April 5, 1932. R. F. GEORGE 1,852,112

PEN

Filed May 14, 1927

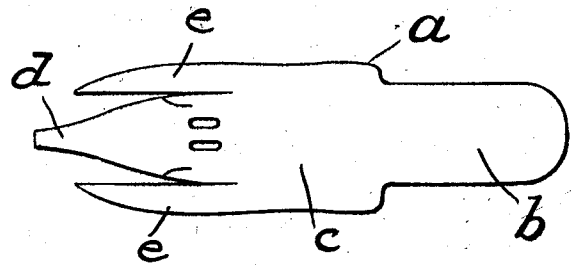

FIG. 1.

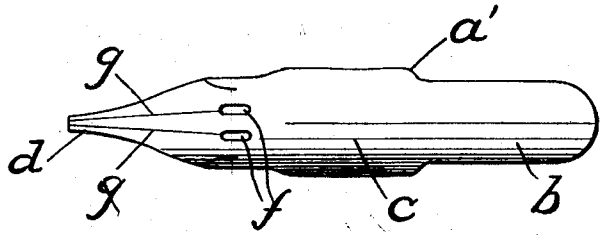

FIG. 2.

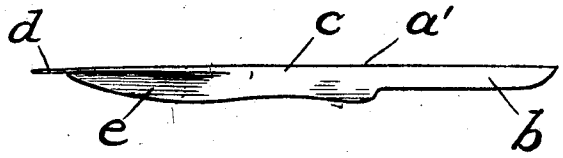

FIG. 3.

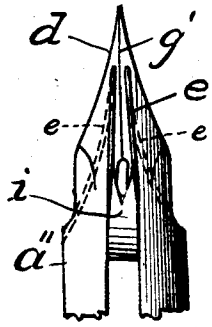

FIG. 6.

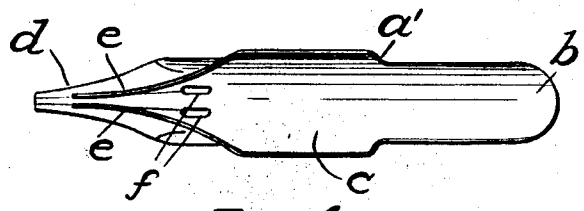

FIG. 4.

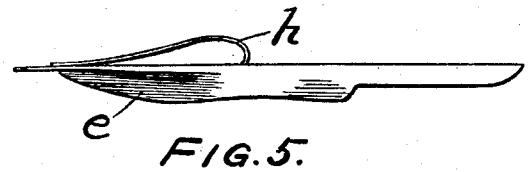

FIG. 5.

WITNESS:

INVENTOR

Ross F. George

BY

ATTORNEYS.

Patented Apr. 5, 1932 1,852,112

UNITED STATES PATENT OFFICE

ROSS F. GEORGE, OF SEATTLE, WASHINGTON

PEN

Application filed May 14, 1927. Serial No. 191,316.

My invention relates to an improvement in pens and more particularly to the provision of a pen adaptable to the usual pen holder and so formed as to include integrally in its structure a feeder, or reservoir in which a supply of ink will be contained and from which ink will be fed to the nibs of the pen solely by capillary attraction.

Heretofore it has been customary to provide pens of various kinds, such as the ordinary writing pen, lettering, or marking pens, etc., with reservoirs or feeders adapted to contain ink and from which ink is fed to the nibs of the pen points. Such reservoirs, or feeders have been produced separately from but adapted for attachment to a pen, and they have been produced in various forms including those constituting a reservoir per se and those adapted to cooperate with the body of the pen to form a reservoir. While certain of the reservoirs, or feeders heretofore produced have been found substantially satisfactory, they have been open to certain objections chief among which are the necessity for positively introducing a supply of ink, difficulty of cleaning and the costs of manufacturing and of assembly with the pen.

Now it is the object of my invention to provide a pen of any desired style, as a writing, lettering, or marking pen and adaptable to any pen holder, so constructed as to include integrally in its structure a reservoir, or feeder for ink to which ink may be supplied by the mere dipping of the pen and in which the ink will be retained and from which ink will be fed solely by capillary attraction; further to provide a pen of the character indicated which will be simple and inexpensive to manufacture and which may be readily and easily cleaned.

Having now indicated, in a general way, the nature and purpose of my invention, I will proceed to a detailed description of a preferred embodiment thereof with reference to the accompanying drawings in which:—

Fig. 1 is a plan view of a blank from which the pen embodying my invention is formed.

Fig. 2 is a view of the upper surface of a pen embodying my invention.

Fig. 3 is a side view of the pen shown in Fig. 2.

