

(12) INNOVATION PATENT
(19) AUSTRALIAN PATENT OFFICE

(11) Application No. **AU 2018100765 A4**

(54) Title
HYBRID DIP FOUNTAIN PEN

(51) International Patent Classification(s)
B43K 5/18 (2006.01) **B43K 5/02** (2006.01)

(21) Application No: **2018100765** (22) Date of Filing: **2018.06.07**

(30) Priority Data

(31) Number	(32) Date	(33) Country
2017902286	2017.06.15	AU

(45) Publication Date: **2018.07.12**

(45) Publication Journal Date: **2018.07.12**

(45) Granted Journal Date: **2018.07.12**

(71) Applicant(s)
James Samuel Finniss;Robert Oster Pty Ltd

(72) Inventor(s)
Oster, Robert;Finniss, James Samuel

(74) Agent / Attorney
Summit IP, PO Box 81, Hope Valley, SA, 5090, AU

ABSTRACT

There is provided a writing instrument, including a body being graspable by a user, a chamber extending inwardly of a forward end of the body, the chamber having an opening, a nib attached in or adjacent said opening, a nib feed held at least partly within said chamber and extending out through the opening such that the nib feed is positioned adjacent the nib, wherein the nib and nib feed are dipable into a volume of writing ink such that said writing ink is drawn into the chamber, whereby the writing ink may be used by the user to undertake writing or drawing.

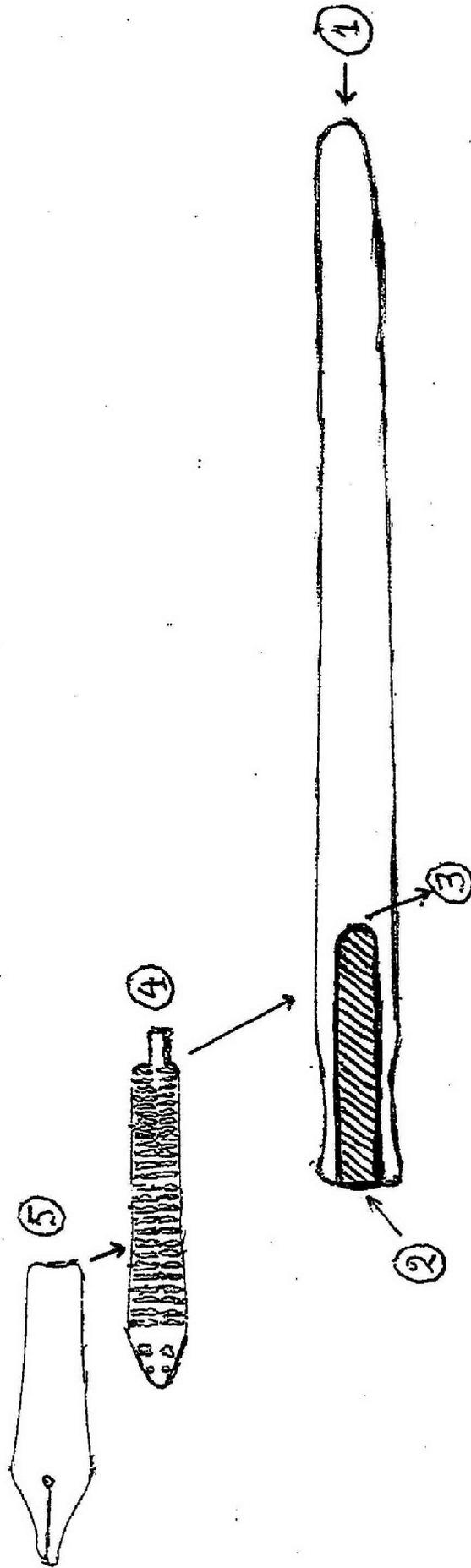


Figure 3

HYBRID DIP FOUNTAIN PEN

FIELD OF THE INVENTION

The present invention relates to writing instruments and in particular to a hybrid dip/fountain pen.

