(No Model.)

K. J. PEERS.

INKSTAND.

No. 545,247. Patented Aug. 27, 1895.

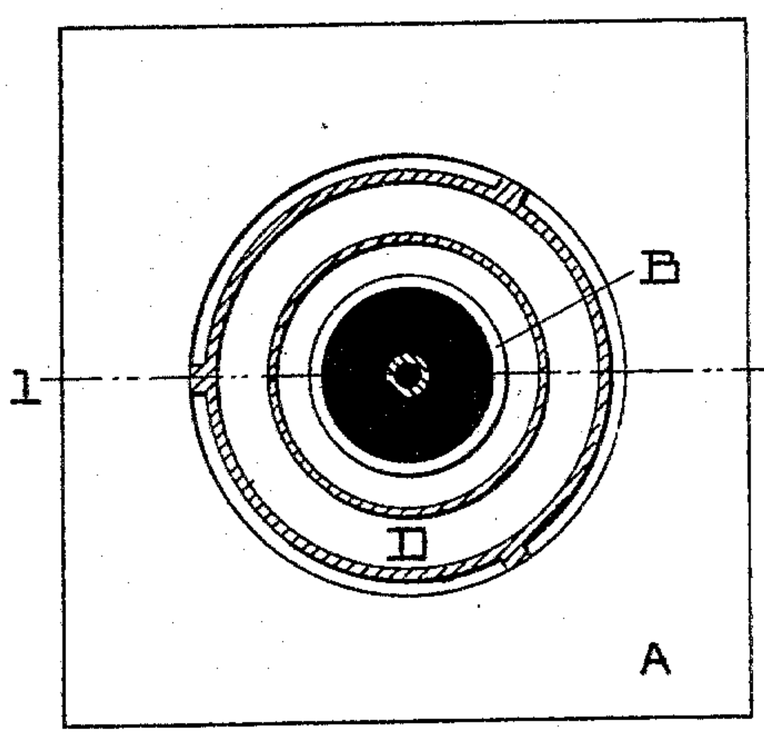

Fig. 1.

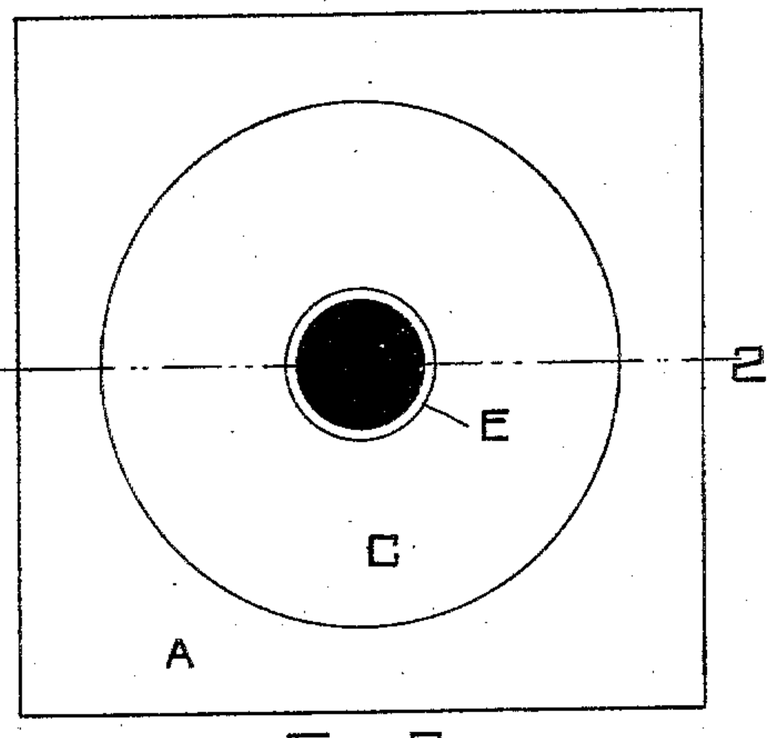

Fig. 2.

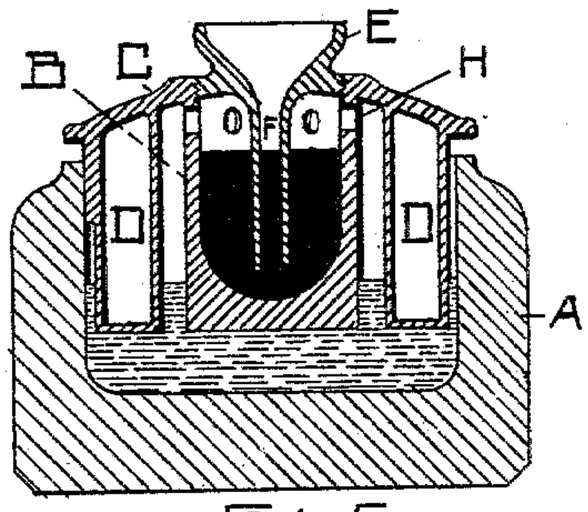

Fig. 5.

