

No. 756,376.

PATENTED APR. 5, 1904.

F. M. KEGRIZE.
FOUNTAIN PEN.

APPLICATION FILED MAY 14, 1903.

NO MODEL.

Fig. 1.

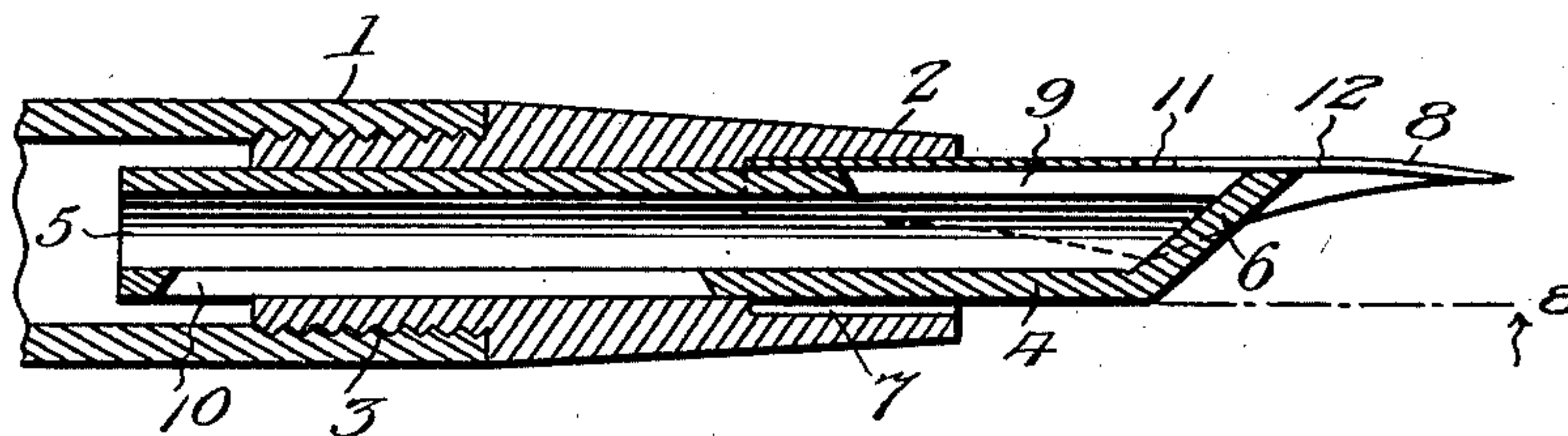


Fig. 2.

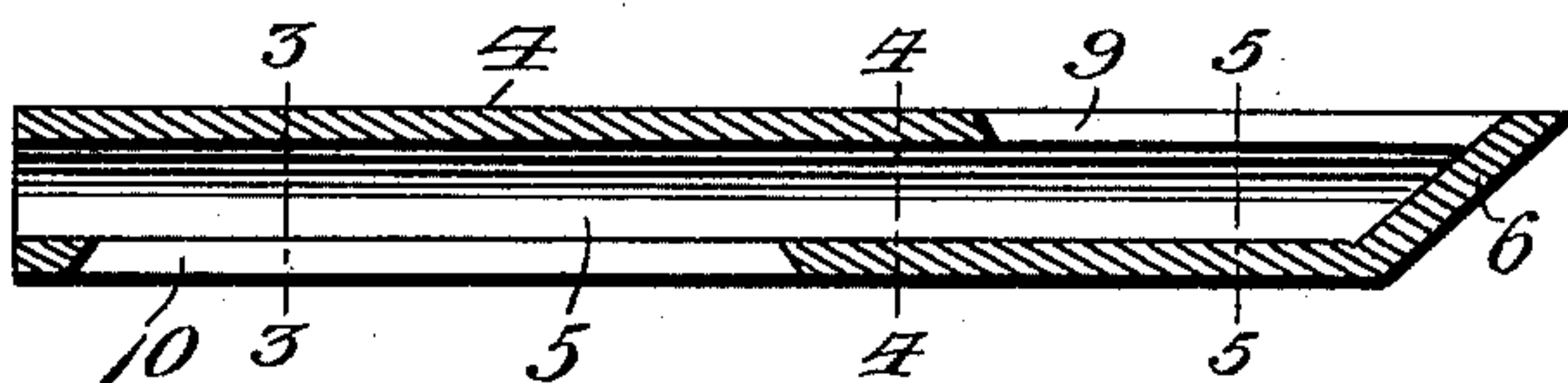


Fig. 3.

