

No. 874,897.

PATENTED DEC. 24, 1907.

M. W. MOORE.
FOUNTAIN PEN.

APPLICATION FILED MAR. 21, 1907.

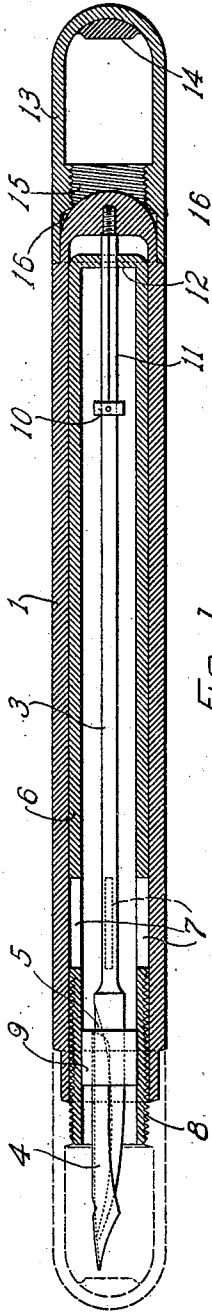


FIG. 1

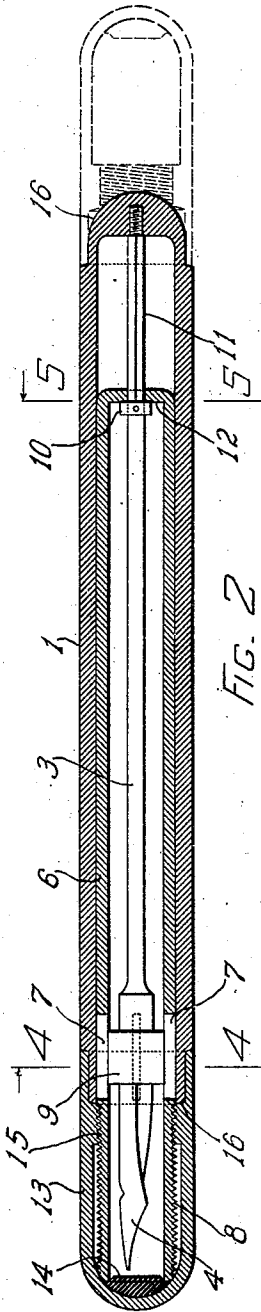


FIG. 2

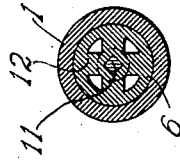


FIG. 5

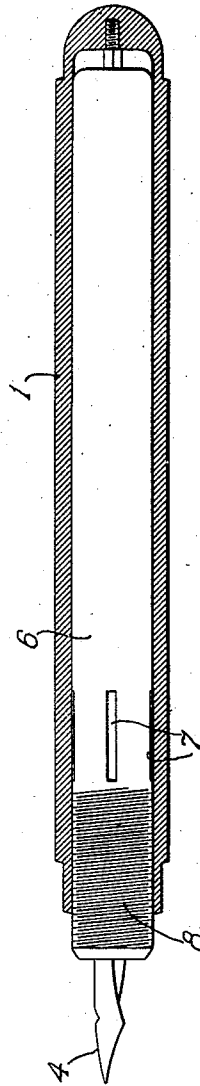


FIG. 3

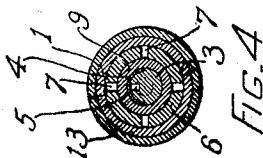


FIG. 4

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. 874,897.

Specification of Letters Patent.

Patented Dec. 24, 1907.

Application filed March 21, 1907. Serial No. 363,737.

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 fountain pens having an ink chamber accessible from the forward or pen end thereof. In pens of this type the efficiency thereof depends largely upon certain features on sealing ink and air tight when in a closed state and in the ready transfer of ink in the ink chamber. To secure this efficiency and certain other advantages in operation, I have devised my present pen which I will more fully disclose hereinafter and which I will illustrate by the structure shown in the accompanying drawing which forms a part of the specification hereof.

