

(No Model.)

A. J. KLETZKER.

FOUNTAIN PEN.

No. 370,342.

Patented Sept. 20, 1887.

Fig. I.

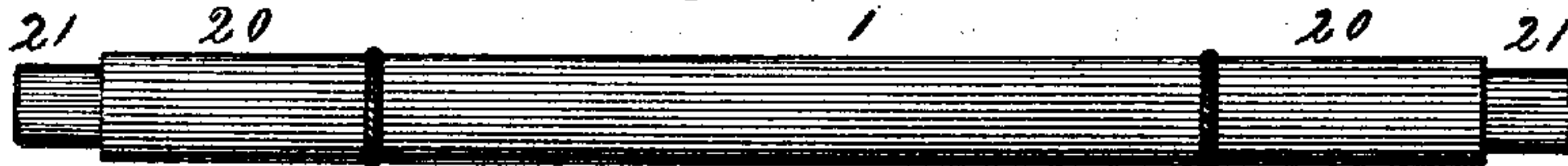


Fig. II.

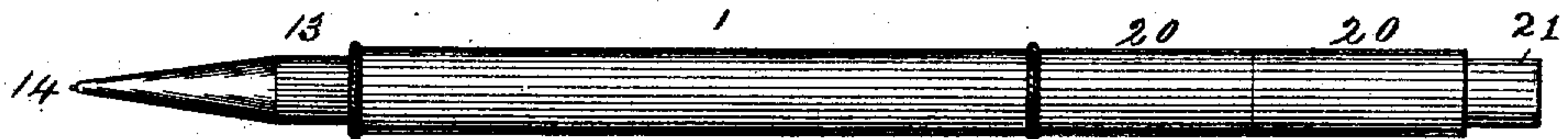


Fig. III.



Fig. IV.

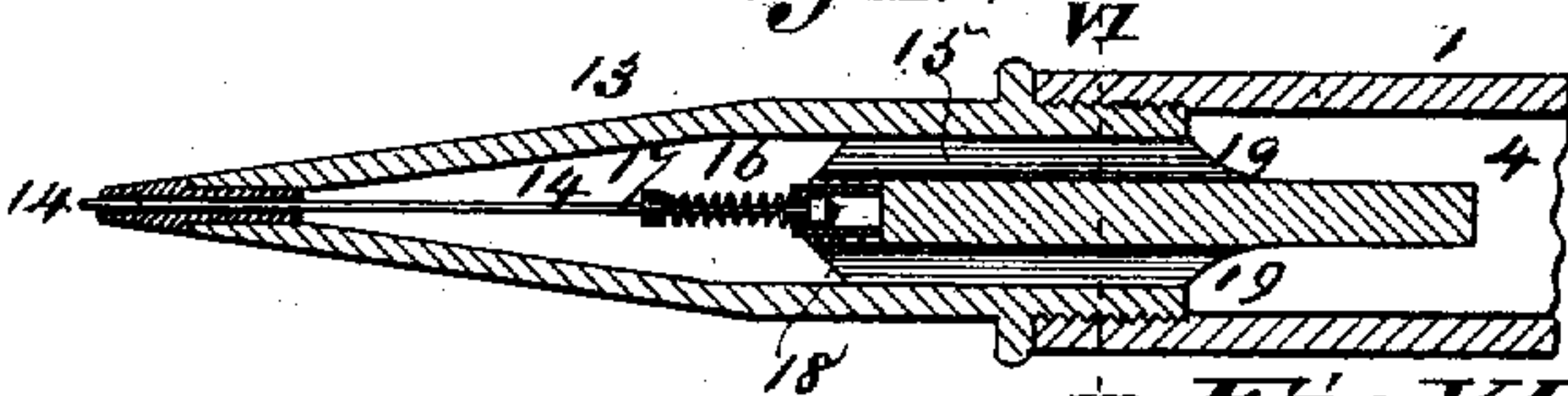


Fig. V.



Fig. VI.



Fig. XII.

