

May 27, 1924.

1,495,871

F. H. OHLAND

FOUNTAIN PEN

Filed March 30, 1923

Fig. 1.

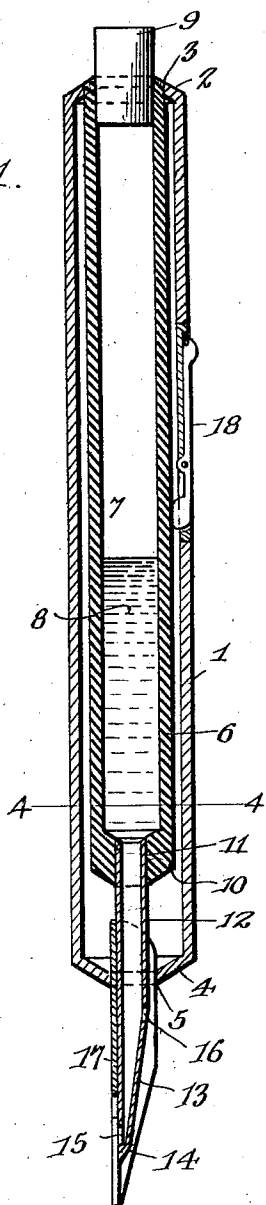


Fig. 2.



Fig. 3.

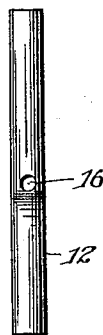
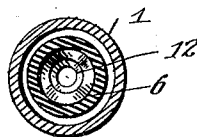


Fig. 4.



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Patented May 27, 1924.

1,495,871

UNITED STATES PATENT OFFICE.

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FOUNTAIN PEN.

Application filed March 30, 1923. Serial No. 628,809.

To all whom it may concern:

Be it known that I, FRED H. OHLAND, a citizen of the United States, residing at Gibbon, in the county of Sibley and State of Minnesota, have invented certain new and useful Improvements in Fountain Pens, of which the following is a specification.

This invention relates to fountain pens, and has for its object to provide a pen of such class, in a manner as hereinafter set forth with a feeding device providing for the automatic feed of the ink to the pen, and further to set up said feeding device in such manner with respect to the pen that the latter can be quickly and conveniently removed and a new pen substituted without interfering with or changing the position of the feeding device.

Further objects of the invention are to provide a fountain pen which is simple in its construction and arrangement, strong, durable, compact, efficient in its use, readily assembled, quickly disassembled for cleaning purposes when desired, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to, which fall within the scope of the claims hereunto appended.

In the drawings, wherein like reference characters denote corresponding parts throughout the several views:—

Figure 1 is a vertical sectional view of a fountain pen in accordance with this invention.

Fig. 2 is an elevation of the feeding device looking towards one side thereof.

Fig. 3 is an elevation of the feeding device looking towards the other side thereof.

Fig. 4 is a section on the line 4—4 of Fig. 1.

Referring to the drawings in detail, 1 denotes the body portion of the fountain pen and which is hollow, as well as constructed of any suitable material, and is provided with a tapered upper end 2, provided with an opening 3, and is also formed with a tapered lower end 4, provided with an opening 5.

Arranged within the body portion 1, and

suspended from the end 2, is a flexible tube 6, which constitutes a reservoir 7, for the ink 8. The upper end of the tube 6 is open, and normally closed through the medium of a removable plug 9. The upper end of the tube 6, is arranged within the opening 3, as well as being secured to the wall of said opening 3. The tube 6 is of less diameter than the body portion 1, and said tube 6 is spaced from the inner face of the body portion 1, and said tube 6 furthermore has its lower end spaced from the end 4 of the body portion 1. The lower end of the tube 6, which is indicated at 10, is provided with an opening 11, and the thickness of the end 10 of the tube 6 is greater than the thickness of the body portion of the tube. The body portion of the tube 6 is compressible. The end 10 of the tube 6 is tapered.

Secured in the opening 11, is a feeding device, which consists of a hollow tube formed of a cylindrical upper portion 12, and a reduced lower portion 13. The upper portion of the feeding device, or rather the portion 12 of the feeding device, has the upper end thereof open and which communicates with the reservoir 7, whereby the ink 8 from the reservoir 7, can pass into the feeding device. The reduced lower portion 13, of the feeding device, has its lower end closed, as at 14.

The feeding device projects through the opening 5, as well as being disposed centrally with respect therewith, and to provide for the reduced lower portion 13 of the feeding device, a side portion of the tube is disposed at an inclination, and is so set up that the lower portion 13 will gradually increase in area from its lower end towards the point of joinder thereof with the upper portion 12.

In proximity to the lower end of the lower portion 13, one side of the latter is formed with an opening 15, and the said reduced portion 13 of the feeding device, on the other side thereof in proximity to its point of joinder with the portion 12 is provided with an opening 16.

The pen is indicated at 17, and which is positioned against the feeding element, as well as projecting from the lower end of the portion 13, and said pen 17, is mounted in the opening 5 and extends into the body portion 1. The wall of the opening 5, frictionally engages with the pen 17, for securing the same in position.

A filling lever of known construction is indicated at 18.

The opening 15 provides a discharge port for the ink, while the opening 16 forms an inlet port for air. Air can also be admitted to the reservoir 7, by removing the plug 9.

When the supply of ink in the feeding device is reduced, additional ink can be supplied thereto, from the reservoir of the pen and air is let into the reservoir to displace the ink taken out.

Although the preferred embodiment of fountain pen, in accordance with this invention is as described and shown, yet it is to be understood that changes in the details of construction can be had which will fall within the light of the invention as claimed.

What I claim is:

1. A fountain pen comprising a body portion having an opening at its upper and at its lower end, the opening at the upper end being of greater diameter than the opening at the lower end, a hollow compressible element of less length than the length of and enclosed by said body portion and having an opening at its upper and lower end, said element having its outer face at its upper end secured to the wall of the opening at the upper end of the body portion, a plug for closing the opening at the upper end of said element, a hollow feed member secured at one end in the opening at the lower end of said element and further extending through the opening at the lower end of the

body portion and having a discharge outlet and an air inlet, and a pen arranged against said member and extending through the opening at the lower end of the body portion.

2. A fountain pen comprising a body portion having an opening at its upper and at its lower end, the opening at the upper end being of greater diameter than the opening at the lower end, a hollow compressible element of less length than the length of and enclosed by said body portion and having an opening at its upper and lower end, said element having its outer face at its upper end secured to the wall of the opening at the upper end of the body portion, a plug for closing the opening at the upper end of said element, a hollow feed member secured at one end in the opening at the lower end of said element and further extending through the opening at the lower end of the body portion and having a discharge outlet and an air inlet, and a pen arranged against said member and extending through the opening at the inner end of the body portion, the lower end of said element being of greater thickness than the body thereof and the opening in said lower end being of smaller diameter than the opening in the upper end of said element.

In testimony whereof, I affix my signature hereto.

FRED H. OHLAND.