

D. J. LA FRANCE.
SELF FILLING FOUNTAIN PEN.
APPLICATION FILED MAY 1, 1916.

1,209,978.

Patented Dec. 26, 1916.

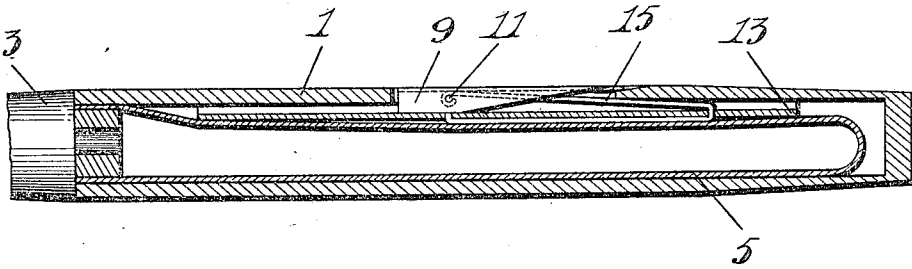


Fig. 1.

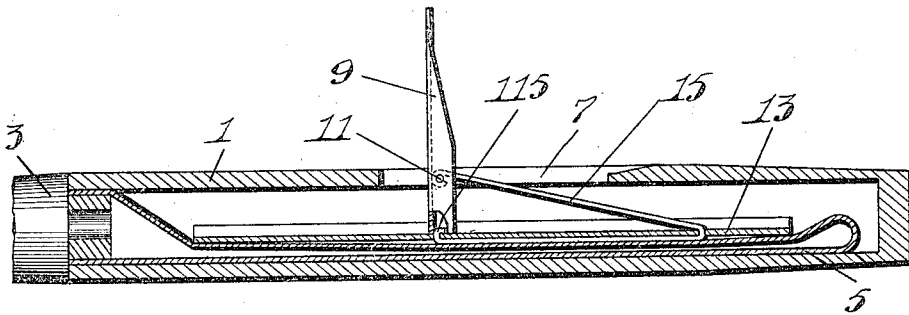


Fig. 2.

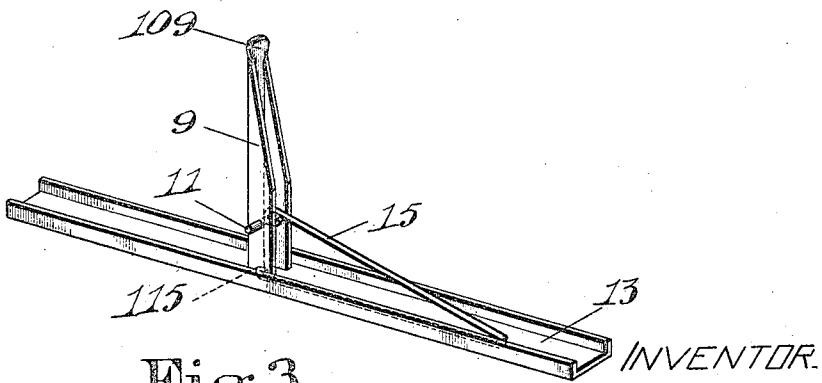


Fig. 3.

INVENTOR.
David J. La France
by Fred W. Gubord
att'y

UNITED STATES PATENT OFFICE.

DAVID J. LA FRANCE, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR TO CHARLES BRANDT, OF BOSTON, MASSACHUSETTS.

SELF-FILLING FOUNTAIN-PEN.

1,209,978.

Specification of Letters Patent. Patented Dec. 26, 1916.

Application filed May 1, 1916. Serial No. 94,676.

To all whom it may concern:

Be it known that I, DAVID J. LA FRANCE, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Self-Filling Fountain-Pens, of which the following description, in connection with the accompanying drawings is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to self-filling fountain pens and is herein illustrated in connection with a self-filling fountain pen in which the ink reservoir is compressed by manipulating a lever which is pivoted to the barrel of the pen.

It is desirable in self-filling pens that a spring be provided for raising the presser bar when the pressure upon it is released and to hold the presser bar in raised position while the pen is being used. The space inside the barrel of such a pen is limited, and for this reason it is desirable that as little space as possible be taken up by the spring and the compressing mechanism when the ink reservoir is full, since otherwise the effective capacity of the reservoir is decreased.

The general object of the present invention is to provide an improved construction and mounting of the spring, presser bar and lever so that these parts, which comprise the compressing mechanism, shall occupy a small space when in their inoperative positions.

A further object is to simplify the manufacture of the parts of the compressing mechanism as well as the assembling of the parts in the pen.

These and other objects of the invention will be described in connection with an illustrative fountain pen and pointed out in the appended claims.

Referring now to the accompanying drawing, Figure 1 is a vertical longitudinal section through an improved fountain pen showing the compressing mechanism in the normal position occupied while the pen is being used, the lever and the spring being shown in full; Fig. 2 is a similar section showing the lever raised and the reservoir collapsed preparatory to being filled with ink; Fig. 3 is a perspective of the lever, pivot, presser bar and spring removed from the barrel of the pen.