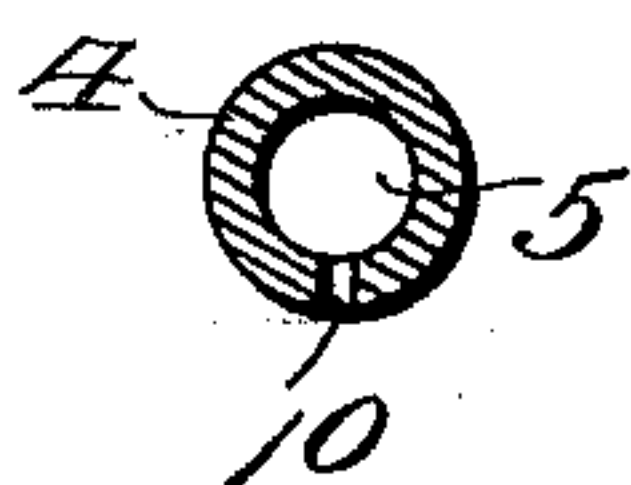


Fig. 4.

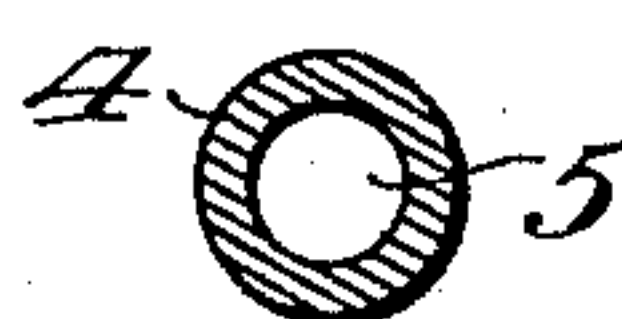


Fig. 5.

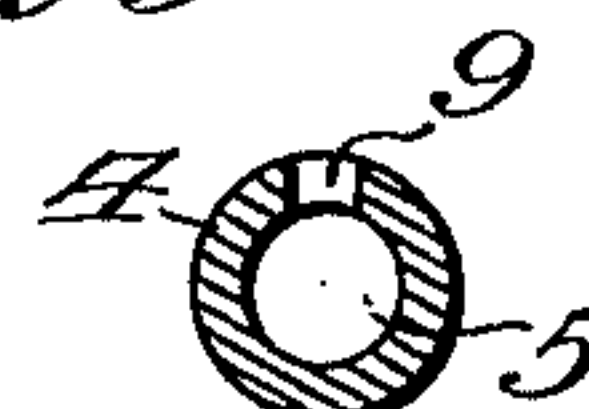


Fig. 6.

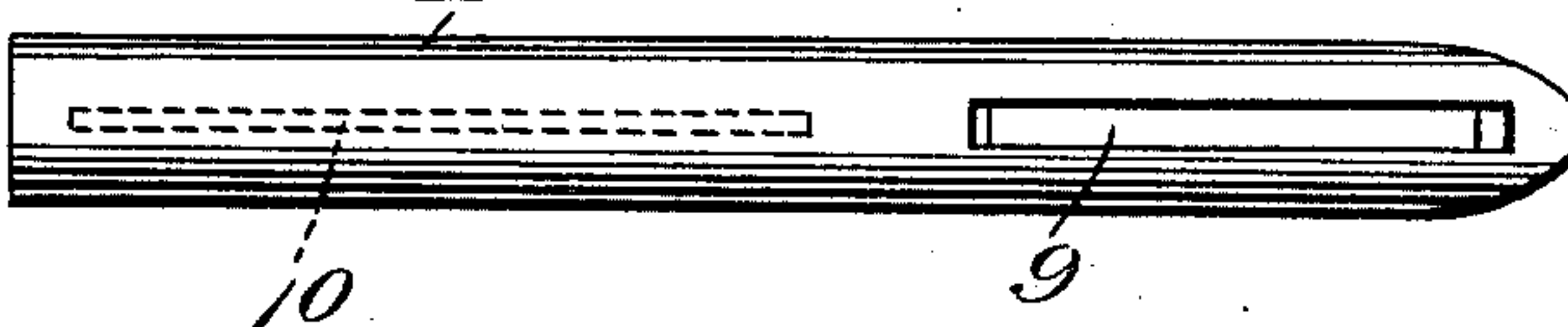


Fig. 7.

