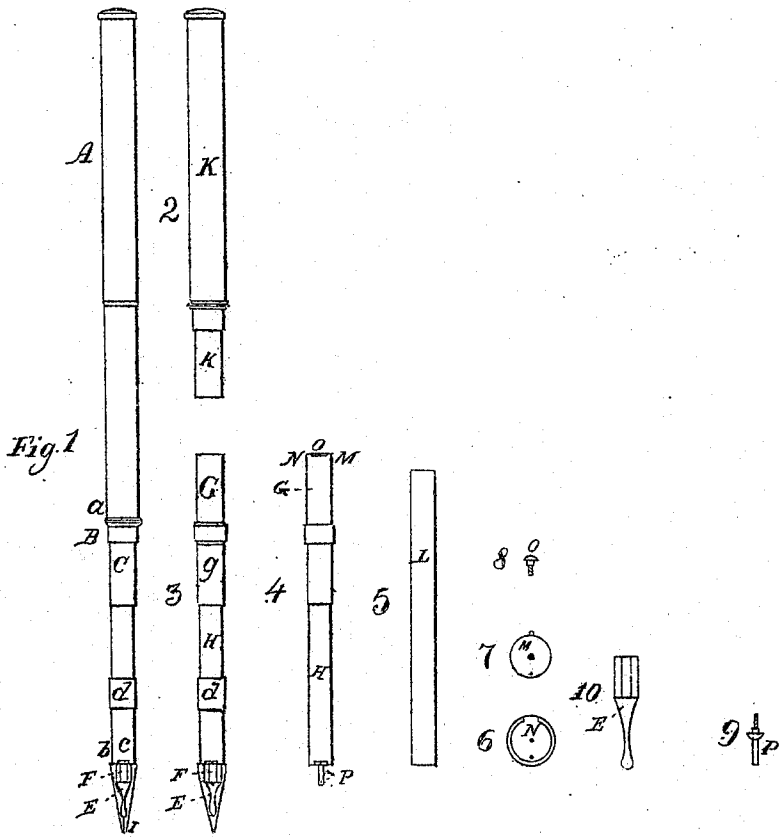


Fountain Pen.

No 17298.

Patented May 12, 1857.



UNITED STATES PATENT OFFICE.

CHARLES ADOLPHUS ROSEFIELD, OF COLUMBUS, GEORGIA.

IMPROVEMENT IN FOUNTAIN-PENS.

Specification forming part of Letters Patent No. 17,298, dated May 12, 1857.

To all whom it may concern:

Be it known that I, CHARLES ADOLPHUS ROSEFIELD, of Columbus, in the county of Muscogee, in the State of Georgia, have invented a certain 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, and to the letters of reference marked thereon.

My improvement relates to the guider or conductor which conveys the ink from the fountain or reservoir to the pen, conductors for this purpose in fountain-pens being common; and the character of my improvement will be shown in the following description of the entire instrument in its several details.

In the ink-reservoir or tubular handle of the pen I prefer to fit a quill cylinder L, Figure 5, for retention of the ink, to prevent corrosion, quill barrels having before been used for a like purpose. Two tubes G and H, Fig. 4, may form the metal covering to the quill barrel, between which union may be established by a solution of gutta-percha. On the top of the upper of these metal tubes G is a metal disk with a small air-hole made in it, said disk being soldered to said tube, and pivoted centrally to the top of this disk by a screw o, Fig. 8, is another disk u, Fig. 7, with a corresponding aperture in it and provided with a stud on its edge arranged for play in the turning of the upper disk in a cavity in the tube, as shown in Fig. 6, which combined arrangement is for the purpose of forming a valve device with stops to govern its operation, not precluding the fitting of the whole in an exterior slide or tube, and which, when in its open condition, by the apertures in said disk lying one over the other, admits of the fountain being filled through suction by the application of the mouth of the writer, as common to other fountain-pens.

Fig. 1 represents the fountain-pen fitted to an extension-holder and as extended and complete for use; and Fig. 2 represents the same when shut up and packed for the pocket, which arrangement, not being part of this invention, it is not necessary to describe minutely here. In Fig. 3 the extension-holder is omitted.

Most or all pens of this description have

what is termed a "guider" or "conductor" to convey the ink in a fluent but not too free manner to the pen. These conductors have been variously constructed and have been made both rigid and flexible. They usually connect with the bottom end of the reservoir, and dipping downward incline or are bent to meet the nib of the pen on its interior and in line with the main or center slit of the pen, so as to convey the ink to the proper point. They have also been made both fixed and detachable. As previously constructed, however, they have not been as perfect or afforded the same facilities which I claim for my improvement on the conductor, which device, though small in itself, is one of the most important features in fountain-pens to make them practicable or advantageous to use.

The ink is supplied to the conductor E, Figs. 1, 3, and 10, from the bottom of the reservoir by perforations in any proper manner. The conductor E, I make of quill, not merely for the purpose of securing elasticity in its contact with the pen to facilitate the feed, but it is free from corrosion, may be readily and perfectly cleaned after the pen has been allowed to stand unwiped, and a new one may, when required, be easily cut or made by any penman, and for this purpose I make it detachable from a metal head-piece connected with a swivel-screw P, Figs. 4 and 9, that unites it to the bottom of the reservoir or lower tube H, said screw fitting in the center of the latter. This head-piece, or it may be termed "conductor-holder," acts in part as a conductor itself, and is shown on an enlarged scale in Fig. 10, with the conductor attached, and at F in Figs. 1 and 3. It is fitted to swivel or turn freely on the screw P, as above specified, or the screw-pin to turn with it, and has a slot or any other suitable provision for the insertion of and to give a steady hold to the conductor E on one side of it and the swivel-pin P when in place, and which is the side next to the pen when the instrument is in use; but when not in use, or from time to time as the parts require to be cleaned of thick or dried ink, and in order to get at conveniently the inside of the pen's nib for this purpose, or rather the whole inside of the pen it may be, the conductor E may be freely swung to either side of the pen or altogether out of it with-

out strainage (which is liable to injure the conductor) by the free swing of its metal holder on the screw-pin, and, if turned half round from its place occupied in writing, gives ample room for cleaning the pen and greater facility for the insertion of a new conductor or repairing or adjustment of the old one.

To take out the pen for the purpose of cleaning, &c., is objectionable, as the pen is frequently injured by so doing, and this arrangement avoids it, also avoids the turning of the pen I with its holding-ring *d* (see Fig. 1) to get at the inside of the pen to clean it, and point of the conductor to clean and adjust it, which is objectionable, as the frequent turning of the pen-holding ring causes it to turn and play loose on pressure applied to the pen in writing, whereas the hold should be a steady one; but even if not so (and in time it gets more or less loose) the slight turning of said ring and its pen will by the bearing of the conductor on the pen and hang of the conductor, as described, turn also the

conductor along with it to keep up the proper relative position of the conductor to the pen, and this without strainage or displacement of the conductor proper, as aforesaid, and this easy lateral play without strainage of the conductor gives a freedom of action to the pen and conductor in writing greater than is due to the mere elastic character of the conductor, in regard to which I claim nothing new.

What I claim as new and useful herein, and desire to secure by Letters Patent, is—

The detachable quill conductor E, fitting laterally in or to a rigid upper conductor or conductor-holder, arranged to freely swivel on a center pin or bearing at the bottom of or below the reservoir for action with the pen and pen-holder, as shown and described.

Columbus, Georgia, February 24, 1857.

CHARLES A. ROSEFIELD.

Test:

JAMES KIVLIN,
TILMON Q. WEST.