

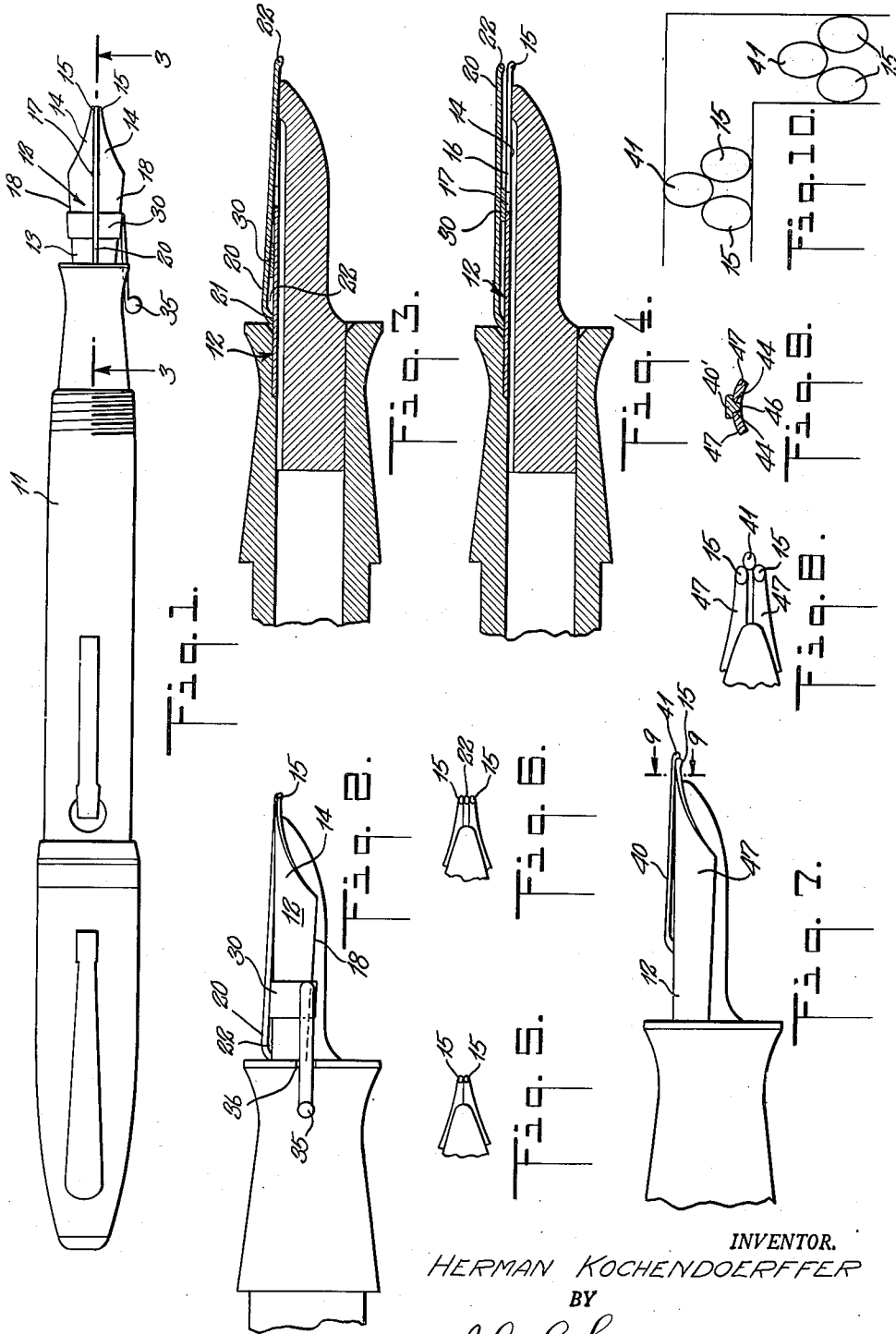
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This invention relates to a pen.

Heretofore, almost all pens are believed to have been made with two prongs, terminating in writing points. A few have been made with three prongs for special lettering purposes. However, no pen has heretofore been made, so far as is known, that would write a thick line regardless of the direction in which the pen was moved. Furthermore, it is believed that no pen has heretofore been made with a single set of writing points that could be made to write selectively a thin or a thick line.

It is an object of this invention to make such pens. The objects of the invention are accomplished, generally speaking, by the adoption of the conceptions hereinafter set forth with respect to particular embodiments of the invention.

In the drawing,

Fig. 1 is a plan view of a fountain pen equipped with a preferred form of the new pen.

Fig. 2 is a side view thereof.

Fig. 3 is a section on the line 3—3 of Fig. 1.

Fig. 4 is a section on the line 4—4 of Fig. 1 showing one of the prongs in retracted position.

Fig. 5 is an inverted plan view of the pen with two points in writing position.

Fig. 6 is an inverted plan view of the pen with three points in writing position.

Fig. 7 is a side view of a preferred type of pen point being, however, without a slider.

Fig. 8 is a bottom plan view of the pen shown in Fig. 7.

Fig. 9 is a section on the line 9—9 of Fig. 7 with the parts exaggerated in size.

Fig. 10 is a diagrammatic view illustrating the action of the pen in different directions.

