

(No Model.)

N. F. PALMER.

FOUNTAIN PEN.

No. 337,610.

Patented Mar. 9, 1886.

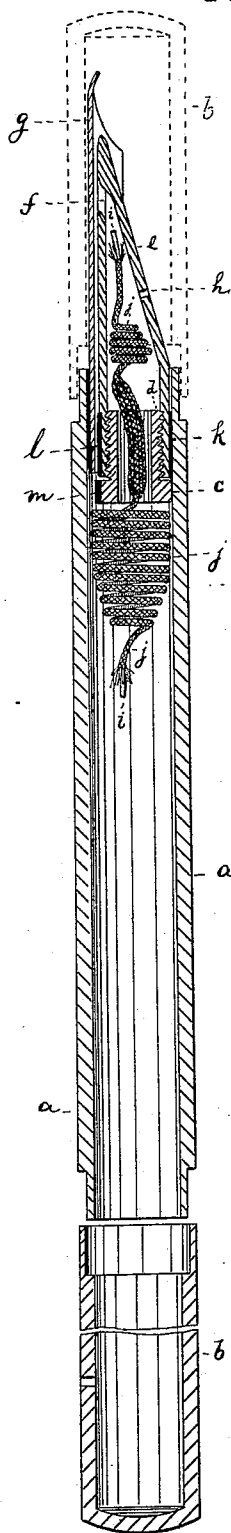


FIG. I.

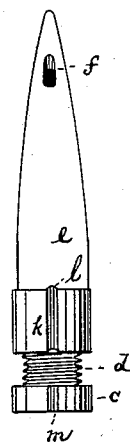
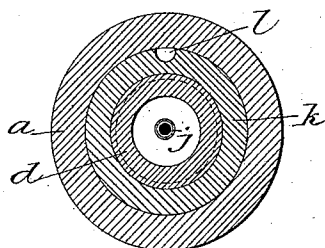


FIG. II.

Fig. 3.



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FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 337,610, dated March 9, 1886.

Application filed January 27, 1886. Serial No. 189,901. (No model.)

To all whom it may concern:

Be it known that I, NOYES F. PALMER, of Jamaica, Queens county, State of New York, have invented a new and Improved Fountain-Pen, of which the following specification is a full, clear, and exact description.

This invention relates to a fountain pen of novel construction, and designed to produce a steady flow of ink from the reservoir to the pen.

The invention consists in the various elements of improvement hereinafter more fully pointed out.

In the accompanying drawings, Figure I is a longitudinal central section of my improved fountain-pen. Fig. II is a side view of the plug and tip, partly unscrewed. Fig. III is an enlarged cross-section through collar *k*.

The letter *a* represents the tubular handle or ink-reservoir, open at one and closed at the other end. A cap, *b*, may be applied to either end of this handle, as customary. Within the open end of the handle there is inserted a hollow plug, *c*, retained within the handle by frictional contact and provided with an outwardly-projecting hollow screw-stem, *d*. This screw-stem is embraced by one end of a tapering tip, *e*, which is perforated longitudinally, to constitute an ink-passage. The perforation within tip *e* opens on the upper side of the tip, as at *f*, directly below the pen *g*.

h is a vent-opening entering the ink-passage of tip *e*, and designed to create the desired air-pressure.

Through the tip *e* and through the plug *c* there extends into the handle *a* a fine piece of wire, *i*, which is enveloped by a covering of silk or other woven fabric, *j*. The wire *i* is within handle *a* formed into a coil, as shown; but it may also be coiled at its outer end.

The wire with its covering constitutes the ink-conveying mechanism.

The coiled inner end of the wire has for its object to divide the ink at the mouth of the

reservoir, when it should become somewhat settled. If the ink has become so thick as to cause a defective flow, a tapping of the pen-holder will cause the coils to vibrate and to thereby break up small sediments of ink. The inner end of tip *e* is provided with an enlargement or collar, *k*, which has a channel or groove, *l*, on its upper side, extending from end to end. This groove is in line with a groove, *m*, in plug *c*, which likewise extends from end to end. The two grooves form combined a narrow passage for the ink from the space below the pen to the reservoir.

When the pen-holder is to be put away after use, it is placed in an upright position, pen up, and thus the spare ink beneath the pen will flow back into the reservoir. Thus the ink will not dry upon the pen.

I do not broadly claim to have invented a fountain-pen provided with a wire for conveying the ink from the reservoir to the tip, as such a construction is shown in Patents Nos. 222,959 and 254,174, granted to W. W. Stewart, December 23, 1879, and February 28, 1882, and in Patent No. 47,432, granted to R. J. La Mothe, April 25, 1865; but

I do claim—

1. The combination of reservoir *a* with tip *d*, and with wire *i*, provided with covering *j* and coiled within the reservoir, substantially as and for the purpose described.

2. The combination of reservoir *a* with tip *e*, having collar *k*, which is provided with groove *l*, and with the coiled wire *i*, having covering *j*, substantially as specified.

3. The combination of reservoir *a* and tip *e*, having grooved collar *k*, with grooved plug *c*, having screw-stem *d*, and with the wire *i*, extending from the reservoir into the tip, substantially as set forth.

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Witnesses:

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