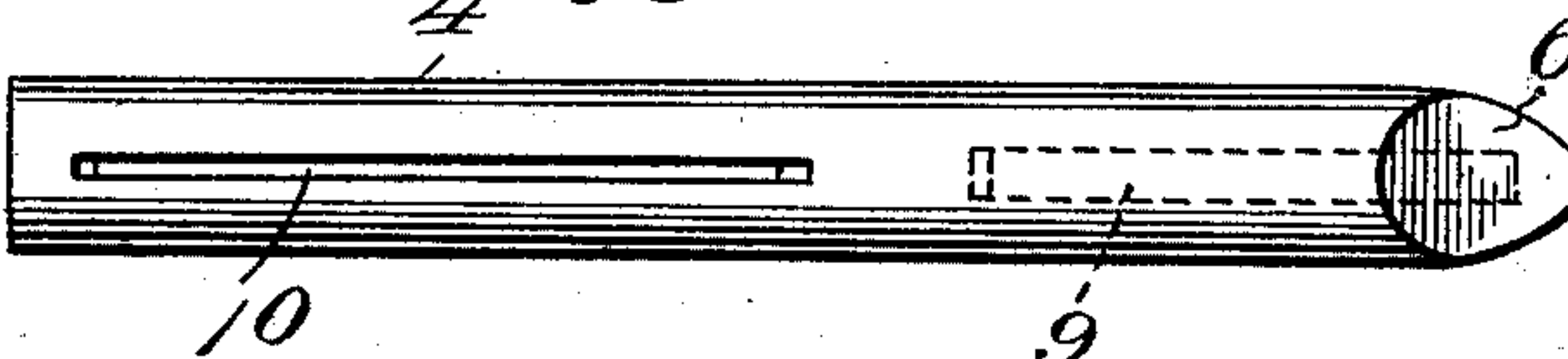
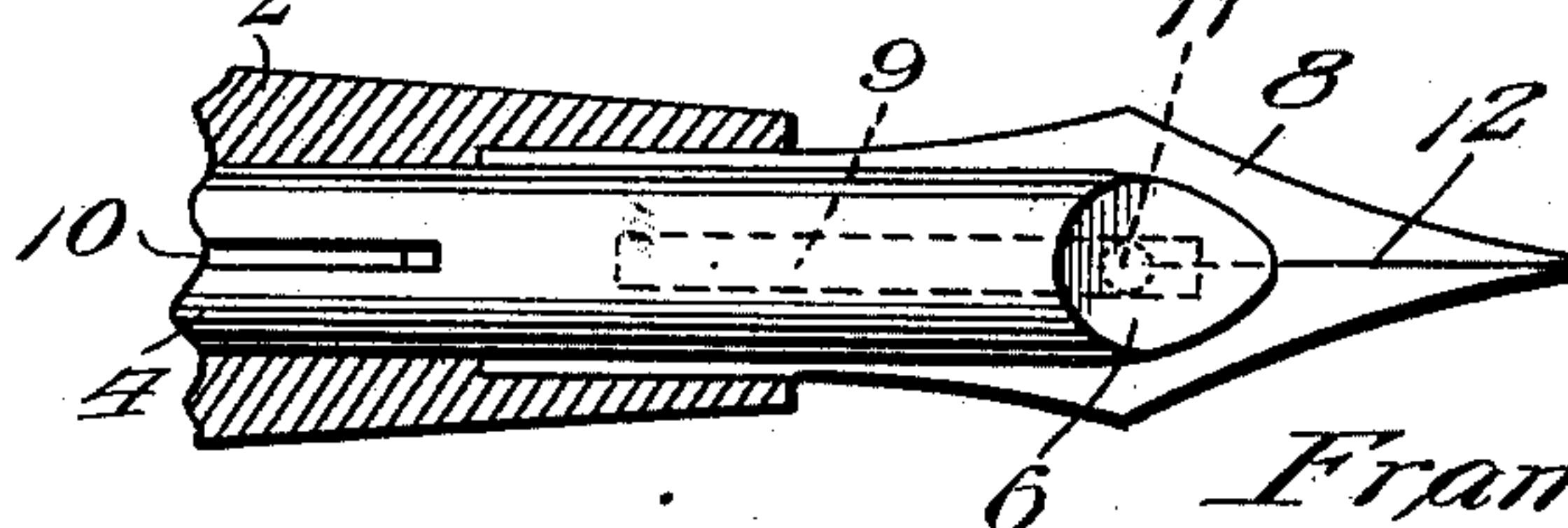


Fig. 8.



Witnesses

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FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 756,376, dated April 5, 1904.

Application filed May 14, 1903. Serial No. 157,122. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. KEGRIZE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Fountain-Pen, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to fountain-pens, and particularly to the feed or device by means of which the ink is conducted from the barrel or well and fed to the writing point or pen proper.

The object of the present invention is to produce a simple, reliable, and effective ink-feed for fountain-pens which is applicable to pens already in use and which may be substituted for the ink-feed devices therein employed, the improved feed being so constructed as to facilitate the flow of ink from the well to the pen-point as soon as the pen is brought to the proper writing position, the construction avoiding the usual hindrance to the free flow of ink which is present in many of the ordinary constructions of ink-feed devices now in use.

With the above and other objects in view, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination, and arrangement of parts, as hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a central longitudinal section through a sufficient portion of a fountain-pen to illustrate the nature of the present invention. Fig. 2 is a longitudinal section through the ink-feed. Figs. 3, 4, and 5 are cross-sections taken, respectively, on the lines 3 3, 4 4, and 5 5 of Fig. 2. Fig. 6 is a top plan view of the ink-feed. Fig. 7 is a bottom plan view of the same; and Fig. 8 is a bottom plan view of a portion of the ink-feed and the pen-point, showing also a portion of the end section of the pen in section.

