

(No Model.)

W. A. LEARY.
FOUNTAIN PEN.

No. 500,811.

Patented July 4, 1893.

Fig. 1.

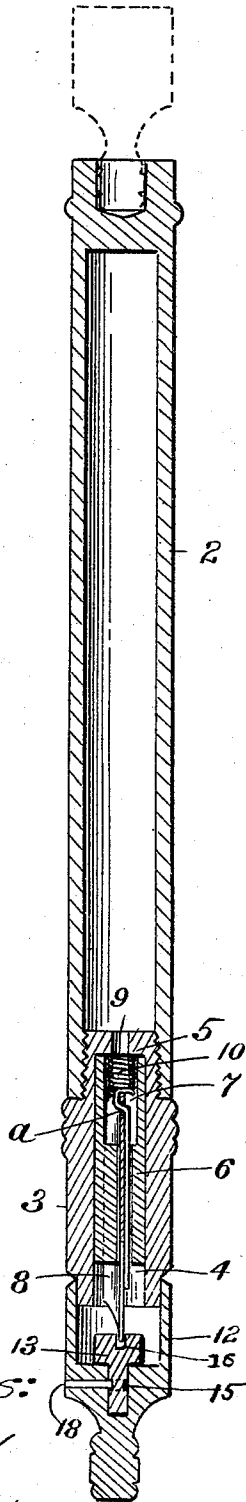
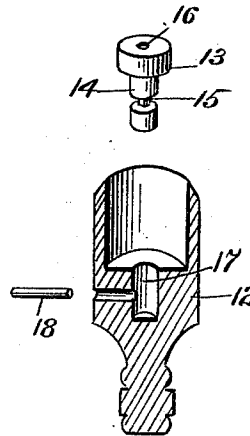


Fig. 2.



Witnesses:

John T. Lafferty
H. J. Clements

Inventor,
William A. Leary
By *Chapman*
Attys

UNITED STATES PATENT OFFICE.

WILLIAM A. LEARY, OF HOLYOKE, MASSACHUSETTS.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 500,811, dated July 4, 1893.

Application filed February 4, 1893. Serial No. 460,989. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. LEARY, a citizen of the United States, residing at Holyoke, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Fountain-Pens, of which the following is a specification.

The object of this invention is, to provide for fountain pens in which the writing pen is longitudinally movable in the tip-section, and outwardly by a spring behind the pen, and inwardly by contact with the tip-closing cap, when the latter is put upon the tip, an improved tip-cap or plug for closing the tip and holding the pen in a retired position within the case, all as hereinafter fully described.

In the drawings forming part of this specification, Figure 1 is a central, longitudinal section of a fountain pen, embodying the construction above referred to and having applied thereto a cap or plug for closing the tip constructed according to my invention. Fig. 2 illustrates, in perspective view, the several parts of the tip-plug and cap separated from each other.

In the drawings 2 represents a barrel or reservoir constructed, substantially as usual, of hard rubber or other non-corrosive material, and 3 represents the tip. The tip is of the general cylindrical or tubular form jointed to the lower end of the reservoir by screwing thereinto, as is usual, and the passage, 4, therethrough extends from end to end, the same being contracted at the upper end to form the seat, 5. A plug, 6, is fitted into the passage, 4, of the tip sufficiently close to remain therein for practical purposes, but is removable for cleaning and purposes of repair, the plug having a chamber, 7, in its upper end and a longitudinal passage leading from said last named chamber through the plug to its lower end, which chamber is of suitable form to permit of passing the pen, 8, through it, as shown. An ink passage, 9, is formed through the said seat, 5, at the upper end of the tip, 3, which communicates with said chamber 7, therein. The pen, 8, shown in section in Fig. 1, has its point extending below the lower end of the tip, even when the tip-plug is on the latter, as there shown, and the body of the pen passes loosely through said

longitudinal passage in the plug, 6, its upper end, when the tip-plug is on, reaching into the chamber, 7, of the plug, 6. A spiral spring, 10, is located in said chamber, 7, having one end bearing against the under side of the seat, 5, and having its lower end extending transversely through the perforated pen-shank at *a*, and thence angularly turned and extended along the back of the pen within said passage to a point a little above the point of the pen, as shown. Said spring, 10, serves to eject the pen when the cap or plug, 12, which closes the tip, is removed, thus bringing the point of the pen sufficiently far beyond the end of the tip, 3, to render it convenient to write.

Heretofore in using a fountain pen of this construction I have employed a tip-cap having an inner base which pressed against the point of the pen when the cap was placed upon the tip, which impinged directly against the pen-point, and in turning said cap more or less to put it on, I found that there was more or less danger of displacing the nib parts of the pen, and, consequently, I have devised the below described swiveling base for the tip-cap, 12, which has no turning motion when pressed against the point of the pen to slide it upward to the position shown in Fig. 1, but how much soever the outer portion of the tip-plug may be turned to put it on or remove it that part of the base of the plug which bears against the point of the pen has no rotary movement, and hence there is no danger of injuring said points. The said cap, 12, is adapted, separately, to be retained on the end of the tip, 3, in the position shown, frictionally. The base proper of said cap does not come in contact with the point of the pen, but I provide a supplementary base, 13, preferably of cylindrical form, as shown, having a shank, 14, thereon, around which is an annular groove, 15, and having in its upper face a suitable recess, 16, to receive the point of the pen. In the base of the cap, 12, a socket, 17, is formed of suitable dimension to receive loosely the said shank, 14, of the supplementary base, 13, so that when the latter is placed in said cap it takes the position shown in Fig. 1, it being therein so fitted that it turns freely. The said base, 13, is secured in the cap, 12, by a pin, 18, which passes through the side of the

cap, 12, one end of which enters the said annular groove, 15, in said shank, 14, thereby locking the said base, 13, into said cap. The above described construction of the cap and its supplementary base provides for the perfectly free rotation of either part independently of the other. Thus it will be clearly seen when the cap, 12, is placed against the point of the projecting pen, said point resting in the said recess in the swiveling base, 13, and the pen is pushed into the tip, 3, turning the cap, 12, or not, that the point of the pen can receive no injury, and that the latter is held in a safely guarded position while the pen is carried in the pocket.

The cap, 12, as indicated by dotted lines in Fig. 1, is, when not on the tip of the pen, carried at the upper end of the barrel, as is usual in such constructions.

What I claim as my invention is—

1. In a fountain pen of the class herein described in which the writing pen has a free longitudinal movement within the tip there-

of, as described, the combination with said tip and the writing pen, of a cap fitting said tip, and a supplementary base for said cap against which the point of the writing pen impinges, having a free swiveling movement within said cap, substantially as set forth.

2. In a fountain pen of the class herein described in which the writing pen has a free longitudinal movement within the tip thereof, as described, the combination with said tip and the writing pen, of a cap fitting said tip having a socket in the base thereof, a supplementary base for said cap against which the writing pen impinges, having a shank thereon in which is an annular groove, freely entering said socket, and a pin in said cap having one end entering said groove, substantially as set forth.

WILLIAM A. LEARY.

Witnesses:

H. A. CHAPIN,
K. I. CLEMONS.