

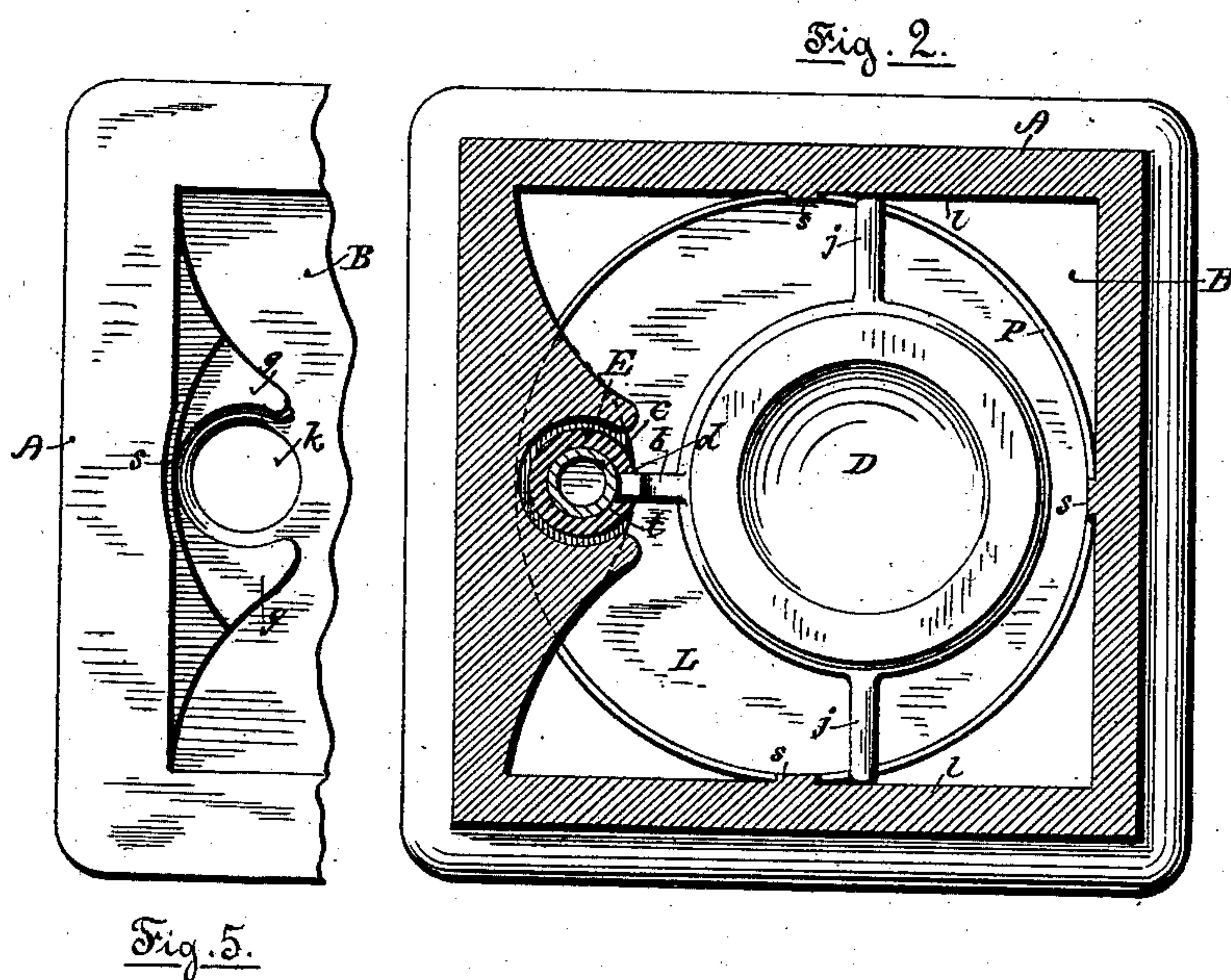
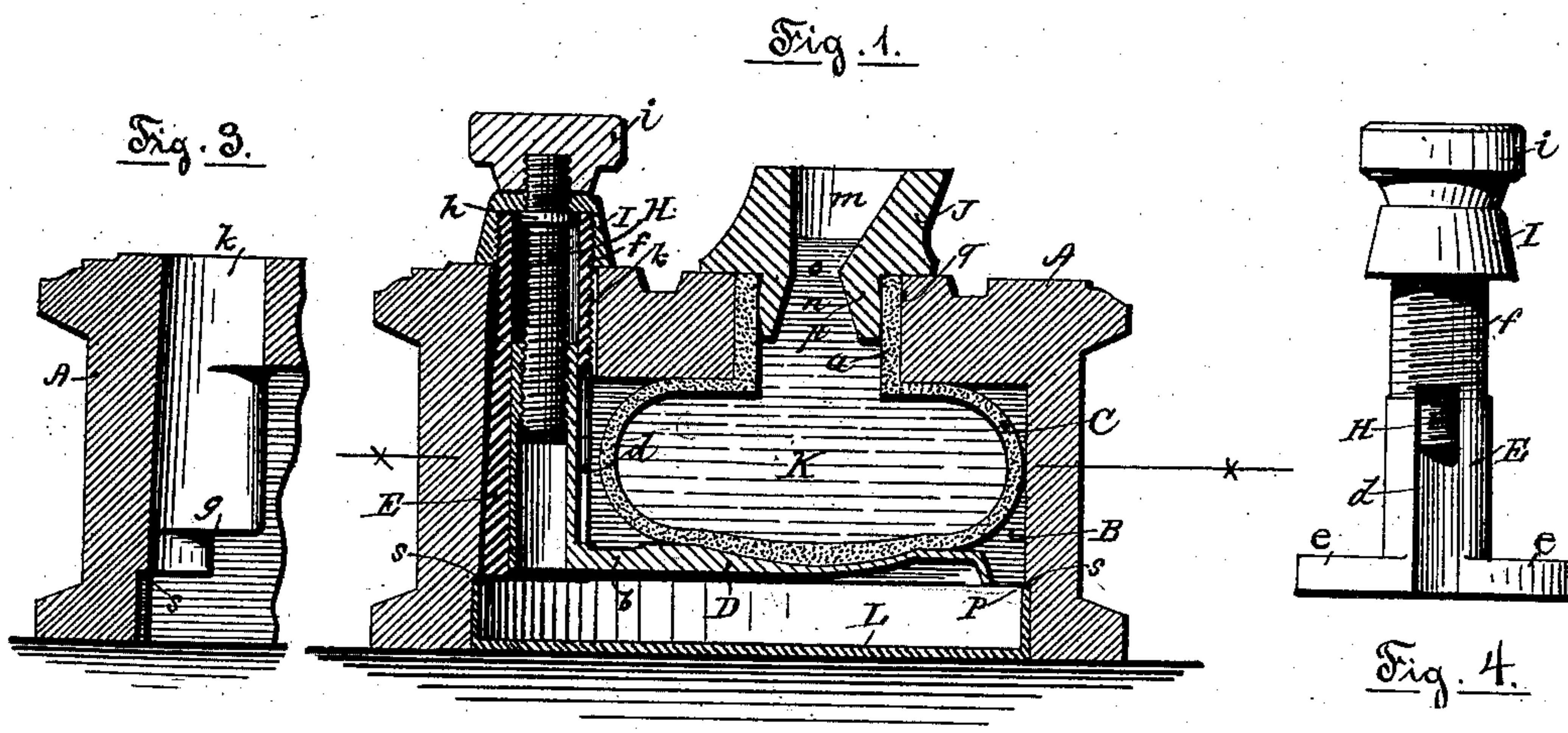
(No Model.)

