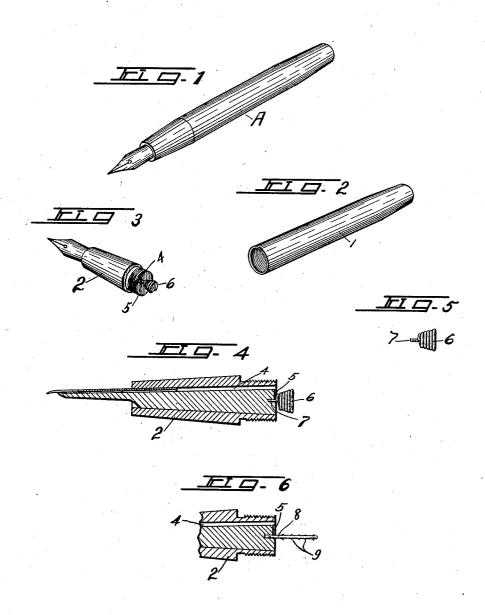
## R. H. STEVENS. FOUNTAIN PEN. APPLICATION FILED JAN. 9, 1912.

1,080,176.

Patented Dec. 2, 1913.



Witnesses: Anthrist E. F. Lucker Michara & Stevens Noward P Stevenson By attorney

## UNITED STATES PATENT OFFICE.

RICHARD H. STEVENS, OF SYRACUSE, NEW YORK, ASSIGNOR TO L. E. WATERMAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## FOUNTAIN-PEN.

1,080,176.

Specification of Letters Patent.

Patented Dec. 2, 1913.

Application filed January 9, 1912. Serial No. 670,226.

To all whom it may concern:

Be it known that I, RICHARD H. STEVENS, of Syracuse, in the county of Onondaga, in the State of New York, have invented new 5 and useful Improvements in Fountain-Pens, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to improvements in 10 fountain pens and has particular reference to means for regulating the feed and flow of the last few drops of ink in the reservoir.

In the use of fountain pens now in use, it

has been found that the user should not, to 15 get the best results, allow the reservoir to become completely exhausted for the reason that the air pressure is so great upon the last four or five drops of ink as to cause it to flow too freely and blot the work. In fact, 20 manufacturers of fountain pens are particular to request that the reservoir of the pen be not allowed to completely exhaust itself.

My object therefore is to produce a device which will overcome these difficulties and 25 allow all of the ink to be used without allowing the excess flow of the last few drops. Not that there is any economy in using the last few drops of ink, but because it is unpleasant to have the work disfigured by an 30 excess flow of ink. I have discovered that this objection may be overcome by securing in the bottom of the ink reservoir a frame of some character, which shall retain, by capillary attraction or otherwise, the last few 35 drops of ink and allow it to be given down

to the pen gradually.

In using the word "frame" I do not limit myself to any particular form of frame or any particular material from which it is to 40 be constructed for the reason that I have discovered that it may be of most any form or of most any material, and equally perform the function required. I have also discovered that a piece of absorbent material, such 45 as felt or the like, may be employed to ad-

Having the above objects and uses in mind, my invention therefore consists in the several new and novel features of construcconnection with the accompanying drawings, which form a part thereof.

Figure 1 is a view of a fountain pen. Fig. 2, the ink reservoir. Fig. 3, the pen-holding plug. Fig. 4, a longitudinal section through 55 the plug, showing the ink channel and a preferred form of ink-retaining-frame. Fig. 5 is a view of the ink-retaining-frame, detached. Fig. 6 is a view similar to Fig. 4, cut away, and showing a modified form of 60 ink-retaining-frame.

The fountain pen —A— is composed of the usual reservoir —1— which may be threaded, and the pen-holding plug -2which may be likewise threaded in order to 65 afford suitable connection between the two parts and for retaining them in operative position, the end of the plug —2— forming the bottom of the ink reservoir when the pen is in use. The pen-holding plug —2— may 70be constructed in any suitable way and has an ink channel —4— communicating at one end with the pen and its opposite end with

the ink in the reservoir. -5— is a groove upon one end of the plug 75 and serves to direct the ink from the bottom of the reservoir toward the channel -4-

Upon the end of the plug which forms the bottom of the reservoir, I erect a frame —6—, the word "frame" being used in the 80 absence of some other appropriate term, and consists, as shown in the drawings in Figs. 3, 4 and 5, of a piece of wire spirally wound and held in position by inserting the stem \_7— into an opening in said plug. This 85 frame may consist, as stated above, of a spirally wound wire, or it may consist of an upright of some character, having off-sets -9— as shown in Fig. 6, adapted to attract to it the last few drops of ink in the reser- 90 voir and allow it to flow gradually through the channel —4— for the purposes indicated, and thereby prevent blurring and blotting. Having described my invention, what I

claim is:

A fountain pen comprising a hollow body portion closed at one end, a plug for insertion in the other end, said plug having a substantially flat circular inner end, the edge of 50 tion and operation hereinafter described, in | which is in contact with the wall of the body 100 portion and provided with a relatively small conduit, leading from the hollow body to the pen, and a frame secured to the inner end of said plug and out of contact with the walls of said conduit, for exercising capillary attraction to regulate the flow of the last few drops of ink.

In witness whereof I have hereunto set my hand this 5th day of January, 1912.

## RICHARD H. STEVENS.

Witnesses:
EUGENE A. THOMPSON,
E. F. TUCKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."