

M. Braun.
Inkstand.

N^o 27,200. Patented Feb. 21, 1860.
Fig. 1.

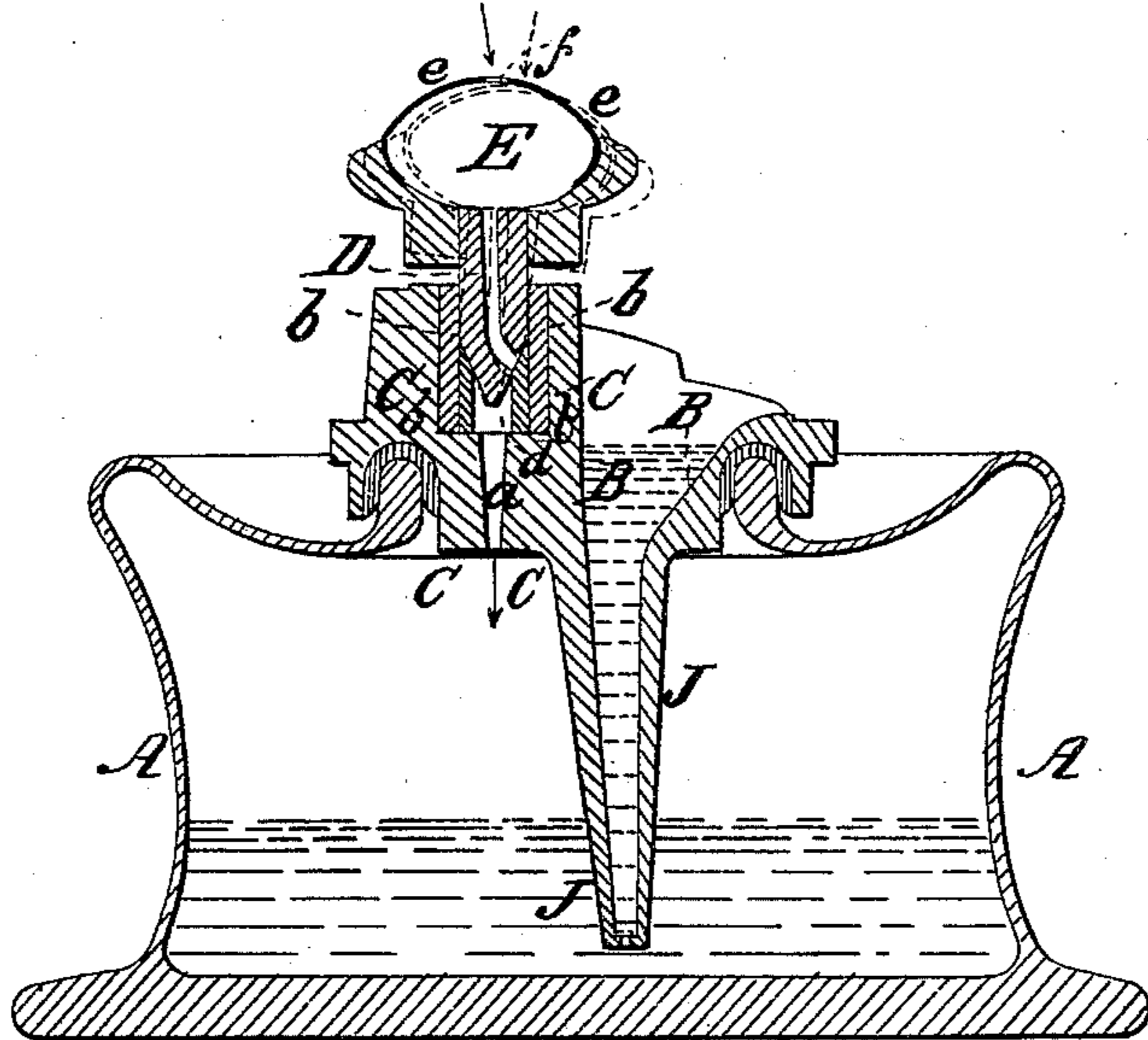
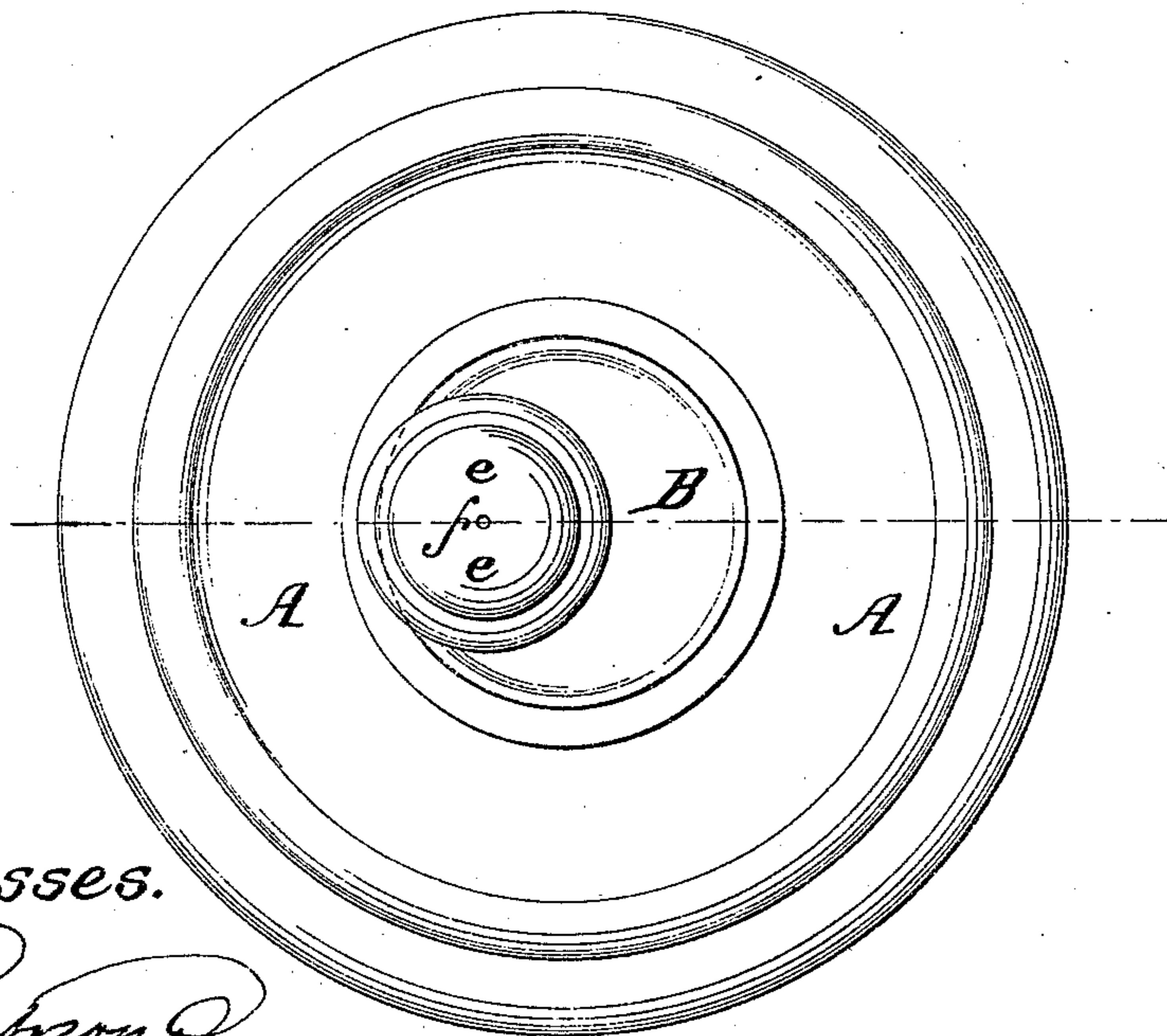