S. DARLING.

INKSTAND.

No. 369,101.

Patented Aug. 30, 1887.



Witnesses:

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UNITED STATES PATENT OFFICE.

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INKSTAND.

SPECIFICATION forming part of Letters Patent No. 369,101, dated August 30, 1887.

Application filed May 20, 1887. Serial No. 238,907. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL DARLING, a citizen of the United States, residing at Providence, in the State of Rhode Island, have invented a new and useful Improvement in Inkstands, of which the following is a specification.

My invention relates especially to that class of inkstands which are provided with an elastic ink-fountain; and the object of my improvement is to render the same less liable to accidents, more convenient in use, and more easily kept in order; and it consists in supplying the case of the inkstand with a removable guard located under the ink-fountain to prevent accidental pressure upon the follower and ink-fountain, which would tend to force the ink out of the dip-cup; in making the follower to nearly fill the horizontal area of the fountain-case, thus holding it in a central position; in making the cavity in the upper portion of the dip-cup at an angle with the axis of the ink passage or cavity in the lower portion or stem of the same, and in making the dip-cup with upper and lower cavities having an intermediate contracted passage whereby the air will be allowed to readily escape when filling the fountain with ink through the cavity of the dip cup.

Figure 1 is a vertical section of an inkstand provided with my improvement. Fig. 2 represents a horizontal section taken in the line *x x* of Fig. 1, the ink-fountain being removed. Fig. 3 represents a partial vertical section of the fountain-case, showing the shoulder against which the head of the guide-post is made to rest. Fig. 4 is an elevation of the guide-post removed from the fountain-case and without the follower. Fig. 5 represents a partial view of the under side of the fountain-case, showing a plan view of the shoulder against which the head of the guide-post is made to rest.

In the accompanying drawings, A is the outer case of the inkstand, which may be made of glass, metal, or other suitable material, forming a chamber, B, which is open at the bottom in order to provide for the insertion and attachment of the ink-fountain C, the follower D, and the safety-vessel L.

