W. B. KELLING.

HUMIDIFIER.

APPLICATION FILED AUG. 24, 1916.

1,281,390. Patented Oct. 15, 1918.

Fig. 1.

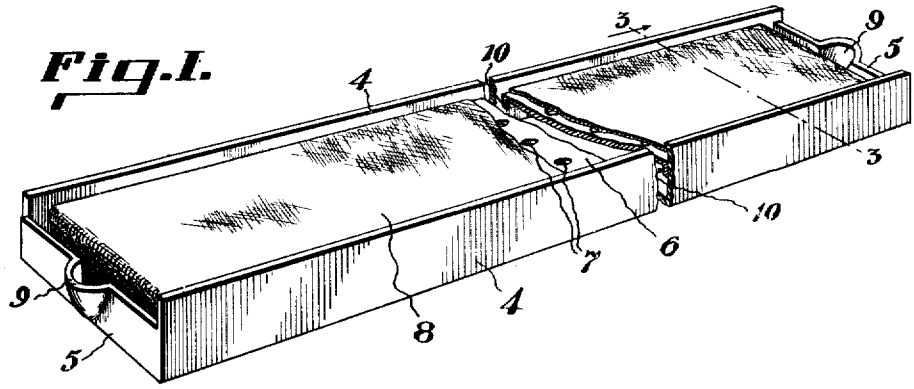


Fig. 2.

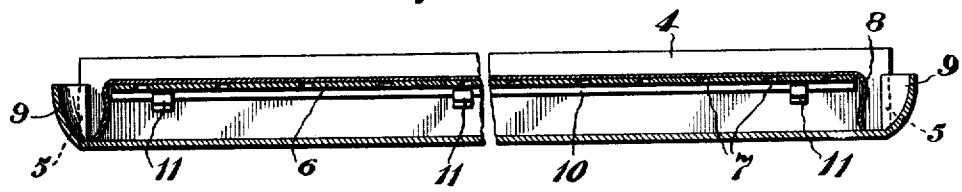
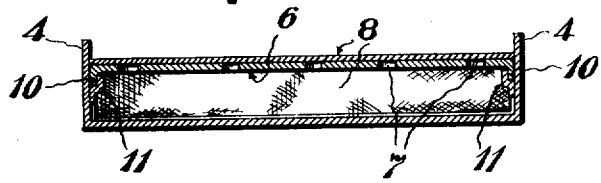


Fig. 3.



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HUMIDIFIER.

1,281,390. Specification of Letters Patent. Patented Oct. 15, 1918.

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To all whom it may concern:

Be it known that I, WILLIAM B. KELLING, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented certain new and useful Improvements in Humidifiers, of which the following is a specification.

My invention relates to a humidifier or means to prevent undue drying of cigars or other tobacco products by supplying moisture to the atmosphere surrounding them.

The principal object is to provide a construction wherein the vaporizing water is supplied by a wick which conveys it by capillary attraction.

Further objects are to provide a tray having a supporting shelf for a relatively large wick to thereby provide a relatively large water-laden area; such a tray preferably having side walls extending above the wick so that they will prevent lateral displacement of boxes or cans which may rest upon the wick; to provide such a tray preferably with a removable shelf and coöperating supporting means between the shelf and the tray so that the side walls will be braced and held against displacement laterally, and further to provide a gage means to determine the quantity of water present and preferably consisting in a cup provided by deflecting an end wall outwardly as will be later described.

Additional objects and advantages will appear and be pointed out by the following description and which is to be taken in connection with accompanying drawings illustrating one preferred embodiment, and wherein:—

Figure 1 is a perspective view of the improved article;

Fig. 2 is a longitudinal sectional view thereof, and

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

Referring specifically to the drawings, wherein like reference characters designate like or corresponding parts, a suitable pan or tray is provided for instance of the construction shown which in addition to having a bottom wall, has side walls 4 and end walls 5. A shelf or supporting plate 6 is suitably positioned in the tray, being spaced from the bottom and as well from the top of the walls 4. Preferably but not necessarily, this supporting plate 6 is perforated by the provision of openings or apertures as at 7. A wick 8 removably rests upon the plate 6 and at its end depends therefrom so as to extend into water or another vaporous liquid contained in the pan. In order to readily determine the quantity of liquid present in the pan, the end walls 4 are preferably deflected outwardly in order to provide cups 9. The level of the water in the cups, of course will be the same as elsewhere in the pan and thus the cups will serve as water gages.

Preferably the supporting plate 6 is provided at its side edges with depending flanges 10 which are contiguous with the inner faces of the walls 4 and coöperate with lugs 11 rigidly connected with the walls 4 and in order to removably secure the supporting plate in place. Any suitable number of the lugs 11 may be employed and it will be noted that these lugs form a seat for the lower edges of the flanges 10 and as well overlap the said flanges 10 on their interior. By means of this construction, the walls 4 are securely braced and secured against lateral displacement and as well, the plate is securely positioned against accidental displacement.

In use, water to the desired extent is poured into the pan or tray preferably but not necessarily while the supporting plate 6 and wick are removed. When the parts are in operative relation, the wick ends extend into the water and since it is of absorbent material like cloth, the water is absorbed by capillary attraction and a water-laden surface of considerable area is provided while the wick rests upon the supporting plate 6. The article if desired may be provided within a cigar display case or cabinet if desired in order to increase the humidity of the atmosphere but it may as well be used exteriorly of a case or cabinet in which event, the boxes or cans containing the cigars are placed directly upon the wick 8. Lateral displacement of the boxes or cans is prevented by the walls 4 extending above the wick. Since the boxes or cans will oftentimes strike the walls 4, it is necessary that they be braced and therefore the feature of providing the flanges 10 and lugs 11 is of great importance.

The invention is particularly applicable for use in connection with tin cans or boxes containing cigars since they usually have a

number of perforations in their bottom walls and these walls engage or rest on the wick and vapor from the wick passes through the openings into the interior of the boxes or cans.

It will be realized that I have shown merely the preferred embodiment of my invention and that therefore changes in the details of construction, combination and arrangements of the parts, may be resorted to without departing from the spirit and scope thereof.

I claim:

1. A device of the class described having a wick of relatively large area, a water container, means to support a substantially flat wick and articles resting thereon in a substantially horizontal plane, said container having walls extending above the wick to confine the artcles resting on the wick, and means connecting the first-mentioned means to said walls for support and to brace the walls against lateral strain under the weight and movement of the articles.

2. A device of the class described having a wick, a water container adjacent the wick and into which the wick extends to convey water by capillarity, said container having wall means extending above the wick, means serving dually to support the wick and brace said wall means against outward displacement and said second-mentioned means comprising an over-lapping relation of parts.

3. A device of the class described having a wick, a water container adjacent the wick into which the wick extends to convey water by capillarity, a plate to support the wick in substantially flat position, said plate having flanges thereon, and said container having lugs to overlap said flanges to removably position the plate and as well brace the container.

4. A device of the class described having a wick, a water container adjacent the wick and into which the wick extends to convey water by capillarity, said container having side walls extending above the wick for the purpose specified, said container having an end wall, said end wall being provided with a cup serving as a water gage, said plate being provided with downwardly extending flanges, lugs on said side walls of the container overlapping said flanges and serving dually to support the plate and brace the side walls against outward displacement, and said wick extending downwardly at the ends of said plate.

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

WILLIAM B. KELLING.

Witnesses:

ELIZABETH BEVERIDGE,

CHAS. E. STREET.

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