The barrel of the pen is indicated at 1, the pen section at 3 and the collapsible ink reservoir at 5, these parts being of any suitable well known construction. In the wall of the barrel is a slot 7 to receive a lever 9, said lever being pivoted to said barrel at 11. Between the slot 7 and the ink reservoir is a presser bar 13 having upstanding ribs. With the construction thus far described it will be clear that movement of the lever from the position shown in Fig. 1 to the position shown in Fig. 2 will collapse the ink reservoir preparatory to filling the pen, and that when the lever is returned to the position of Fig. 1, the presser bar will rise as ink is sucked into the reservoir. It is desirable, however, to provide a spring to raise the presser bar and hold it firmly in the position shown in Fig. 1 while the pen is being used as well as to provide a stop to limit the movement of the lever to the position shown in Fig. 2.

To this end a resilient member or spring 15 is connected to the barrel 1 and to the presser bar 13. The connection to the barrel is made by an eye in the end of the spring which encircles the pivot 11. From this point the spring extends to the right, then down through the presser bar at a point near one end thereof, then along the under side of the presser bar, then up through the presser bar at a point near the middle thereof where it ends in a stop 115 arranged to contact with the lever when said lever has been moved to operative position as shown in Fig. 2. It will be noted that the lever has wings or ribs at its sides so that it is substantially U-shaped in cross-section, and that these wings or ribs extend down over and partially inclose a portion of the spring when the parts are in inoperative position as shown in Fig. 1. The wings or ribs terminate near the upper or right hand end of the lever and at the extremity of the lever is a small finger piece 109 which normally lies in a beveled groove forming an extension of the slot 7 in the barrel, the purpose of this construction being to permit the operator to insert a finger nail beneath the end of the lever to raise it.

It will be particularly noted that as the lever is released and goes back to its normal inoperative position, the spring rises within the hollow of the lever and brings the presser

bar firmly up against the inside of the wall of the barrel thereby providing more ink space than in those constructions in which the whole spring lies between the inner wall of the barrel and the presser bar.

The construction which has been described above is simple, efficient and inexpensive to manufacture. At the same time the compressing mechanism, when in inoperative position, takes up a small space thereby permitting a large amount of ink to be sucked into the reservoir.

Although the invention has been set forth in connection with a particular construction it should be understood that the invention is not limited in the scope of its application to the particular construction shown and described except as set out in the claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A fountain pen comprising a barrel having an elongated slot in the wall thereof, a collapsible ink reservoir in said barrel, a presser bar located between said slot and said reservoir, a lever in said slot, a pivot extending into the walls of said slot intermediate the ends thereof by which said lever is connected to said barrel, and a spring fastened at one end to said pivot and at the other to said presser bar in such manner that the slot receives a portion of the spring.

2. A fountain pen comprising a barrel having an elongated slot in the wall thereof, a collapsible ink reservoir in said barrel, a presser bar located between said slot and said reservoir, a lever in said slot, a pivot extending into the walls of said slot intermediate the ends thereof by which said lever is connected to said barrel, and a spring fastened at one end to said pivot and at the other to said presser bar in such manner that the slot receives a portion of the spring, a portion of the spring being constructed and arranged to serve as a stop to limit the movement of the lever to operative position.

3. A fountain pen comprising a barrel having a slot in the wall thereof, a collapsible ink reservoir in said barrel, a presser bar located between said slot and said reservoir, a lever in said slot, a pivot by which said lever is connected to said barrel, and a resilient member connected to said pivot, extending down through said presser bar at a point near one end thereof, running along the under side of said presser bar and up through said presser bar at a point near the

middle thereof to form a stop to limit the movement of said lever to operative position.

4. A fountain pen comprising a barrel, a collapsible ink reservoir in said barrel, a presser bar located between said slot and said reservoir, a lever in said slot, a pivot by which said lever is connected to said barrel, and a resilient member connected to said pivot and to said presser bar, said lever being substantially U-shaped in cross section so that the sides thereof extend down past a portion of the resilient member when the lever is in inoperative position.

5. A fountain pen comprising a barrel having a slot in the wall thereof, a collapsible ink reservoir in said barrel, a presser bar located between said slot and said reservoir, said presser bar having upstanding ribs, a lever U-shaped in cross section, a pivot by which said lever is connected to said barrel, and a spring connected to said pivot and to said presser bar.

6. A fountain pen comprising a barrel having an elongated slot in the wall thereof, a collapsible ink reservoir in said barrel, a presser bar located between said slot and said reservoir, a lever movable in said slot, a pivot extending into the walls of said slot intermediate the ends thereof by which said lever is connected to said barrel, and a spring extending into the slot and fastened at one end to said pivot and at the other to said presser bar in such manner that the slot receives a portion of the spring, that portion which is received in the slot when the lever is in closed position being beneath that portion of the lever which may be raised to compress the reservoir.

7. A fountain pen comprising a barrel, a collapsible ink reservoir in said barrel, a presser bar located between said slot and said reservoir, a lever member in said slot and a resilient member connected to said pivot and to said presser bar, one of said two members being U-shaped to permit the other to nest within it.

8. A fountain pen comprising a barrel having a slot in the wall thereof, a collapsible ink reservoir in said barrel, a presser bar located between said slot and said reservoir, a lever in said slot, a pivot by which said lever is connected to said barrel, and a resilient member connected to said pivot and to said presser bar.

In testimony whereof I have signed my name to this specification.

DAVID J. LA FRANCE.