(No Model.)

J. OLIPHANT.

FOUNTAIN PEN.

No. 448,360. Patented Mar. 17, 1891.

Fig. 1.

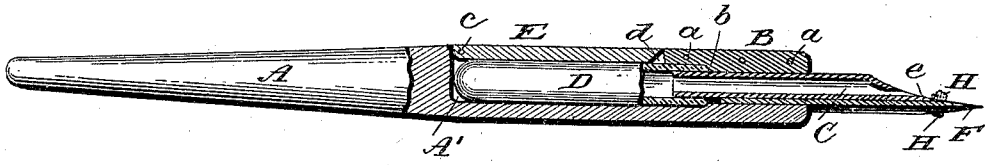


Fig. 2.

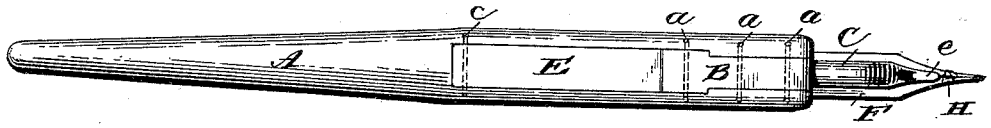


Fig. 3.

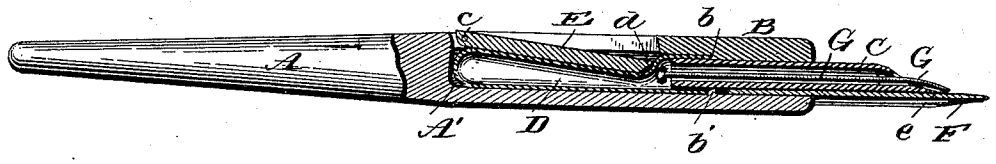
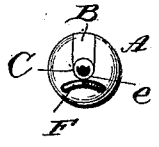


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN OLIPHANT, OF TOLEDO, OHIO.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 448,360, dated March 17, 1891.

Application filed May 12, 1890. Serial No. 351,461. (No model.)

To all whom it may concern:

Be it known that I, JOHN OLIPHANT, a citizen of the United States, residing at Toledo, in the county of Lucas, State of Ohio, have invented certain new and useful Improvements in an Automatic Reservoir Pen-Holder, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in self-filling automatic reservoir pen-holders wherein a compressible bulb is employed in connection with a pivoted or hinged piece to be actuated by the thumb or finger or other means to compress said bulb.

It has for its object, among others, to provide for the ready assembling of parts, to provide for the regular and uniform flow of the ink to the pen-point, and to improve generally upon this class of devices.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation, with parts in section, showing a pen-holder constructed in accordance with my invention. Fig. 2 is a top plan. Fig. 3 is a side elevation, with parts in section, with the pressure-lever depressed, and showing a modified form of tongue or ink-flow regulator; and Fig. 4 is an end view with the pen removed.

Like letters refer to like parts in all the figures of the drawings.

Referring now to the details of the drawings by letter, A designates the holder, which may be of any desired material, such as hard rubber, celluloid, or any other substances or material suited for this purpose, and of any preferred shape. It is formed with a cavity or chamber A′ to receive the working parts of the holder. At the outer end I remove a portion of the body of the holder, as B, to permit of the insertion of the tube C, the object of which is to take up and hold the ink. After the tube has been inserted this portion B may be retained in place in any suitable manner—such, for instance, as pins or rivets *a*—which will allow of its ready removal when desired.

Within the chamber A′ there is located a compressible bulb D, of such size as will fit quite closely within the chamber, and at its outer end embracing the inner end of the tube C, and held from movement endwise by means of shoulders *b b′*, as seen best in Fig. 3.

E is a pressure-lever pivoted within an opening in the body of the holder upon a transverse pin or pivot *c*, and adapted when closed to conform to and complete the contour of the body of the holder, as seen in Fig. 2. Its forward end is preferably beveled, as shown at *d*, so as to allow ready movement thereof, and is designed to be pressed inward upon the bulb by the thumb or finger, as indicated in Fig. 3, to compress the bulb.

F is the pen-point, which may be of any desired or well-known form or make, and is inserted in a recess or opening *e* therefor in the forward end of the holder beneath the tube C, its movement inward being limited by the shoulder *b′*, as seen in Fig. 3.

In Figs. 1 and 2 I have shown the lower portion of the tube C as reduced very thin to make a flexible tongue *e*, which rests upon the end of the pen-point, as shown best in Fig. 2, and as the end of the pen moves in writing the tongue moves with it, and by this movement the ink is worked down to the point of the pen as it is needed. This tongue also prevents waste or accidental flow of the ink when not required. In Fig. 3 I have shown a different construction for this purpose. It consists of a wire G or any other material inserted within the tube C, with its outer end bent downward and bearing upon the top of the pen near the point thereof.

In Fig. 1 I have shown a small piece of absorbent material H, as sponge, which is held upon the pen in any suitable manner at the point of the tube C, so as to prevent the ink from squirting out over the paper, and also preventing the ink from being drawn back into the tube when the pressure is removed.

The operation is simple and will be readily understood. The pen-holder is taken in the hand and pressure put upon the lever E with

either the thumb or finger, and the pen-point and tube C then inserted in the ink until the ink covers the end of the tube. The pressure is then removed from the lever and the ink flows up into the tube and through it into the bulb, when the pen is ready for writing. Little or much ink may be taken up, as preferred, and an independent filler is not required.

What I claim is—

1. The combination, with the holder provided with a cavity and a removable portion at the forward end thereof, of the tube arranged beneath the removable portion, the compressible bulb within the cavity of the holder and sleeved upon the inner end of the tube, and the pivoted pressure-lever pivoted to the holder and arranged in line with the bulb to compress the same, substantially as shown and described.

2. The combination, with the holder, of the tube, the compressible bulb, and the flexible tongue arranged to bear upon the pen near its point, substantially as and for the purpose specified.

3. The combination, with the holder and the compressible bulb and pivoted pressure-lever, of the tube held within the holder and having its outer end reduced and adapted to bear upon the pen near its point, substantially as and for the purpose described.

4. In a reservoir pen-holder, the combination, with the holder having a removable portion and formed with interior shoulders *b b'*, of the tube C, held within the holder, and the compressible bulb within the holder with its outer end embracing the inner end of the tube, and held from movement outwardly by said shoulders, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JNO. OLIPHANT.

Witnesses:

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S. D. CHAMBERLIN.