5 BACKGROUND OF THE INVENTION

There are numerous types of writing instruments currently available on the market and suggested in the published prior art. These pens include dip pens which were developed to replace the quill pen, and the fountain pens that was developed to overcome some of the problems associated with the dip pen.

10 A dip pen typically includes a metal nib with a capillary channel that extends between a tapered tip and a breather hole. The metal nib is detachably mounted to a handle or holder, and the breather hole acts as an ink reservoir.

One of the major problems with existing dip pens is that the user must frequently recharge the ink from an inkwell to continue with their drawing or writing.

15 The published prior art suggests the use of a narrow tube reservoir that can be clipped onto the side of a dip pen, which allows the user to draw or write for several minutes without recharging the nib. However, these tubes could become easily clogged and are of limited usefulness.

20 The dip pen may also be recharged using a syringe or brush, however this adds to the effort required to undertake the writing or drawing activity and may lead to spillage of the ink.

In contrast, a fountain pen includes an internal reservoir of ink and a nib feed, which abuts the underside of a metal nib. Ink from the internal reservoir passes through the nib feed, and sometimes also an internal tube, to the metal nib to be deposited onto a paper surface by the user. To fill the internal reservoir with ink a user may manually use a pipette or syringe to inject the ink into the internal reservoir. Some fountain pens include an internal filling mechanism which creates suction by way of a piston mechanism to thereby draw the ink directly through the nib into the reservoir. Other fountain pens use a replaceable reservoir in the form of a pre-filled cartridge.

25

30

Both dip pens and fountain pens have their own advantages. For instance, dip pens can be more sensitive to variations of pressure and speed, which makes it easier to produce a line that varies in thickness. Furthermore, dip pens can produce a finer line compared to conventional fountain pens. In contrast fountain pens provide longer periods of writing or drawing and do not require frequent refiling. However, the use of disposable cartridges has an environmental impact and it may be more difficult or impossible to change nibs of a fountain pen if a different colour or style of nib is going to be used.

It should be appreciated that any discussion of the prior art throughout the specification is included solely for the purpose of providing a context for the present invention and should in no way be considered as an admission that such prior art was widely known or formed part of the common general knowledge in the field as it existed before the priority date of the application.

SUMMARY OF THE INVENTION

In one aspect of the invention, but not necessarily the broadest or only aspect, there is proposed a writing instrument, including:

- a body being graspable by a user;
- a chamber extending inwardly of a forward end of the body, the chamber having an opening;
- a nib attached in or adjacent said opening;
- a nib feed held at least partly within said chamber and extending out through the opening such that the nib feed is positioned adjacent the nib;

wherein the nib and nib feed are dipable into a volume of writing ink such that said writing ink is drawn into the chamber, whereby the writing ink may be used by the user to undertake writing or drawing.

The writing ink is drawn into the chamber that acts as a temporary reservoir of writing ink to permit the user to undertake writing. The configuration of the chamber and connection with the nib and nib feed means that the writing ink is drawn into the temporary reservoir and then is feed out thereof once the user begins to write or draw.

In this way, the user does not need to frequently dip the pen into an inkwell to replenish the writing ink. The temporary ink reservoir acts in a similar way to the

reservoir of a fountain pen but without the additional attachments or inserts that are required for a fountain pen to operate correctly.

The nib and nib feed preferably frictionally engage the opening such that they are held in position for writing or drawing.

5 The nib may include a main body portion, opposite shoulders, a tapered end, and a slit extending inwardly from the tapered end and leading to a breather or vent hole located through the main body portion between the opposite shoulders.

10 The nib may alternatively include a body, a tapered end, a breather or vent hole and a capillary channel that extends between the tapered end and the breather or vent hole.

Preferably the nib feed includes a wing that is positionable adjacent said tapered end of the nib, a post at an opposite end of the nib feed to said wing, and a plurality of fins intermediate of the wing and post. An ink channel or channels may also extend through one or more of the plurality of fins.

