No. 888,955. PATENTED MAY 26, 1908.

W. F. BARRETT.

FOUNTAIN PEN.

APPLICATION FILED FEB. 18, 1908.

Fig. 1.

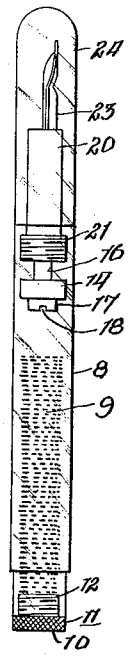


Fig. 2.

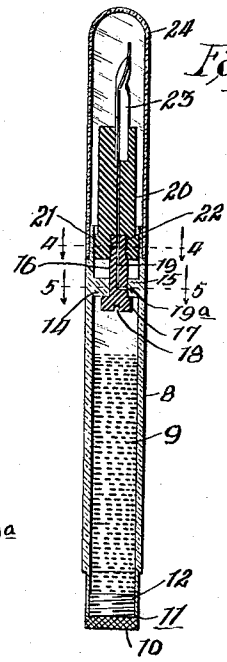


Fig. 3.

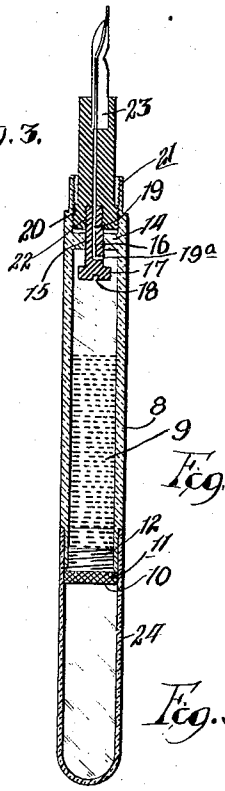


Fig. 6.

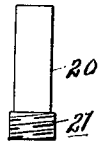


Fig. 4.

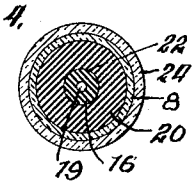


Fig. 7.

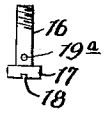


Fig. 5.

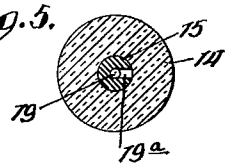
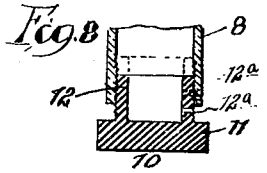


Fig. 8.



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UNITED STATES PATENT OFFICE.

WILLIAM F. BARRETT, OF CHICAGO, ILLINOIS.

FOUNTAIN-PEN.

No. 888,955. Specification of Letters Patent. Patented May 26, 1908.

Application filed February 18, 1908. Serial No. 416,566.

To all whom it may concern:

Be it known that I, WILLIAM F. BARRETT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

My improved fountain pen consists in part of an ink reservoir forming a part of the fountain pen, composed essentially of transparent, translucent, or sufficiently transparent material to enable the writing fluid therein to be readily observed and the exact level ascertained at any and all times.

The primary object of my invention is, to construct a fountain pen in such manner that the same may be readily filled with writing fluid, that all leakage or overflow, when not in use, or in the pocket, will be eliminated, even though carried upside down, or when subjected to undue jar, shaking, or shock of the severest character.

Another object is to coat the interior of the reservoir body with a suitable hydro-carbon grease, preferably vaseline, which serves the following purposes: to increase the transparency of the reservoir and to render the ink surface of the reservoir less susceptible to being coated with the ink or writing fluid.

The invention consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of my improved fountain pen when not in use; Fig. 2 a vertical section thereof with the ink supply shut off; Fig. 3 a similar view to Fig. 2, with the cap removed and the ink supply opened; Fig. 4 a transverse section, taken on line 4—4 of Fig. 2, looking in the direction of the arrow; Fig. 5 a transverse section, taken on line 5—5 of Fig. 2, looking in the direction of the arrow; Fig. 6 a side elevation of the movable feed section; Fig. 7 a side view of the fluid supply plug; and Fig. 8 a sectional detail of the end plug.

My improved fountain pen comprises, preferably, an elongated tubular ink reservoir 8, made of celluloid or other suitable material of a transparent, translucent, or sufficiently transparent nature to enable the user to readily determine the exact amount of writing fluid therein. At the upper end of the ink reservoir 8 is a threaded opening adapted to permit writing fluid 9 to flow therethrough, said fluid being securely retained within the reservoir by means of an end plug 10, which comprises an enlarged milled head 11 and a screw-threaded hollow plug 12 adapted to be entered into the end of the reservoir body.

