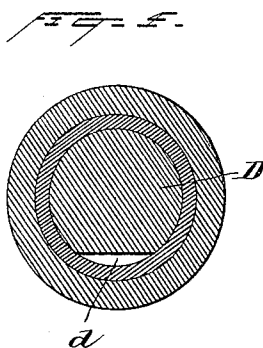
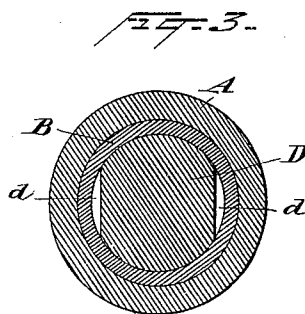
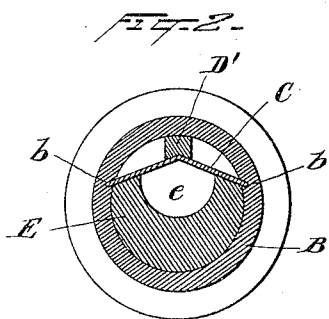
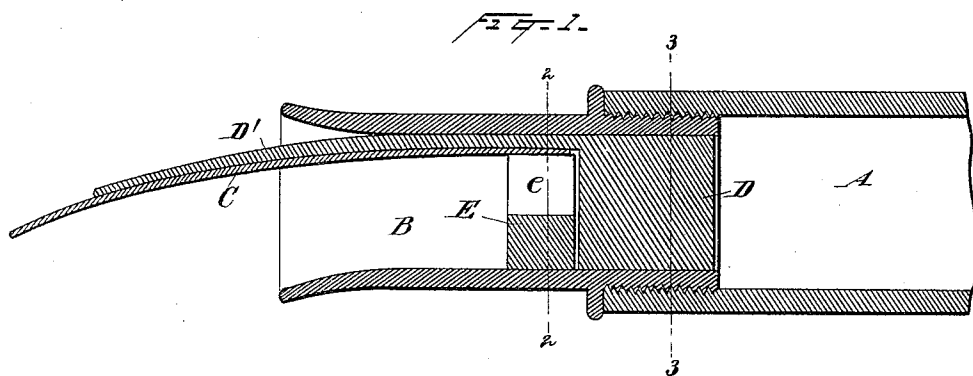


(No Model.)

T. W. EVANS.
FOUNTAIN PEN.

No. 467,261.

Patented Jan. 19, 1892.



Witnesses
Norris A. Clark.
Charles R. Searle.

Inventor
T. W. Evans
By his Attorney
James D. Searle

UNITED STATES PATENT OFFICE.

THOMAS W. EVANS, OF NEW YORK, N. Y.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 467,261, dated January 19, 1892.

Application filed November 6, 1891. Serial No. 411,029. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. EVANS, a citizen of the United States, residing in the city and county of New York, in the State of New York, have invented a certain new and useful Improvement in Fountain-Pens, of which the following is a specification.

My improved device is of the class which uses the main body of the pen handle or holder as a reservoir for ink and has a short removable tube at the open lower end, in which is contained the pen and the required parts which lead the ink to its point with just sufficient freedom. The removable tube, sometimes termed the "pen-section," is adapted to receive ordinary metallic pens. I prefer a form to be shown in the drawings, in which the cross-section is approximately angular—a wide inverted V; but the ordinary curved section will serve. Either form of metallic pen is received in grooves in the interior of the pen-section and may be removed when required for cleaning or exchange.

I provide in connection, as with many other devices of this general class, a feeder which extends along the central line on the upper portion or back of the pen and by capillary action facilitates the flow of a small quantity of ink along the joint between this feeder and the pen, thus supplying the point with a small stream along the back.

I provide special means for inducing and controlling a flow of ink also along the under or front side of the pen. The head or upper end of the feeder is a partial plug, which fits in the interior of the pen-section near the upper end and maintains the position of the feeder, and also obstructs the flow of the ink. There is a passage past this plug on the under side. I provide another separate partial plug, which is mounted a little below it and forms a second obstruction to the flow of the ink. This second plug fits tightly to the bottom and side of the interior of the pen-section, but allows a sufficient opening in the center and the upper part adjacent to the pen.

The device is filled in the ordinary manner by inverting it and removing the pen-section and supplying the ink by a dropper or otherwise until the body is nearly filled and then screwing in the pen-section with its contents.

The accompanying drawings form a part of

this specification and represent what I consider the best means of carrying out the invention.

Figure 1 is a central longitudinal section. Fig. 2 is a cross-section on the line 2 2 in Fig. 1. Fig. 3 is a cross-section on the line 3 3 in Fig. 1, and Fig. 4 is a corresponding cross-section showing a modification.

Similar letters of reference indicate corresponding parts in all the figures where they appear.

A is the body, a hollow cylinder of hard rubber or other suitable material, with its upper end closed and its lower end interiorly screw-threaded.

B is the pen-section, of sufficiently smaller diameter than A and screw-threaded at its upper end and adapted to engage strongly and tightly with the lower end of the body and ink-reservoir A. A groove *b* in the interior on each side is adapted to receive the edge of the pen.

C is a metallic pen, preferably of the form shown in section in Fig. 2. It is engaged in the grooves *b*.

D is the upper plug, and D' the feeder, firmly attached thereto or constructed in one therewith. This feeder D' extends along on the upper face of the pen and leads to the split near the point. The partial plug D stops the passage of the ink, except through a contracted aperture *d*, (shown in Fig. 3 as double,) one on each side, and in Fig. 4 as a single aperture on its lower side.

E is the second or lower partial plug. It is in the form shown in Fig. 2 and applies tightly to the bottom and sides of the interior of the pen-section. It leads the ink which has passed the partial plug D *d* up to the pen and allows it to move slowly down on the opposite or outer face between it and the feeder D'. The aperture *e* in this second partial plug being at a high point in the interior, as it is usually held inclined in the hand, and the aperture or apertures *d* being at a lower point or points, the arrangement retards the admission of bubbles of air and aids to insure the proper slowness of the delivery of the ink.

Modifications may be made without departing from the principle or sacrificing the advantages of the invention. The upper end of the second plug E may be beveled or cham-

ferred, as shown by dotted lines in Fig. 1. Such
may be of possible advantage in leading ink
upward to the pen; but my experiments do not
indicate that it is generally necessary. The
5 two plugs D and E may either or both be re-
moved with ease when required for cleaning
or for any other purpose. The feeder may
extend along the under instead of the upper
face of the pen, if preferred. I can, if re-
10 quired, have two feeders, one as shown by D'
on the upper face and another of the same
or a different size extending along the lower
face of the pen. The trumpet form of the
mouth of the pen-section B is of service in
15 leading the superfluous ink inward when the
device is reversed; but this feature is not
essential.

I claim as my invention—

In a fountain-pen, the body A, adapted to
contain a quantity of ink, the pen-section B, 20
interiorly grooved at *b*, the pen C, and upper
plug D, with its aperture *d* and a connected
feeder D', in combination with each other
and with the lower partial plug E, with its
aperture *e*, arranged for joint operation as 25
herein specified.

In testimony that I claim the invention
above set forth I affix my signature in pres-
ence of two witnesses.

T. W. EVANS.

Witnesses:

CHARLES R. SEARLE,
M. F. BOYLE.