15 In one form the nib is a fountain pen nib and the nib feed is a correspondingly shaped fountain pen nib feed. The fountain pen nib may be a Number 6 nib, with corresponding a correspondingly shaped nib feed.

In still another form the nib is a conventional calligraphy nib with a correspondingly shaped nib feed.

20 The writing instrument may therefore include a number of exchangeable nibs or be compatible therewith, wherein the nibs may be conventional dip pen nibs and/or conventional fountain pen nibs and/or conventional calligraphy nibs. In this way, the line weighting, effects and colour of the writing can easily be changed by the user.

25 The open end of the chamber also enables rapid cleaning of the chamber after use or when colours or ink types are being changed.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate an implementation of the invention and, together with

the description, serve to explain the advantages and principles of the invention. In the drawings,

- Figure 1 is a perspective view of the body of the writing instrument illustrating the position of the chamber and opening;
- 5 Figure 2 is a side view of the body of the writing instrument of Figure 1;
- Figure 3 is a schematic view of the nib, nib feed, and the body of the writing instrument of Figure 1 illustrating the position of the chamber and opening.
- 10 Figure 4 is a schematic view of the nib, nib feed and body of the writing instrument of Figure 3, showing one embodiment of the corresponding body and nib feed;
- Figure 5 is a schematic view of the nib, nib feed and body of the writing instrument of Figure 3, showing one embodiment of the corresponding body, nib feed and nib;
- 15 Figure 6 is a schematic view of the nib, nib feed and body of the writing instrument of Figure 3, showing a top view of the assembled corresponding body, nib feed and nib of Figure 5; and
- 20 Figure 7 is a schematic view of the nib, nib feed and body of the writing instrument of Figure 3, showing an underside view of the assembled corresponding body, nib feed and nib of Figure 5, illustrating the relative position of the nib feed and nib.

DETAILED DESCRIPTION OF THE ILLUSTRATED AND EXEMPLIFIED EMBODIMENTS

25 Similar reference characters indicate corresponding parts throughout the drawings. Dimensions of certain parts shown in the drawings may have been modified and/or exaggerated for the purposes of clarity or illustration.

Referring to the drawings for a more detailed description, there is illustrated a writing instrument, demonstrating by way of an example, an arrangement in which the principles of the present invention may be employed. Turning to Figures 1 and 2

there is illustrated one embodiment of a body 1 of the writing instrument, which is graspable by a user, the body 1 having an opening 2 leading to a chamber 3.

The chamber 3 is configured the retain a nib feed 4 and nib 5 that are illustrated in Figure 3. The configuration of the chamber 3 means that it can be easily
5 cleaned after use or when colours or ink types are being changed.

As illustrated in Figure 4, the nib feed 4 is a conventional fountain pen nib feed having a wing, a post at an opposite end of the nib feed 4 and a plurality of fins intermediate of the wing and post. The nib feed 4 may be constructed from PVC or another plastics material. As further illustrated in Figure 4, the body 1 may be
10 constructed from resin, but may also be constructed from metal or wood.

Figure 5 illustrates one embodiment of the nib 5 that is constructed from a metal material, such as stainless steel. As illustrated in Figure 5, the nib 5 of the present embodiment includes a main body portion, opposite shoulders, a tapered end, and a slit extending inwardly from the tapered end and leading to a breather or
15 vent hole.

As illustrated in Figures 6 and 7, the nib 5 and nib feed 4 are inserted in through the opening 2 such that they frictionally engage the opening 2 and are held in position for writing or drawing. The nib feed 4 is configured to bear against an underside of the nib 5 to push it against the edge of the opening 2.

20 As illustrated in Figure 7 the forwardly extending wing of the nib feed 4 is positioned adjacent and rearward of the tapered end of the nib 5.

As further illustrated in Figure 7, the nib feed 4 extends out through the opening 2 such that the nib feed 4 is positioned adjacent the underside of the nib 5.