Referring now to Fig. 1, the numeral 11 indicates a fountain pen which may be presumed to be of any standard construction, except for the metal nib 12 which will hereinafter be called the pen. This pen is composed of a base portion 13, two prongs 14, 14 which are similar to the two prongs of an ordinary pen, and two writing points 15, 15, which are similar to those on an ordinary pen. The two prongs 14, 14 are separated by a capillary groove 16 which terminates in a hole 17. The prongs 14, 14 have some flexibility. The base 13 of the pen has diverging side edges 18, 18. A third prong 20 is attached to the base of the pen 12, for instance by welding or silver soldering, or in any other way found satisfactory, at a point indicated at 21 in Fig. 3. The rearward part of that prong is raised above the general level of the base 13 of pen 12

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so that a small amount of space 22 exists between it and the pen. The point 22 of prong 20 is shown in Figs. 1, 2, and 3 as being admitted between points 15, 15 of pen 12, as shown in Fig. 6. The prong 20 is biased downward so that it enters between the prongs 14, 14 when the latter are spread apart by pressure, thus furnishing a three-point writing surface as indicated in Fig. 6. In Fig. 6 the three points are in a straight line and that pen will make a wider line when drawn parallel to its length than when moved in any other direction. It is thus useful in making shaded signatures and in lettering.

When it is desired to write a fine line the prong 20 is lifted and the point 22 is removed from between the points 15, 15 which then returns to the relation shown in Fig. 5. In order to facilitate the removal of the intermediate prong, to maintain the fineness of the line drawn with two points, and if need be to increase the stiffness of those points and their resistance to pressure, a slider 30 is provided. This slider is represented as a thin band of metal having hooked ends that engage beneath the ends 18 of the pen 12. In its fully retracted position, the slider 30 fits loosely inside the space 22 and offers no opposition to the entry of prong 20 between prongs 14. When it is desired to move the intermediate prong out of writing position, the slider 30 is moved forward as shown in Fig. 4, lifting the point 20 out from between points 15 and bearing with increasing pressure on the diverging edges 18, 18 of the pen to insure the immediate return of those points to writing juxtaposition and if need be, to apply some pressure to them so that they will withstand greater writing pressure without separation.

In a modification of the invention the prong 20 can be biased upward and the slider 30 will then be placed outside the prong rather than under it so as to cam it into position.

In order to enable the slider 30 to be manipulated without inking the fingers, a push rod 35 is provided and extends backwardly through a slot 36. By moving the push rod the slider can be adjusted from the position of the grip.

In Figs. 7, 8, and 9 is shown a very important modification of the invention. In these figures the middle prong 40 has a point 41 that projects beyond the ends of points 15. In this form of the invention the pen has several points which are located at the apices of a geometrical figure. As shown, there are three prongs located at the apices of a triangle. When a line is drawn with

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such a pen, the result is as indicated in enlargement in Fig. 10, where the vertical and horizontal lines are of substantially equal width. No matter in what direction such a pen is moved a wide line is produced, thus differing from the result produced by a pen having three points arranged in a straight line as shown in Fig. 6. It is believed that this conception marks a very material advance in pen construction.

In all the forms of the invention the intermediate prong when in operating position is separated from the adjacent prongs by capillary slits such as indicated at 44, 44 in Fig. 9. In that figure the intermediate prong 40' has a thin wedge 46 that enters between the outer prongs 47, 47 of the pen. In the form of the invention illustrated the points of the pen are oval and rounded, but any point construction that writes satisfactorily may be employed.

One advantage of the invention is in a pen point that writes a thick line in any direction.

Another advantage of the invention is a pen point that is useful to write either a broad or a fine line, selectively.

Another advantage is in the construction of the pen, which is simple and durable. The points may be used on fountain pens, as shown, and may be employed equally well for hand-fed or dipped pens.

Other advantages will be apparent to persons in the pen industry.

As many apparently widely different embodiments of the present invention may be made without departing from the spirit and scope thereof, it is to be understood that the invention is not limited to the specific embodiments.

What is claimed is:

1. A pen having three prongs terminating in writing points in juxtaposition, two of said points being in one general plane, one of said prongs being out of the general plane of the other two prongs, and being of such width that it may enter between the other two prongs, when they are spread apart, to form a third writing point, said other prongs being flexible to accommodate

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the point of said one prong, and means to control the position of said one prong.

2. A pen having two points separated by a capillary slit and capable of being flexed apart, a third point overlying and biased toward said slit and of such width as to be admitted between said two points when they are flexed, the sides of said third point forming capillary slits with the sides of the said two points in the writing position of the third point.

3. A pen having a curved body with three prongs separated by capillary slits, and means to move the intermediate prong out of writing position and to move the remaining prongs into writing juxtaposition including a slider movable along the pen having a portion beneath the intermediate prong.

4. A fountain pen having a longitudinally extending nib comprising two laterally flexible points, means to flex the points to vary the width of the ink line made by the pen, and finger-operable control means, for manipulating said means to flex, extending beyond the nib along the barrel of the pen.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
87,661	Godspeed	Mar. 9, 1869
333,104	Brandenburg	Dec. 29, 1885
1,486,973	Lilly	Mar. 18, 1924
1,746,065	Van Sant	Feb. 4, 1930
1,800,425	Ashmore	Apr. 14, 1931

FOREIGN PATENTS

Number	Country	Date
6,549	Great Britain	Jan. 25, 1834
114,801	Great Britain	Apr. 18, 1918
586,917	Great Britain	Apr. 8, 1947