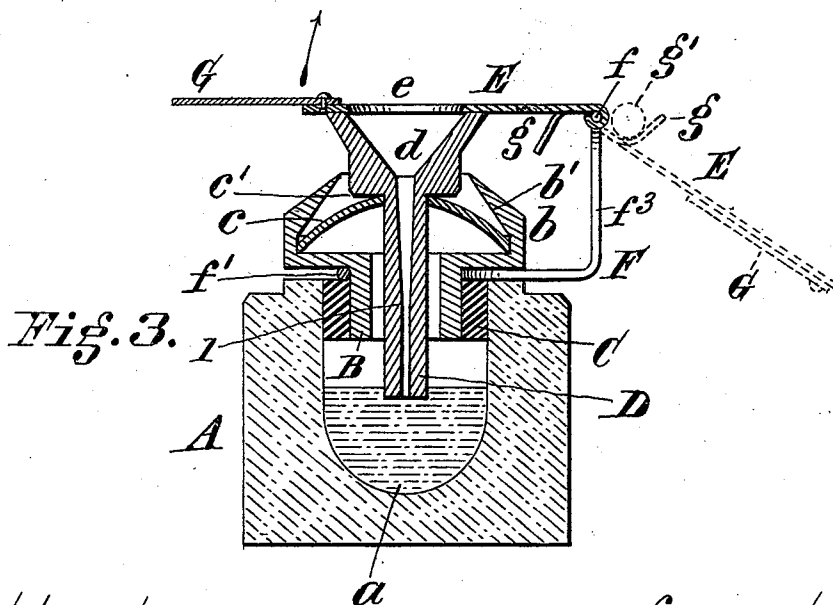
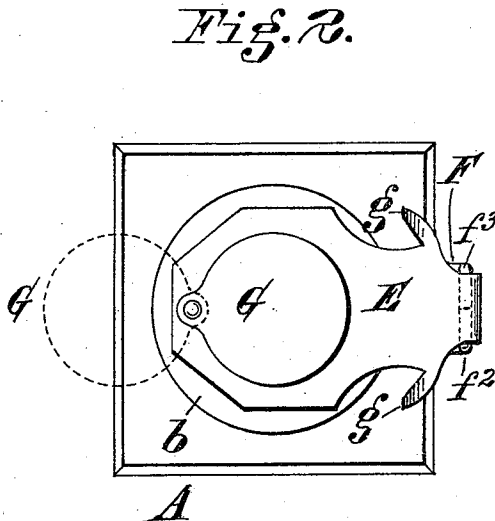
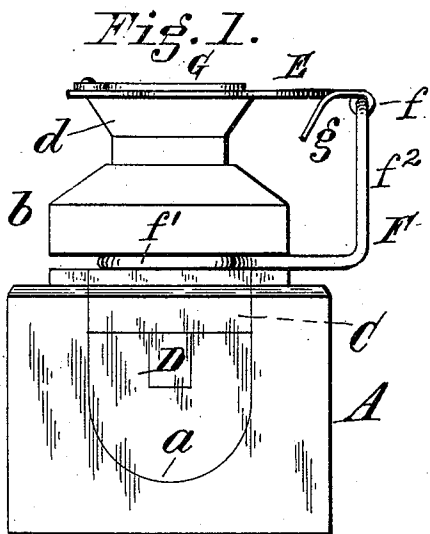


(No Model.)

L. N. THOMAS.
FOUNTAIN INKSTAND.

No. 536,361.

Patented Mar. 26, 1895.



Attest
Joseph C. Butler
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Inventor
Lincoln N. Thomas,
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UNITED STATES PATENT OFFICE.

LINCOLN N. THOMAS, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-THIRD TO
EDWARD A. FAWCETT, OF BUFFALO, NEW YORK.

FOUNTAIN-INKSTAND.

SPECIFICATION forming part of Letters Patent No. 536,361, dated March 26, 1895.

Application filed October 20, 1894. Serial No. 526,432. (No model.)

To all whom it may concern:

Be it known that I, LINCOLN N. THOMAS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Fountain-Inkstands, of which the following is a specification.

My invention relates to improvements in fountain-inkstands, the novel features of construction and operation of which are hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings:—Figure 1 is a side-elevation of my invention, with my ink-tube depressing-apparatus and dust-lid closed; Fig. 2, a plan of the same, the open position of the presser dust-lid being shown in dotted lines; and Fig. 3, a central, longitudinal sectional-elevation, showing my invention as it appears when in use by the penman, the presser-dust-lid being shown thrown open and projecting forwardly from the ink-tube depressing-plate, and the dotted lines to the right indicating the position of the depressing-apparatus when thrown back and utilized as a pen-rack.

A represents an ordinary glass ink-stand having ink-chamber *a*.

B is a tubular stopper having an expanded hollow-head *b*, the latter opening upwardly and provided with an inner inclined-wall *b'*. The stopper is made small so as to fit the mouths of the smallest bottles, and an elastic ring or gasket C of varying thickness is applied thereto, whereby it may be interchangeably and tightly inserted or placed in different bottles or inkstands having mouths of varying sizes.

D represents a vertical ink-tube having dip-cup *d* at its upper end, and mounted in the elastic-diaphragm *c*, through the central orifice of which diaphragm it closely passes up to the broad-shouldered bottom *c'* of said dip-cup.

The diaphragm *c* when not in place is flat and of greater diameter than that of the internal chamber of hollow-head *b*, and thus when in place on the ink-tube within said internal-chamber it naturally and forcibly assumes the upwardly-bulging convex form seen in Fig. 3, with its periphery resting un-

der the lower edge of the inclined-wall *b'* of said internal chamber.

