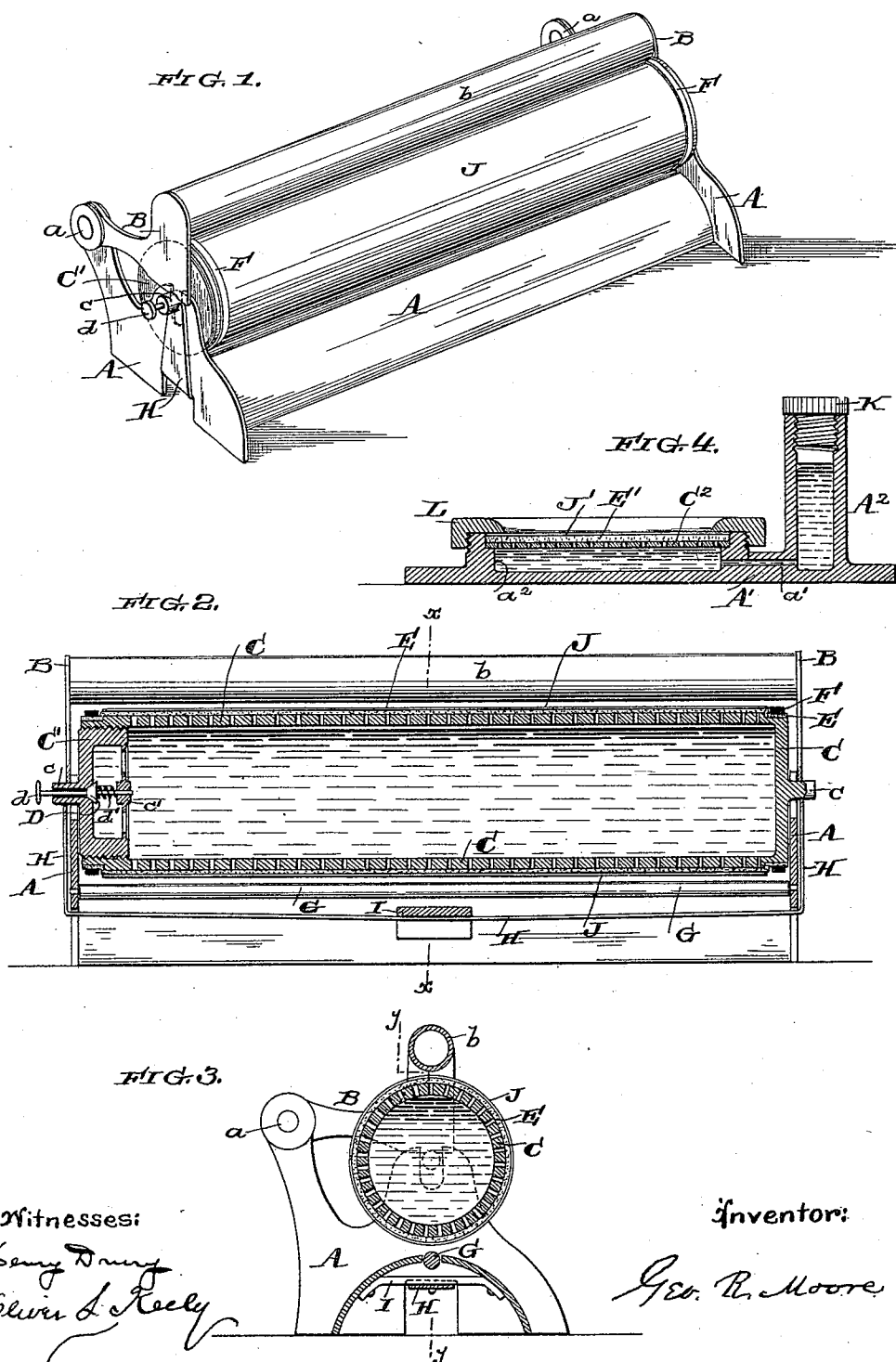


(No Model.)

G. R. MOORE.
SURFACE LEAKAGE WATER VESSEL.

No. 443,781.

Patented Dec. 30, 1890.



UNITED STATES PATENT OFFICE.

GEORGE RODNEY MOORE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO ZACHARY T. HALL, OF SAME PLACE.

SURFACE-LEAKAGE WATER-VESSEL.

SPECIFICATION forming part of Letters Patent No. 443,781, dated December 30, 1890.

Application filed July 19, 1890. Serial No. 359,332. (No model.)

To all whom it may concern:

Be it known that I, GEORGE RODNEY MOORE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Surface-Leakage Water-Vessels, of which the following is a specification.

