

No. 814,990.

PATENTED MAR. 13, 1906.

J. SINNOTT.
FOUNTAIN PEN.
APPLICATION FILED JAN. 27, 1905.

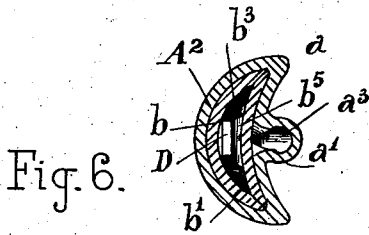


Fig. 6.

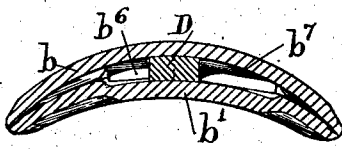


Fig. 5.

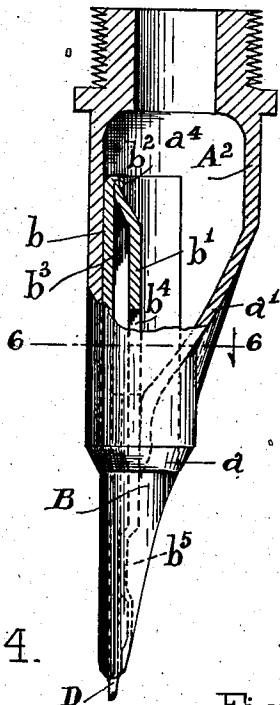


Fig. 4.



Fig. 1.

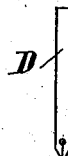


Fig. 7.

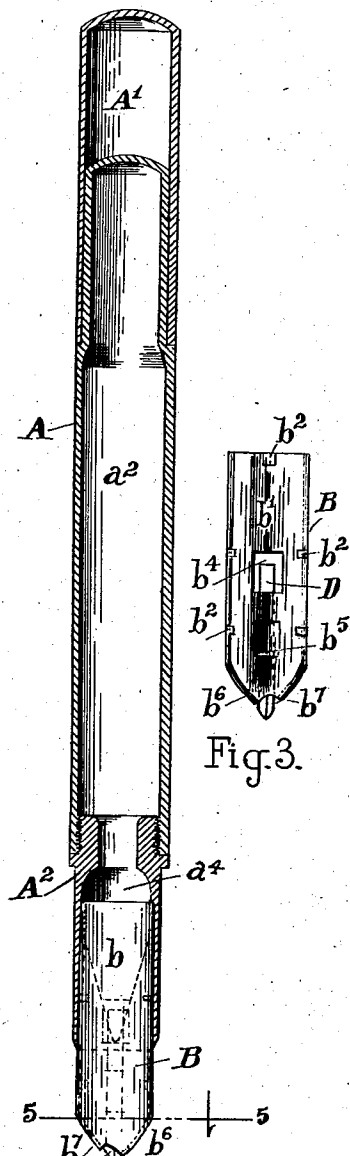


Fig. 2.

Fig. 3.

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JAMES SINNOTT, OF CHATHAM, ILLINOIS.

FOUNTAIN-PEN.

No. 814,990.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed January 27, 1905. Serial No. 242,858.

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 pens which have an ink-reservoir in the pen-handle.

The purposes of my invention are to provide, in connection with a holder having an ink-reservoir, a pen of improved construction having an inclosed ink-chamber communicating with the ink-reservoir in the holder; to provide means for controlling the flow of the ink from the reservoir in the holder into the chamber in the pen; to provide a detachable tongue having nibs which may be conveniently inserted in or removed from the pen; to provide simple and effective means for retaining the tongue in the pen, and to provide means adapting the pen for making marks of three different widths—namely, a fine line, such as is commonly used in writing, a fine line and a somewhat heavier line adjacent thereto, such as is commonly used by bookkeepers in ruling at the foot of columns when accounts are balanced or closed, and a fine line and a relatively wide line, such as is commonly used by draftsmen for the borderline of maps or the like. By reason of the diversity of lines described the pen is also very effective in ornamental lettering or scrollwork.

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 in which similar reference-letters designate like parts in the several views.

Referring to the drawings, Figure 1 is an elevation of the fountain-pen complete. Fig. 2 is an axial section through the holder and shows the pen in position in the holder, the convex upper side of the pen being visible. Fig. 3 is a plan of the pen detached looking at the concave under side of the pen. Fig. 4 is an enlarged combined side elevation and sectional view of the pen-socket and the pen in position in the socket. Fig. 5 is a greatly-enlarged transverse section through the pen on the line 5 5 of Fig. 2. Fig. 6 is an enlarged transverse section on the line 6 6 of

Fig. 4. Fig. 7 is a plan of the tongue detached.

