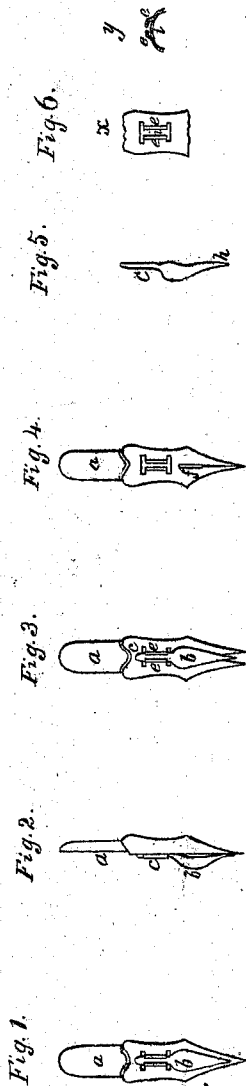


H. S. Goodspeed.

Fountain Pen.

No 87661.

Patented Mar 9 1869



Witnesses:

Louis Mochlag

P. A. Larned.

Inventor:

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attys

United States Patent Office.

HENRY S. GOODSPEED, OF NEW YORK, N. Y.

Letters Patent No. 87,661, dated March 9, 1869.

IMPROVEMENT IN PENS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY S. GOODSPEED, of the city, county, and State of New York, have invented a new and useful Improvement in Fountain-Pens; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of the back of my improved fountain-pen.

Figure 2 is a side view of the same.

Figure 3 is a view of the back, with the points separated by pressure.

Figure 4 is a view of the pen, with the spoon removed.

Figure 5 is a view of the spoon detached.

Figure 6 shows the mode of forming the attachment in two views, plan *x* and section *y*.

My improvement consists in the application, to the back of steel or other metallic pens, of a spoon-shaped reservoir, having its smaller extremity elongated into a point, which lies parallel, or nearly so, with and in close proximity to the slitted point of the pen, and so arranged therewith, as to act by capillary attraction in absorbing the ink into and delivering it from the reservoir, and to produce uniformity in the supply; and also to afford a mechanical support to the points of the pen when pressure is applied to it, and to insure the shedding of the ink, however widely these points may be separated.

It also consists in the mode of fastening the spoon to the pen, as hereinafter described.

As represented in the drawings—

a is a steel pen, which may consist of any ordinary form, and

b, the spoon-shaped reservoir.

This is attached to the back of the pen, by means of a stem, *c*, which slides under two lips, or flanges *e e*, raised longitudinally on either side of a central strip, *i*, which is on a plane with the back of the pen, and serves as a guide to the under side of the stem.

The manner of forming this fastening-device is most clearly shown in fig. 6, where *x* shows the pen-back as cut previous to raising the lips *e e*, and *y*, the same in section after those lips are raised.

These processes are effected by cutting-punches and dies, by methods well known in the arts.

The lips bear, with a slight pressure, on the stem, holding it firmly in place, but enabling it to be adjusted to the point of the pen, and raised or lowered with ease.

The reservoir *b* is spoon-shaped, with its concave side next to the back of the pen, lying over the piece

f, so as to facilitate the free circulation of the writing-fluid between the reservoir and the slit of the pen, which it follows to the point, there being no ink left upon the surface while writing.

I am aware that devices of various shapes have been applied to the inside of the pen, to retain ink, but such, whether flat or concave, do not act upon the principle or accomplish so good a result as mine, the operation of which is by capillary attraction, produced by the close proximity of two nearly parallel surfaces, as represented by the point and lower extremity of the spoon-reservoir, while the chamber formed by the hollow space above, retains a sufficient supply for use for a considerable time.

Some penmen occasionally bear with so much force on the pen, in making flourishes, as to separate the points so widely that the ink will not flow by capillary attraction; but my improvement obviates this defect, by the intrusion of the point *h* of the spoon through between the points of the pen, diminishing the space, so that capillary absorption is maintained, and supporting the points by pressure, so that a more flexible pen may be employed, with less fatigue to the writer, and insuring uniformity in the flow of ink.

I do not claim broadly a spoon-shaped reservoir, for retaining a supply of ink for the pen; but

What I claim, and desire to secure by Letters Patent, is—

1. The reservoir-attachment *b*, applied to the back of the pen, by a shank or stem rigidly connected therewith, so as to maintain its pointed extremity in juxtaposition with the nib, for the purposes of first rendering capillary service in supplying the ink; second, of supporting the nib under moderate pressure; third, of protruding through the slit, and thereby forming a triple point under extreme pressure, said attachment forming a component part of the pen with which it is combined, but capable of being removed and applied to another, when the first becomes unserviceable, substantially as herein set forth.

2. A capillary reservoir, when applied to the back of the pen, and provided with an auxiliary point, arranged and operating substantially as and for the purposes set forth.

In witness whereof, I have hereunto signed my name, in the presence of two subscribing witnesses.

HENRY S. GOODSPEED.

Witnesses:

WM. F. McNAMARA,
G. M. LAWRENCE.