No. 879,626. PATENTED FEB. 18, 1908.

C. W. GASTON.

FOUNTAIN PEN.

APPLICATION FILED OCT. 16, 1907.

Fig. 1.

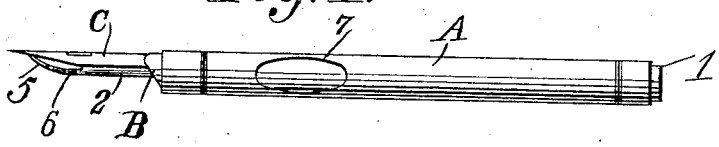


Fig. 2.

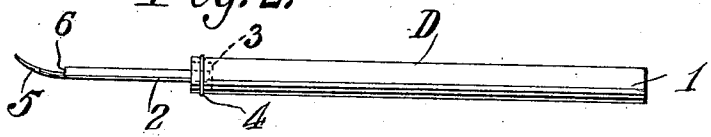


Fig. 3.

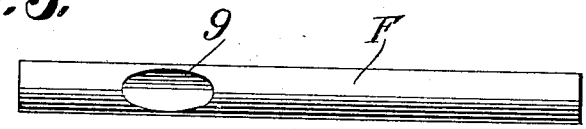


Fig. 4.

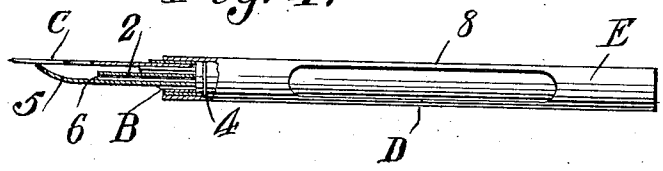
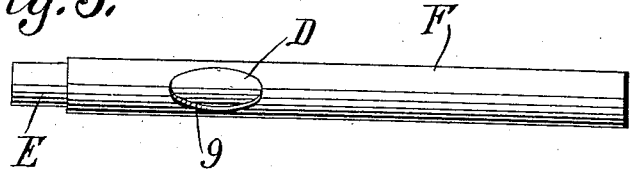


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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FOUNTAIN-PEN.

No. 879,626. Specification of Letters Patent. Patented Feb. 18, 1908.

Application filed October 16, 1907. Serial No. 397,689.

To all whom it may concern:

Be it known that I, CHARLES W. GASTON, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Fountain-Pens, of which the following is a specification.

This invention relates to self-filling fountain pens of that type containing a compressible sack or reservoir disposed within the handle of the pen.

The invention has for one of its objects to improve and simplify the construction and operation of devices of this character so as to be comparatively easy and inexpensive to manufacture, and thoroughly reliable and efficient in use.

A further object of the invention is the employment of an improved means for feeding ink from the sack to the reservoir without danger of the ink being drawn into the sack from the pen when pressure on the sack is removed.

A further object of the invention is the provision of a fountain pen consisting of a tubular handle from which the sack is readily removable for the purpose of re-filling, cleaning the feed tube or the like.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawing, which illustrates one of the embodiments of the invention, Figure 1 is a side view of the fountain pen intended more particularly for desk use. Fig. 2 is a view of the sack and feed tube removed. Fig. 3 is a side view of the tubular handle of the fountain pen designed for pocket use. Fig. 4 is a side view—partially in section of the pocket fountain pen. Fig. 5 is a side view showing the outer tube applied to the pen to serve as a cap therefor.

Similar reference characters are employed to designate corresponding parts throughout the several views.

Referring to the drawing, and more particularly to Figs. 1 and 2, A designates a tubular handle open at both ends and having pen-holding jaws of any approved construction for receiving a steel or gold pen C. Extending longitudinally of the handle or grip piece A is a rubber tube or sack D closed at the end 1 and having secured in its upper end, the feed tube 2 that has a bushing 3 applied thereto and secured in position by a band 4 encircling the sack and frictionally holding the feed tube in the bushing, which bushing is preferably of rubber or other compressible material.

The feed tube 2 is formed at its outer end with an integral tongue 5 that may be flat or concave from the outlet 6 of the tube and terminating against or close to the underside of the pen for the purpose of holding the ink against the pen at a suitable distance from the outlet 6 to prevent the ink from being drawn back into the sack when pressure is relieved from the latter at the completion of the ejecting operation. The tubular handle A is provided with a slot 7 located at such a point as to enable the thumb to press upon the sack D while the pen is held in position for writing, so that whenever the pen becomes dry, a slight pressure of the thumb will be sufficient to eject ink from the sack to the pen. The pen can be filled by removing the sack together with the feed tube from the tubular handle or body A for completely deflating the sack by pressing the same between the fingers. While the sack is so compressed, the feed tube is dipped into a vessel of ink so as to draw in a charge by the expansion of the sack when the pressure thereon is relieved. If, however, it is not desired to remove the sack from the body A, the sack can be compressed by inserting the finger into the slot 7 for depressing the adjacent part of the sack and sufficient ink can be drawn into the latter when the pen is inserted into a bottle or ink and the finger removed from the sack. Enough ink will be drawn in in this manner to write about four hundred words before re-charging will be necessary. In the modification shown in Fig. 3, the sack is mounted in a tubular holder E that has a slot 8 of substantial length so that a considerable portion of the sack can be compressed therethrough, it being understood that the sack is not intended to be removed from the holder. The holder is contained in a casing or handle piece F which is slidable thereon and has a slot 9 through which the sack is exposed and by means of which the thumb can be inserted for compressing the sack sufficiently to discharge enough ink to wet the pen. One end of the handle piece or casing F is closed so that the said piece can be removed and

applied over the pen so as to protect the same, as shown in Fig. 5 and thus rendering the fountain pen suitable for carrying in the pocket. It will thus be seen that a self-filling fountain pen is produced in which the feed of ink can be delivered directly to the pen point and without any danger of the ink being drawn back into the sack when the thumb is removed from the latter, and furthermore, there can be no leakage or overflow while using the fountain pen, and steel, gold or other metal pens can be readily used, the feeding of ink being always under the control of the thumb of the user.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as are within the scope of the claims.

Having thus described the invention, what I claim is:—

1. A fountain pen comprising a tubular handle piece forming a casing, a compressible ink-holding element therein, a pen attached to the handle piece, a feed tube connected with the ink-holding element and having its outer end spaced from the pen, and a tongue connected with the outer end of the tube and curved toward the pen from the side of the tube opposite from the latter for conducting the ink from the tube to the pen, the ink-carrying surface of the tongue being smooth and straight in transverse cross section.

2. The combination of a handle piece, a pen secured thereto, an ink feeding tube disposed under and spaced from the pen, a relatively flat extension extending from and integrally connected with the discharge end of the tube to proximity to a point adjacent the pen, a hollow plug into which the tube extends, an ink-holding sack open at one end to receive the plug, and a band binding the sack and plug together, the band being housed normally within the handle piece.

3. The combination of a tubular handle piece open at both ends, a compressible ink-holding element mounted therein and removable through either end thereof and having one end normally projecting out of the said piece, an ink feeding tube connected with the element and projecting from the opposite end of the handle piece, and a pen secured to the handle piece, there being a slot in the handle piece for permitting the element to be compressed by the finger of the user.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES W. GASTON.

Witnesses:
CHARLES F. HASPEL,
PETER LAUTERBACH.