Communicating with the interior of the screw-threaded stud is an air vent passage 12^a opening near the shoulder provided by the enlarged milled head, which arrangement affords an air duct that will remain open during the screwing up of the plug 10 until the final turn which brings the air vent opening inside of the reservoir body and brings the milled head into contact with the end of the tube, thereby sealing the orifice. Formed integral with this tubular reservoir body 8, and at or near its lower end, is a cross wall 14, having an annular opening 15 drilled through its center, said opening permitting an ink supply plug 16 to be inserted therethrough. This ink supply plug has, at its upper end, a round head 17, formed with a cross slot 18 on its upper face, its end having therein, in this instance, left handed threads. Within the stem of the ink supply plug 16 is formed a central ink supply passage or channel 19, which communicates with a lateral passage 19^a opening from the side of the plug. The central passage 19, as shown, is in direct communication with a central passage of a movable feed section 20. Upon the upper end of the periphery of this movable feed section 20 are right hand threads 21. The movable feed section is recessed at its upper end, as at 22, to receive the lower threaded end of the fluid supply plug 16. The lower end of the movable feed section is adapted to receive and retain a writing pen and feed 23, of the usual type, said feed being in direct communication with the supply passage or channel 19. A cap 24, of any suitable construction, is adapted to protect the pen, when not in use, and is adapted to be removed therefrom and positioned upon the upper end of the reservoir body, as indicated in the drawings.

From the foregoing description, it is apparent that by turning the movable feed section in one direction brings the passage 19^a of the fluid supply plug 16 into the position indicated in Fig. 2, said passage being closed by contacting the face of the opening 15 in the cross wall 14, thereby arresting the flow of ink. By turning the movable feed section in the opposite direction raises the movable feed section 20 and with it the supply plug 16, moving the passage 19^a away from contact with the wall of the opening 15 and into

communication with the well of the reservoir 8, thereby opening up a continuous fluid channel from the ink reservoir to the writing pen.

The construction of my improved fountain pen is such that the user is enabled to enjoy the advantage of filling the pen at any and all times, being certain that an over supply of ink is not filled therein; and that under any and all conditions it is possible to determine whether the ink supply is running low and the pen needs refilling.

The inner walls of the ink carrying reservoir being lightly coated with vaseline, as described above, makes the ink carrying reservoir almost as transparent as glass and at the same time permits the use of a casing of absolutely non-breakable character as well as adequate transparency.

Most important of all, however, the leak preventing mechanism and fluid regulating device, as described herein, render the use of this pen absolutely free from the usual worry and uncertainty in fountain pens whereby leakage or seepage of ink into the cap or pocket is practically a certainty if by accident or miscalculation the pen is left in a horizontal, semi-horizontal, or upright position in the pocket or elsewhere.

What I claim as new and desire to secure by Letters Patent is:

1. In a fountain pen, a transparent reservoir body having a cross wall near its lower end and having a central opening therethrough, a fluid supply plug having its stem inserted through the cross wall, said plug having on its upper end a head and adjacent thereto a fluid channel, and a movable feed section having a central fluid channel therethrough attached to the lower end of the fluid supply plug, substantially as described.

2. In a fountain pen, a transparent reservoir body, an opening in the upper end of the reservoir body, a cap adapted to be retained in said opening, a cross wall near the lower end of the reservoir body having a central opening therethrough, a hollow fluid supply plug having its stem inserted through the cross wall, said hollow plug having on its upper end a head and adjacent thereto a fluid channel, and a movable feed section having a central fluid channel therethrough attached to the lower end of the fluid supply plug, substantially as described.

3. A fountain pen having a reservoir body sufficiently transparent to enable the user to readily observe the contents, an opening in the upper end of the reservoir body, a cap having a vent opening adapted to be retained in the upper end of the reservoir body, a cross wall near the lower end of the reservoir body and having a central opening therethrough, a fluid supply plug having its stem inserted through the cross wall, said stem having on its upper end a head and adjacent thereto a fluid channel, and a movable feed section having a central fluid channel therethrough attached to the lower end of the fluid supply plug, substantially as described.

4. A fountain pen having a reservoir body sufficiently transparent to enable the user to readily observe the contents and open at its upper end, the inner surface of the reservoir body being lightly coated with non-drying grease, a cap for the reservoir body having a vent opening therein, a cross wall near the lower end of the reservoir body having a central opening therethrough, a fluid supply plug having its stem inserted through the cross wall, said plug having, on its upper end, a head and adjacent thereto a fluid channel, and a movable feed section having a central fluid channel attached to the lower end of the fluid supply plug, substantially as described.

5. A fountain pen having a transparent reservoir body, the inner surface of the reservoir body being lightly coated with non-drying grease, a cross wall near the lower end of the reservoir body having a central opening therethrough, a fluid supply plug having its stem inserted through the cross wall, said plug having on its upper end a head, and adjacent thereto a fluid channel, and a movable feed section having a central fluid channel attached to the lower end of the fluid supply plug, substantially as described.

6. A fountain pen having a transparent reservoir body, the inner surfaces of the reservoir body being lightly coated with non-drying grease, a cap for the reservoir body having a vent opening therein, a cross wall near the lower end of the reservoir body having a central opening therethrough, a hollow fluid supply plug having its stem inserted through the cross wall, said hollow plug having on its upper end a head and adjacent thereto a fluid channel, and a movable feed section having a central fluid channel attached to the lower end of the fluid supply plug, substantially as described.

WILLIAM F. BARRETT.

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