(No Model.)

D. H. SLEEM.

MOISTENING APPARATUS.

No. 545,103. Patented Aug. 27, 1895.

FIG. 1.

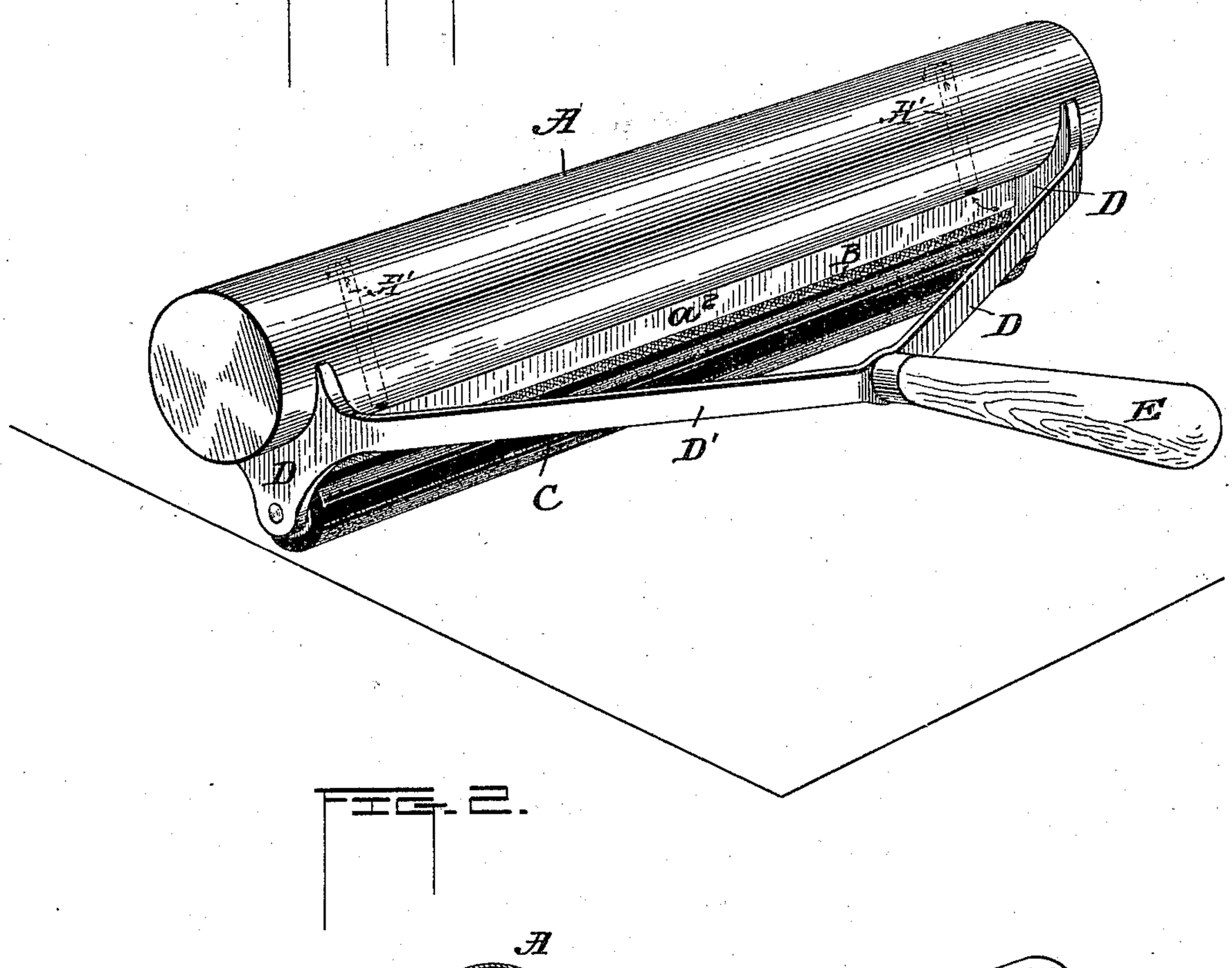


FIG. 2.

