(No Model.)

E. C. WILEY.

PEN.

No. 414,739. Patented Nov. 12, 1889.

Fig. 1.

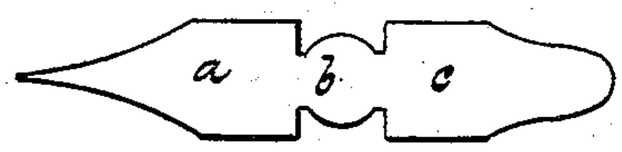

Fig. 2.

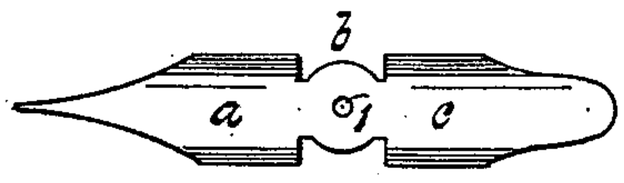

Fig. 3.

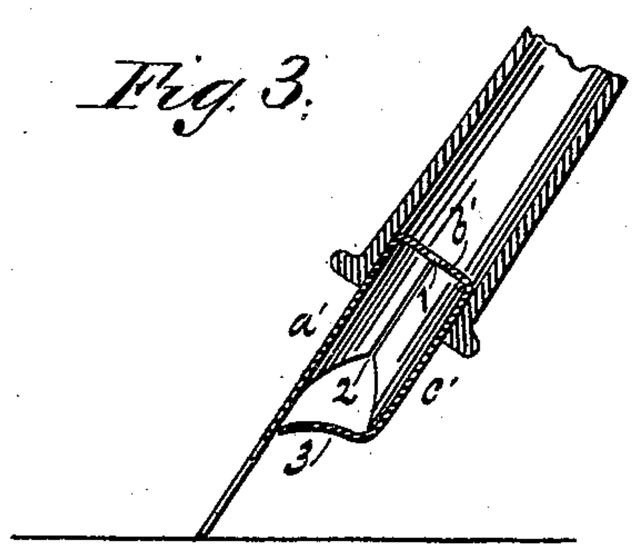

Fig 4

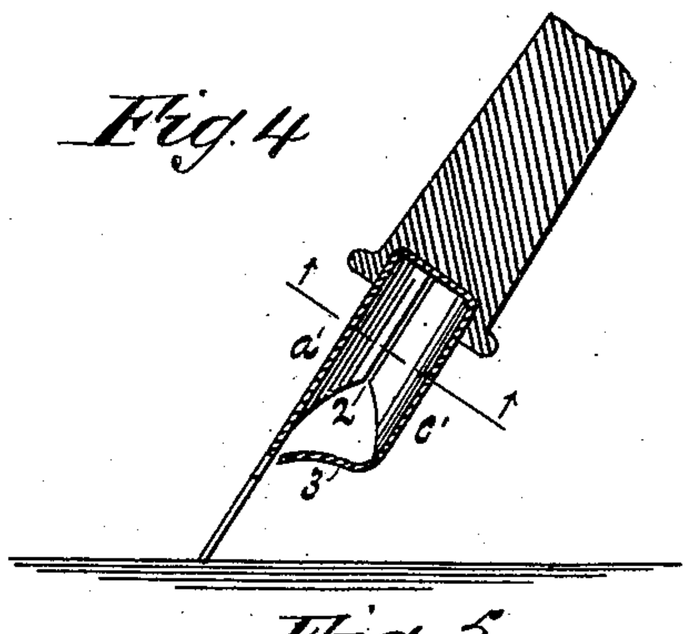

Fig. 5

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SPECIFICATION forming part of Letters Patent No. 414,739, dated November 12, 1889.

Application filed March 8, 1889. Serial No. 302,485. (No model.)

To all whom it may concern:

Be it known that I, EDWIN C. WILEY, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Pens, of which I declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in pens which are provided with a special cell or chamber to contain a supply of ink; and the invention consists of a pen constructed substantially in the manner herein described and claimed.

In the accompanying sheet of drawings, Figure 1 is a view of the blank; Fig. 2, a view of the blank partly formed. Figs. 3 and 4 are sections of the pen and holders, and Fig. 5 a cross-section of the pen in the plane indicated in Fig. 4.

Similar letters and figures of reference indicate like parts in the several views.

Pens may be made according to the following description either of gold or of steel, though the invention is particularly useful when the pens manufactured are gold pens. First, a blank of the proper thickness is prepared. This blank has the section *a*, which corresponds to the blank of an ordinary pen, the narrow central section *b* and the section *c* similar in shape to the section *a*, though the tapering part of the latter is somewhat longer and narrower at its outermost extremity than the corresponding part of the section *c*. A small perforation 1 is made in the blank at the center of the section *b*. This blank is subjected to the action of suitable dies, whereby the sections *a* and *c* are drawn together till their lateral edges meet, and thus is formed a tube with slits 2 2 on opposite sides thereof, extending from end to end, the tube being composed of the two half-cylinders *a'* and *c'*, connected by the perforated end portion *b'*. The part *a'* is split and finished in the same manner as an ordinary pen, and the tip 3 of the part *c'* is bent inward close to the under side of the other part, so that the tube is closed to a considerable extent at that end, as well as at the opposite end.

In the manufacture of gold pens the iridium for the point is applied and the nib tempered in the usual manner before the blank is drawn up into the tube, as described. When the pen so constructed is to be used, the tubular part is tightly inserted in a hole in the end of a suitable holder and dipped into the ink. The ink fills the space or chamber between the sides *a'* and *c'*, and the quantity thus taken up is fed down to the point in the same manner as by an ordinary pen. The pen may likewise be applied to a holder which is provided with an ink-reservoir, the ink in this case being admitted into the chamber of the pen from the reservoir through the perforation 1, as will be understood by reference to Fig. 3. The upper part *a'* of the pen, it will be observed, is nowhere connected to the under part excepting at the end *b'*, the two parts being separated by the slits 2 2, and therefore the pen may have the same degree of elasticity as a common pen; but this would not be the case if the tube should be made without any division, since all the elasticity the pen could then have would be that of the nib alone.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A pen constructed with a tubular chamber formed integral with the rest of the pen, said chamber having the closed end *b'*, and having its lateral wall divided from end to end, substantially as and for the purpose described.

2. A pen composed of the two parts *a'* and *c'*, separated by the slits 2 2, and connected by the end portion *b'*, substantially as and for the purpose described.

3. A pen formed from the blank having the sections *a* and *c* connected by the narrow disk-shaped section *b*, substantially as and for the purpose described.

EDWIN C. WILEY.

In presence of—

D. A. CARPENTER,

E. C. SMITH.