The holder A is preferably a hard-rubber tube; but other non-corrodible material may be used. A cap A' fits on the handle and incloses the pen when not in use. When in use, the cap fits on the upper end of the holder in the usual manner. The pen-socket A² screws into the lower end of the handle and has an interior chamber a⁴ communicating with the reservoir a². The lower part of the socket is curved, as at a, Figs. 4 and 6, to fit snugly around the shank of the pen, and the pen fits in and closes the opening in the lower end of the pen-socket A². The intermediate part a' of the member A² gradually contracts and converges toward the part a, and the converging part of the member A² forms a duct or channel a³, leading the ink from the reservoir a² in the holder into the ink-chamber b³ in the pen.

The pen B consists of two concavo-convex plates b and b', tapering and converging to a point. Ears b² on the plate b turn back against the plate b', so as to hold the plates together. The inner plate b' is somewhat less concave than the outer plate b, and the space between the plates forms a chamber b³, adapted to contain ink. In the inner plate b' is an elongated opening b⁴, through which ink is admitted into the chamber. The pen is closed at its upper end, as shown in Fig. 4, so that ink cannot pass directly into the chamber through the end of the pen, but must be admitted through the opening b⁴ in the under side of the pen.

When the pen is in the socket A², the opening b⁴ is in line with the duct a³, and the quantity of ink flowing from the duct through the opening b⁴ into the chamber b³ of the pen may be varied at pleasure merely by sliding the pen upward or downward in the socket, so as to increase or diminish the extent of the opening, thereby correspondingly increasing or diminishing the flow of ink. This feature is of great practical advantage, because if the ink flows too fast the pen may be slid outwardly to diminish the flow, and if it flows too slow the pen may be pushed inward to increase the flow.

The pen may be made of hard rubber or non-corrodible metal or other suitable material.

In the central part of the plate b' is a longitudinal depression b⁵, which serves to retain the tongue D in the pen, as hereinafter ex-

plained. The tongue D fits between the plates *b* and *b'* of the pen and is held in place therein by the metal of the plate *b* pressed inward to form the depression *b⁵*. The tongue is kept in place by friction with sufficient firmness to avoid accidental displacement of the tongue, but permitting the tongue to be slid inward or outward to adjust the nibs to suit the convenience of the user. This feature is of great practical advantage, because it admits of the use of a minimum quantity of gold or other precious metal in the construction without impairing the effectiveness of the pen.

Along the edges of the pen B at its lower end and adjacent to the tongue D are slits *b⁶* and *b⁷*. These slits are of different lengths, and the lower ends of the slits are at different distances from the axis of the tongue, so that when the pen is turned edgewise for the purpose of ruling, as hereinafter described, the longer slit *b⁷* will make a wider mark than would be made by the shorter slit *b⁶* on the opposite side. The inclination of the slits to the axis of the tongue D is such that if either edge of the pen be placed in contact with the paper the entire length of the slit in that edge will contact with the paper. In writing the point of the pen is placed on the paper, and the pen is used in the usual manner. In ruling a double line, such as a ledger-ruling, the pen will be held with the edge contacting with the paper, so that the point of the pen and the corresponding slit *b⁶* will apply the ink to the paper. In ruling a double-border line the opposite edge with the wider slit *b⁷* will be used in the same manner.

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

1. A fountain-pen comprising a holder hav-

ing an ink-reservoir, a pen having an ink-chamber communicating with said ink-reservoir and having in its edges slits of different lengths; and a tongue mounted on said pen and cooperating with the slits in said pen, to produce double lines of different widths.

2. A pen having an ink-chamber, also having in its edges slits of different lengths and an opening to supply ink to said ink-chamber; in combination with an elongated removable pen-tongue mounted and slidable in the ink-chamber of said pen.

3. A pen comprising an outer concavo-convex plate; an inner concavo-convex plate having an opening and a depression; and a tongue retained in position between said plates by contact with the walls of said depression.

4. In a fountain-pen the combination of a holder having an ink-reservoir, also having a pen-socket provided with an interior chamber in communication with said ink-reservoir and also having a lower curved part adapted to fit around the shank of a pen and a contracting ink-duct leading from the chamber in the socket and adapted to conduct ink to the pen fitting in the pen-socket, and a pen having an ink-chamber and an opening communicating with the ink-chamber of said pen, said pen being slidable in said socket to vary the extent of the opening communicating between the duct of the pen-socket and the ink-chamber of the pen to control the flow of ink through the pen.

In witness whereof I have hereunto subscribed my name, at Springfield, Illinois, this 23d day of January, 1905.

JAMES SINNOTT.

Witnesses:

LYMAN L. BROWNE,
MARGARET McDONALD.