In this way, the nib 5 and nib feed 4 can be dipped into a volume of writing ink
25 (not shown) such that the writing ink is drawn up into the chamber 3, which acts as a temporary reservoir for the ink. The opening 2 therefore provides an inlet through which ink can be drawing into the temporary reservoir/chamber 3 and also an outlet for the ink when the user begins to write or draw.

30 As the reader will appreciate this means that the user is able to dip the pen less frequently into an inkwell in comparison to existing dip pen.

The writing instrument may include a number of exchangeable nibs or be compatible therewith. The nibs may be conventional dip pen nibs or conventional fountain pen nibs or conventional calligraphy nibs, or may be provided with, or at least compatible with, a combination thereof.

5 The skilled addressee should now appreciate some of the advantages of the illustrated invention over the prior art. In one form the invention provides a writing instrument that combines the advantages of the dip pen and a fountain pen. The Inventor has found that using the present invention a person is able to write a full A4 page or more of standard script without having to replenish the temporary reservoir.

10 This is a significant improvement over existing dip pens that may only be able to achieve a single line of standard script without requiring refilling.

Various features of the invention have been particularly shown and described in connection with the exemplified embodiments of the invention, however it must be understood that these particular arrangements merely illustrate the invention and it is

15 not limited thereto. Accordingly, the invention can include various modifications, which fall within the spirit and scope of the invention.

CLAIMS

1. A writing instrument, including:
 - a body being graspable by a user;
 - a chamber extending inwardly of a forward end of the body, the chamber
5 having an opening;
 - a nib attached in or adjacent said opening;
 - a nib feed held at least partly within said chamber and extending out through
the opening such that the nib feed is positioned adjacent the nib;
 - wherein the nib and nib feed are dipable into a volume of writing ink such that
10 said writing ink is drawn into the chamber, whereby the writing ink may be
used by the user to undertake writing or drawing.
2. The writing instrument in accordance with claim 1, wherein writing ink is
drawn into the chamber that acts as a temporary reservoir of writing ink to
permit the user to undertake writing.
- 15 3. The writing instrument in accordance with claim 2, wherein the nib and nib
feed preferably frictionally engage the opening such that they are held in
position for writing or drawing.
4. The writing instrument in accordance with claim 3, wherein the nib includes a
main body portion, opposite shoulders, a tapered end, and a slit extending
20 inwardly from the tapered end and leading to a breather or vent hole located
through the main body portion between the opposite shoulders.
5. The writing instrument in accordance with claim 4, wherein the nib feed
includes a wing that is positionable adjacent said tapered end of the nib, a
post at an opposite end of the nib feed to said wing, and a plurality of fins
25 intermediate of the wing and post.

