(Model.)

G. S. PARKER.

FOUNTAIN PEN.

No. 510,439. Patented Dec. 12, 1893.

Fig. 1.

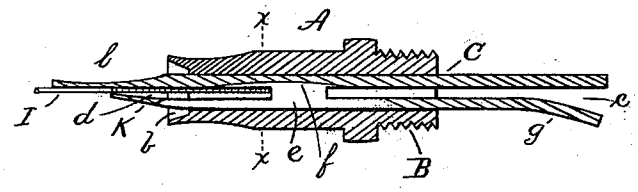


Fig. 2.

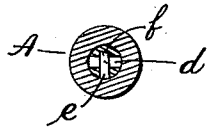


Fig. 3.

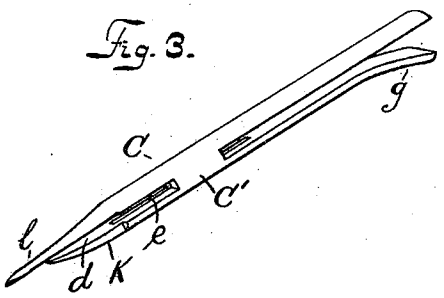


Fig. 4.

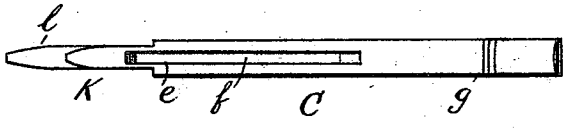
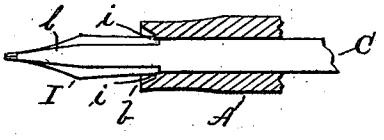


Fig. 5.



WITNESSES:

O. D. Swett.

George S. Parker

INVENTOR

George S. Parker

BY

Chas. D. Smith.

ATTORNEY.

THE NATIONAL LITHOGRAPHING COMPANY.
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE S. PARKER, OF JANESVILLE, WISCONSIN.

FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 510,439, dated December 12, 1893.

Application filed December 14, 1892. Serial No. 455,132. (Model.)

To all whom it may concern:

Be it known that I, GEORGE S. PARKER, a citizen of the United States, residing at Janesville, in the county of Rock and State of Wisconsin, 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention consists in the novel construction of the nozzle and feed bar of a fountain pen; and in the adaptation of a pen nib for use therein. The feeding device is in a single piece, is adjustable, and is easily and cheaply made.

The invention unites all the elements essential to secure an even flow of ink in the desired quantity.

In the drawings Figure 1 represents a longitudinal vertical section of the invention. Fig. 2 is a transverse section taken on line *x*—*x* of Fig. 1. Fig. 3 is the feed bar in perspective. Fig. 4 is a plan of the under side of the feed bar, and Fig. 5 is a horizontal section of part of the nozzle and showing the nib in position in the feed bar.

Like letters of reference denote corresponding parts in the different views.

The letter A indicates the nozzle or pen-section of a fountain pen having a threaded portion B. for attachment to the reservoir or body of the pen. The bore of the nozzle is uniform except at its vent *b*. which is abruptly enlarged to form a seat for the projections *i*. *i*. on the nib I. and to serve as an overflow ink chamber.

C. is the feed-bar adapted to fit into the nozzle B. but so as to be adjusted forward or backward or to be drawn entirely out from the nozzle in either direction. The bar C. is cut lengthwise in two places, viz: from the rear forward to about the middle of the bar, forming the slit *c*, and from the front about one third its length to form the slit *d*. thus leaving the central part C′. of the bar as yet intact. The two cuts *c*. and *d*. are in the same plane. At a right angle to these cuts is a central longitudinal slot cut from the under side upward through the central portion C′ and the adjoining parts of the lower prongs K. and *g*. and into the upper half of the feed bar. This slot is cut at right angles to the end slit *c*. and *d*. and intersects them. Its upper part lettered *f*. serves as an ink duct and its lower part lettered *e*. as an air inlet. One or both prongs of the divided rear end of the bar should be bent away to present a more available surface for the outflowing ink. The drawings show one prong *g* thus deflected. The slit *d*. is to receive the heel of the pen nib I. The prong K. partially cut by the slit *e*. and occupying the concavity of the pen nib, is somewhat shortened, but so that it will underlap approximately the rear one third of the slit in the pen nib. The other prong or tongue *l*, which lies along upon the convex side of the rib, extends nearly to its point and being worked thin and pliant accommodates itself to the flexures of the nib when in use. Those portions of the prongs K. and *l*. which project forward from the smaller part of the nozzle are made somewhat narrower than the body of the feed bar, so as not to affect the flexibility of the nib.

The nib I. is of the ordinary shape except that it is slightly narrowed for about one half its length from the heel forward leaving the projections *i*. *i*. which rest in the annular recess *b*. in the nozzle.

In use the reservoir of the pen having a supply of ink and the pen being inclined in the act of writing the ink is conducted by gravity and capillary attraction into the slit *c*, thence through the channel *f*. into the slit *d*, where by contact with the nib I. it further advances to the extreme tips of the prongs K. and *l*. thus supplying ink to both sides of the nib, whereby ink is always present on its concave side well along its split portion and on its convex side almost to its tip and is conveyed readily through its slit to its extreme point. The space in the reservoir vacated by the ink is filled by the air which passes into the barrel through the inlet *l* in the feed-bar.

Excepting the nib I. my fountain pen is preferably made of hard rubber, but other materials may be used.

What I claim, and desire to secure, is—

1. In a fountain pen, a feed-bar having slits

cut in the same plane from each end to near its center and a slot cut from its under side upward through the central part of the bar and the adjoining parts of the lower prongs at right angles to, and intersecting, said end slits and forming an ink duct in the upper half and an air inlet in the lower half of the feed-bar substantially as described.

2. In a fountain pen, a pen-section having a threaded portion for attachment to the ink reservoir, a recess to form a pen nib seat and an overflow ink chamber, a feed-bar having slits cut in the same plane from each end to near its center and a slot cut from its under side through the central part of the bar at right angles to, and intersecting said end slits and a nib I. having projections *i. i.* adapted to rest in said pen seat substantially as described.

3. In a fountain pen, a feed-bar having slits cut in the same plane from each end to near its center and a slot cut from its under side upward through the central part of the bar and the adjoining parts of the two lower prongs at right angles to said end slits and intersecting them, forming an ink duct in the upper half of the feed bar and an air inlet in its lower half, and its two front prongs made narrower than the body of the bar substantially as set forth.

4. In a fountain pen, a pen section A. with threaded end B. and recess *b.* to form a pen seat and overflow ink chamber, a feed bar C. having end slits *c.* and *d.* cut in the same plane, an air inlet *e.* and an ink duct *f.* cut upward through the central portion of the bar and intersecting said end slits at right angles, a rear prong *g.* deflected and the two front prongs made narrow, a nib I. adapted to rest in the slit *d.* and having projections *i. i.* to rest in the seat *b.* substantially as herein set forth.

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

GEO. S. PARKER.

Witnesses:
SILAS HAYNER,
A. J. RAY.