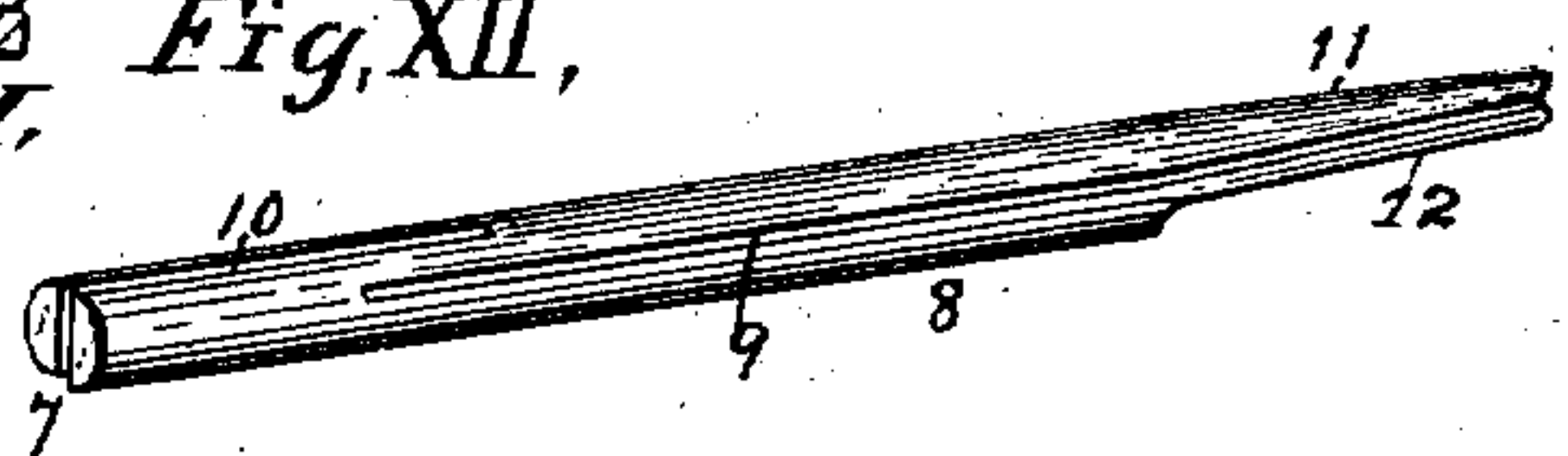


Fig. VII.

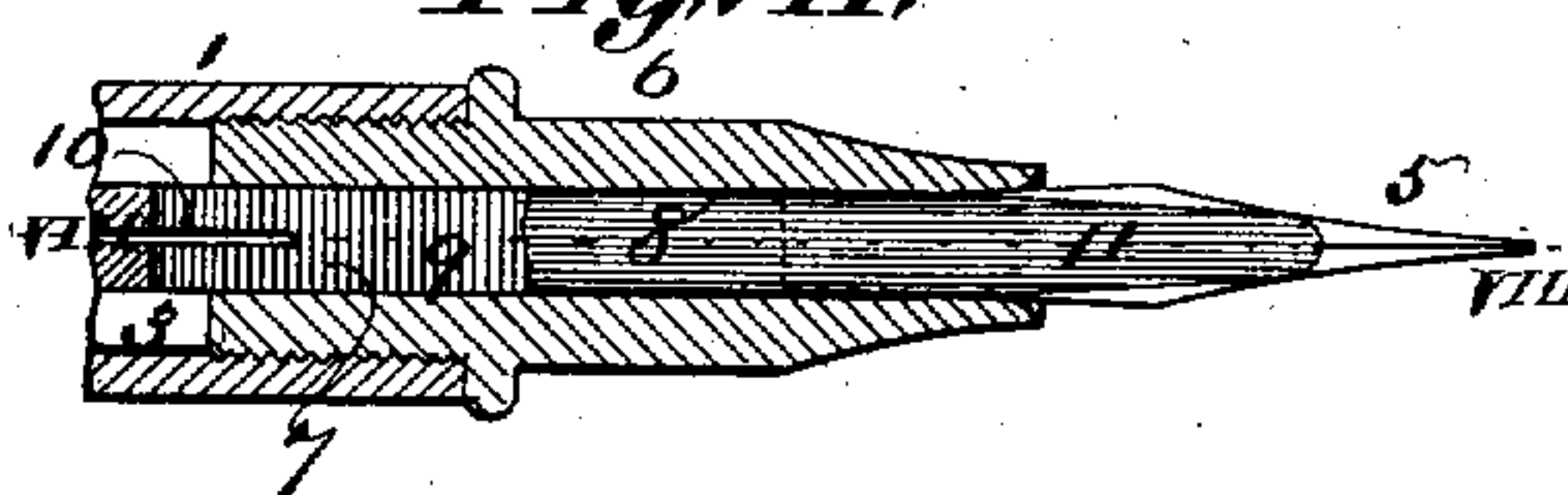


Fig. VIII.

