

No. 816,344.

PATENTED MAR. 27, 1906.

W. N. LANCASTER.
FOUNTAIN PEN.

APPLICATION FILED OCT. 13, 1905.

Fig. 1.

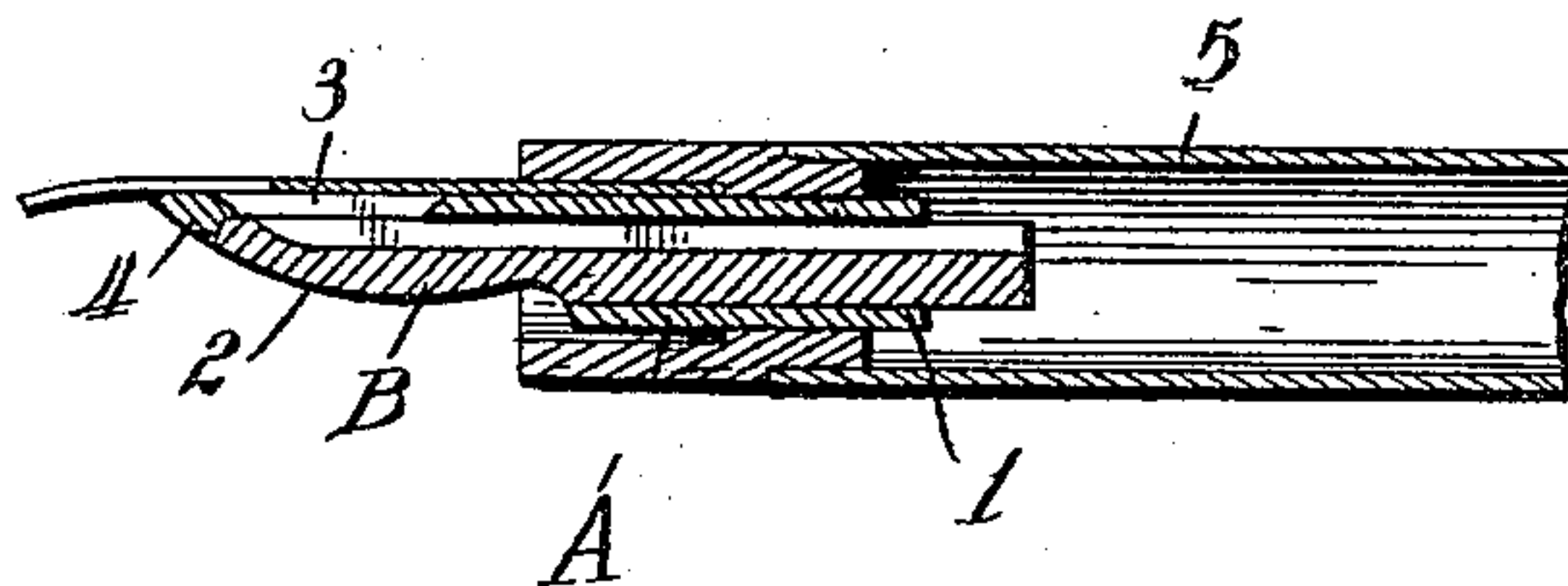


Fig. 2.

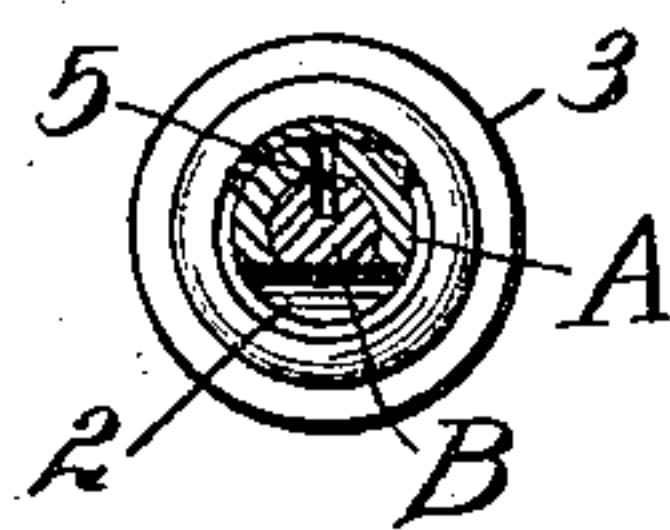


Fig. 4.

