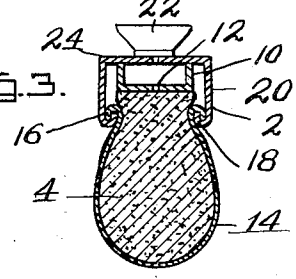


FIG. 4.

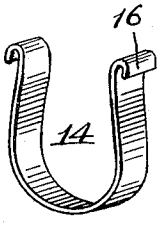
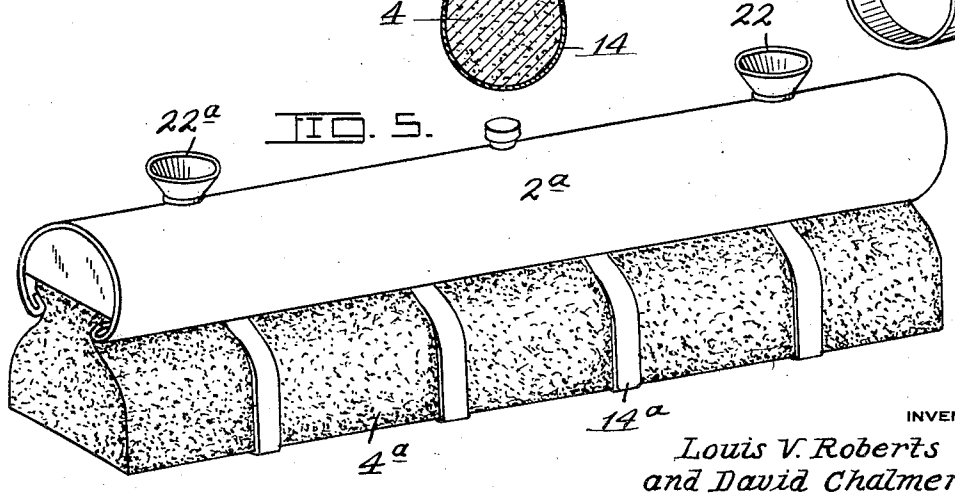


FIG. 5.



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HUMIDIFIER

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4 Claims. (Cl. 299—20)

Our invention relates to that type of humidifiers used in moistening the air in show cases and other enclosures containing cigars or other merchandise likely to become damaged by exposure to dry air, and our object is to provide a simple and inexpensive device of this character of ornamental appearance and which will prove efficient for the purpose intended.

In carrying out our invention we employ suitable porous material such, for example, as felt, sponge rubber, or the like, a holder for the porous material, a reservoir in said holder, and means capable of supporting said holder from the top, or other wall of the enclosure.

In order that the invention may be fully understood, reference will now be had to the accompanying drawing, in which:

Fig. 1 is a perspective view of a humidifier made in accordance with our invention.

Fig. 2 is a longitudinal sectional view of the holder with the porous material in elevation.

Fig. 3 is a cross sectional view on line 3—3 of Fig. 1.

Fig. 4 is a detail of one of a plurality of spring clips for detachably securing the porous material in the holder.

Fig. 5 is a perspective view of a modified form of the humidifier.

Referring in detail to the different parts comprising the humidifier, 2 designates a holder of hollow rectangular formation open at its bottom portion to receive the upper portion of the porous material 4. The holder 2 consists of any suitable material, such for instance, as sheet metal which may be burnished, lacquered, or nickel plated to present an attractive appearance and its upper wall is perforated as indicated at 6 for a purpose which will hereinafter appear.

The upper portion of the porous material 4 fits snugly against the inner surface of the side, end and top walls of the holder 2 and also against the bottom of a reservoir 10 secured in the upper portion of the holder 2 for holding a supply of water to maintain the porous material 4 in a saturated condition. The major portion of the porous material, which latter, as hereinbefore stated may consist of felt, sponge rubber, or the like, is exposed to provide a large evaporating surface for keeping the surrounding air in a moistened condition. The bottom of the reservoir 10 is perforated as indicated at 12 to provide for uniform distribution of the water to the porous material 4, which is thereby kept in a saturated condition.

In order to prevent accidental displacement of the porous material 4 the same is removably secured in the holder 2 by a suitable number of spring clips 14 the ends of which are bent to form downturned hooks 16 adapted to detachably engage upturned complemental flanges 18 formed at the lower margins of the side walls 20 of the holder 2.

The humidifier is provided with suitable means for supporting it from the top wall of the show case or other enclosure, such means in the present instance comprising rubber vacuum cups 22 secured to the top wall 24 of the holder by suitable means such as screws 26 which may also be employed for securing the reservoir 10 to the under side of the top wall 24, as shown by Fig. 2.

In practice the reservoir 10 may be filled with water by the simple act of immersing the humidifier so that the water may enter through the perforations 6. At the same time the porous material 4 is also saturated to supplement the supply in the reservoir 10. Should the pores of the porous material 4 become clogged in the course of time with sediment deposited therein by the water, said porous material may be readily removed from the holder 2 for cleansing by first removing the clips 14.

In the modified form disclosed by Fig. 5, the construction is somewhat similar to that disclosed by Figs. 1 to 3, inclusive, as is evidenced by corresponding reference numerals with exponents *a*, the main difference being that the holder 2*a* is segmental in cross section and the bottom of the porous material 4*a* and the clips 14*a* are flat instead of being curved as in the form shown by Figs. 1 and 3. If desired the clips 14*a* may be dispensed with as that part of the porous material 4*a* inside of the holder 2*a* will bulge over the longitudinal lower margins of said holder and thus secure the porous material against accidental displacement.

In order that this modified form of humidifier may be supported from a side wall, or end wall, as well as the top of the enclosure without loss of water from the reservoir through perforations such as 6, we dispense with said perforations in the holder 2*a* and provide the latter with an opening through which the reservoir may be filled and close said opening with a removable cap 28.

From the foregoing description, taken in connection with the drawing, it is apparent that we have provided a humidifier embodying the advantages above pointed out, and while we have shown two forms thereof we reserve all rights to such other forms and modifications as properly fall within the spirit and scope of the invention as claimed.

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

1. A humidifier of the character described comprising a hollow rectangular holder open at its bottom portion, porous material having a portion thereof fitting within said open bottom portion, and a reservoir arranged within the holder and provided with perforations through which water may flow and thus saturate the porous material.

2. A humidifier of the character described comprising a hollow holder open at its bottom portion, a suitable number of vacuum cups secured to said holder, porous material having a portion thereof fitting within the open bottom portion of the holder, and a reservoir arranged within the holder and provided with perforations through which water may flow and thus saturate the porous material.

3. A humidifier comprising a hollow holder open at its bottom portion and provided with flanges, porous material having the upper portion thereof removably arranged in said holder, and clips embracing said porous material and detachably engaging the flanges.

4. A humidifier comprising a hollow holder open at its bottom portion and provided with marginal upturned flanges, porous material having the upper portion thereof removably arranged in said holder, and clips embracing said porous material and provided with downturned hook-shaped terminals for detachably engaging the flanges.

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