

No. 776,951.

PATENTED DEC. 6, 1904.

J. SINNOTT.
FOUNTAIN PEN.

APPLICATION FILED MAR. 16, 1904.

NO MODEL.

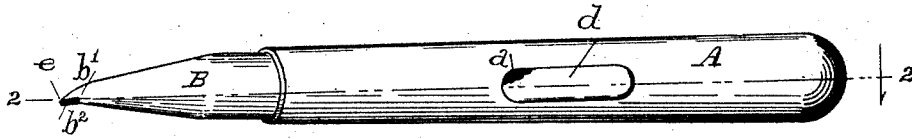


FIG. 1.

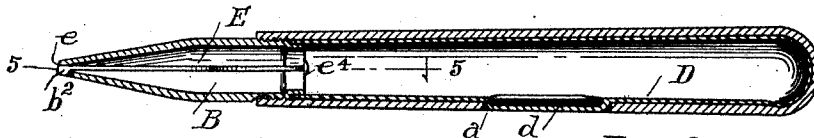


FIG. 2.

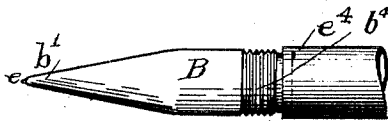


FIG. 3.

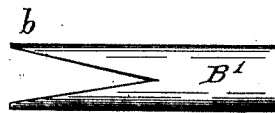


FIG. 4.

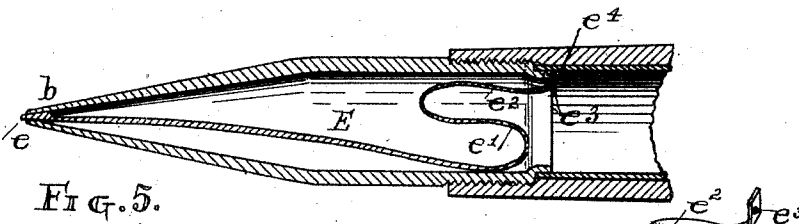


FIG. 5.

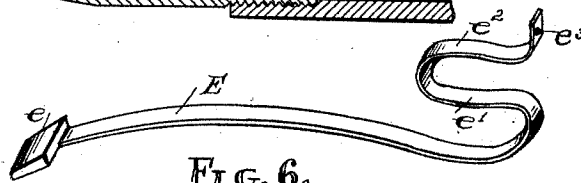


FIG. 6.

Witnesses

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FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 776,951, dated December 6, 1904.

Application filed March 16, 1904. Serial No. 198,368. (No model.)

To all whom it may concern:

Be it known that I, JAMES SINNOTT, a citizen of the United States, residing at Chatham, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Fountain-Pens, of which the following is such a full, clear, and exact description as will enable others skilled in the art to which it appertains to make and use my said invention.

My invention relates to fountain-pens of that class in which the interior of the pen-handle serves as a reservoir to contain a supply of ink.

The purposes of my invention are to provide a fountain-pen so constructed and arranged that the pen proper, in conjunction with a compressible ink-container situated within the pen-handle, may serve as a reservoir to contain a supply of ink and so constructed and arranged that the fountain-pen may be equally serviceable as a marking-pen or as an ordinary writing-pen; to provide means whereby pressure may be applied on the ink in the compressible ink-container, so as to force it outward and remove any dried ink or other obstruction between the nibs of the pen, which would retard the flow of ink or otherwise prevent free action of the pen-point; to provide a cylindrical pen having an interior ink-chamber in the pen proper; to provide an ink-container of improved construction; to provide means for regulating the flow of ink, and to provide simple and effective means for mounting the pen and the ink-container in the pen-handle.

With these ends in view my invention consists in the novel features of construction and combinations of parts shown in the annexed drawings, to which reference is hereby made and hereinafter particularly described and finally recited in the claims.

Referring to the drawings, Figure 1 is a perspective view of the complete pen. Fig. 2 is an enlarged longitudinal section on the line 2 2 of Fig. 1. Fig. 3 is a side elevation of the pen proper detached. Fig. 4 is a side elevation of the blank from which the pen is formed. Fig. 5 is a vertical section on the

line 5 5 of Fig. 2 greatly enlarged, and Fig. 6 is an enlarged perspective view of the feed-spring detached.

Similar reference-letters designate like parts in the several views.

The pen-handle A is a tapering cylinder, preferably of hard rubber or other non-corrosive material, and has an elliptical opening *a*, through which pressure may be applied to the compressible ink-container D, as hereinafter explained. The opening *a* may be situated in any convenient position on the pen-handle.

The cylindrical pen B screws into or is otherwise suitably connected with the handle A.

