

M. A. METZNER.
MOISTENER.

APPLICATION FILED OCT. 2, 1907. RENEWED OCT. 18, 1909.

958,149.

Patented May 17, 1910.

Fig. 1.

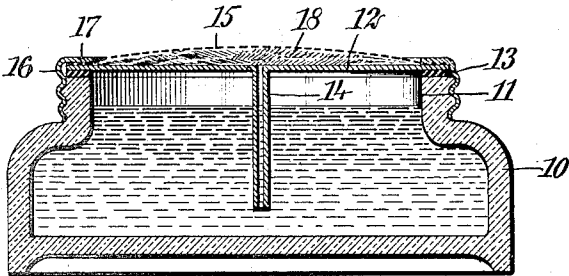


Fig. 4.

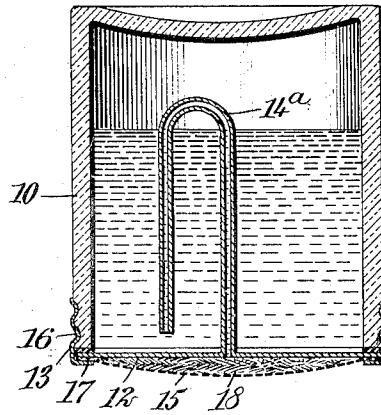


Fig. 2.

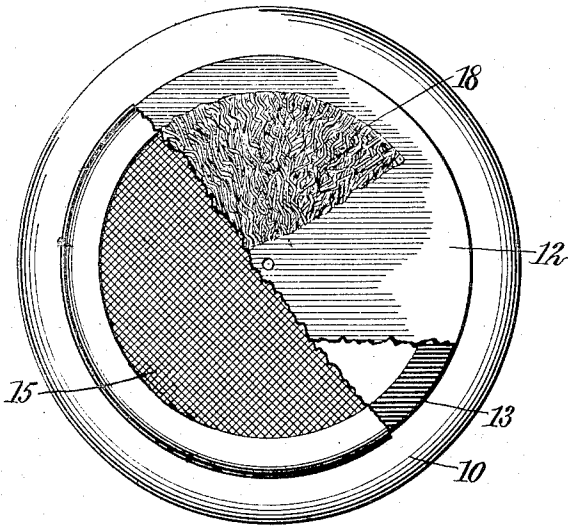
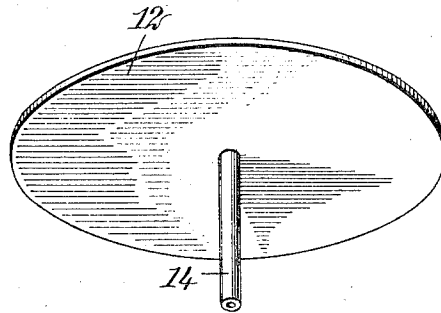


Fig. 3.



WITNESSES

Geo. W. Naylor
C. W. Fairbank

INVENTOR

Maxwell A. Metzner

BY

Wm. G. ...
ATTORNEYS

UNITED STATES PATENT OFFICE.

MAXWELL A. METZNER, OF PERTH AMBOY, NEW JERSEY.

MOISTENER.

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Specification of Letters Patent.

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Application filed October 2, 1907, Serial No. 395,493. Renewed October 18, 1909. Serial No. 523,197.

To all whom it may concern:

Be it known that I, MAXWELL A. METZNER, a citizen of the United States, and a resident of Perth Amboy, in the county of Middlesex and State of New Jersey, have invented a new and Improved Moistener, of which the following is a full, clear, and exact description

This invention relates to certain improvements in devices adapted for use in moistening stamps, sealing envelopes, counting bills, papers, or the like, and relates more particularly to the means employed for maintaining a surface of the device moist at all times.

The device is so constructed that it may be inverted without liability of spilling the contents, and the liquid within the moistener save that on the exposed surface is protected from evaporation. The liquid is delivered to the surface only during the employment of the device. The moistener may also be so constructed as to facilitate its employment in sponging cloth or the like, the means for feeding the liquid to the surface terminating adjacent the portion of the device which is lowermost in the normal use thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a transverse section through a moistener constructed in accordance with my invention; Fig. 2 is a top plan view thereof showing portions broken away; Fig. 3 is a perspective view of the diaphragm and feeding means; and Fig. 4 is a section through a device adapted to be used in an inverted position.

