

No. 856,082.

PATENTED JUNE 4, 1907.

M. W. MOORE.
FOUNTAIN PEN.

APPLICATION FILED FEB. 23, 1907.

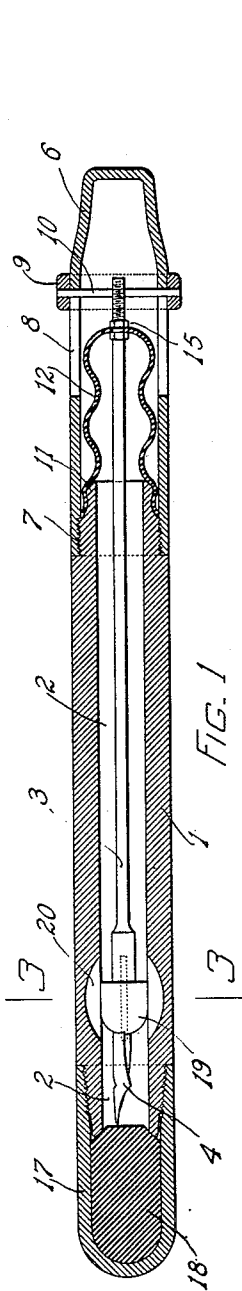


FIG. 1

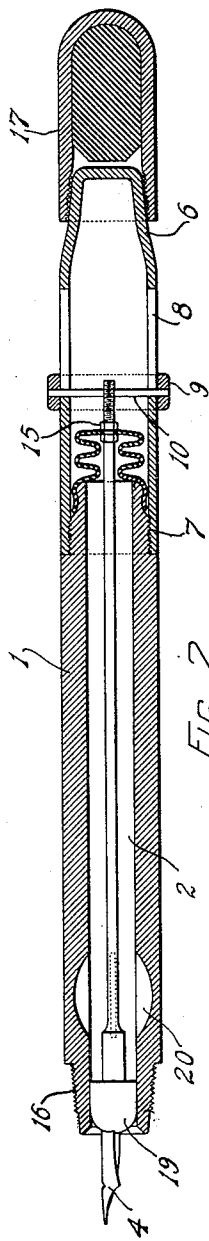


FIG. 2

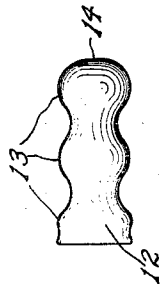


FIG. 3

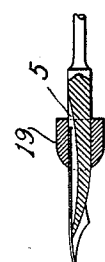


FIG. 4

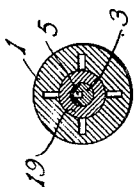


FIG. 5

WITNESSES
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UNITED STATES PATENT OFFICE.

MORRIS W. MOORE, OF EVERETT, MASSACHUSETTS, ASSIGNOR TO ATLANTIS FOUNTAIN PEN COMPANY, OF EVERETT, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

FOUNTAIN-PEN.

No. 856,082.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed February 23, 1907. Serial No. 358,805.

To all whom it may concern:

Be it known that I, MORRIS W. MOORE, of Everett, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

This invention relates to fountain pens, and particularly to pens of this class in which, by a relative movement of the parts, the ink chamber is opened for filling at the forward or pen end.

The object of the present invention is to provide a simple and efficient construction in which the pen point may be readily withdrawn into the chamber of the pen for protection and in which the filling of the pen will be provided for and the syringical effect overcome. To this end I have devised my present structure in which a by-pass is provided in the walls of the ink chamber so that a valve, tightly fitting the bore of the chamber throughout, may be moved therein freely and the ink be allowed to accommodate itself to such movements with like freedom.

This structure and the arrangement of the parts therein will be more fully set forth in the specification which follows and is illustrated in the drawings which form a part thereof in which,

Figure 1, is a longitudinal sectional view of a pen involving my invention and showing the pen withdrawn and the cap in place. Fig. 2, is a similar view showing the pen in position for use. Fig. 3, is a section on the line 3—3 Fig. 1. Fig. 4, is a section of the valve and stem; and, Fig. 5, is a view of the collapsible nipple.

1 is a pen barrel having a uniform cylindrical bore throughout from end to end.

3 is a pen bar having at one end the pen 4 to which an ink passage 5 leads along the pen bar.

At the rear end of the barrel is mounted a shell 6, united by screw-threads 7 to the barrel. The shell 6 is slotted at 8 and has slidably mounted thereon a band 9 which by a cross-pin 10 is attached to the pen bar 3. The pin 10 works in the slot 8 which is just long enough to allow it sufficient play to withdraw and protrude the pen point 4. At this end the exterior of the barrel 1 is reduced as at 11 and has slipped over it the nipple 12

which is formed with bellows like folds 13 which make it readily collapsible longitudinally. The end of the nipple is pierced as at 14 for allowing the pen bar 3 to pass through and is held ink tight thereon by any suitable means as the nuts 15.

At the front or pen end the barrel is threaded as at 16 and the cap 17 is correspondingly threaded.

18 is a stopper in the cap 17 for closing the mouth of the chamber 2.

19 is a valve on the pen bar 3 just above the pen end thereof, and 20 are a plurality of by-passes having a length on the surface of the chamber a little greater than the length of the valve so that when the pen is withdrawn, as shown in Fig. 1, each by-pass will be in communication with the chamber 2 at both sides of the valve so that the ink can freely pass from one side to the other of the said valve. This provides means for filling the pen when positioned as in Fig. 1, and with its cap removed and also allows the ink in advance of the valve to return to the other side thereof when the pen is pushed out, as shown in Fig. 2. To fill the pen therefore it is held pen end up and with the pen withdrawn the ink is turned into the chamber which it may fill both above and below the valve. If the pen is not to be used immediately the cap 17 is screwed on and the pen may then be carried in any position without leakage.

When it is desired to use the pen it is held pen end up and the cap 17 removed. The band 9 is then pushed up as far as it will go and the pen protruded. In the mean time any ink above the valve 19 has by the by-passes 20 transferred itself to the other side thereof.

What I therefore claim and desire to secure by Letters Patent, is:—

1. A pen of the class described, having a tubular chamber of uniform diameter throughout, a pen bar slidably mounted therein, a valve on the said bar fitting said chamber, said chamber having a longitudinally disposed slot in its wall of greater length than said valve so that when the pen is retracted the slot and valve form a by-pass.

2. A pen of the class described, having a tubular chamber of uniform diameter

throughout, a bar having a pen at one end and slidably mounted in said chamber, a valve on said bar in the rear of the pen and fitting said chamber, said chamber having a longitudinally disposed slot in its wall terminating near the mouth thereof and of greater length than said valve so that the slot and valve form a by-pass, when the pen is retracted.

3. A pen of the class described, having a tubular chamber of uniform diameter throughout, a pen supported therein, a valve mounted in the rear of said pen and fitting

said chamber, said chamber having a longitudinally disposed slot in its wall of greater length than said valve, and means for relatively positioning said chamber and said valve, so that said slot and valve form a by-pass when the pen is positioned within the chamber. 15

In testimony whereof I have affixed my signature, in presence of two witnesses. 20

MORRIS W. MOORE.

Witnesses:

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