In these drawings; Figure 1, is a sectional view of a pen embodying my invention with the pen exposed for writing. Fig. 2, is a similar section with the sleeve pulled out. Fig. 3, a section of the barrel showing the sleeve in elevation. Fig. 4, a section on the line 4—4 Fig. 2, and Fig. 5, a section on the line 5—5 Fig. 2.

1 is a pen barrel having a bore of uniform diameter throughout, but terminating just short of one end to leave it closed.

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

Within the barrel 1 is slidably inserted a sleeve 6 open at both ends and having in its wall slots 7 which are located preferably near the forward or pen end. The sleeve 6 is threaded at its forward end as shown at 8.

The pen bar has near its pen end a valve 9 and near its opposite end a stop 10.

11 is a squared portion in the rear of the stop 10 adapted to cooperate with a squared opening in the spider 12 which crosses the end of the sleeve 6.

13 is a cap having a stopper 14 in the bottom thereof adapted to close the forward end of the sleeve 6 when it is in the position shown in Fig. 2.

15 is a thread on the interior of the cap 13 and adapted to engage the thread 8 on the sleeve 6.

16 is a shoulder on the cap to engage the end of the pen barrel 1.

The operation of the pen is as follows: In the position shown in Fig. 1 the pen, if filled, is in condition to write. To close the pen to carry it the cap 13 is removed from the rear end where it is shown in Fig. 1 and screwed onto the opposite end. As soon as the threads 15 on the cap have passed onto the threads 8 of the sleeve and the shoulder 16 has engaged the end of the barrel 1, the sleeve 6 will begin to be drawn out until it finally reaches the bottom of the cap 13 when it contacts with the stopper 14 which tightly seals it. In this position the spider 12 has reached the stop 10 so that the cap and sleeve can not be withdrawn by any further twist or pull. In this position the slots 7 which are slightly longer than the valve 9, allow the ink to pass freely from one side of said valve to the other and return quickly to the rear side of said valve when the pen is held pen end up, which is the position always used in opening or closing pens of this type.

When it is desired to fill the pen the sleeve 6 is pulled out, either wholly or in part by the screw engagement of the cap and the cap backed off and removed. The ink is then poured into the open end and running around the valve 9 through the slots 7 fills the barrel. The pen is now returned to condition to use by merely pushing in the slide 6. To close the pen the cap is screwed on again as above indicated.

Obviously various modifications in the sleeve shifting means may be made and other devices for the accommodation of the ink as well as in the form of sleeve, without departing from the spirit of my invention.

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

1. In a pen of the class described, a barrel, a pen held against movement therein, a valve in the rear of said pen and a movable member operatively associated with said valve and having a by-pass of greater length than said valve.

2. In a pen of the class described, a barrel, a pen held against movement therein, a valve in the rear of said pen, a movable sleeve having a by-pass of greater length than said valve and operatively associated with said valve, and means for positively moving said member.

3. In a pen of the class described, a barrel, a pen held against movement therein, a valve

in the rear of said pen and a movable sleeve between said valve and barrel and having a by-pass of greater length than said valve.

4. In a pen of the class described, a barrel 5 having a by-pass, a pen supported therein, a valve in the rear of said pen, said by-pass being of greater length than said valve, a cap for the end of the barrel, and means operable by said cap for securing relative positionings 10 of said valve and by-pass.

5. In a pen, a barrel, a shoulder on said barrel, a cap for the end of said barrel and rotatable thereon in longitudinal abutment with said shoulder, a movable member 15 within said barrel, and means for engage-

ment between said cap and member for moving said member longitudinally.

6. In a pen, a barrel, a shoulder on said barrel, a cap for the end of said barrel and rotatable thereon in longitudinal abutment 20 with said shoulder, a slidable member in said barrel, a threaded portion on said member and an engaging threaded portion on said cap for moving said member longitudinally.

In testimony whereof I have affixed my 25 signature, in presence of two witnesses.

MORRIS W. MOORE.

Witnesses:

WALTER L. CAME,
EDWARD N. GODING.