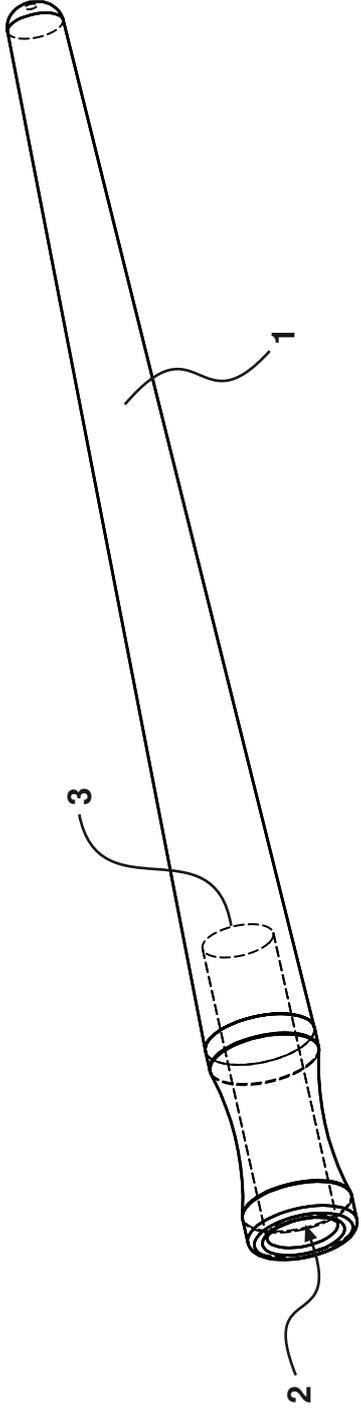


Figure 1

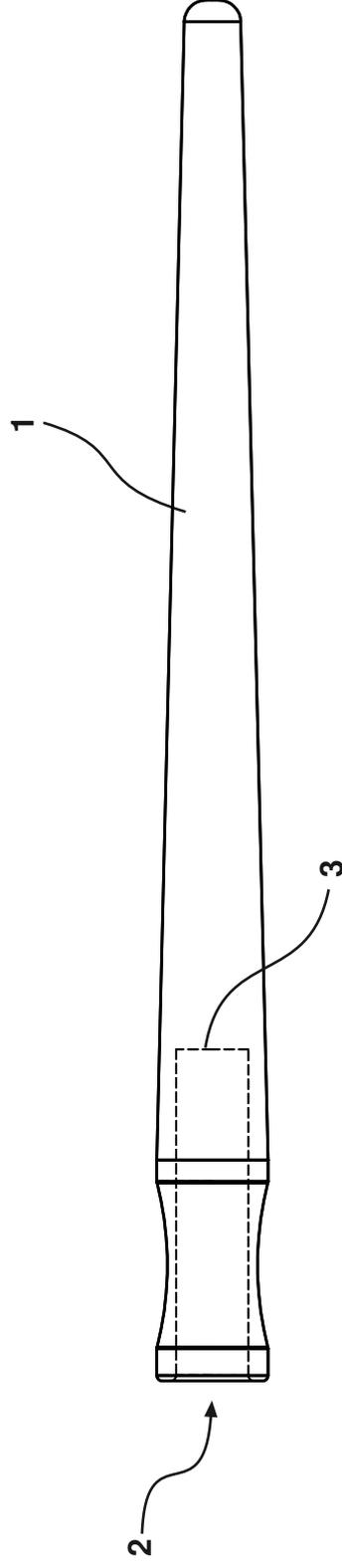


Figure 2