The fountain C is made of india-rubber and provided with a neck, *a*, by means of which it is to be secured to the fountain-case A. The

follower D is provided with an arm, *b*, at the outer end of which is formed the guide-nut *c*, which moves up and down in the cavity *t* of the guide-post E, the arm *b* passing through the slot *d* in the side of the post. The post E passes upward through a perforation, *k*, in the top of the fountain-case, and is provided at its lower end with a head, *e*, extending laterally upon opposite sides of the post, as shown in Fig. 4 and by the broken lines in Fig. 2. The post is also provided at its upper end with a screw-thread, *f*, upon which is placed the inverted-cup-formed nut I, by means of which the head *e* of the post will be firmly held against the shoulder *g* within the chamber B of the case A.

The screw H, which serves to operate the follower, is provided with a fixed collar, *h*, near its upper end, and the nut I is loosely held between the collar *h* and the milled head *i* of the screw. The nut *c* and screw H are to be so adjusted relatively to the position of the lower surface of the fountain-case that the follower will have entered the lower opening of the chamber B before the screw will have entered the threads of the nut, and by this relative adjustment liability to accident will be avoided, for the reason that when the screw is allowed to engage with the nut previous to the entrance of the follower into the chamber B the follower will be liable to catch upon one side of the bottom of the case, and then the continued rotation of the screw will cause the bending or breaking of the follower. The follower D is provided with the oppositely-projecting guide-arms *j j*, which extend to the side walls, *l l*, of the chamber B, and thus serve to hold the follower in its proper central position as it rises or falls within the chamber B under the action of the screw.

The arms *j j* are made to extend outward below the plane of the upper face of the follower in order to provide suitable space for the downward curvature of the rubber wall of the fountain when the same has been fully compressed by the upward movement of the follower.

The dip-cup J is provided with a stem, *p*, which enters the neck *a* of the ink-fountain C, and which, upon insertion into the said neck, serves to hold the neck *a* firmly within the perforation *q* in the top of the fountain-case. The dip-cup J is also provided with an upper

conical cavity, *m*, which receives the ink to supply the pen, and a lower cavity, *n*, with a contracted opening, *o*, between them, the contraction *o* being made of less diameter than the width of an ordinary writing-pen, thus serving as a gage to prevent the pen from passing downward into the ink-fountain when dipping for the ink in the cavity *m*. The axis of the cavity *m* is made at an inclination with the axis of the cavity *n*, or with the axis of the passage through which the ink is caused to rise into the cavity *m* to supply the point of the pen and this inclination is preferably made at about the angle in which the pen is commonly held when dipping for the ink, and by reason of the inclined construction of the dip-cup *J* the ink-holding cavity *m* can be made of very small size and still be conveniently accessible for the pen.

The downward enlargement of the cavity *n* below the contracted point *o* serves to allow the air to rise from the chamber *K* of the ink-fountain and escape while the ink-fountain is being filled with ink through the cavity *m* of the dip-cup, the ink readily passing downward at one side of the cavity *m* and the air passing upward.

The follower when constructed and operated as hereinbefore described is liable to accidental movement when the inkstand is being handled or is set upon an uneven surface, thus compressing the ink-fountain sufficiently to cause the overflow of the ink from the dip-cup, and this liability to accidental movement arises from the backlash or looseness of the guide-nut and the operating-screw, which is located at one side of the follower, the effect of this looseness being greatly multiplied by the leverage of the said follower; and in order to suitably protect the follower and ink-fountain in an inkstand of this construction I provide a removable guard, *L*, which may be made in circular form, with a rim, *P*, which fits within the walls of the chamber *B* and abuts against the stop shoulders *s s*, being frictionally held within the lower portion of the chamber of the case; and the guard *L*,

when made tight, will serve to hold the ink in case of an accidental leak in the fountain.

The ink is caused to rise into the dipping-cavity *m* from the ink-fountain by turning the screw to cause an upward movement of the follower, and upon the reverse movement of the screw and follower the ink will sink away from the cavity *m* into the ink-fountain.

I claim as my invention—

1. An inkstand having a fountain-case, an elastic ink-fountain within the chamber of the case, a dip-cup, a guide-post, a follower provided with a guide-nut and an operating-screw, and the removable guard, which serves to protect the follower and the ink-fountain, substantially as described.

2. An inkstand having a fountain-case, an elastic ink-fountain within the chamber of the case, a dip-cup, a guide-post, and a follower provided with a guide-nut and an operating-screw, the said follower being held in a central position relatively to the ink-fountain by the inner walls of the case, substantially as described.

3. An inkstand having a fountain-case, an elastic ink-fountain held within the chamber of the case, means for compressing the ink-fountain to raise the ink into the dip-cup, and a dip-cup the axis of the upper cavity of which inclines at an angle with the axis of the ink passage or cavity in the lower portion or stem of the cup, substantially as described.

4. An inkstand having a fountain-case, an elastic ink-fountain held within the chamber of the case, means for compressing the ink-fountain to raise the ink into the dip-cup, and a dip-cup having a stem which enters the neck of the ink-fountain, and also being provided with upper and lower cavities, which are connected by a contracted passage, forming a pen-gage, substantially as and for the purpose set forth.

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Witnesses:

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