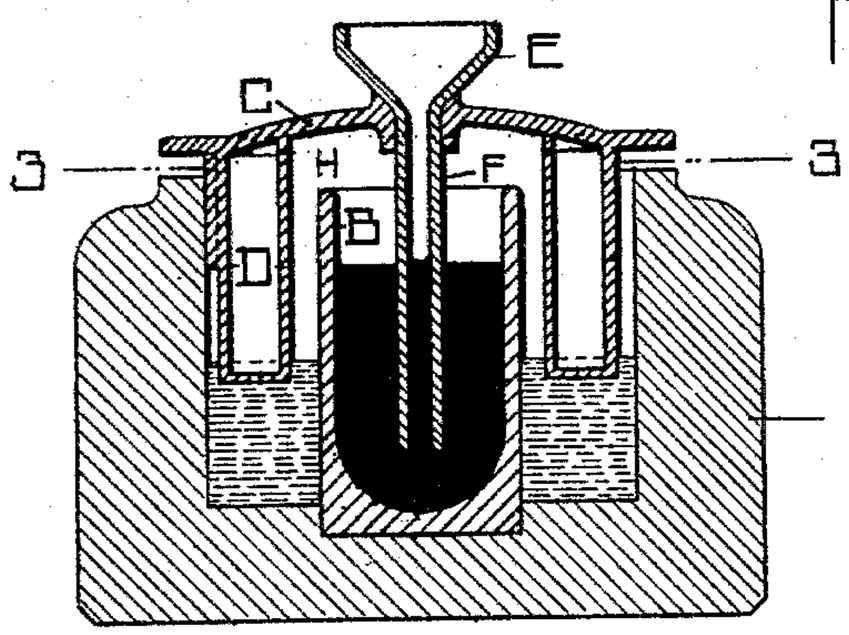

Fig. 3.

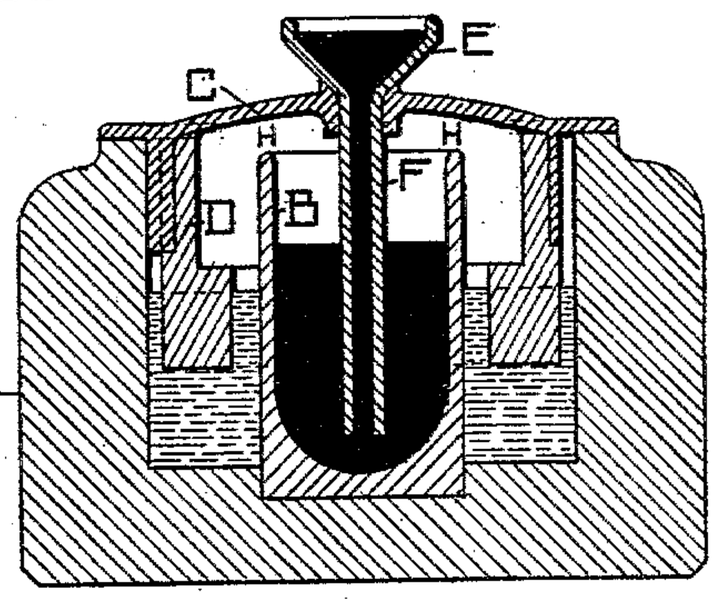

Fig. 4.

WITNESSES;

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UNITED STATES PATENT OFFICE.

KESTER J. PEERS, OF BOSTON, MASSACHUSETTS.

INKSTAND.

SPECIFICATION forming part of Letters Patent No. 545,247, dated August 27, 1895.

Application filed January 15, 1895. Serial No. 534,990. (No model.)

To all whom it may concern:

Be it known that I, KESTER J. PEERS, a subject of the Queen of Great Britain, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Inkstands, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention consists of an ink-well, a water-chamber surrounding it, a cover common to both and floating upon the water in said chamber, and a dipping-funnel with depending tube, all so arranged that the action of dipping the pen into said funnel depresses the funnel and the said cover to which the funnel is attached, thereby displacing the water in the water-chamber, compressing the air above the water and in the top of the ink-well, thus depressing the ink and causing it to rise through the said tube into the dipping-funnel, filling the pen, and upon the removal of the pen from the funnel the cover rises, owing to its buoyancy, and the ink recedes into said ink-well, leaving but a small surface exposed to atmospheric influences.

