

C. BAUR.
Fountain-Pen.

No. 220,568.

Patented Oct. 14, 1879.

Fig 1.

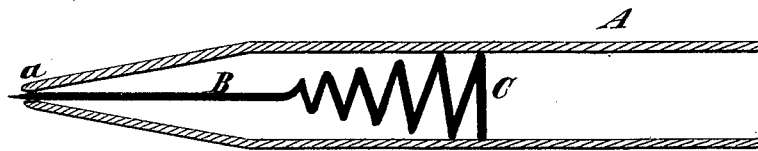


Fig 2.

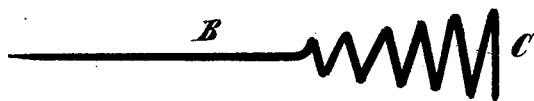


Fig 3.



Witnesses:

Chandler Hall.

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R. R. Moffatt

UNITED STATES PATENT OFFICE.

CHARLES BAUR, OF NEW YORK, N. Y.

IMPROVEMENT IN FOUNTAIN-PENS.

Specification forming part of Letters Patent No. **220,568**, dated October 14, 1879; application filed October 10, 1878.

To all whom it may concern:

Be it known that I, CHARLES BAUR, of New York, in the county and State of New York, have invented certain new and useful Improvements in Fountain-Pens, of which the following is a specification.

My invention consists in a fountain-pen comprising a glass capillary fountain-tube, rounded externally and internally at the tip or nib, and provided with a valve consisting of a rod actuated by a spring.

It also consists in a fountain-pen comprising a fountain-tube, preferably of glass, and of such size that the ink is held therein by capillary attraction, and a valve connected with a spring, and so combined with the tube as to be retained therein by lateral pressure, and adapted to yield and actuate the valve, whereby I produce a very simple article, and provision is afforded for the easy adjustment of the valve.

In the accompanying drawings, Figure 1 represents a central longitudinal section of a pen embodying my improvements; Fig. 2, a view of the valve-rod and its actuating-spring detached from the tube, and Fig. 3 a view of a valve-rod and spring of slightly-modified form.

Similar letters of reference designate corresponding parts in all the figures.

A designates the fountain-tube of my pen. It is preferably formed of glass, so that the amount of ink in the tube and the condition of the tube can be readily ascertained at a glance, and also to facilitate the cleaning of the pen. This tube is preferably made of a size to hold the ink therein by capillary attraction, as it can then be made open at the end. It is tapered to a fine tip or nib at one end, and in order that the pen may write smoothly I round the tip or nib both externally and internally, as illustrated in Fig. 1. This may be well accomplished by holding the tip or nib in a flame until the glass is softened thereby and caused to assume the desired rounded form at the tip or nib.

B designates a valve, formed of a piece of wire, and shown as having its tip tapered and rounded. This valve is of such a size that its taper end may close the end of the tube, and yet protrude through the same.

C designates a spring, shown as of spiral form, and attached to the inner end of the rod B. This spring is of such size that it may fit snugly within the tube and exert sufficient pressure on the sides thereof to hold it against accidental longitudinal displacement. When not otherwise actuated, the rod B is forced down by the spring C, so as to close the tip or nib of the pen. The ink is thus prevented from clogging at the tip or nib, and as the latter is closed the ink will not exude when the tip is brought in contact with any object, as it otherwise might do.

The form of spring C' (shown in Fig. 3) is of the kind known as "convolute springs," and is made by coiling up a thin strip of sheet metal.

It will be seen that by my invention I produce a very simple and cheap pen, wherein the ink is held by capillary attraction, the valve may be adjusted at pleasure, and great convenience is afforded for viewing the interior for ascertaining the necessity for cleaning or replenishing the tube, and that, inasmuch as the fountain-tube may be left open at the top, great facility for cleaning it is afforded.

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

1. A fountain-pen comprising a glass capillary fountain-tube rounded externally and internally at the tip or nib, and provided with a valve consisting of a rod actuated by a spring, substantially as specified.

2. A fountain-pen comprising a fountain-tube and a valve connected to a spring, so combined with the tube as to be retained therein by lateral pressure, and adapted to yield and actuate the valve, substantially as specified.

3. A fountain-pen comprising a glass capillary fountain-tube and a valve connected to a spring, so combined with the tube as to be retained therein by lateral pressure, and adapted to yield and actuate the valve, substantially as specified.

CHARLES BAUR.

Witnesses:

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G. A. LILLIENDAHL.