The bore of the ink-tube is extremely small and minute at the lower portion thereof up to a point *l*, (Fig. 3,) and then tapers or expands upward to the bottom of the dip-cup, making a very desirable feature, as hereinafter more fully explained.

The bore or central opening of the stopper B is somewhat larger than the diameter of the ink-tube, to enable the latter to operate freely both vertically and laterally.

E represents a plate or bar pivotally connected at its rear end to the upper horizontal cross-bar *f* of a wire supporting-frame F, the latter having a circular-loop *f'* in its lower horizontal portion which takes around the upper end of the stopper B and lies intermediate the flat-bottom of the stopper-head *b* and the upper face of the gasket or filling-ring C. Supporting-frame F is preferably made of spring-wire so that it shall clamp or cling securely around said stopper, and it has upright arms *f*², *f*³, which are bent horizontally toward each other at their upper ends to form said cross-bar *f*.

e is an opening or orifice in plate E concentric with the dip-cup when in place thereover, and G is a circular lid or disk loosely riveted or hinged to the fore end of plate E, so as to cover said orifice *e*, (see Figs. 1 and 2,) when the inkstand is not in use and thus exclude dust and other foreign matter from the ink and the mouth of the ink-tube. When said lid G is thrown open, or turned horizontally forward on its pivot, (as seen in Fig. 3, and in dotted lines Fig. 2,) it serves as a base or rest upon which one or more of the fingers (say the third finger) may bear to depress the ink-tube for the raising of the ink into the dip-cup and dipping the pen in said raised-ink, without the necessity of pressing with the pen on said dip-cup of the ink-tube, as heretofore, and thereby frequently breaking or injuring its point.

The resting of the plate E on the dip-cup, and the great leverage presented by the lid G projecting forwardly from said plate, enable the penman to very readily depress the ink-tube against the upward pressure of the elastic-diaphragm, and the ink is also very readily

raised in the tube to the dip-cup thereby. The lesser bore or hole in the lower portion of the ink-tube (above referred to) permits just the proper quantity of ink to enter, which ink, when it flows upward into the larger, tapering portion of the bore, expands therein, and thus, any quick downward movement of the ink-tube into the ink below, will not cause a spray of ink from the dip-cup, as heretofore the great fault with fountain-ink stands of this description. The inclined inner wall *b'* of the hollow-head *b*, which is closely engaged by the periphery of the diaphragm, as before stated, prevents said periphery of the latter raising too high in its chamber on the upstroke of the ink-tube after a depression, and maintains said diaphragm in its normal operating-condition at all times.

g, g, are pendent arms or projections constructed in the metal near the rear, pivotal-end of plate *E*, which arms, when said plate is turned over backwardly, (as seen in dotted lines Fig. 3,) provide a convenient rack for the pen *g'*. (Indicated by a dotted circle in Fig. 3.)

My ink-tube depressing-attachment can be very readily applied to most of the fountain-inkstands in general use, without necessity of much, if any, adjustment or material change of parts, and at very little extra cost, the saving on pens and time in dipping soon paying therefor.

I claim—

1. In a fountain-inkstand, the combination with a vertical ink-tube having a dip-cup at its upper end and elastically suspended within an ink-chamber, of a depressing-attachment composed of an orificed-plate pivotally mounted at its rear end on said inkstand and freely resting upon and sliding over the upper face or rim of said dip-cup, and a disk or plate *G*, the latter being pivotally mounted at the fore end of said orificed-plate and adapted to be swung both forward and backward on its pivot whereby it may be respectively used as a presser-device to conveniently and readily depress said ink-tube, and as a lid or cover for the inkstand, substantially as herein set forth.

2. In a fountain-inkstand, the combination with a suitable stopper, an ink-tube having a suitable dip-cup and operatively suspended by means of an elastic-diaphragm within an ink-chamber fitted with said stopper, of a depressing-apparatus composed of an orificed-plate, a pivoted cover and presser-plate *G* on said orificed-plate, a supporting-frame *F* to one end of which the rear end of said orificed-plate is pivotally attached and whose other end engages the said stopper, substantially as herein set forth.

3. In a fountain-inkstand, the combination of an ink-conveying tube *D* having a funnel-mouth or dip-cup *d* at its upper end and a broad-shouldered bottom *c'* constructed on said dip-cup; a tubular stopper *B* fitting within the ink-receptacle and having an expanded hollow-head or cup *b*, the latter opening upwardly and constructed with an undercut or inclined inner-wall *b'*, and a broad, flat bottom; and a detachable, elastic diaphragm *c*, of greater diameter than that of the internal-chamber of hollow-head or cup *b*, whereby its periphery shall fit closely within said hollow-head or cup under the inclined or undercut wall thereof and thereby caused to bulge upward into active convex form; said tube passing downward through a close-fitting central-orifice in said diaphragm, up to said dip-cup bottom *c'*, and elastically suspended in the ink-well, substantially as herein set forth.

4. In a fountain-inkstand, the combination of a tubular-stopper fitted with interchangeable elastic gaskets or rings, a hollow-head on said stopper and provided within with an elastic-diaphragm, an ink-tube having a dip-cup and passing downwardly through said diaphragm and stopper, a depressing-plate hinged to a supporting-frame on said stopper, and a pair of pendent arms on said depressing-plate near its rear pivotal end, substantially as herein set forth.

LINCOLN N. THOMAS.

Witnesses:

L. M. JONES,
JOHN E. JONES.