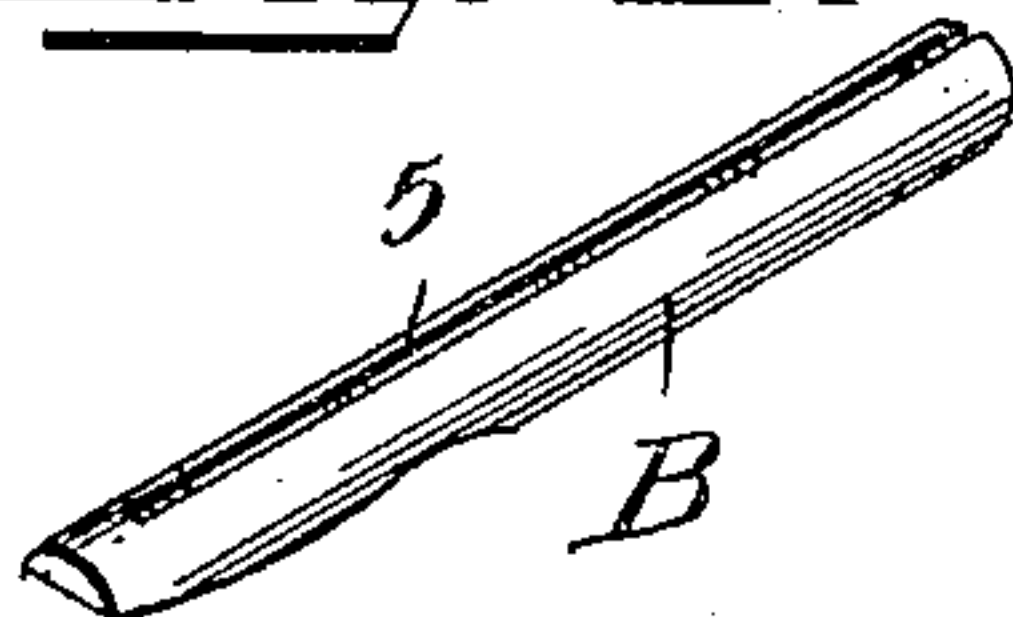
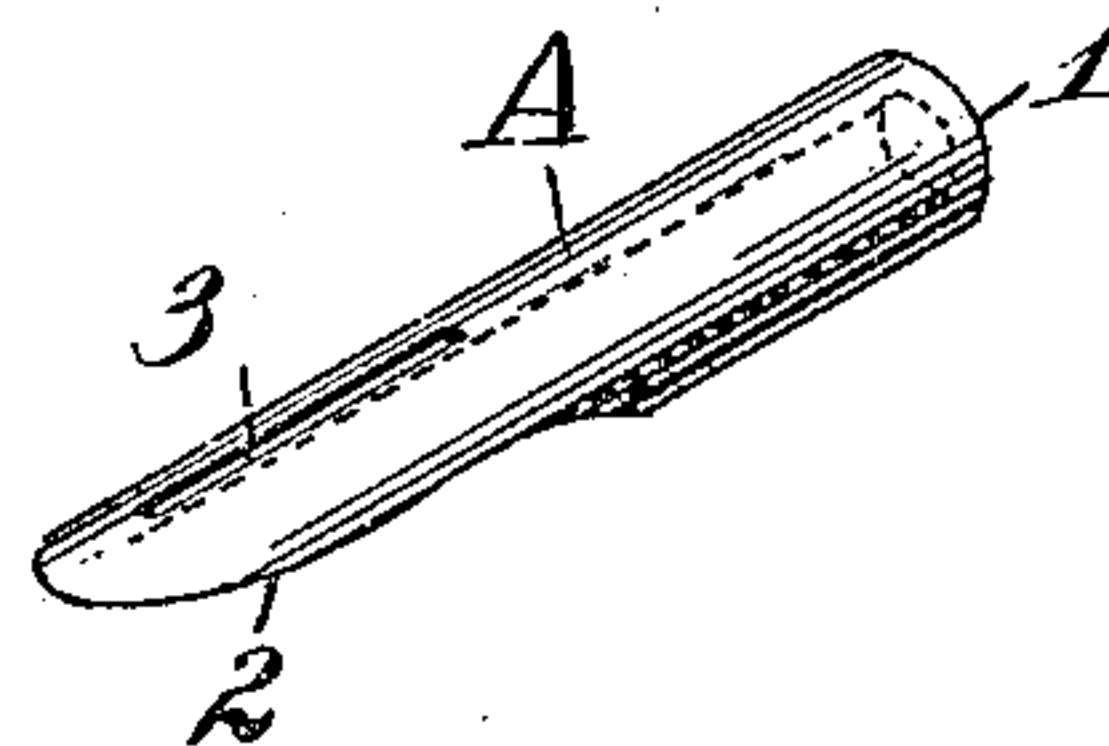


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WARREN N. LANCASTER, OF BALTIMORE, MARYLAND.