In my improved moistener I employ a container 10 of any suitable material and of suitable form. As shown in Figs. 1 and 2, the container is formed of glass or ceramic material or metal, and has a large opening in the top thereof surrounded by a threaded neck 11. Extending across the opening there is provided a diaphragm 12 forming a water-tight seal with the neck by means of an annular rubber washer 13. The diaphragm carries a small capillary tube 14 extending to a point adjacent the bottom of the container and opening through the top of the diaphragm flush with the upper surface thereof. Above the diaphragm and spaced a short distance therefrom is a sheet

of foraminous material, as for instance, a fine mesh wire gauze 15 forming the moistening surface. The diaphragm and the edges of the gauze are held in firm engagement with each other and against the rubber washer 13 by means of an annular collar 16 threaded for engagement with the container neck, and having an inwardly-directed flange 17 engaging with the outer surface of the wire gauze at its periphery. The diaphragm is substantially flat, while the gauze 15 is curved outwardly slightly at its central portion. The thin space between the diaphragm and the gauze is preferably filled by a thin pad 18 of porous material, the construction or structure of which will not be affected by the liquid within the container. This thin pad is preferably of dried and cured seaweed of a fibrous structure, although it is evident that other materials may be employed in place thereof, if desired. The special advantage of the seaweed lies in the fact that its long contact with sea water and the bleaching and drying effect produced by exposure on the shore, prevents the same from decomposing or in any way deteriorating, even though it is continuously exposed to the action of water in the moistener.

In the operation of this form of my device, the container is filled with water to any desired extent, and the cover, including the diaphragm, pad, and gauze, is secured in position. By applying a very slight pressure to the gauze, the flexible diaphragm is depressed and water rises through the tube to be absorbed by the pad and distributed to the gauze. The diaphragm is of such size and flexibility that the simple act of moving the finger across the gauze depresses the diaphragm sufficiently to deliver a further supply of water to the pad and gauze.

If the device be left unused for a considerable length of time, the liquid within the pad will, of course, evaporate, but none of the liquid within the container is exposed to evaporation save the almost infinitely small portion within the tube. The device is rendered ready for use in a moment's notice by gently depressing the gauze and diaphragm a few times.

The device is readily adapted for use in sponging cloth or applying a cleaning fluid to grease spots and the like. The diaphragm prevents the escape of any liquid from the device save through the tube 14.

When using the device for sponging or cleaning, the container 10 is preferably formed of such a size that it may be readily grasped in the hand, as shown in Fig. 4, and the entire open end thereof or such portion as may be desired is provided with a closure involving my improved construction. When using the device inverted, the tube 14^a is so bent as to terminate adjacent the diaphragm and deliver the liquid through the same to the pad. The unevenness in pressure as the device is moved over the surface of the cloth, causes a sufficient movement of the diaphragm to deliver the required supply of liquid to the pad.

Benzin or any cleaning fluid may be used within the device instead of water.

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

1. In a moistening device, a liquid container having a flexible diaphragm forming an air-tight joint therewith, a sheet of foraminous material having its peripheral portions in engagement with peripheral portions of said diaphragm, means for securing said diaphragm and foraminous sheet to said container, a tube extending from adjacent the bottom of said container through said diaphragm, and an absorbent pad intermediate said sheet and said container at their central portions.

2. A moistening device, comprising a container having an opening, a flexible diaphragm closing said opening and forming an air-tight joint therewith, a capillary tube carried by said diaphragm and extending to adjacent the bottom of the container, a pad of fibrous material in engagement with the

outer surface of said diaphragm at the central portion thereof, a wire gauze sheet in engagement with the outer surface of the pad and with the outer surface of the diaphragm at the peripheral portion thereof, and an annular collar having threaded engagement with said container and adapted to secure said diaphragm and wire gauze in position.

3. In a moistening device, a liquid container having a flexible diaphragm forming an air-tight joint therewith, a sheet of woven wire gauze having its peripheral portions in engagement with the peripheral portions of said diaphragm, means for securing said diaphragm and wire gauze to said container, and a tube extending from adjacent the bottom of said container through said diaphragm.

4. In a moistening device, a liquid container having a flexible diaphragm forming an air-tight joint therewith, a sheet of foraminous material having its peripheral portions in engagement with the peripheral portions of said diaphragm, means for securing said diaphragm and foraminous sheet to said container, an absorbent pad intermediate said sheet and said container at their central portions, and means for delivering liquid through said diaphragm to said pad.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MAXWELL A. METZNER.

Witnesses:

ADOLPH METZNER,
T. A. ATHERLEY.