Oct. 17, 1961 A. C. HUMMEL 3,004,515

MOISTENING DEVICE

Filed June 16, 1958

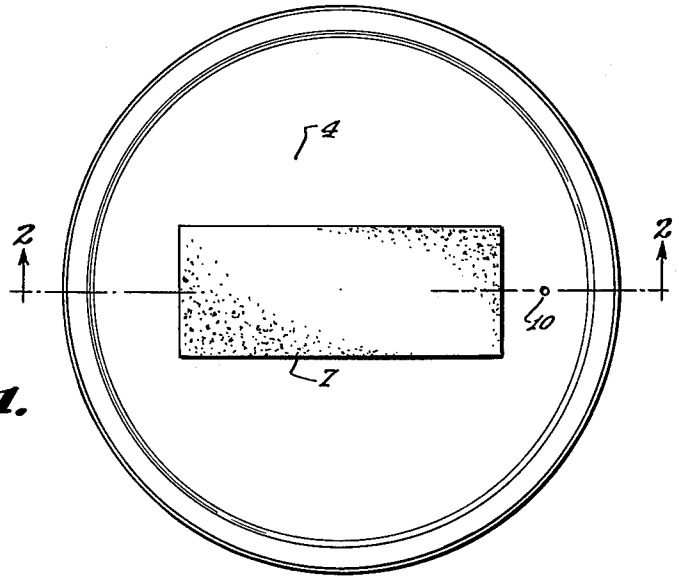


FIG. 1.

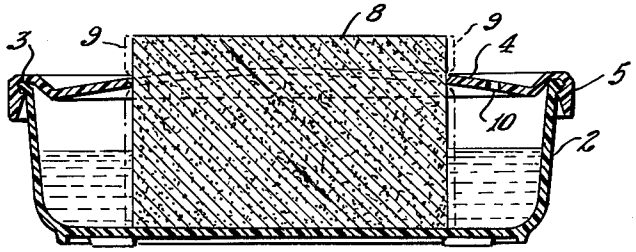


FIG. 2.

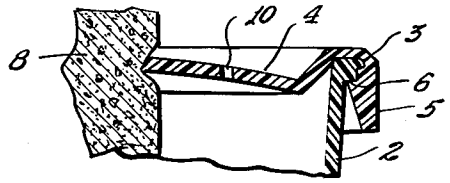


FIG. 3.

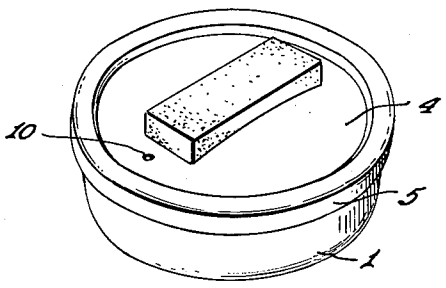


FIG. 4.

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United States Patent Office 3,004,515
Patented Oct. 17, 1961

3,004,515

MOISTENING DEVICE

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Filed June 16, 1958, Ser. No. 742,093
2 Claims. (Cl. 118—270)

This invention relates to moistening devices of the type used for moistening adhesive coated paper labels, stamps, gummed tape and the like wherein the surface to be moistened is wiped across a water soaked moistening member. The instant application is a continuation-in-part of my copending application Serial No. 580,154 filed April 5, 1956, now abandoned.

The instant invention is concerned with the provision of an inexpensive moistening device intended primarily for home use. While numerous moistening devices are currently available, the great bulk of them have been designed for office use and their cost is well beyond that which the average home user is willing to pay. In addition, such moisteners possess features which detract from their utility in the home. Generally speaking, they are relatively heavy and bulky and hence difficult to carry from place to place. Another disadvantage of such moisteners lies in the fact that the liquid receptacle has an open top, or is at best only partially covered, and if the receptacle is tipped over or even moved about, it is inevitable that a part at least of the moistening liquid will be spilled.

It is, therefore a principal object of my invention to provide an inexpensive, light weight and essentially spill proof moistening device which is readily adapted for use in the home.

A further object of my invention is the provision of a moistening device comprising a closed liquid receptacle having a tight fitting cover, the cover having an opening therein in which the moistening member is snugly received, the arrangement of parts being such that the edges of the cover are in pinching engagement with the moistening member or sponge when the latter is moisture laden.

A further object of my invention is the provision of a moistening device of the character described in which the tight fitting cover is provided with a breather opening of small diameter, which opening permits air to enter into the receptacle to enhance the capillary action of the moistening member acting to draw the moistening liquid to its upper surface. At the same time the relatively small breather opening does not interfere with the essentially spill-proof character of the device.

The foregoing together with other objects of the invention which will appear hereinafter or which will be apparent to the skilled worker in the art upon reading these specifications, I accomplish by that construction and arrangement of parts of which I shall describe an exemplary embodiment.

Reference is now made to the accompanying drawings wherein:

FIGURE 1 is a plan view of a moistening device made in accordance with my invention.

FIGURE 2 is a vertical sectional view taken along the line 2—2 of FIGURE 1.

FIGURE 3 is an enlarged fragmentary sectional view of the upper right hand portion of the moistening device as seen in FIGURE 2 illustrating the pinching action of the cover or top member against the moistening sponge.

FIGURE 4 is a perspective view of the moistening device.

