

(No Model.)

J. H. OSGOOD.
RECEPTACLE FOR INKING FLUIDS.

No. 557,014.

Patented Mar. 24, 1896.

FIG. 1.

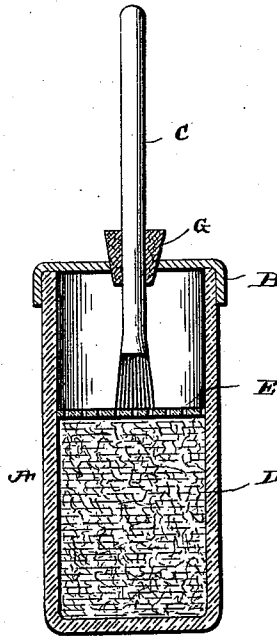
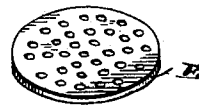


FIG. 2.



FIG. 3.



WITNESSES

E. Claude Kessler.
Geo. M. Copenhaver.

INVENTOR

Joseph H. Osgood
John J. Halsted & Co. his Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH H. OSGOOD, OF PEABODY, MASSACHUSETTS.

RECEPTACLE FOR INKING FLUIDS.

SPECIFICATION forming part of Letters Patent No. 557,014, dated March 24, 1896.

Application filed February 14, 1895. Serial No. 538,333. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. OSGOOD, of Peabody, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Receptacles for Inking Fluids; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My improvement relates to receptacles or holders for ink, adapted either for stamping purposes or for writing or other purposes, and it has among its objects the prevention of spilling the ink in case the vessel or holder be upset, the avoidance of taking into a brush or into a writing-pen more ink than it required, the forcing up for the brush or pen of the requisite quantity of ink just proportionate to the degree that the brush or pen is pressed down in the act of taking the ink, and the avoidance when leaving the brush in the bottle after using it of leaving it immersed in the ink. Other advantages will also appear from the following description.

In the drawings, Figure 1 illustrates, in vertical central section, one form of ink vessel or holder embodying my improvements; Fig. 2, a perspective view of its movable diaphragm suitable when using a brush, and Fig. 3 a section of a movable diaphragm suitable when using a pen.

A indicates a bottle or other vessel; B, its top or cover, having a hole through it through which a brush C, a pen, or other instrument for supplying ink may be passed.

The atramental or inking fluid of any desired kind, instead of being placed and left in the vessel in a state of fluidity, is held or contained in a body of absorbent material D—such as cotton or other material of like nature. The vessel may, of course, be thus filled to any height desired. Upon the top of this absorbent material rests, in cases where the ink is heavy and a brush is to be used, a diaphragm E, which may be of soft or hard rubber, or of metal, or of any other suitable material, made flat and perforated. The amount of inking material taken up by the

end of the brush will, of course, be proportionate to the pressure exerted in pushing the diaphragm with the brush, the ink in such case oozing up from the absorbent and through the perforations.

For writing-inks for use with a pen the diaphragm is preferably of the form shown at F, Fig. 2, and made of hard rubber or metal. It needs no perforation except the central one f' , which serves as a dip-cup for the pen. It will be evident that as the diaphragm is loose or movable, as above stated, and rests on the ink-saturated cotton or absorbent, upon pressing the pen down upon the diaphragm the point of the pen will enter the center nipple or opening f' , while its wider part under the same pressure will press down this diaphragm and force the ink to rise and escape and well up into the nipple or tubular part f' , and thus charge the pen. The amount of ink thus expressed from the absorbent and taken up by the pen will, of course, be, as already stated, proportionate to the voluntary pressure given by the pen.

The cotton or other absorbent being charged with all the ink the holder or vessel may be carried about without spilling even when it is inverted, the cover, as shown, being a tight or air-tight one which protects the fluid from the atmosphere, and the sliding plug G also fitting air-tight.

When the vessel is filled with saturated absorbent, the whole of the ink is held in suspension by the absorbent as in a sponge. A slight pressure only is sufficient to press out a sufficient quantity to charge the brush or pen, as the case may be, and as the cotton or equivalent absorbent is not elastic, it does not when the pressure is removed expand and lift the diaphragm. The absorbent thus shrinks as the ink is used, until finally there is left but a thin layer of nearly dry absorbent, the thin perforated diaphragm allowing this to be accomplished perfectly. By these means the last drop of fluid can be squeezed out, even to dryness of the absorbent. This is an important feature, especially in using inking-fluid stamps. Upon removing the brush or pen and thus relieving the pressure, any excess of ink pressed up and not taken by the brush or pen at once falls back, and is absorbed again by the absorbent material.

G is a plug of any suitable material, and which being removed with the brush leaves a liberal opening for the insertion of a pen; or, if desired or preferred, the cover B may be removed from the vessel when using a pen.

It will thus be seen that the brush is never immersed in a body of fluid, and as it rests, when not in use, on the upper surface of the thin diaphragm without pressure, it is always ready for immediate use and is never overcharged, the diaphragm being always interposed between the brush and the ink.

The amount of cotton or other absorbent needed is small, and is such that when the fluid is exhausted from it, a layer, scarcely an eighth ($\frac{1}{8}$) of an inch thick, remains in the bottom of the bottle.

This invention supplies a neat, handy and cleanly means for storing, handling and applying stamps and other inks.

Where automatic and other stamps are used it is necessary, in order to yield a clean and clear impression, that they be supplied with ink at not infrequent intervals and also in small portions at a time. My improvement enables this to be done.

I make no claim to a vessel or bottle provided with a cover having a hole in it for a brush, as such are well known and used in ordinary mucilage-bottle.

What I claim, and desire to secure by Letters Patent, is—

1. In an ink-holder, the combination of a

tightly-covered vessel or bottle, an ink-taking implement extending through the cover, and a non-elastic absorbent material in the vessel containing and holding in suspension all the atramental fluid, and a loose, unattached perforate diaphragm, substantially as and for the purposes set forth.

2. In combination with an air-tight ink-vessel containing a non-elastic absorbent material charged with and holding all the atramental fluid in the vessel, and having in this cover a tight plug, and adapted for inserting a pen or a brush, an unattached thin perforate diaphragm beneath such cover and resting loosely on such absorbent material and free to be pushed downward by a brush or pen pressed upon the central portion of the diaphragm, all substantially as and for the purposes set forth.

3. In combination with an ink-vessel having an air-tight cover, a non-elastic absorbent material in the vessel holding in suspension all the inky fluid, and a loose unattached diaphragm having its opening therein adapted for a writing-pen and free to be moved by the pressure of the pen while getting its supply of ink, all substantially as shown and described.

JOSEPH H. OSGOOD.

Witnesses:

PETER L. FORRISTALL,
HENRY W. APEL.