With reference to the drawings, Figure 1 is a sectional plan of an inkstand embodying my invention, the section being taken at line 3 3 in Fig. 3. Fig. 2 is a plan view showing stand complete. Fig. 3 is a sectional elevation showing all the parts of the stand in their normal positions, the section being taken on line 1 1, Fig. 1. Fig. 4 is a similar sectional elevation showing the cover depressed and the ink raised into the dip-funnel. Fig. 5 is also a sectional elevation showing a modification of the device.

The arrangement and action of the parts are as follows: An ink-well B is provided which is located within a cup or water-chamber A, and a cover C, common to both, has depending from it an annular ring D, which is either made hollow or of a material sufficiently light so as to float upon the water in the chamber A, thus normally sustaining the cover C in an elevated position, as shown in Fig. 3. Through the center of this cover is a dip-funnel E, from which depends a tube or quill F, dipping into the ink in the ink-well B. It is now obvious that a quantity of air is confined in the upper part of the ink-well and within the ring D, which is somewhat compressed by the weight of the cover, and which acts to maintain or assist in maintaining the bouyancy of the cover, as well as to cause, upon the downward movement of the cover, the ink to rise in the tube and dip-funnel, and that the water serves as a seal preventing any atmospheric action on the ink except as it is exposed in the tube F or dip-funnel E. Now if the cover be depressed, either by the action of dipping a pen into the dip-funnel or by other means, as is shown in Fig. 4, the displacement of the water will displace and slightly compress the confined air, and, owing to the consequent pressure upon the surface of the ink, cause it to rise into the tube and dip-funnel. Upon the removal of pressure from the dip-funnel or cover the compressed air within the ring D then acts to lift or assist in lifting the cover to its normal position.

In Fig. 5 the ink-well B is shown as being attached to the cover C, but it is obvious that the action is yet the same, since the holes or air-passages H in the walls of the ink-well allow of the pressure of the air being communicated to the surface of the ink. In either case it is apparent that as soon as the pressure is removed from the cover C it will resume its normal floating position, as shown in Figs. 3 and 5, and the ink will recede from the dip-funnel into the tube F and the ink-well.

Many variations may be made in the construction of such an inkstand without departing from the spirit of my invention. Any suitable materials may be employed.

Having thus described my invention, what I claim, and wish to secure by Letters Patent, is—

1. An inkstand consisting of an inkwell, a water chamber, a cover common to both which by reason of its buoyancy normally floats upon the water in said chamber, a dip-funnel in said cover and a tube depending from said funnel into the ink in the said inkwell, the whole so constructed and arranged that by the depression of the cover and the consequent displacement of the water and confined air the ink in the inkwell is depressed and caused to rise into the said tube and dip-

funnel and upon the removal of the pressure from the cover the whole resumes the normal condition, substantially as set forth.

2. An inkstand having an inkwell, a cover to the same in which is a dip-funnel from which a tube depends into the ink in said inkwell a suitable liquid medium for sustaining said cover in an elevated floating position independent of the ink in said inkwell and a chamber for said liquid medium, all substantially as and for the purposes herein more fully set forth.

3. In an inkstand, the combination of a water chamber, an inkwell, a cover common to both and so constructed as to float upon the water in said water chamber, a dip-funnel in said cover and a tube depending from said dip-funnel into said inkwell, all substantially as and for the purposes herein described.

4. In a water sealed inkstand, a cover so constructed as to float upon the water in said stand, substantially as described.

5. An inkstand having two chambers one for ink and the other for water, a cover common to both, said cover being so constructed as to float upon the water in said water chamber, and thus sealing the ink from exposure to atmospheric influences, substantially as herein described.

6. The combination of the water chamber A, the inkwell B, the dip-funnel E and the tube F with a cover, common to both the water chamber and the inkwell and carrying the said dipfunnel and tube, so constructed as to float upon the water in said water chamber, all substantially as and for the purposes set forth.

7. The combination of the water chamber A, the water contained therein, the inkwell B, the cover C its depending buoyant ring D, the dip-funnel E and the tube F, all substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 12th day of January, A. D. 1895.

KESTER J. PEERS.

Witnesses:
C. L. WOODWARD,
ARTHUR CARROLL.