S. Darling.

Inkstand.

No. 76409. Patented Apr. 7. 1868.

Fig 1

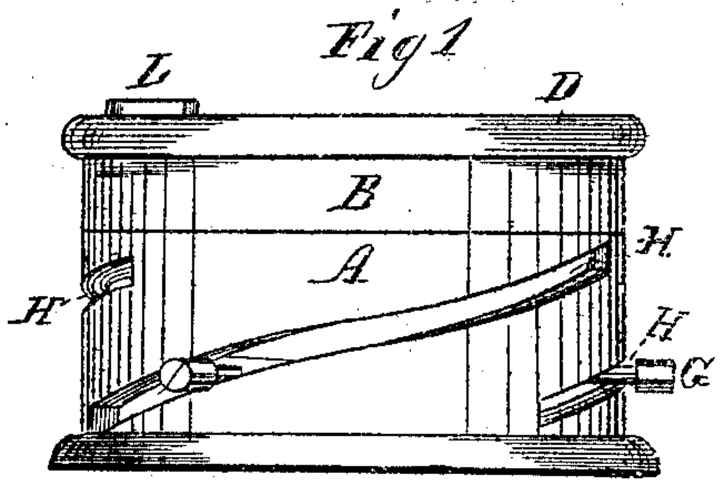


Fig. 2

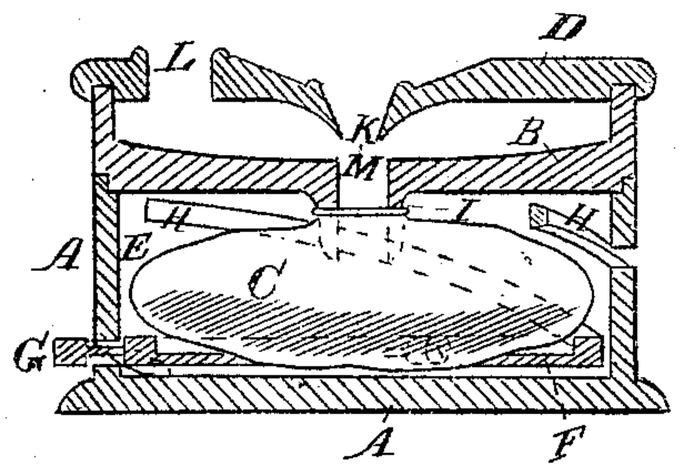
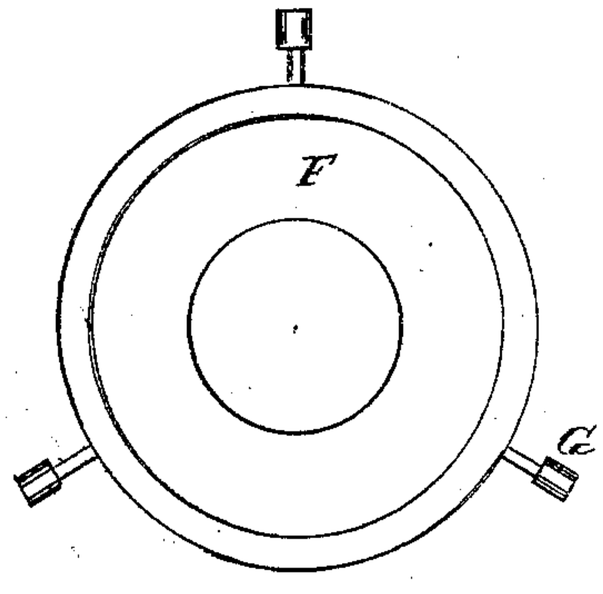


Fig. 3.



Witnesses { M. A. Morley
Sam'l J. Lozier

Samuel Darling
by Crosby Halsted & Gould
his Attorneys.

United States Patent Office.

SAMUEL DARLING, OF BANGOR, MAINE.

Letters Patent No. 76,409, *dated April* 7, 1868.

IMPROVEMENT IN INKSTANDS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, SAMUEL DARLING, of Bangor, in the county of Penobscot, and State of Maine, have invented certain Improvements in Inkstands; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

Figure 1 represents an elevation, and

Figure 2 a vertical section of my improved inkstand; and

Figure 3 a plan of the follower and its adjusting-screws.