Like reference-numerals designate corresponding parts in all the figures.

Referring to the drawings, 1 designates the barrel, reservoir, or well of a fountain-pen; 2, the end section thereof, which is ordinarily threaded, as shown at 3, into the end of the bar-

rel or well. The end section 2 is provided with a smooth central bore to receive the ink-feed 4, which is in the form of a cylindrical tube having a central ink-passage 5, which opens out at the inner end of the tube, the outer extremity of the tube being closed, as shown at 6, and preferably beveled or chamfered from the under side, as shown. The outer end of the end section 2 is also rabbeted, as shown at 7, to receive the inner or butt end of the pen-point 8, which is inserted in said rabbet and frictionally held between the ink-feed 4 and the end section 2, as shown clearly in Fig. 1, the pen-point 8 bearing for the greater part of its length against the upper side and outer end portion of the tubular feed 4.

In carrying out the present invention the outer end portion of the tubular feed 4 is provided with an eduction-slit 9, which extends from a point near the outer extremity of the feed inward lengthwise of the tube, said slit extending entirely through the outer wall of the tube 4, so as to convey the ink from the central passage 5 directly to the under or inner surface of the pen proper, 8, as clearly shown in Fig. 1.

The inner end portion of the tube 4 is provided with an induction slit or interstice 10, which extends from a point near the inner extremity of the tube lengthwise thereof, as shown in Fig. 1, and by preference reaching not quite as far as the inner end of the eduction-slit 9. The induction and eduction slits are preferably of different widths and capacities, the induction-slit being quite narrow, as illustrated in Fig. 7, and the eduction-slit being relatively wide, as shown in Fig. 6. Said induction and eduction slits are located at opposite sides of the longitudinal axis of the feed-tube, and the tube is made of such length that the inner portion of the induction-slit 10 reaches into the barrel or well, as shown in Fig. 1, so as to admit ink laterally through the bottom wall of said tube, after which the ink finds its way along the remainder of the slit 10, the flow of the ink to the eduction-slit and pen being thus greatly facilitated.

The pen-point 8 is provided with a hole 11 at the inner end of the usual slit 12, so that

air can pass through said hole and along the passage 5 of the feed to take the place of the ink being fed therefrom.

While the slits 9 and 10 extend entirely through the walls of the tube-feed when the feed is in position in the end section 2 and the pen proper is in place, said slits in reality constitute grooves, as they are closed throughout the greater part of their lengths by the pen proper, 8, and the end section 2, the only portion not being so closed being the inner end of the induction-slit, where the same projects into the barrel or well 1. The induction-slit takes the ink directly from the well and leads the same well forward toward the pen, where it is delivered to the eduction-slit and conveyed directly to the under side of the pen-point. This ready flow or movement of the ink facilitates the prompt delivery of the same to the pen-point after the pen has been standing idle for some time. The flow of the ink is not in the least hindered or interfered with, as air readily enters through the hole 11 in the pen-point to displace the ink which is being fed to the pen-point. The tubular feed is simple and cheap in construction and may be easily fitted into the end sections of fountain-pens now on the market, thus making it practical to furnish the public with a cheap ink-feed which will produce superior results.

Having thus described the invention, what I claim as new is—

1. A feed for fountain-pens consisting of a tube having a central longitudinal bore closed at one end, said tube being provided near one end with an induction slit or interstice and near its opposite end with an eduction-slit,

both slits being in communication with the longitudinal bore.

2. A feed for fountain-pens consisting of a tube closed at its outer extremity and having a longitudinal induction slit or interstice through the tube-wall near one end and a longitudinal eduction-slit through the tube-wall at the opposite side and near the opposite end.

3. A feed for fountain-pens consisting of a tube closed at its outer extremity and having an induction slit or interstice near one end, and an eduction-slit near its opposite end, the induction and eduction slits being located at opposite sides of the longitudinal bore of the tube.

4. A feed for fountain-pens consisting of a tube closed at its outer extremity and having a longitudinal induction slit or interstice near one end and a longitudinal eduction-slit near its opposite end, said induction and eduction slits extending from near the ends of the tube toward each other and located at opposite sides of the bore of the tube.

5. A feed for fountain-pens, consisting of a tube closed at its outer extremity and having an induction slit or interstice near one end, and an eduction-slit near its opposite end, said slits extending from near the ends of the tube lengthwise thereof and arranged at opposite sides of the bore of the tube, the induction-slit communicating with the barrel or well of the pen through the side of the tube.

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

FRANK M. KEGRIZE.

Witnesses:

HARRY COOK,
HARRY LINKER.