Fig. 2.



Witnesses.

Wm Thompson
M. H. Livingston

Inventor.

M. Braun

UNITED STATES PATENT OFFICE.

MAX BRAUN, OF BROOKLYN, NEW YORK.

INKSTAND.

Specification of Letters Patent No. 27,200, dated February 21, 1860.

To all whom it may concern:

Be it known that I, MAX BRAUN, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful
5 Improvement in Fountain-Inkstands; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specifica-
10 tion, in which—

Figure 1, represents a vertical diametrical section taken through my improved fountain inkstand, and device for raising the ink up into the fountain cup. Fig. 2, is a plan view
15 of the inkstand of Fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

The object of my invention and improvement in fountain inkstand is to provide with
20 a reservoir or ink cup of glass or other suitable material a fountain cup, and peculiarly constructed air pump, for forcing the ink contained in the reservoir up into the cup in any desired quantity and for allowing the
25 ink to flow back from the fountain at a suitable time. To prevent the ink from flowing over the fountain cup by the expansion of air in the reservoir and to enable any person to obtain a free supply of ink,
30 in either warm or cold weather as long as any ink remains in the reservoir. The device can be readily applied to reservoir or ink cups of any shape, size or description and for the complete working of the device, it is
35 only requisite that the cover should be fitted air tight. The parts may be made of metal, glass or vulcanized rubber or other suitable material, they are exceedingly compact, may
40 be highly ornamented and made cheaper than anything to accomplish the same results of the present construction.