The object of my invention is to provide porous water-vessels capable of graduated leakage over a wide surface and for whatever uses such porous vessels may be found desirable, whether for desk use in offices or in other places and ways. To moisten the mucilage of envelopes or stamps, or one's fingers if need be, the convenience of a uniformly-damp surface upon a roller or pad at easy touch is obvious. The construction is very simple and easily understood. The vessel into which the water is poured may be of any shape or size desired, provided it is all air-tight excepting the surface intended for moisture, and this part is made of finely-perforated sheet metal, which perforations are covered with cloth or other fibrous and porous material to the extent desired for slowing the leakage from the perforations. When the vessel is filled, an air-tight stopper secures the inclosed water, so that it can only ooze out through the cloth cover as fast as the air passes in the opposite direction through the same pores to prevent a vacuum in the vessel. The principle involved is that air passes through dry cloth easier than when the same is wet. Thus the vessel is adjusted at pleasure by few or more layers of cloth to the degree of moisture or leakage desired by the operator, after which, by self-adjustment, it continues the same degree of moisture. Any tendency in the cloth cover to become dry is counteracted by a greater freedom of air through the pores into the vessel and a corresponding tendency for the water to ooze out through the same pores, so that vessels made in this way may stand for days with no perceptible change in the degree of moisture on the porous surface, until at last the water in the vessel is dissipated by slow evaporation from the surface. Any admission of air inward, whether by valve or otherwise, will

hasten the escape of water outwardly and uniformly over all its surface.

Figure 1 shows the water-vessel and frame-work supporting it in perspective, the vessel resting on small gudgeons, upon which it may revolve. Fig. 2 is a vertical transverse section of the vessel and so much of the frame-work as may be seen on the line *yy* of Fig. 3. Fig. 3 is a cross-section of the vessel in its frame-work, as seen on the line *xx* of Fig. 2. Fig. 4 shows in cross-section an optional plan, a kind of cup for a surface-leakage vessel, with water conveyed beneath a perforated plate covered with cloth from a stand-pipe.

Similar letters refer to similar parts in all the figures.

A is the frame in which the vessel is horizontally suspended on small gudgeons *c c*.

B B are arms jointed to the frame at *a a* and rigidly attached to the manual pressure-bar *b*.

C is the internal and the perforated part of the water-vessel. C' is a removable head for filling the same.

D is a manual air-valve; *d*, valve-stem and pressure-knob; *d'*, closing-spring; *c'*, valve-guide and spring-support; E, firmly-attached cloth covering to the vessel; F F, rubber bands holding the same.

G is a supporting-roller to secure any needed pressure upon the vessel.

H H is a spring turned up at each end and affording bearings for the journals of the vessel, so that in its normal state the vessel will be kept up and free from touch of G.

I is a cross-piece in the frame, to which H is fastened.

J is an outside and removable cloth spread over the vessel and not inclosed by the rubber bands, so that for cleansing or change it is readily removed.

In Fig. 4, A' is the vessel, a kind of shallow cup, supplied with water from the stand-pipe A² through a duct *a'* to the extent of the water-space *a*². C² is the perforated top of the cup; E', the cloth covering; J', the removable spread. K is the filling-cap, air-tight. L is a flanged ring screwed down upon the out edges of the leakage-cover to the cup.

To moisten the mucilage to an envelope by the surface-leakage of the vessel in the frame

A, the gummed side of the envelope should be slipped under the vessel above the roller G, and a slight pressure upon the pressure-bar *b* as the envelope is withdrawn imparts the required moisture. If more immediate wetness be required on the surface of the vessel when it is not without water, turn it up and touch the air-valve for a moment and the desired result will be instantly obtained.

10 What I claim as my invention, and desire to secure by Letters Patent, is—

1. The horizontal perforated water-vessel C, provided with the graduated fibrous leakage-cover E and a close stopper C', substantially as and for the purpose herein set forth.

2. The perforated water-vessel C, provided with the graduated leakage-cover E and stopper C', and removable cover J, substantially as and for the purpose herein set forth.

20 3. In combination, the revolving perforated

water-vessel with graduated surface-leakage, and the frame A, with spring-bearings H H and pressure-bar *b*, substantially as shown.

4. In combination, the perforated water-vessel with graduated surface-leakage, the frame A, with spring-bearings, and the sub-roller G, substantially as shown.

5. The horizontal perforated water-vessel C, provided with the graduated fibrous leakage-cover E and a close stopper C', and air-valve D, substantially as and for the purpose herein set forth.

6. In combination, frame A, sub-roller G, water-vessel C, spring-bearings H H, and pressure-bar *b*, substantially as shown.

GEO. RODNEY MOORE.

Witnesses:

OLIVER S. KEELY,
CHAS. WAGNER, Jr.