In the practice of my invention, the moistener is composed essentially of a liquid receptacle having a cup-shaped bottom part and a top part or cover capable of

making sealing contact wtih the walls of the body part. The top part has a rectangular opening therein into which a moistening member in the form of a rectangular block of sponge-like material is fitted, the moistening member being of a depth such that its lower end will project downwardly and seat on the bottom of the receptacle with its upper edge projecting upwardly beyond the cover for contact by the gummed surface to be moistened. The receptacle and cover preferably formed from plastic materials, with the bottom part of a transparent material so that the water level may be readily observed and the cover formed from a sufficiently flexible plastic material so that a tight locking engagement may be made between the bottom and cover parts. While the device may be of any configuration desired, I have found a relatively shallow circular receptacle having a depth slightly in excess of 1 inch and a diameter of approximately 4 inches to be highly desirable in that it seats firmly on a table top or the like and is difficult to tip over.

The moistening member itself is preferably formed from a commercially available rubber or cellulose sponge material which may be obtained in sheet or mat form and cut to size. In the preferred embodiment, the sponge material is cut into blocks of approximately 1½ inches depth, 1 inch in width, and a length of 2½ inches.

Referring now to the drawings, I have therein illustrated a preferred embodiment of my invention wherein the moistening device comprises a bottom part or receptacle 1 having an upstanding annular wall 2 terminating upwardly in an outwardly directed flanged lip 3. The receptacle or bottom part 1 is closed by a cover member 4 having a downwardly projecting annular flange 5 and a shoulder 6 which is adapted to seat against the flanged lip 3 to make resilient sealing contact therewith, in the manner best seen in FIGURE 3. Preferably, the cover 4 will be of slightly dome-shaped configuration, as will be readily apparent in FIGURES 2 and 3.

A rectangular opening 7 is formed in the cover 4, the edges of the opening being essentially straight and effective, as will be explained more fully hereinafter, to make pinching contact with the moistening member or sponge 8.

The moistening member 8 will be of a size, when dry to just nicely fit in the opening 7 with its sides in snug contact therewith. As already indicated and as illustrated in the drawings, the dimensions of the moistening member are such that its lower surface will contact the bottom wall of the moistener with its upper surface projecting upwardly beyond the cover member by something in the nature of ¼ inch. As the moistening member takes on water it tends to swell, this swelling being indicated in FIGURE 2 of the drawings by dotted lines and indicated by the reference numerals 9. The swelling action of the moistening member serves to form a seal about the opening with the sides of the opening in effect pinching into the sponge in the manner best seen FIGURE 3. This pinching action will effectively prevent the moistening liquid from leaking out even when the moistener is accidentally overturned. At the same time, the surface tension of the liquid in the saturated moistening member is sufficient to prevent the liquid from dripping from the member, and consequently the device is rendered both drip proof and spill proof. Since the liquid saturated and expanded moistening member effectively seals the opening in the top of the moistener, a breather opening 10 having a 1/16 inch diameter is provided in the cover 4. This opening permits free capillary action of water or other moistening liquid rising to the top of the sponge. It has been found that without this breather opening the exposed portion of the sponge projecting from the cover has a tendency to dry out. At the same time, the size

of the breather opening is such that water will not spill from it when the device is moved about, and even when the device is overturned, the amount of water leaking through the breather opening is negligible.

While the cover part 4 of the receptacle may be removed to introduce additional moistening liquid, I have found that the liquid can be conveniently introduced by inserting a finger between an end of the moistening member and the end of the opening 7, thereby compressing the member lengthwise and creating an opening of a size sufficient to permit the device to be placed under a water faucet or the like. Upon release of the moistening member it will expand and reassume its initial position.

The moistening device just described also possesses another feature which is highly desirable in a moistening device. This feature is the complete freedom of the moistening member or sponge from objectionable odors which are generally present after moistening devices have been in use for some time. These odors generally result from glue particles and the like which are entrapped in the moistening member during use. While it is difficult to attribute the elimination of these odors to any one source, it is apparently the result of the enhanced capillary action which occurs by reason of the particular construction employed, which results in a washing action tending to keep the upper part of the sponge freshly supplied with moistening liquid.

Modifications may, of course, be made in the invention without departing from the spirit of it. While I prefer to form the receptacle and cover from plastic material since they are not only inexpensive but also susceptible to formation in various colors for decorative effects, the receptacle could be formed of other materials such as aluminum. Similarly, while I have described the moistening member or sponge as being of rectangular configuration, it will be evident that other shapes could be employed if so desired.

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

1. A moistening device having a bottom part and a separate cover part, said bottom part consisting of a receptacle having a bottom and integrally formed upstanding walls, said walls terminating upwardly in an enlarged outwardly projecting annular lip, said cover part comprising a cover wall terminating outwardly in a downturned peripheral flange having an inwardly directed shoulder engageable with the enlarged lip on said receptacle to form a seal therewith, one at least of said parts being formed from a distortable material such that a water-tight seal may be effected between said parts upon engagement of said inwardly directed shoulder with said annular lip, an opening in said cover part, said opening having relatively thin inwardly directed peripheral edges, and a sponge-like moistening member snugly fitted in said opening, said moistening member being of a size to completely fill said opening and of a depth such that its lower surface seats on the bottom of said receptacle with its upper surface projecting upwardly beyond the opening in said cover part, said sponge-like member being adapted to swell upon saturation with moistening liquid, whereby the relatively thin peripheral edges of said opening will make pinching contact with the sides of said sponge-like moistening member, and a breather opening in said cover member through which air may enter the otherwise closed receptacle to enhance the capillary action of the moistening member.

2. The device claimed in claim 1 wherein said opening is of rectangular configuration, and wherein said breather opening is of approximately 1/16 inch in diameter.

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