W. W. BEACH.

Moistening Device.

No. 212,175. Patented Feb. 11, 1879.

Fig. 1

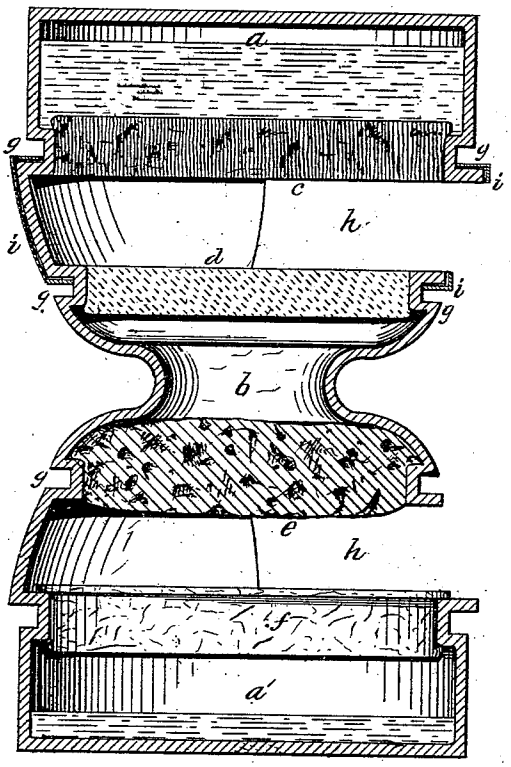
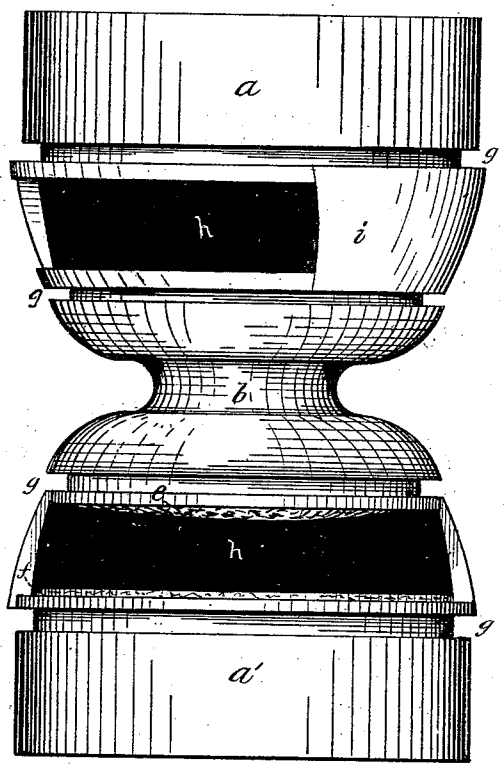


Fig. 2.



Attest:

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by his Attorneys

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UNITED STATES PATENT OFFICE.

WILLIAM W. BEACH, OF NEW YORK, N. Y., ASSIGNOR TO RUDOLF MEYER, OF SAME PLACE.

IMPROVEMENT IN MOISTENING DEVICES.

Specification forming part of Letters Patent No. **212,175**, dated February 11, 1879; application filed June 18, 1878.

To all whom it may concern:

Be it known that I, WILLIAM W. BEACH, of New York city, have invented an Improved Moistening Device, of which the following is a specification:

The object of my present invention is to provide a device, which shall combine a number of absorbent disks or moistening-surfaces of various kinds, adapted for different uses, and in which the moisture may be renewed by a simple movement; and the nature of my invention will be made plain in the following description, and its distinctive novelty clearly indicated in the concluding clauses.

In the drawings, Figure 1 is a vertical section of my improved moistening device, and Fig. 2 is an elevation at right angles to the line of view of Fig. 1.

As shown in the drawings, my device proximates in form to an hour-glass, which is the form in which I prefer to construct the device when made double—that is, the body of the device consists, preferably, of two hollow bulbs, *a a'*, joined at the center by a connecting-neck, *b*. Each bulb is provided with an absorbent disk or moistening-pad, placed in either end of the bulb and disposed each side of the horizontal center of the bulb, their acting surfaces facing each other and separated sufficiently to permit access to the surface of either disk, as indicated at *c d e f*. Each bulb is also provided with a lateral aperture, *h*, which is cut in the side of the bulb about centrally thereof, and between the position of the moistening-disks *c d e f* to permit access to the same.

