

No. 618,164.

Patented Jan. 24, 1899.

J. H. BURTON.  
FOUNTAIN PEN.

(Application filed June 28, 1898.)

(No Model.)

Fig. 1.

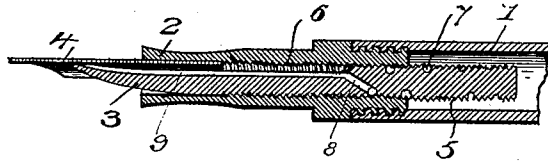


Fig. 2.

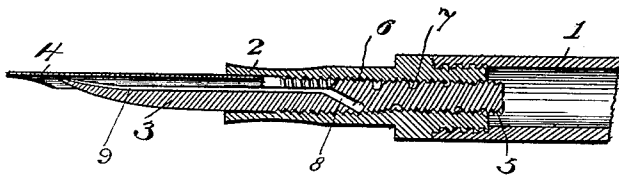


Fig. 3.

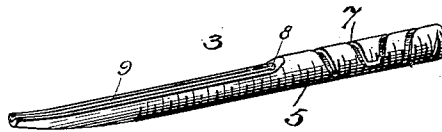


Fig. 4.

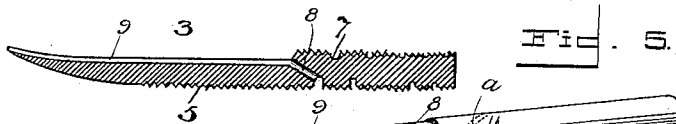


Fig. 5.

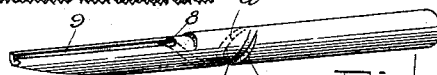


Fig. 6.



Witnesses:

*Fenton S. Pelt,*  
*J. H. Burton*

Inventor:  
*Joseph H. Burton,*

*A. B. Wilson & Co.*  
Attorneys.

# UNITED STATES PATENT OFFICE.

JOSEPH H. BURTON, OF KINGSTON, NEW YORK.

## FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 618,164, dated January 24, 1899.

Application filed June 28, 1898. Serial No. 684,650. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH H. BURTON, a citizen of the United States, residing at Kingston, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Fountain-Pens; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to fountain-pens; and the object is to provide a fountain-pen with a feed which may be adjusted to vary the amount of ink fed or supplied to the pen-point.

With this object in view the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a longitudinal sectional view through the pen-socket, feed, and pen-point, showing the feed in its maximum range of adjustment to supply the pen-point with a large quantity of ink. Fig. 2 is a similar view showing the feed adjusted to supply the pen-point with but a small amount of ink. Fig. 3 is a detail perspective view, on an enlarged scale, of the feed removed. Fig. 4 is a longitudinal sectional view, on an enlarged scale, of the same part. Fig. 5 is a perspective view of a modification, and Fig. 6 is a longitudinal sectional view of the same.

In the drawings, 1 denotes the staff or reservoir of the pen holder; 2, the pen-socket; 3, the feed, and 4 the pen-point. The holder, pen-socket, and pen-point may be of any well-known or approved construction. Hence a detailed description of the same is not deemed necessary. The feed has a cylindrical rear end formed with a screw-thread 5, which is adapted to take a similar thread 6 in the pen-socket.

7 denotes a groove formed in the cylindrical end of the feed and gradually decreasing in depth from the forward end of the cylindrical portion to the rear end thereof, where it merges into the body portion. This groove, as shown in Figs. 1 and 4, is an inverse spiral. The forward end of the groove communicates with a diagonal duct, extending through the tubular forward end of the body portion, and

this duct 8 communicates with a straight ink-passage 9, which leads the ink out to the pen-point.

The form of groove may be changed or varied at pleasure, and the manner of conducting the ink to the pen-point may be also modified, the gist of the invention being the manner of regulating the flow of ink.

It is evident that when the feed is screwed into the position shown in Fig. 1 a greater depth of the groove 7 will be presented to the ink-reservoir, thereby allowing said groove to fill its entire depth with ink and the ink to run out and be fed to the pen-point. When the feed is screwed out to the position shown in Fig. 2, but a small portion of the groove is exposed to the ink in the reservoir, and consequently but a small amount of ink will be allowed to escape through the groove 7. By screwing the feed farther out the inner end of the cylindrical portion of the feed or that part where the inner end of the groove merges into the body portion will be engaged with the internal threads of the pen-socket, thus entirely shutting off the supply of ink.

In the construction shown in Figs. 5 and 6 I have formed the body of the feed with two diverging grooves *a a*, which intersect at *a'* and increase in depth from their inner to their outer ends and communicate with the passage 9 through the inclined duct 8.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. As an improved article of manufacture, a feed for fountain-pens having a surface groove varying in depth from its inner to its outer end, substantially as described.

2. A feed for fountain-pens having a cylindrical end formed with a surface groove decreasing in depth from its outer to its inner end, an ink-duct extending entirely through the feed and communicating with said groove, and an ink-passage communicating with said duct and leading to the forward end of the feed, substantially as set forth.

3. The combination with a pen-socket internally screw-threaded, of a feed having a cylindrical end exteriorly screw-threaded to

engage the socket, said feed being provided with a surface groove increasing in depth from its inner to its outer end, an ink-passage formed in the feed, and an ink-duct extending entirely through the body of the feed and connecting said ink-passage with the said groove, substantially as set forth.

4. The combination with an internally-threaded pen-socket, of an exteriorly-threaded feed and longitudinally adjustable in said

socket to vary or entirely cut off the flow of ink, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH H. BURTON.

Witnesses:

GEO. P. BOARDMAN,  
SELIGMAN OPPENHEIMER.