One end of the container D is closed, and the other end is open and surrounds the inner end of the pen proper.

A slight protuberance *d* on the container projects through the opening *a* in the handle so that its outer surface is flush with the outer surface of the handle.

The pen B is in the form of a cylinder having a flattened and tapering part. The pen is preferably formed from a light tubular blank, of suitable non-corrosive material, such as brass, silver, &c.

The blank B' has two integral segmental members *b*, which in the course of manufacture are pressed together and flattened to produce a tapering and flattened pen-point *b'*, as shown in Figs. 1 and 2.

In forming the pen from the blank B' the parts *b* are pressed together until their straight edges contact with each other. The two parts are then brazed together along one side down to the point of the pen and along the other side are brazed together approximately four-fifths of their length, leaving at the end and at one side of the pen-point a slit *b''*, in which the lower end of the feed-spring fits and through which the ink passes.

I have shown the pen B as having a screw-threaded part *b⁴*, which screws into the handle; but the pen may be connected with the handle in any other suitable manner.

The slitted side of the pen-point is slightly rounded, so as to move freely on the paper in writing when the pen is held with the slit

in the end of the pen approximately vertical to the paper on which the writing is done. The pen is preferably used in this position for ordinary writing.

5 When using the pen for marking, it is placed on the paper or article to be marked so that the slit across the end of the pen-point lies on the surface of the paper.

10 A light spring E, of bronze or other suitable springy non-corrosive metal, has a chisel-shaped point *e* fitting loosely in the slit *b*² in the end of the pen. It also has a downwardly-bent part *e*¹, a reverse or upwardly-bent part *e*², and a laterally-extending part *e*³.

15 A pin *e*⁴ or other suitable securing device secures the part *e*³ on the end of the tubular pen B.

20 The part *e* projects very slightly through the slit *b*². When the pen is used in writing, the pressure on the pen-point pushes the end of the spring E upward, and when the pressure is removed from the part *e* the springy parts *e*¹ and *e*² act to push the part *e* outward.

25 It will be seen then that there is constant vibration of the spring E during the operation of writing and that this vibration serves to keep the slit at the point of the pen open, so that there is a regular and even flow of ink. Furthermore, when the pen is not in
30 use the part *e* closes the slit in the end of the pen, so as to prevent leakage of ink.

The interior of the pen B is an inclosed chamber adapted to contain ink.

35 The container D surrounds the upper end of the pen, and there is free communication between the interior of the container and the ink-chamber of the pen.

40 If from any cause the point of the pen becomes obstructed, it is only necessary in order to remove the obstruction to press upward the part *e* of the spring E, so as to open the slit in the pen-point, and then to press on the protuberance *d* with the thumb, thereby producing within the ink-container pressure
45 sufficient to force the ink out and cleanse the pen-point.

50 The form of the spring E is such that its action is equally effective when the instrument is used as a marking-pen with the transverse slit at the pen-point approximately parallel to the paper or whether it is used as an ordinary writing-pen with transverse slit of

the pen-point approximately vertical to the plane of the paper.

When the point of the pen is flat on the paper, it makes a relatively wide mark. When the rounded edge of the pen is on the paper, the pen makes a narrow mark, such as is desirable in ordinary writing.

60 With a little practice the pen may be manipulated so as to make broad lines, narrow lines, or lines of intermediate widths at pleasure.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fountain-pen, the combination of a pen cylindrical in its upper part and flattened and tapering in its lower part and having at its tapering and flattened end a slit transverse to the tapering part of the pen and extending through the end and through one wall thereof, the point of the pen being slightly rounded on the side adjacent to the slit in the wall of the pen, a spring mounted to vibrate within said pen and having a chisel-shaped point fitting loosely in the slit in the end of the pen and projecting slightly through the slit in the wall of the tapering part of the pen, and an ink-reservoir connected with said pen, all so constructed and arranged that when the lower edge of the chisel-shaped part of the spring contacts with the paper the pen will produce a relatively wide mark and when the corner of the side edge of the chisel part of the spring contacts with the paper the pen will make a narrower mark, as set forth.

2. A pen cylindrical in its upper part and tapering and flattened in its lower part and having at its tapering and flattened end a slit extending through the end and through the wall of the tapering part of the pen, said pen being formed from a tubular blank having two diametrically opposite tapering segmental members pressed together and united to form the tapering and flattened part of said pen, as set forth.

In witness whereof I have hereunto subscribed my name, at Chatham, Illinois, this 7th day of March, 1904.

JAMES SINNOTT.

Witnesses:

T. R. BUTLER,
W. I. ALDRICH.