

# A.D. 1910

Date of Application, 16th Nov., 1910 Complete Specification Left, 16th June, 1911—Accepted, 31st Aug., 1911

#### PROVISIONAL SPECIFICATION.

## Improvements in Pen Nibs or Styles.

I, ALEXANDER MUNRO, of No. 117, Birchfield Road, Handsworth, Birmingham, Inventor, do hereby declare the nature of this invention to be as follows:-

The invention is applicable to fountain pens in particular, but it also may be applied to any instrument for writing or ruling, such as the ordinary pen

5 that is dipped into ink.

I make an improved nib or style which consists of a style split lengthwise into two or more parts or sections and held together in position in an india rubber or other elastic setting. This construction produces a writing point that differs considerably from the usual style on the one hand and from the 10 usual steel or gold nib on the other hand, although in some respects it produces certain qualities of both the style and the nib. In former patents, nibs consisting of two separate parts have been shown and described as nibs, but as in this invention the improved nib or style presents more the appearance of a style than of a nib, I will hereafter refer to it as the improved style.

The sections of the improved style may be formed of glass, quartz, metal, or other suitable material. When metal sections are used, these may also be tipped with a harder material in the usual way. The india rubber setting is fitted into the nose of the pen in any suitable way. Thus, a recess may be formed into which the india rubber setting may be drawn or pushed, or a separate vulcanite cone may be fitted or screwed over the lower end of the penholder to hold the india rubber setting firmly in place.

The improved style preferably forms a round bar when the sections forming it are in position. One or more fillets or shoulders may be formed on the style The inner or upper end of the style may be caused to rest against the vulcanite substance of the penholder where greater rigidity is required, but as a rule I find it more desirable to let the upper end of the style rest against the india rubber, on account of the greater elasticity thus given to the style, and for other reasons.

The needle as used in the ordinary stylographic pen may, for any special reason, be used also with the improved style, but one of the principal advantages of the improved style is that the needle is usually dispensed with for ordinary purposes. The lower or writing end of the style, in the case where the needle is not used, or in the case where the needle is not prolonged to the lower end of the style, may finish as a ball shaped or other shaped point. Or it may 55 finish something like the shape of the usual steel or gold nib.

The improved style may or may not have a central hole or duct for nearly

all its length.

Where the improved style is used in a fountain pen, it is essential that a duct from the reservoir, or the lower part of the reservoir itself, should conduct the ink to the inner or upper end of the style.

Where used in an ordinary pen for dipping into ink, projections or fins may be formed either on the india rubber setting or otherwise, for the purpose of

allowing a quantity of ink to adhere to the pen,

[Price 8d.]

## Munro's Improvements in Pen Nibs or Styles.

From the circumstance that the improved style consists of two or more sections, it has some tendency to gape apart in writing, thus making thick and thin strokes. This tendency may further be increased by placing an arm on each of the sections, which arm is fixed at such an angle that it may throw the sections further apart at the writing point when the writing point is pressed 5 on the paper in the action of making heavy down strokes.

The improved style in use has a large amount of flexibility in every direction. This flexibility may be controlled in degree, as well as in direction, according to the shape and size of the recess into which the india rubber setting is fitted.

From the circumstance that no needle is required to be used, the improved style is particularly suitable for use in self filling fountain pens where the ink is sucked up from the writing point.

Dated this 14th day of Nov., 1910.

ALEXANDER MUNRO.

### COMPLETE SPECIFICATION.

## Improvements in Pen Nibs or Styles.

I, ALEXANDER MUNRO, of No. 117, Birchfield Road, Handsworth, Birmingham, Inventor, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention has for its object the provision of a new sort of pen nib or style. Excluding drawing pens, the writing points of pens hitherto in use may be said to belong to two great classes. To the first class belongs the steel and gold nib, the quill, and the reed. In the second class is the style, with or without a hole through it, and with or without a needle in the hole. According to this invention I provide a pen nib or style which has something of the qualities of both classes. It is difficult to say whether it is intermediate in character between the two classes referred to above, or whether it forms an entirely her classes by itself. For the sake of clearness, I will afterwards refer

to it as the improved style.