Referring to the accompanying drawings, A represents the lower portion of the stand, formed of Britannia, cast iron, or any other suitable material. B, a removable portion, fitting tightly therein, and which I prefer to make of glass or porcelain, and to which is attached a flexible and compressible pouch or sack, C, preferably made of India-rubber, vulcanized or not, as may be desired; or it may be made of any other material, provided it be impervious to ink, and of a flexible and yielding character. D is the top or cap-piece, surmounting the whole, and, by means of a groove or otherwise, made to fit closely and snugly upon B. The better way, however, to make this is to form B and D solid, and in one piece. The pouch may be large enough to occupy, when filled, a considerable portion of the space E between the follower F and the part B. The follower F, made of any suitable material, I prefer to make with a cavity or opening either at its centre or at that portion which lies beneath that part of the sack which, when distended by the ink, hangs farthest down, and it is of such diameter as to be moved freely up or down within the stand. In its edge or periphery I insert several (say three) pins or screws, G, at equal distances apart, and each of these passes through a spiral slot, H, cut through the stand A, and running from its base nearly to its top. The pouch may be secured to the part B in any well-known manner. I have shown it as surrounding with its mouth a tubular projection, I, thereon, to which it may be tied by a cord or thread. This projection and tube need not necessarily be centrally situated, as shown, but may be located at one side. In that portion of the cover which lies immediately above the tube of the projection I is the mouth or dipping-cup K, for the insertion of the pen, this cup tapering downwards in its bore, to prevent the pen being dipped too far into the ink. In this cover is another hole or orifice, L, designed for a cork or other stopper. A slight air-outlet is left in this cork. The top of B is made slightly concave, or dish-shaped, and the lowest extremity of the dipping cup K reaches nearly to but not so as to be in contact with B.

When the follower is to be held in place by tightening a screw, one only of the pins G need be tightened for that purpose, and the heads of all the others may be cut off flush with the outer surface of the stand, so that the operator can take hold of the right one only; and the headless ones may have slots in the ends, for the sake of conveniently removing them when desired. It is not, however, necessary that any of these pins be made to screw, as the follower may be held in place equally well by friction either of the pins against the sides of the slots, or of the follower against the inner sides of the stand.

The operation is as follows: The sack being well filled with ink, and so as to exclude all air, sufficient additional ink should be poured into the dipping-gauge or cup to reach above the mouth M, and partially fill the space between B and D, so that the lower point of the dipping-gauge may be in the ink. The stand is now ready for use.

As the ink becomes diminished by use, a loosening of the screws, when screws are used, or the mere turning of the follower, when it is held by friction only, admits of raising the follower to any degree desired, and there securing it, so that the whole body of the ink shall be held up by it. The degree to which it should be raised should be such as always to keep the level of the ink a little above the bottom of the gauge-cup. The great breadth of surface of the ink in the reservoir, compared with that in the gauge-cup, requires, however, this adjustment to be but seldom made. This raising of the ink may be continued until nearly all the ink is forced out of the pouch.

No air, it will be perceived, is in the pouch when properly filled, nor can any enter it if it has proper attention. And this is a feature, it is believed, not found in any inkstand now known.

It will also be observed that its principle differs entirely from all that class of stands in which only a small column of ink is raised by a descending follower or plunger. In the present invention the whole body of the ink is raised, and not merely a small portion of it, whilst the ink also is always near the top, and not constantly receding from it.

There may be more than one tube, if found convenient, for filling or cleaning the stand.

I do not confine myself to any particular form of the rubber, or its equivalent, nor to any particular position of it, nor to any of the special means I have shown for expelling the ink therefrom, for it is evident that various forms of pouch, and various locations for it, and various devices for compressing it, may be devised, all of which would embody my invention, and be no departure from it.

The pouch might even be placed outside the stand, and it might be compressed by hand, provided any means be furnished to keep it so compressed and at the same time admit no air within it.

Nor do I confine myself to any particular way of connecting the pouch to the tube.

It may sometimes be found desirable to fill the space E, between the pouch and B, with wooden half rings, made flat, and removable at will, but I have made a hole in the follower, to allow it to be raised high enough to pass by and beyond the tube sufficiently to press the ink out from the sack.

I do not claim an inkstand having a flexible ink-reservoir, when in the performance of its functions, the reservoir depends upon the use and occasional admission of atmospheric air within it; but

1. I claim an inkstand, having an elastic ink-reservoir, C, a dipping-cup, K, and a presser, F, constructed and operating substantially as described.

2. I claim an inkstand, having, in combination, an elastic or flexible ink-reservoir, a pen-dipping cup, and an intermediate ink-chamber, arranged and operating substantially as described.

3. I claim an inkstand, having, in combination, an elastic ink-reservoir, a follower, an intermediate ink-chamber, and a pen-dipping cup, substantially as described.

SAMUEL DARLING.

Witnesses:

JOHN E. HALL,

J. H. PERKINS.