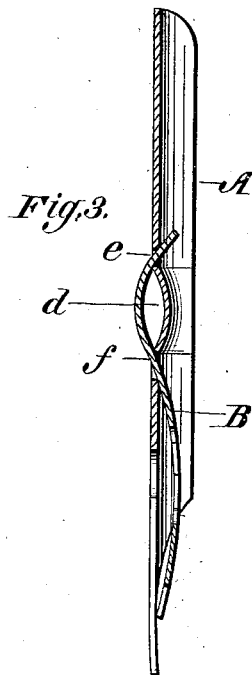
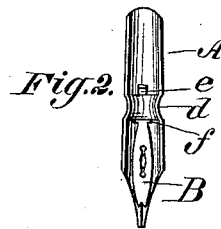
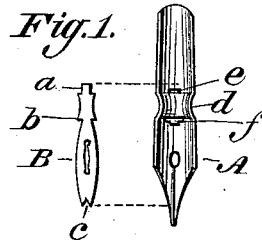


L. W. FAIRCHILD.
Fountain-Pen.

No. 215,813.

Patented May 27, 1879.



Witnesses:
Donn S. Twitchell.
William M. Dodge.

Inventor:
L. W. Fairchild.
by Dodge & Son.
his Atty.

UNITED STATES PATENT OFFICE

LEROY W. FAIRCHILD, OF NEW YORK, N. Y.

IMPROVEMENT IN FOUNTAIN-PENS.

Specification forming part of Letters Patent No. **215,813**, dated May 27, 1879; application filed April 10, 1879.

To all whom it may concern:

Be it known that I, LEROY W. FAIRCHILD, of New York, in the county of New York and State of New York, have invented certain Improvements in Fountain-Pens, of which the following is a specification.

My invention relates to that class of pens called "fountain-pens," in which a small plate or strip of metal is attached to the concave side of the pen itself, for the purpose of taking up, holding, and gradually giving off a much larger supply of ink than the pen alone will hold; and the invention consists in providing the extra strip or tongue-piece with shoulders arranged to lock it fast when its upper end is inserted through transverse slits in the pen proper, and in so applying the tongue-piece that its lower end shall press against the inner face of the pen with a spring-pressure, so that it will follow the movements of the points of the pen as they spring back and forth by the varying pressure in writing, and in so attaching it to the pen that it can be readily detached, whenever desired, for cleaning the parts, all as hereinafter more fully set forth.

Figure 1 is a plan view of the pen and its tongue-piece, each shown separately. Fig. 2 is a front-plan view of the pen with the tongue-piece attached; and Fig. 3 is a central longitudinal section, enlarged, the better to illustrate the shape and position of the parts when united.

Many efforts have heretofore been made to produce a fountain-pen on this general plan; but, generally speaking, they have not proved a success. In nearly all cases they have been made of steel, and one cause of their failure has been the fact that parts soon become inoperative because of the corrosion of the parts, and their consequent failure to deliver the ink freely, the corrosion causing the ink-space to become clogged. In many of them the tongue-piece was so attached to the pen that it could not be readily detached, and hence the parts could not be easily or readily cleaned, and in most of them it was not made to act as a spring and press against the pen-points in such a manner as to move with them as they were pressed upon more or less, and hence did not deliver the ink with that degree of uniformity that is desirable in practice.

To remedy these difficulties and to obviate the objections which have heretofore existed against this class of pens is the object of my present invention, and hence, in the first place, I select a material that will not corrode, preferably gold, and make all the parts of that material.

In order to carry out my invention I construct the pen A as represented in the drawings, it being made with a transverse concavity, *d*. At the upper edge of this concavity I make a small transverse slot, *e*, and at its lower edge I make another transverse slot, *f*, this latter being made with an offset in its lower side, thus forming a notch or recess somewhat shorter than the slot proper, as shown in Fig. 1. In all other respects the pen may be made in any form or style desired. The tongue-piece B, I make of a thin and very elastic strip of gold, of the form shown in Fig. 1, its upper end being provided on each edge with shoulders *a* and *b*, the distance between these two sets of shoulders being a little greater than that between the slots *e* and *f*. At its lower end a V-shaped notch, *c*, is made, as represented in Figs. 1 and 2, so that when it is secured in place the points on each side of this notch will bear against the inner face of the pen, as shown in Figs 2 and 3, thus leaving an open space between said points for the ink to flow through, said space being directly above the nibs of the pen, so that the ink will be delivered at the point where it is required. This tongue-piece B, after being formed, and before it is applied to the pen A, is bent into a recurved form, as represented in Fig. 3, or nearly so. Its upper end is then inserted first through the slot *f*, and is then forced inward through the slot *e*, its shoulders *a* bearing against the back of the pen at each side of the slot *e*, thereby preventing it from passing any farther through. Its body is then pushed upward until its shoulders *b* have passed through the slot *f*, (the elasticity of the metal permitting it to bend and yield sufficiently for this purpose,) when the narrow part immediately below the shoulders *b* will rest in the recess or notch in the lower wall of the slot *f*, thereby causing the shoulders *b* to engage with the metal at the sides of said notch, and thus lock the tongue-piece B fast, and cause it to assume the position shown

in Fig. 3, with its points at its lower end bearing against the inner face of the pen's points. The curvature of this lower portion of the tongue-piece B is such that it is made to bear at its lower end against the inner face of the pen with a pressure sufficient to keep it in contact therewith at all times, it springing and moving with the points of the pen as the latter spring in the operation of writing, thereby keeping the space through which the ink flows at all times more nearly uniform, thus insuring a regular and uniform delivery of ink in writing.

Whenever it is desired to clean the parts it is only necessary to take hold of the lower part of the tongue B and spring it outward far enough to lift its neck out of the notch in slot *f*, thereby disengaging its shoulders *b*, when it can be at once drawn out or detached. After the parts have been cleaned the tongue-piece B can be returned to its place in the

manner hereinbefore described. By this plan of construction I am enabled to produce a fountain-pen which not only works with uniformity, delivering the ink with regularity, but which can be readily separated for cleaning and as readily readjusted for use again.

I am aware that pens have had tongue-pieces attached by solder, and also by means of lips formed by turning over portions of the metal of the pen or of the tongue-piece, and therefore I do not claim such; but

What I do claim is—

The tongue-piece B, provided with the shoulders *a* and *b*, in combination with the pen A, provided with the transverse slots *e* and *f*, the said parts being constructed and arranged to operate substantially as described.

LEROY W. FAIRCHILD.

Witnesses:

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WILLIAM W. DAVIS.