Fig. 4 is a view of the under surface of the pen shown in Fig. 2 showing the reservoir, or feeder.

Fig. 5 is a side view showing a modification of the pen shown in Fig. 2.

Fig. 6 is a view of a pen embodying a modification of my invention.

Referring more particularly to Figures 1–4, *a* indicates a blank from which the pen *a'* is formed. The blank is so formed as to provide a shank *b*, for insertion in a pen holder, a body portion *c*, provided with pierce holes *f*, a point *d*, which is subsequently slit to form nibs, and a pair of wings *e* on opposite sides of the body and extending toward the end of the point.

In forming the pen *a'* from the blank *a*, the blank is first raised, as is usual in pen making practice; which positions the wings *e* oppositely beneath the forward end of the body of the pen. After the pen is raised, it is hardened and slitted as at *g* to form the nibs. The wings *e* are then pressed oppositely at their end portions so as to give them the form and direction, as shown in Fig. 4, with the end portions in substantial parallelism and spaced apart, and curving from their end portions to the body of the pen. The wings *e* will spring to the desired form on the release of pressure, if they are pressed at their end portions into such position that their free ends touch.

If now the pen *a'* is dipped into ink, the ink will fill the space between the wings *e* and the under surface of the pen, which forms a reservoir, or feeder, and will be retained therein by capillary attraction. When the pen is used the ink will flow under the influence of capillary attraction from between the free ends of the wings to the nibs of the pen. When the feeder, or reservoir becomes empty, it may be refilled by redipping the pen in ink and when it is desired to clean the pen such may be readily accomplished, since the feeder, or reservoir is entirely open, the ink being held therein entirely by capillary attraction.

Referring more particularly to Figure 5,

the pen shown is of precisely the same construction as is the pen of Figures 1–4 with the addition of an over feeder *h* in addition to the under feeder formed by the wings *e*. The over feeder *h* may be of any conventional type formed separately and secured to the pen, or formed from a tongue cut out of and integral with the body of the pen.

Referring more particularly to Figure 6, the pen *a'* is provided with a point *d* and slit as at *g'* to form nibs. A tongue *i*, bent from the body of the pen and bent over on the top surface of the pen to extend toward the point, is slit from its free end and the wings produced thereby are turned outwardly to form wings *e'* positioned as shown. The space between the wings *e'* forms a reservoir in which ink will be retained by capillary attraction and from which it will be fed to the point of the pen between the free ends of the wings *e'*. Wings *e* are located beneath the pen as in the previous modification.

It will be understood that my invention may be adapted to various types of pens including those used for ordinary writing purposes and those provided, as by bending up the nibs, with variously formed marking surfaces and including lettering and marking pens.

Having now fully described my invention, what I claim and desire to protect by Letters Patent is:—

1. A pen including a body and nibs and having a reservoir for ink formed by a pair of oppositely positioned wings extending beneath the under surface of the pen from the body toward the end of the nibs, said wings in their extension being oppositely curved throughout the major portion of their extension and having end portions spaced apart and extending in substantial parallelism and a second reservoir formed by a pair of oppositely positioned wings extending adjacent to the top surface of the pen from the body toward the end of the nibs, said last-named wings being unconnected with the pen throughout their forward extension.

2. A pen including a body and nibs and having a reservoir for ink formed by oppositely positioned wings connected to the body of the pen at their rear ends and extending forwardly toward the ends of the nibs, all portions of the wings extending substantially perpendicularly to the body and nibs.

3. A pen including a body and nibs, the nibs being formed by at least one ink feeding slit, said pen having a reservoir for ink formed by oppositely positioned wings connected to the body of the pen at their rear ends and extending forwardly toward the ends of the nibs, all portions of those parts of the wings adjacent the slit extending substantially perpendicularly to the body and nibs.

4. A pen including a body and nibs, the nibs being formed by at least one ink feeding slit, said pen having a reservoir for ink formed by oppositely positioned wings connected to the body of the pen at their rear ends and extending forwardly beneath the pen toward the ends of the nibs, all portions of those parts of the wings adjacent the slit extending substantially perpendicularly to the body and nibs.

5. A pen including a body and nibs, the nibs being formed by at least one ink feeding slit, said pen having a reservoir for ink formed by oppositely positioned wings connected to the body of the pen at their rear ends and extending forwardly above the pen towards the ends of the nibs, all portions of those parts of the wings adjacent the slit extending substantially perpendicularly to the body and nibs.

In testimony of which invention, I have hereunto set my hand, at Philadelphia, Pennsylvania, on this 6th day of May, 1927.

ROSS F. GEORGE.