FOUNTAIN-PEN.

No. 816,344.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed October 13, 1905. Serial No. 282,638.

To all whom it may concern:

Be it known that I, WARREN N. LANCASTER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have
5 invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

My invention relates to an improvement in fountain-pens; and the object is to provide means for regulating the feed of the ink to the pen, and in connection with this feed regulation my invention makes it perfectly feasible to use the ordinary long-point pen as well as a stub, which heretofore has
15 been practically impossible.

With these objects in view my invention consists in a tube having a feed-orifice therein on the side adjacent to the pen to supply the ink to the pen, in connection with a feed-
20 valve which fits the bore of the tube, is adjustable therein and removable therefrom, and provided with a channel extending longitudinally thereof for conducting the ink from the barrel of the pen to the feed-orifice.

My invention further consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is
30 a sectional view through a portion of a pen, showing my improvement applied thereto. Fig. 2 is a cross-section, and Fig. 3 is a detail, of the feed-tube; and Fig. 4 is a similar view of the valve.

A represents the feed-tube, one end 1 of which is cylindrical, whereby it is adapted to fit the barrel of the pen and retain its position therein by friction, and the other end is preferably cut away more or less as a tube on
40 one side, the opposite side being adapted to fit the curvature of the end side of the pen. At this point it is provided with a feed-orifice 3, which is cut through the tube and through which the ink is supplied to the pen.

The valve B is in the main cylindrical in form and fitted to the bore of the tube, where it is held in place by friction. When forced into the tube the full distance, it is stopped by striking the end 4 of the bore. When in
50 this position, its outer surface is flush with the cut-away portion 2 of the end side of the

tube. The valve is channeled longitudinally, as at 5, nearly throughout its length, the channel starting at the inner end of the valve and extending nearly to the outer end, where it
55 gradually decreases in depth until it reaches nothing at the surface of the valve. This channel aligns with the orifice in the tube when the valve is inserted, and by the endwise adjustment of the valve in the tube the feed
60 to the pen is regulated with precision. In other words, the amount of ink issuing through the orifice is determined by the position of the valve within the tube, and this is adjusted to suit the style of pen used, as
65 well as the requirements of the penman. By pulling the valve out it forms or increases the air-inlet through the orifice, the size of which inlet may be very finely and accurately regulated. The length of the valve exceeds that
70 of the tube, so that the entire end always protrudes beyond the end of the tube, thus affording means for taking hold of the valve and manipulating it.

As previously stated, it is my purpose to
75 provide a feed for fountain-pens which will make it possible to use any style of pen, quantities of which are at present a drug on the market, because they cannot be utilized on any known form of fountain-pen, it being
80 the custom almost exclusively to use the so-called "stub-pen." In this way the usefulness of the fountain-pen is greatly increased.

It is evident that slight changes might be resorted to in the form and arrangement of
85 the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact description herein set forth; but,

Having fully described my invention, what
90 I claim as new, and desire to secure by Letters Patent, is—

1. A feed for fountain-pens comprising a tube having an ink-opening at the top and an air-opening at the bottom, and a valve hav-
95 ing an ink-duct therethrough, said valve slidably mounted within said tube and snugly fitting the same, and constituting a means to wholly or partially close the air-opening and at the same time regulate communication
100 between the ink-opening in the tube and the ink-duct in the valve.

2. A feed for fountain-pens comprising a tube and a longitudinally-channeled valve slidingly mounted within said tube and snugly fitting the same, said tube having an
5 ink-opening at the top and an air-opening at the bottom, and said valve constituting a means to wholly or partially close said air-opening and at the same time regulate com-

munication between said ink-opening and the channel in said valve.

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

WARREN N. LANCASTER.

Witnesses:

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