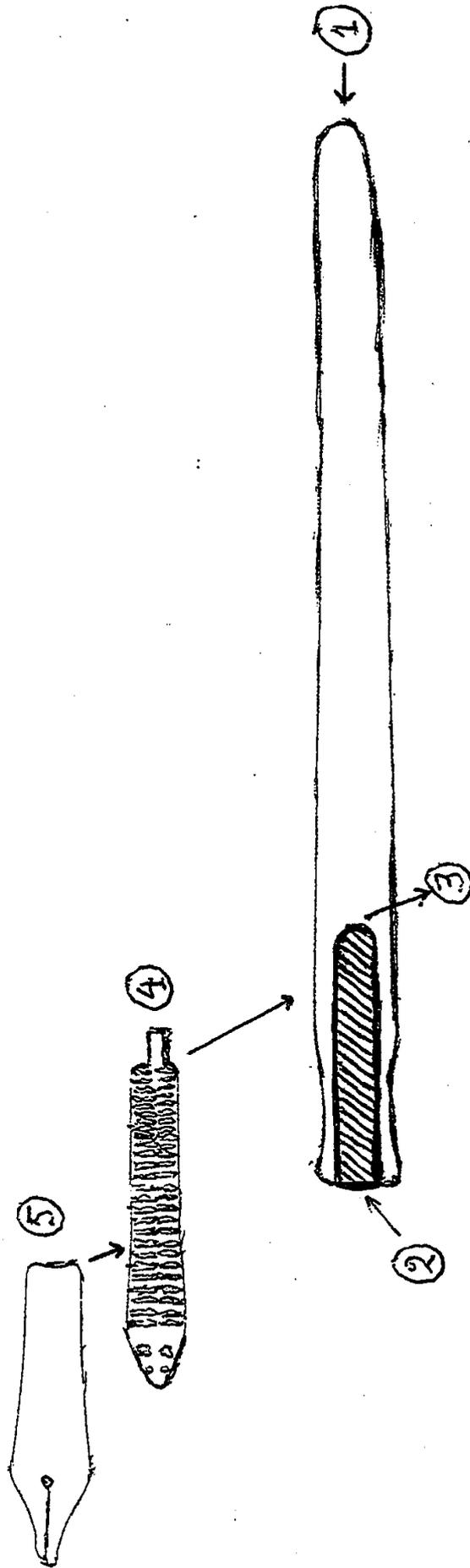


Figure 3



Figure 4

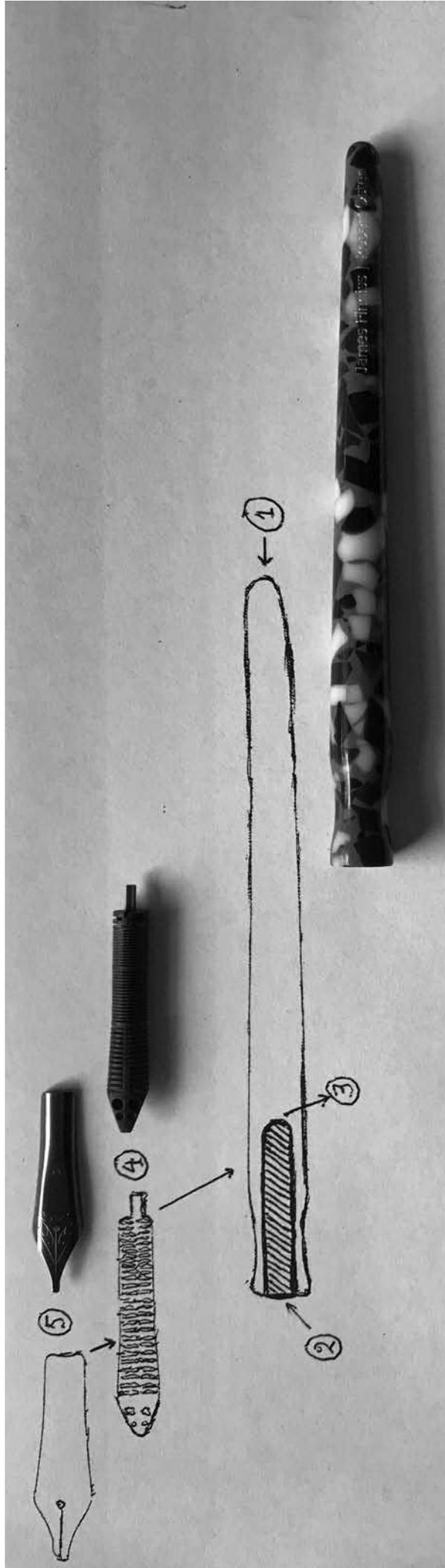


