(No Model.)

H. C. STIFEL.

INKSTAND.

No. 458,078. Patented Aug. 18, 1891.

Fig. 1.

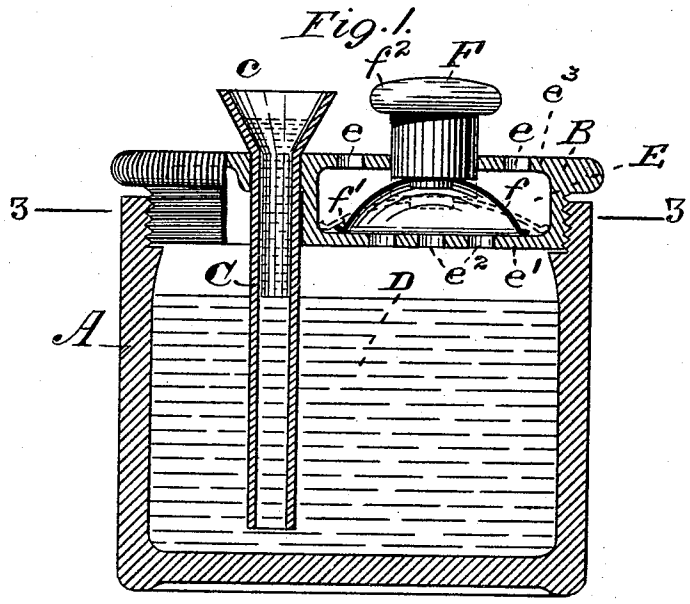


Fig. 2.

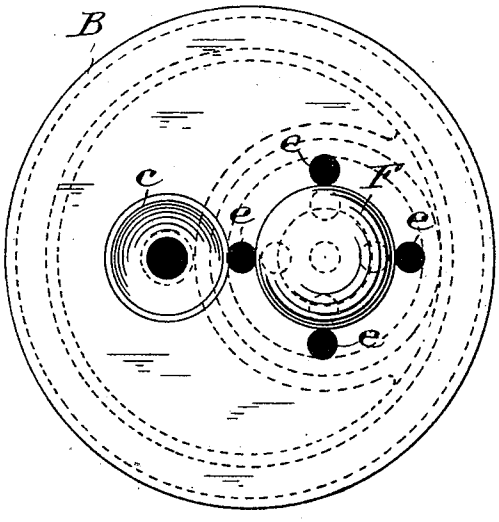
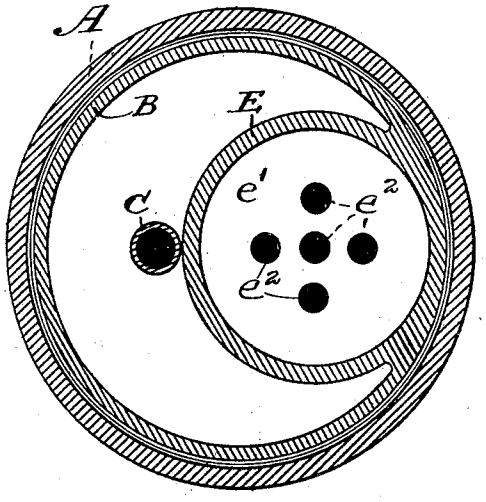


Fig. 3.



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UNITED STATES PATENT OFFICE.

HERMAN C. STIFEL, OF ST. LOUIS, MISSOURI.

INKSTAND.

SPECIFICATION forming part of Letters Patent No. 458,078, dated August 18, 1891.

Application filed September 24, 1890. Renewed May 22, 1891. Serial No. 393,721. (No model.)

To all whom it may concern:

Be it known that I, HERMAN C. STIFEL, of St. Louis, Missouri, have made a new and useful Improvement in Inkstands, of which the following is a full, clear, and exact description.

This invention relates to that class of fountain-inkstands in which a diaphragm-piston is used to force the ink into the dip-hole. In such inkstands the piston is usually arranged at the top, and the dip-hole is a fixture and arranged lower down at the side and toward the bottom of the structure; and in another form the piston has been attached directly to the tube through which the ink is supplied to the dip-hole, and to operate the piston the pen-point in taking the ink is pressed upon the stem, causing it to move downward, and the ink thereby made to well upward through the tube to meet the pen-point. The first-described method is not wholly satisfactory, in that a separate movement is required for operating the piston, and the last-mentioned construction in its use is liable to work injury to the pen-point. These objections are obviated, and an improved construction obtained by means of the improvement under consideration, which consists in the special means whereby the person using the ink can, in dipping his pen-point into the dip-hole, readily and with the same hand in which the pen is being held operate a plunger to force the ink into the dip-hole, substantially as is hereinafter specified and claimed, aided by the annexed drawings, making part of this specification, in which—

Figure 1 is a vertical section of the improved inkstand; Fig. 2, a plan of the same; Fig. 3, a horizontal section on the line 3 3 of Fig. 1.

The same letters of reference denote the same parts.

A represents a suitable cup for holding the ink. It is provided with a removable cover B, which is adapted to be attached to the cup by screwing it thereinto, substantially as is indicated in Fig. 1. The cover serves to uphold the tube C, through which the ink D is supplied to the dip-hole *c*, and it is also provided with or shaped to form a chamber E, in which the piston F works. The chamber E is at the side of the tube C, and it is perforated at the top at *e* to provide for the passage of air into and from the chamber in the operation of the piston, and its bottom *e'* is perforated at e^2 to provide air-passages from the chamber to the interior of the cup in which the ink is contained. The piston works through the roof e^3 of the chamber E, and at its lower end it has attached to it a cup-shaped flexible diaphragm *f*, whose lower edge *f'* bears upon the bottom of the chamber E. The upper end f^2 is arranged to come at the level, or thereabout, of the dip-hole, substantially as shown.

The various enumerated parts of the structure are respectively composed of suitable materials, and the shapes respectively of the cup, the cover, the tube, and the chamber can be more or less varied without departing from the principle of the improvement, so long as the dip-hole and the upper end of the piston are arranged side by side and substantially at the same level.

In the operation of the inkstand the person holding the pen by means of his thumb and forefinger, and perhaps with the aid of the middle finger, dips the pen-point into the dip-hole, and at the same time presses with the remaining fingers of his hand upon the piston. The ink flows in the usual manner upward through the tube to meet the pen-point, and as soon as the pressure is removed from the piston the ink descends in the tube. The broken lines in Fig. 1 indicate the action of the diaphragm in the described movement of the piston.

I claim—

The combination of the cup, the cover, the tube having the dip-hole at the upper end thereof, the chamber, and the piston, said cover supporting said tube and having said chamber, said piston having the diaphragm and working in said chamber, and said dip-hole and the upper end of said piston being side by side and at the same level, or thereabout, substantially as described.

Witness my hand this 19th day of September, 1890.

HERMAN C. STIFEL.

Witnesses:
C. D. MOODY,
GEO. J. CHAPMAN.