

W. A. Wheeler:
Inkstand.
N^o 47,060. Patented Mar. 28, 1865.

Fig. 1

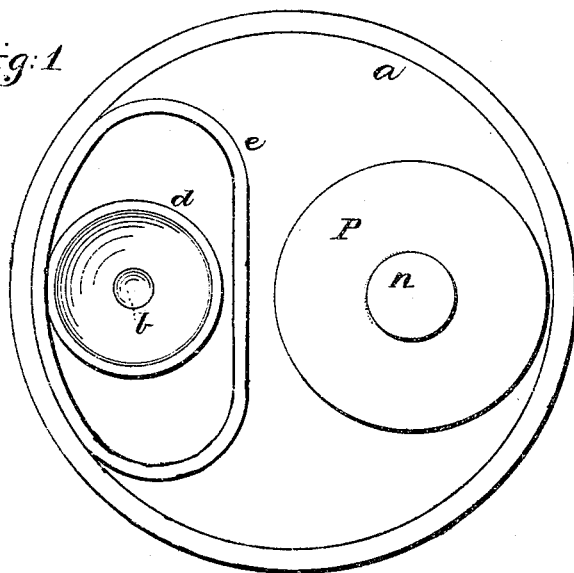


Fig. 2.

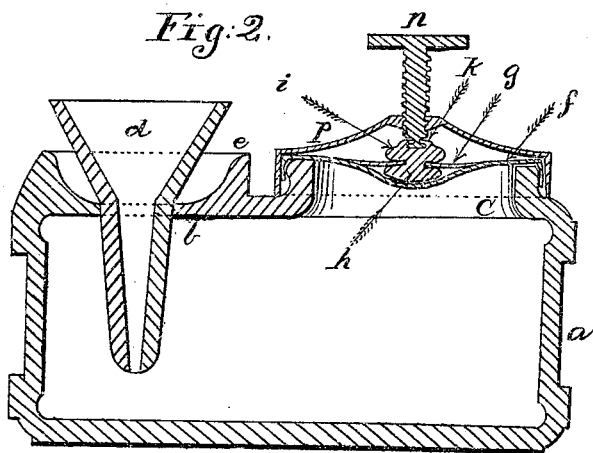
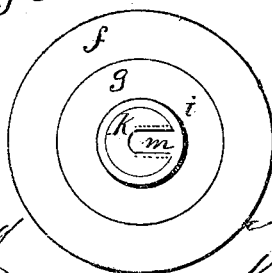


Fig. 3.



Witnesses:

John Henderson
Charles L. Ramo

Inventor:

Wm A. Wheeler

UNITED STATES PATENT OFFICE.

WILLIAM A. WHEELER, OF NEW YORK, N. Y.

IMPROVEMENT IN THE OPERATING PARTS OF A FOUNTAIN-INKSTAND.

Specification forming part of Letters Patent No. 47,060, dated March 28, 1865.

To all whom it may concern:

Be it known that I, WILLIAM A. WHEELER, of the city, county, and State of New York, have invented certain new and useful Improvements in the Method of Constructing the Operating Parts of Fountain-Inkstands; and I do hereby declare the following to be a full description of the same.

The object of improvement is to utilize and make more perfect the operations of fountain-inkstands by making a perfectly air-tight diaphragm, and thus obviate the objection to their general use for want of permanency of action; and the nature of my invention consists in making the rubber disk or diaphragm of two thicknesses at its center part, (but joined only at their edges,) the upper thickness only having a small hole in it, through which one head of a double-headed button is inserted, thus permitting the rubber to contract around the neck of the button to confine it securely upon the upper side of the diaphragm and entirely out of the reach of the corroding action of the ink, as would be the case if the end of the screw for operating the diaphragm passed through it and was secured on its under side by a metal washer and screw-nut.

But to describe my invention more particularly, I will refer to the accompanying drawings, forming a part of this specification, the same letters of reference, wherever they occur, referring to like parts.

Figure 1 is a plan view of a fountain-inkstand. Fig. 2 is a vertical cut section of the same. Fig. 3 is a plan view of the diaphragm and button, showing the slot in which engages the lower end of the screw for operating the diaphragm.

Letter *a* is a glass reservoir or fountain, in the upper face of which are formed two circular holes, *b* and *c*. In *b* is inserted a funnel, *d*, the pipe of which extends down to near the bottom of the ink-reservoir, so as to be always below the surface of the ink, and thus permit it to rise through it on the application of any pressure upon the surface of the ink in the reservoir.

Letter *e* is a raised margin around the funnel to hold any overflow of ink from it.

Letter *f* is a disk of thin sheet-rubber, covering the entire opening *c*, and having upon its upper surface a smaller disk of sheet-rubber, *g*, in the center of which is a small hole. Through this hole is forced the lower head, *h*, of the double-headed button, and as the rubber contracts around the neck of the button, holds it securely between the two thicknesses of the diaphragm, and at the same time out of contact with the ink. In the upper head, *i*, of the button is a cap-plate, *k*, having a slot, *m*, in it, with projecting edges, under which engages a ledge on the lower end of a screw, *n*, working through a metal cap, *p*, covering the opening *c*. This metal cap is secured down upon and over the raised edges of the hole *c*, by means of cement, plaster-of-paris, or other well known ways for making air-tight joints, and at the same time holds the edges of the diaphragm.

It will be obvious, therefore, that, when the metal cap is properly secured down upon the diaphragm no air can escape from under it, and as there is no metal in contact with the ink or vapor arising therefrom, and the rubber being impervious to those influences, it will retain its elasticity and permanency of action for years, which would not be the case if the end of the screw passed through the diaphragm and was secured by a metal washer and nut on its lower side in contact with the ink or vapor of it, as is the case with Whitney's inkstand.

Having now described my invention, I will proceed to set forth what I claim and desire to secure by Letters Patent.

I claim—

The use of a diaphragm made of two thicknesses, as described, for fountain-inkstands, in combination with the double-headed button *h i* and screw *n* and cap-plate *p*, arranged and operating in manner and for the purposes herebefore set forth.

WM. A. WHEELER.

Witnesses:

JAS. HENDERSON,
CHARLES L. BARRITT.