The bulbs are formed with encircling corrugations *g g*, each side of the lateral aperture *h*, which form on the interior of the bulbs projecting shoulders, which afford a hold for the inserted moistening-disks *c d e f*, and which on the exterior form grooves, in which a sliding or rotatable cover, *i*, is fitted to turn on the cylindrical surface of the bulb, and thus serve to cover or expose the aperture *h* to permit access to the moisteners or preserve the same from dust or evaporation, according as the cover is turned one way or the other. The moistening-disks closely fit the internal diameter of the bulbs, but do not entirely fill the cavity thereof, so as to leave spaces, as shown, for the reception of water to keep the disks moist.

The bulbs are preferably made with flat bottoms, so that the device may be set on either end, being thus invertible like an hour-glass, so that the moisture may thus gravitate or slowly trickle from one bulb or series of moistening-disks to the other, and so that the moisture may thus be alternately transferred from one to the other, as their condition may require, by simply inverting the position of the bulbs.

The device, however, may be made single, or in one bulb only, in which case both extremities of the bulb are formed flat, so that it may be inverted and set on either end, as desired, the same as the hour-glass form, the construction of the bulb in other respects being the same as described for each bulb of the double form.

I prefer to construct the device of glass, blown from the base of one of the bulbs to the shape shown in the drawings, and of true continuous circular form without the lateral openings *h h*, which are afterward formed. After the glass is blown it is then chucked in a lathe, and a brass ring to form the sliding cover *i* is spun upon the bulb, its edges being turned into the grooves *g g*. The lateral openings are then formed by a grindstone, which cuts through the brass ring and the glass beneath it to the extent desired to form an opening of sufficient size. The glass is covered at the grooved part with a strip of paper before the spinning operation to form a cushion to protect the glass, and also to form a loose fit of the ring on the glass when the paper is subsequently removed to permit the free working of the cover.

The moistening-disks *c d e f* are preferably of various kinds and adapted for different uses. I prefer to adapt one disk for use as a hone, as shown at *d*, forming a porous and absorbent whetstone, composed, say, of pottery clay and emery baked in a very porous condition, so that it will readily absorb the water and be always moist and ready for use, the lateral opening *h* permitting the insertion of the blade to be sharpened thereon. The other moistening-disks may be adapted for general moistening purposes—such as moistening the tips of

the fingers, moistening postage-stamps, &c., and may be made of any suitable soft absorbent material. I prefer, however, to construct one of the moisteners of sponge, as shown at *e*, and the others may be of fine-grained end-wood—that is, the disk being cut across the grain of the wood and preferably punctured with fine punctures, which extend through the disk in line with the grain, so as to render the disk more permeable and absorbent; or the disk may be made preferably of those pith woods known in botany as "pourretia platania folia" or "ochromo lygophus," as indicated at *c*. The disks may also be formed of a molded soft absorbent material, such as felt, as shown at *f*, and with a shoulder to rest upon the shoulder of the bulb, as indicated.

What I claim as my invention is—

1. A moistening device formed of a hollow bulb or shell adapted to retain a moistening-fluid, and fitted with an absorbent disk or moistening-pad in the hollow of each of its ends, and provided with a central lateral aperture opening into the hollow of the bulb between the opposing faces of the moistening-disks to permit access to the same, the bulb being invertible, so that either end may be placed upright to permit the gravitation of the moisture from one end to the other, substantially as herein set forth.

2. A moistening device proximating in form to an hour-glass, or formed of two hollow bulbs, *a a'*, joined by a central neck, *b*, the said bulbs being fitted with a moistening-disk in each end and provided with a lateral aperture, *h*, between the said disks, the whole device being invertible to permit the transfer of moisture from one bulb to the other, substantially as herein shown and described.

3. A moistening device formed of a hollow bulb provided with a lateral aperture, *h*, and having its interior fitted with a moistening-disk, in combination with a sliding rotatable cover, *i*, capable of partial rotation upon the bulb to cover or expose the lateral aperture, substantially as herein shown and described.

4. A moistening device formed of the combination, with a hollow invertible vessel adapted to retain moisture, of absorbent disks of end wood, fitted transversely in the apertures of the said vessel, so as to close the same and expose an even wet surface adapted for the moistening of articles thereon, and arranged, substantially as described, so that the moisture may be transferred through the wooden disks, from one end of the vessel to the other, by inverting the device, substantially as herein shown and described.

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Witnesses:

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