For this purpose my invention consists in a peculiar constructed top for the ink-cup and the novel introduction of a small finger
45 force pump for increasing the pressure of the air on the ink in the cup, and in this manner forcing it up into a fountain cup, by supplying new air, instead of densifying the air in the reservoir, in the present man-
50 ner when flexible diaphragms are used to raise the ink by pressing on them, the device is to be so constructed that the fountain cup can be filled with ink, or only partly filled, and so that all the ink in the fountain
55 cup may be driven back into the reservoir by removing a portion of the air, above the

ink in the reservoir, all as hereinafter described and represented.

The great evil attending the fountain ink-stands of the present construction is, that
60 they are so affected by changes in temperature, which render them very objectionable on account of the ink flowing over, and on the desk by the expansion of air in the res-
65 ervoir while in cool weather a copious supply cannot be had, there are no provisions for regulating the supply, nor to keep up a full supply of ink when it is low in the reservoir. My invention obviates this evil,
70 and the parts are less complicated and less expensive than those I refer to.

Therefore to enable those skilled in the art to fully understand my invention I will proceed to describe its construction and op-
75 eration.

In the drawings A represents a non-corrosive ink reservoir upon the top of which is closely fitted and suitably packed a foun-
tain cup B made of glass, rubber, or other
80 suitable material and to one side of which is an enlargement C with a recess terminating in a small tube *a*, which latter perforation extends through the piece C opening into the reservoir A. In this recess is forced an
85 india rubber tube *b* with a small pole *d* through its bottom, or a smaller and shorter tube may be inserted in the larger one, and forced down as shown by the drawings to the bottom of the recess.

D is a hollow stem with a conical bottom,
90 and with an opening through one side of the cone to the central opening, which latter communicates with a hollow chamber E, covered by an india rubber or other flexible
95 diaphragm *e* having a small perforation *f* in its center. The neck J or the fountain cup B, extends down near the bottom of the reservoir so that as long as any ink remains
100 in the reservoir it may be forced up in the fountain cup. The fountain cup with the air pump enlargement C may be cast, or otherwise formed in one piece, or they may
105 be two separate and distinct pieces, the pump being attached to the side of the inkstand or reservoir and the fountain cup to its center or vice-versa, still the principle of
110 action will remain the same although where compactness and cheapness are desired ends the parts will be constructed as herein described and represented.

The operation of this improvement in inkstands may be described as follows. The

end of the neck of the fountain cup being kept in the ink, by a gentle pressure with the finger on the diaphragm *e*, with the finger closing the perforation *f* in said diaphragm and with the stem D slightly inclined so as to bring the perforation through its conical end, over the small hole *d* through the inner tube, a communication is thus formed with the reservoir A and by raising and depressing the finger air may be forced into the reservoir until the desired quantity of ink is obtained in the fountain cup, then, by relieving the finger from the diaphragm, the stem D will assume its original position and the perforation in the side of its conical bottom will be closed by the short tube *d* and the air thus prevented from escaping, and in this way by the simple movement of the finger, letting air into chamber E, and forcing it down into the reservoir, ink may be raised into the fountain cup as long as any remains in the reservoir. For returning the ink back into the reservoir from the fountain cup, it is only necessary to tip the stem D over a little, when the air will rush out and consequently the ink will return back into the reservoir. Should the pressure of the air above the ink in the reser-

voir be increased by the expansion a slight movement of the stem D will let a sufficient quantity of air out to prevent the over-flow of ink from the fountain cup. For filling an inkstand of this description, it is only necessary to remove the stem D, and pour the ink through the fountain cup, close the aperture again with the stem and the inkstand will be ready for use.

I am aware that diaphragms have been used, which by flexing with the finger, or otherwise, ink would be elevated into the fountain cup.

I am also aware that pistons have been used to force the ink up into an ink-cup, but to these I lay no claim, but:

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

The chamber E, with flexible perforated diaphragm *e*, hollow stem D, and tubes *a b* combined with a fountain cup B, and arranged in the manner and operating upon the principles set forth.

M. BRAUN.

Witnesses:

WM. THOMPSON,

M. M. LIVINGSTON.