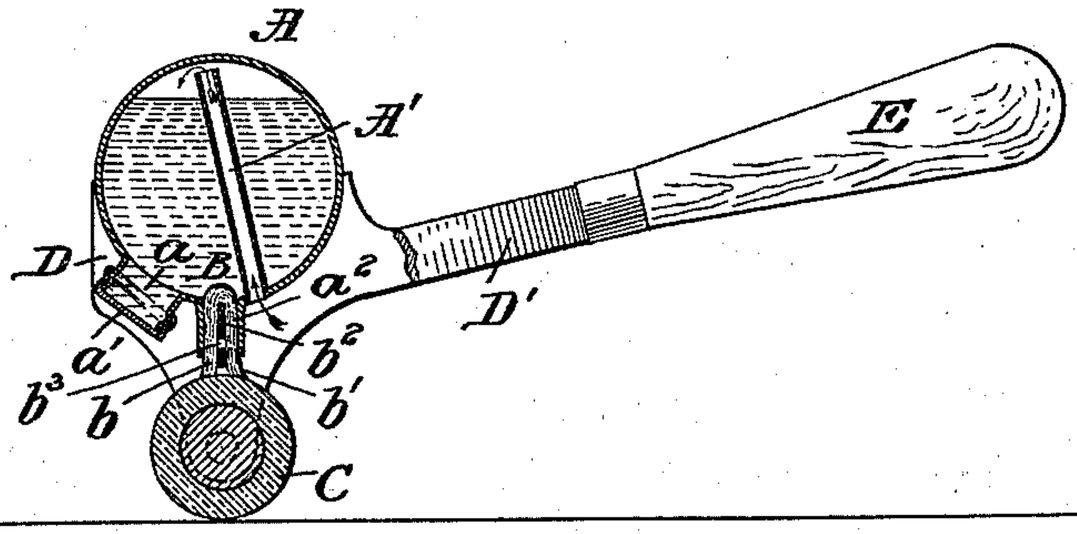
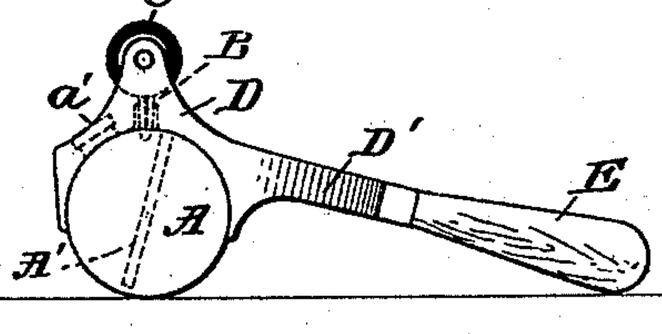


FIG. 3.



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DAVID H. SLEEM, OF NEW YORK, N. Y.

MOISTENING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 545,103, dated August 27, 1895.

Application filed February 14, 1895. Serial No. 538,424. (No model.)

To all whom it may concern:

Be it known that I, DAVID H. SLEEM, a subject of the Sultan of Turkey, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Moistening Apparatus; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in moistening apparatus especially adapted for dampening evenly broad surfaces, especially copying-pads or blotters for press-copying purposes.

My invention is designed to produce a simple, cheap, and durable article which when not in use will prevent the evaporation and capillary action common in devices employing wicking which is in constant contact with water in the reservoir. To remedy these defects and produce a device which is immediately ready for use when desired is a further object of my invention.

With these ends in view my invention further consists in certain features of construction and combination of parts, as will more fully hereinafter appear, and be pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the device. Fig. 2 is a sectional view showing the reservoir and roller in cross-section. Fig. 3 is a side elevation showing the position when not in use.

In the drawings like letters of reference indicate like parts wherever they occur.

Referring to the accompanying drawings, A represents a water-reservoir of suitable dimensions, preferably made cylindrical and of sheet metal. This reservoir can be made slightly longer than the dampening-roll, if desired, in order to increase the capacity of the reservoir. The reservoir is provided with a filling-opening a, preferably located near the wick, as shown, and is closed by a screw-cap a'. Upon the under side of the reservoir is cut a slot, which is made of the width it is desired to give the dampening-wick. The wick B is held in place between thin metal plates a^2, secured conveniently by solder to the reservoir A, said plates being sufficiently elastic to grip the wick. I prefer to double the wick, as shown, and in order to give it the necessary stiffness I place a thin strip of hard rubber or non-corrosive metal b^2 between the parts b b' of the wick. This also serves to cause the plates a^2 to more tightly grasp the wick B. A hole b^3 or a notch may be provided to permit ready withdrawal of the strip b^2 when it is desired to do so. The dampening-roller C is made of any suitable material—for example, rubber of the desired hardness upon a core of hard rubber or wood. The dampening-roller C is journaled by suitable trunnions in the bracket-arms D, which support the reservoir A at each end. The handle E is secured to the brackets D by the forked extension D', which can be made integral with the brackets D, the handle E being secured to the extension in any suitable way. An air-tube A' is secured to the reservoir, by which air is supplied to the reservoir to cause the more speedy saturation of the wick B.