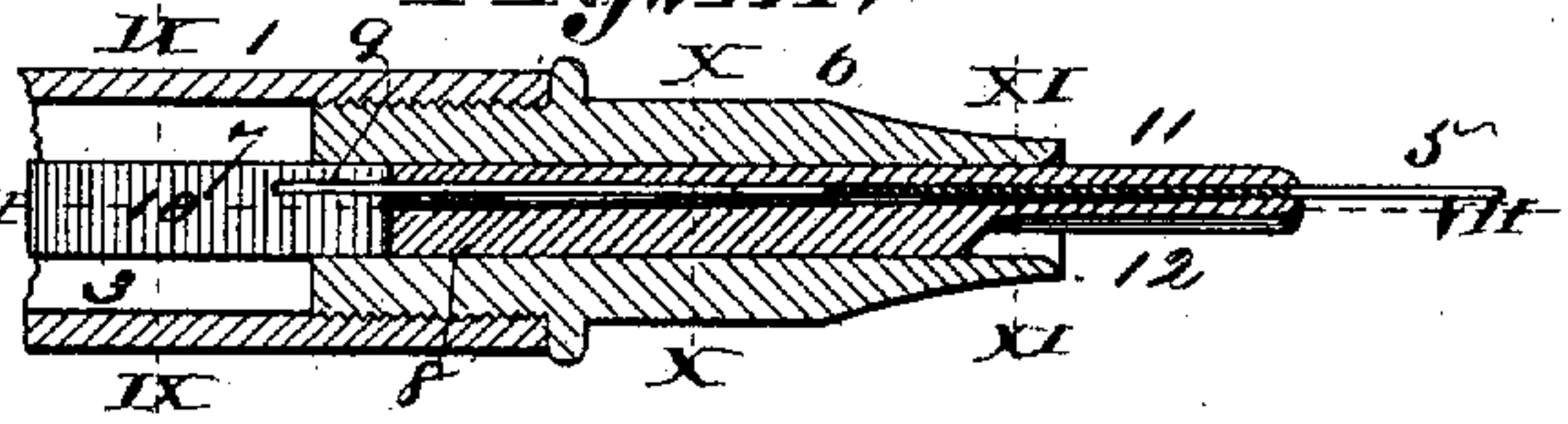


Fig. IX.



Fig. X.

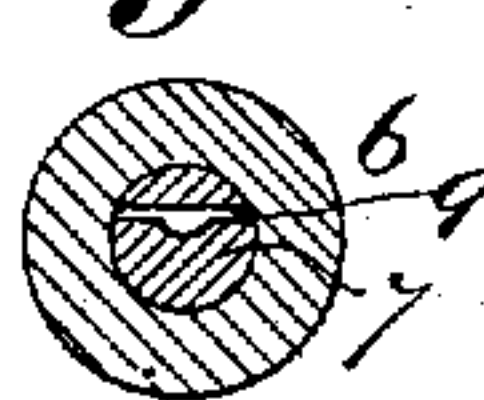


Fig. XI.



Attest,
H. S. Knight,
E. Arthur.

Inventor,
Albert J. Kletzker.
By Knight & Bro.
Attys.

UNITED STATES PATENT OFFICE.

ALBERT J KLETZKER, OF ST. LOUIS, MISSOURI.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 370,342, dated September 20, 1887.

Application filed July 5, 1887. Serial No. 243,422. (No model.)

To all whom it may concern:

Be it known that I, ALBERT J. KLETZKER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Fountain-Pens, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This improvement consists, partly, in the construction of the device for feeding ink to the pen, and partly to the combination at the opposite ends of the handle of a stylograph and ordinary pen, respectively.

Figure I is a side view of the pen with both ends closed. Fig. II is a side view with the stylograph end exposed. Fig. III is a side view with pen end exposed, and part in section to show the partition between the two ink-chambers. Fig. IV is an enlarged detail axial section of the stylograph. Fig. V is a side view of the style and the block to which it is connected. Fig. VI is a cross-section at VI VI, Fig. IV. Fig. VII is a longitudinal section at VII VII, Fig. VIII. Fig. VIII is a longitudinal section at VIII VIII, Fig. VII. Fig. IX is a cross-section at IX IX, Fig. VIII. Fig. X is a cross-section at X X, Fig. VIII. Fig. XI is a cross-section at XI XI, Fig. VIII. Fig. XII is a perspective view of the solid feeding-plug.