Figure 5

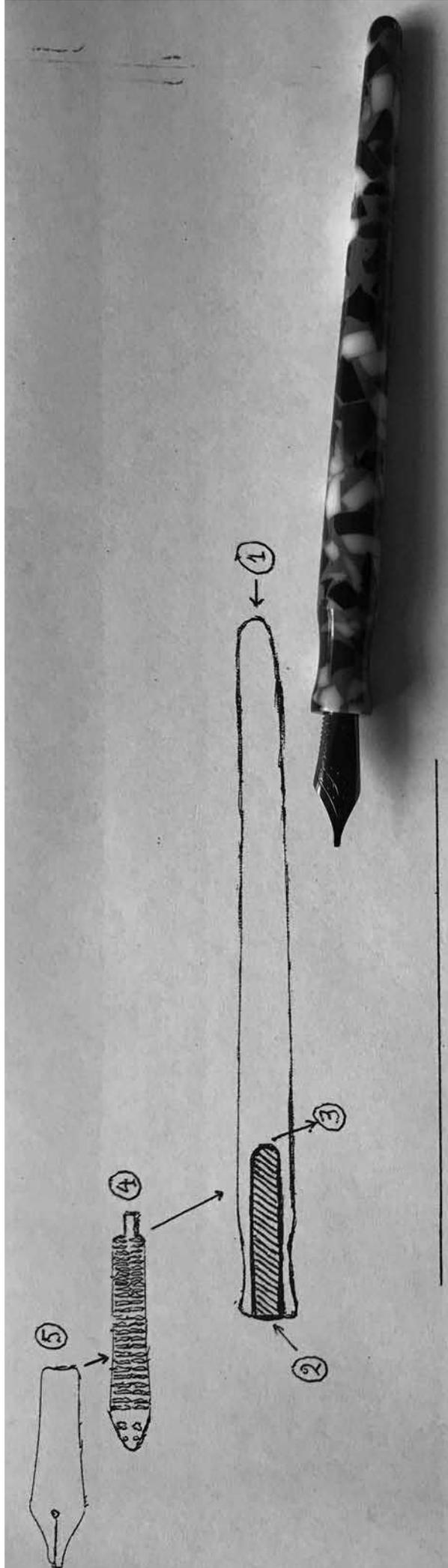


Figure 6

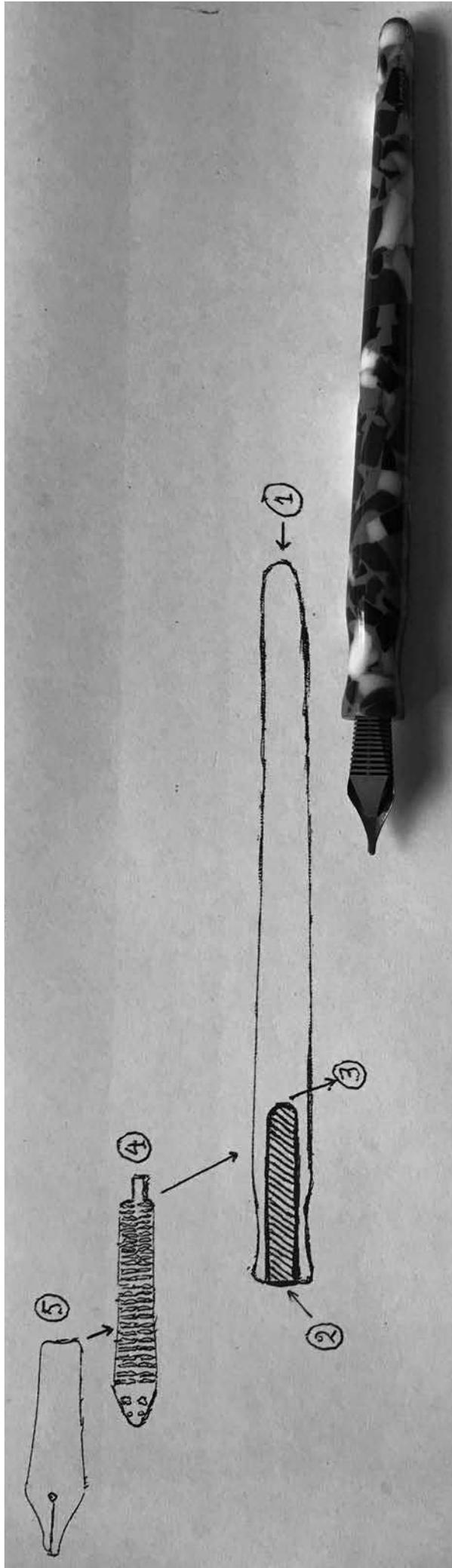


Figure 7