The handle is preferably given an inclination by which, when in the position shown in Fig. 3, the reservoir and the handle will be upon the same level, thereby supporting the dampening-roller in such a position that the water is not in contact with the wicking when not in use. This is a material advantage in devices for this purpose.

The wicking is easily removed by withdrawing the stiffening-plates when desired to renew the wick or to clean the reservoir, and is easily reinserted by simply springing the plates a^2 a^2 apart and inserting the stiffening-piece in the fold of the wick.

The operation is obvious. The filling-opening being located adjacent to the wick, the water is poured into the reservoir and the wick does not come in contact with water until it is desired to use the apparatus. When it is turned over into the position shown in Figs. 1 and 2, it is obvious that the wicking will become saturated at once, and the roller C as it is rolled back and forth distributes the moisture evenly over a wide surface, so that an even copy is produced by the pad or blotter that has been moistened or the page in the letter-book, as the case may be. The stiffening in the wicking and the exposure of only a minimum of its surface—viz., the lower edge—greatly reduces the evaporation. The amount

of moisture can be regulated by the density of the wicking and the thickness of the strip which is placed between the folds of the wicking, which causes the wick to be more or less compressed. It is obvious a single thick wick may be used and the strip may be omitted. The air-tube A′ is secured adjacent to the slot, through which the wick extends, and its open end extends nearly to the top of the reservoir when apparatus is in use. It is obvious that when in the position shown in Figs. 1 and 2 an atmospheric pressure is given to the water, and the wicking is more perfectly and speedily moistened.

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

1. A dampening apparatus for dampening the surfaces of copying pads, blotters and the like, said apparatus comprising a reservoir adapted to hold water, bracket arms supporting said reservoir, a dampening roller journaled in said bracket arms, a wick extending through a slot in the reservoir and in contact with the dampening roller, a filling opening adjacent to said slot in the under side of said reservoir permitting the same to be filled without saturating the wick, when turned over to give access to the filling opening, and a handle arranged in such a manner when the device is not in use that the apparatus is supported by said handle and the reservoir, thereby preventing the saturation of the wick and moistening the dampening roller, substantially as and for the purpose described.

2. A dampening apparatus for dampening the surfaces of copying pads, blotters and the like, said apparatus comprising a reservoir adapted to hold water, bracket arms supporting said reservoir, a dampening roller journaled in said bracket arms beneath said reservoir, an air tube secured to the bottom of said reservoir where it communicates with the external air, and having its opposite open end within the reservoir near the top of same, said reservoir having a slot extending longitudinally for the geater portion of its length equal to the length of the dampening roller, spring plates forming front and rear walls to said slot, a wick doubled upon itself, a stiffening piece between the folded portions of the wick, said wick and strip being nipped between the spring plates, said wick extending through said slot into the reservoir, said wick also being in contact with the dampening roller, whereby moisture is supplied to the dampening roller, and a handle arranged in such a manner when the device is not in use that the apparatus is supported by said handle and the reservoir when turned upside down, thereby preventing the saturation of the wick and moistening the dampening roller and loss by evaporation, substantially as and for the purpose described.

3. A dampening apparatus for dampening the surfaces of copying pads, blotters and the like, said apparatus comprising a reservoir adapted to hold water, bracket arms supporting said reservoir, a dampening roller journaled in said bracket arms, a wick extending through a slot in the reservoir, a filling opening upon the under side of the reservoir adjacent to said slot permitting the same to be filled without saturating the wick, said wick also being in contact with the dampening roller, whereby moisture is supplied to the dampening roller, and a handle secured to the reservoir supporting brackets at such an inclination that the top of the reservoir and the end of the handle are on the same level so that when the device is not in use and is turned upside down the apparatus is supported by said handle and the reservoir, thereby preventing the saturation of the wick and moistening the dampening roller, substantially as and for the purpose described.

4. A dampening apparatus for dampening the surfaces of copying pads, blotters and the like, said apparatus comprising a reservoir adapted to hold water, an air tube wholly within the reservoir adapted to supply air to said reservoir, bracket arms supporting said reservoir, a dampening roller journaled in said bracket arms, a wick extending through a slot in the reservoir, said wick also being in contact with the dampening roller, whereby moisture is supplied to the dampening roller, and a handle arranged in such a manner when the device is turned upside down the apparatus is supported by said handle and the reservoir, thereby preventing the saturation of the wick and moistening the dampening roller, substantially as and for the purpose described.

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

DAVID H. SLEEM.

Witnesses:
J. H. DURLAND,
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