

No. 819,294.

PATENTED MAY 1, 1906.

H. B. LEVY.
FOUNTAIN PEN.

APPLICATION FILED AUG. 22, 1905.

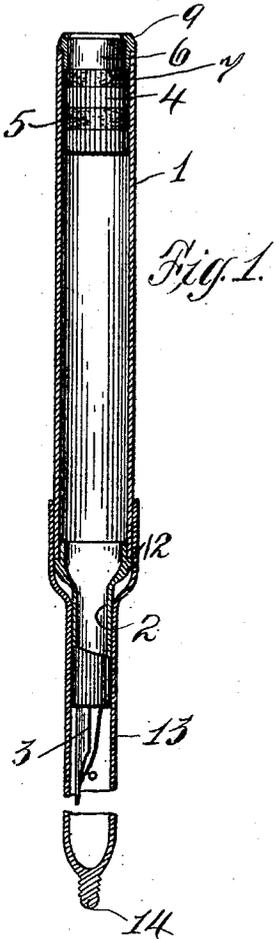


Fig. 1.

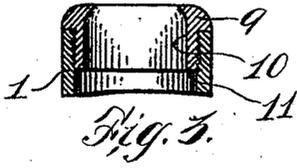


Fig. 3.

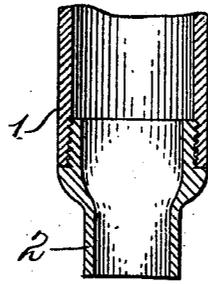


Fig. 4.

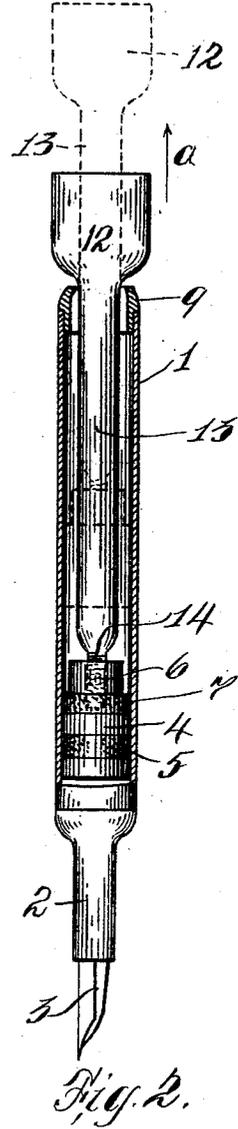


Fig. 2.

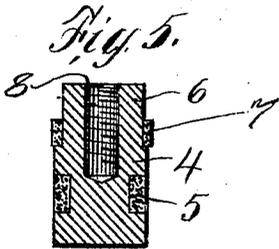


Fig. 5.

Witnesses
C. A. Jarvis.
Haskell Corbenthal

Inventor
Henry B. Levy.
By his Attorney
Maurice Block

UNITED STATES PATENT OFFICE.

HENRY B. LEVY, OF NEW YORK, N. Y.

FOUNTAIN-PEN.

No. 819,294.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed August 22, 1905. Serial No. 275,216.

To all whom it may concern:

Be it known that I, HENRY B. LEVY, a resident of New York city, county and State of New York, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

My invention relates more particularly to that class of fountain-pens known as "self-filling" fountain-pens—that is to say, pens of this character which are filled with ink without the aid of separate ink-fillers; and my invention has for its primary object to provide a fountain-pen of this character which dispenses with the rubber or compressible sacks generally employed in such self-filling fountain-pens and yet which may readily be supplied with ink by means embodied in the barrel and cap usual in fountain-pens. The compressible sacks for containing the ink employed in self-filling fountain-pens now in use rapidly deteriorate and besides have the objectionable feature of taking up considerable space within the barrel, thus permitting but a limited supply of ink.

My invention is adapted to obviate these difficulties; and to these and other ends, which will hereinafter appear, it consists in the novel features of improvement and combination and arrangement of parts, which I will now proceed to describe and finally claim.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a longitudinal central section of a fountain-pen embodying my improvements. Fig. 2 is a similar view showing the pen ready for filling, the contracted portion of the cap being shown inserted into the pen-barrel and its end attached to the plunger. Fig. 3 is a detail sectional view of the head portion of the barrel. Fig. 4 is a similar view showing the connection of the barrel and nozzle section, and Fig. 5 is a longitudinal central section of the plunger.

Like numerals of reference indicate corresponding parts in the several views.