The nib end will first be described and afterward the stylograph.

1 is the barrel, which I prefer to make with a partition, 2, separating it into two ink-chambers, 3 and 4, the former supplying ink to the pen or nib 5 and the latter to the stylograph. (See Fig. III.)

6 is the pen-section, which screws into the end of the barrel and which is bored through axially.

7 is the solid feeder, whose body consists of a plug, 8, which fits the bore of the pen-section, so as to prevent the escape of ink, except through the small passage especially provided for it. The plug is flattened at the outer part and has a thin slot or slit, 9, parallel with its under sides and extending, say, more than half the length of the body of the feeder. At its inner end this slot 9 communicates with a similar slot or slit, 10, made in the rear end of the feeder. The slot 10 is not in the same plane as that 9, so that the feeder is not divided

into two parts. The slots 9 and 10 are shown at right angles to each other. (Compare Figs. VII with VIII and IX with X.) The outer part of the slot 9 is made to receive the pen or nib 5, so that the pen or nib is held between the two tongues 11 and 12, that act as ink-feeders to the nib, and act by capillary attraction not only to feed the ink at both the top and bottom of the pen 5, but also to prevent the ink dropping from the pen when there is a surplus. This feature of the combined bottom and top feed is of the greatest importance in causing the perfect action of the pen in giving an unfailing supply of ink and preventing the dropping of ink from the point of the pen.

I am aware that it is very common to have a single feeding tongue carrying the ink along either the top or the bottom of the pen to the slit, which terminates at the extreme point; but in all these cases the ink is liable to become dry and hard upon the side of the pen opposite to the feed-tongue.

The two feed-tongues are flexible and serve to mechanically move the ink endwise upon the pen as it is bent in writing. The two feed-tongues keep the pen constantly moist upon both sides almost to the point, even when not in use, so that it is ready for immediate use at any time.

The stylograph end has a point-section, 13, screwing into the barrel 1, drilled through, as usual, to allow the passage of the needle 14. The inner end of the needle has bearing in a plug, 15, fitting in the bore at the inner end of the point-section. The needle has a limited endwise movement in its bearing, and is pushed outward by a spiral spring, 16, bearing at one end against a collar, 17, upon the needle, and at the other end against the outer end of the plug 15.

18 is a collar on the needle, limiting its outward movement. The plug has channel or channels 19 for the passage of ink to the point. The caps by which the ends are covered are shown at 20. They are made with reduced ends 21, so that one cap may be placed on another. (See Figs. I, II, and III.)

Where the barrel has a partition, 2, inks of different colors or character may be used in the two chambers 3 and 4.

I claim as my invention—

1. A solid feeder, 7, for a fountain-pen formed

integral, extending into the reservoir, and having a body, 8, and feeding-tongues extending above and below the pen and gripping the same, substantially as set forth.

5 2. A solid feeder, 7, for a fountain-pen formed integral, having a body, 8, and two tongues extending above and below the pen to near the point of the same, and passage for the ink extending from the reservoir through the body
10 of the feeder to the pen, substantially as set forth.

3. The combination, in a fountain-pen, of a solid feeder, 7, formed integral with a body, 8, and two tongues and a pen, the feeder closing
15 the orifice of the pen-section, except for an ink-passage made through the body of the feeder, and the two tongues, being of equal width and length, extending above and below the pen nearly to its point and bearing against the pen
20 so as to hold it in position.

4. The combination, in a fountain-pen, of a solid feeder, 7, formed integral, having a body inserted in the pen-section and two flat tongues

extending above and below the pen, so as to hold a pen, and a pen having a slit extending 25 from the point past the points of the tongues, substantially as set forth.

5. A solid feeder, 7, for fountain-pens formed integral, having a plug, 8, fitting the bore of the pen-section, and overlapping longitudinal 30 slots 9 10, made angularly to each other and forming an ink-passage through the feeder, substantially as set forth.

6. The combination, in a fountain-pen, of a slitted pen at one end and a stylograph at the 35 other, substantially as set forth.

7. The combination, in a fountain-pen, of two ink-reservoirs, 3 and 4, and a slit pen at one end communicating with one reservoir and a stylograph at the other end communicating 40 with the other reservoir, substantially as set forth.

ALBERT J. KLETZKER.

In presence of—

SAML. KNIGHT,
JAS. E. KNIGHT.