In the drawings, 1 indicates the barrel of my fountain-pen, and 2 the nozzle-section thereof connected to the barrel in the usual manner, 3 indicating the usual pen and feeder-bar. Within the barrel 1 is a piston or plunger 4, the same being provided with a packing-ring 5 of suitable material and is also provided with a contracted portion or lug 6, about which is contained a washer 7 of suitable material for the purpose of keeping the

bore of the barrel clean and also assisting in providing a tight working fit of the plunger. The upper portion of the plunger 4 is provided with a threaded socket 8 for a purpose presently to be explained. The upper end of the barrel is provided with a removable head 9 in order that the piston may be withdrawn without necessity of removing the nozzle-section 2 in case such removal is desired. The head 9 is provided with an opening 10, which is approximately of the same diameter as the lug 6 of the plunger 4, a shoulder 11 being thereby formed, against which the piston 4 will strike when drawn to its fullest outward extent.

12 indicates the cap of my pen, the same having an elongated contracted portion or neck 13, the neck being hollow and being approximately of the same diameter as the contracted portion of the nozzle-section 2 in order to permit of proper covering and protection of the pen. (See Fig. 1.) The neck 13 of the cap is provided at its extremity with a threaded portion 14, which is adapted to engage the threaded socket 8 of plunger 4, as shown in Fig. 2.

In order to fill the pen with ink the plunger 4 is depressed, as shown by full lines in Fig. 2, the cap having been removed and the threaded end 14 thereof inserted into the opening or socket 8 of the plunger. By pulling the piston outwardly in the direction of the arrow *a* a suction is created, whereby the ink is forced into the barrel, (it being of course understood that the pen has been inserted into an ink-supply.) When the plunger is in its extreme outward position and the barrel filled with ink, as described, the cap is removed and may be utilized in the usual manner as a cover for the pen. The fitting of the plunger within the barrel is such that no leakage will occur, and it will be obvious that my improved pen may be refilled with one stroke of the piston.

It will be seen that by utilizing the cap of my pen as the piston-operating means I have produced a simplified self-filling fountain-pen overcoming the objectionable features hereinbefore referred to.

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

1. A fountain-pen comprising a barrel, a piston therein, and a pen-covering cap, said cap having an elongated neck adapted for insertion into the barrel and to be detachably

connected with the piston to act as a piston-rod therefor.

2. A fountain-pen comprising a barrel, a plunger therein having a threaded socket, and a pen-covering cap, said cap having a hollow neck adapted for insertion into the barrel to act as an operating-rod for the plunger, the neck having a threaded end adapted to engage the threaded socket in said plunger.

3. A fountain-pen comprising a barrel, a plunger therein provided with a threaded opening, a nozzle-section detachably secured to the barrel, a cap for the pen, said cap having a neck adapted to fit said nozzle-section and means for operating said plunger.

4. A fountain-pen, comprising a barrel, a plunger therein, an open head detachably secured to the outer end of the barrel, the opening in said head being smaller than the bore of said barrel, a nozzle-section detachably secured to said barrel, a cap for the pen, the cap having a tubular neck adapted to fit the nozzle-section, and means carried by said neck for operating the plunger.

5. A fountain-pen, comprising a barrel, a plunger therein provided with a threaded socket, a head having an opening detachably secured to the outer end of the barrel, a nozzle-section detachably secured to said barrel, a cap for the pen, the cap having an elongated contracted portion and a threaded end adapted to engage the threaded socket of said plunger.

6. In a fountain-pen, the combination of a barrel, a plunger therein, said plunger provided with a packing and a lug smaller in diameter than said plunger, a washer upon said

lug adapted to fit the bore of the barrel, a cap for the pen, and means carried by the cap for operating the plunger.

7. In a fountain-pen, the combination of a barrel, an open head detachably secured to the end of said barrel, the opening in said head being smaller in diameter than the bore of the barrel, a plunger in said barrel, said plunger provided with a packing adapted to fit the bore of said barrel, and said plunger having a threaded socket, a cap for the pen, the cap having a contracted elongated portion provided with a threaded end adapted to engage the threaded socket in said plunger.

8. In a fountain-pen, the combination of a barrel, having a head detachably secured thereto, the head provided with an opening, a plunger in said barrel having a threaded opening and provided with a packing and a lug smaller in diameter than said plunger, a washer upon said lug fitting the bore of said barrel, a nozzle-section carried by the barrel, a cap for said pen, the cap being provided with a contracted threaded portion adapted to engage the threaded opening in the plunger for operating same.

9. In a fountain-pen, the combination of a barrel, a plunger therein, means for limiting the outward stroke of said plunger, and a cap for the pen, the cap having an elongated hollow neck, said neck being adapted to cover the pen-point and to act as a detachable operating-rod for the plunger.

HENRY B. LEVY.

Witnesses:

ALLEN CAMTHERD,
HASKEL COREHTHAL.