On the accompanying drawings, Figure 1 shows a longitudinal section of one of the simplest forms of the invention. Figure 2 is a transverse section of the line A B in Figure 1. The lower end (1) of the penholder contains the india rubber or other elastic setting (2) which holds the style (3). The upper side of the shoulder (4) of the style rests against the india rubber setting and is thus supported in the act of writing. The improved style (3) is here shown as formed of three separate pieces which in section show three sectors of a circle. These pieces or sectors may easily be pulled out of the india rubber setting and may easily be replaced. Figure 3 is a view of the style (3) alone. Instead of three sectors, however, two semi-circles as in Figure 4 may be used, or any greater number of pieces may be used. I find, however, that three pieces forming the style is usually the most suitable. It is not essential that the pieces forming the style should be of similar shape and equal size, although it is usually convenient to have them so. Figure 5 shows a different section which may be used. Nor is it essential that the pieces forming the style should present a circular section. Any shape that can be held within the india rubber setting may be used, and the cross section presented by the style need not be alike for all portions of its length, although it is usually more convenient to have it alike. Figure 6 shows a section of a style where three rods are used. In this case the cross section at the shoulder would present a different appearance. Figure 7 shows a variation in the shape of the india rubber setting.

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In Figure 8, the india rubber setting (2) may easily be withdrawn on unscrewing the piece (1<sup>n</sup>) which screws on to the lower end (1) of the penholder. As shown in Figure 8, the style may have a fillet (5) for the purpose of preventing the style dropping out of place. As also shown in Figure 8, there may be 5 an open space (6) intervening between the style and the india rubber setting and extending along the middle and upper part of the style or for part thereof. I find that this open space (6) is useful sometimes for giving a fuller supply of ink to the writing point.

In Figure 9, the shoulder (4) of the style is constructed further up. The 10 shoulder may be made to rest against the vulcanite lower end (1) of the pen-

holder, when a much harder and unyielding writing point is desired.

In Figure 10, a vulcanite or other ring (7) is introduced for the purpose of absolutely preventing any leakage of ink between the penholder and the india rubber setting (2), although I find that in the absence of the ring any leakage 15 is rare.

In Figures 1, 7, 8, and 9, the inner or upper end of the style (3) is shown as projecting slightly into the lower end (8) of the ink reservoir of a fountain pen. In Figure 10, a duct (9) conducts the ink from the reservoir to the upper end of the style. The outer air hole (10) and the inner air hole (11) admit 20 air to the reservoir while writing, the open space (12) serving as an overflow chamber as in former pens.

Where the improved style is used in an ordinary dip pen, the india rubber setting may have fins or projections or other means may be employed whereby a larger quantity of ink may adhere to the style when it is dipped into ink.

In addition to the various ways already described by which the india rubber setting is fitted into the nose of the penholder, any other suitable way of

fitting may be employed.

In all the illustrations shown, it will be seen that when the style is pressed against the paper in the act of writing there is an elastic backing to the style 30 which produces a very different effect to the rigid styles formerly in use. different pieces of the style also tend to diverge at the writing point, producing thick and thin strokes in writing. The writing point being resilient in every direction also produces a different effect from that obtained from the ordinary steel or gold nib. The india rubber setting may be so stretched or compressed 35 that this resilience may be increased or diminished, or increased or diminished in certain directions.

The lower or writing end of the style I usually round off, but it may be finished off something after the manner of the ordinary steel nib or in a variety

The improved style is particularly suitable for use in reservoir pens. No needle is required to be used, although a needle may be employed. One of the principal advantages of the improved style is that the use of a needle can be dispensed with for ordinary purposes. The improved style is also suitable for use in self filling pens.

The centre of the style may be hollowed out to form a larger ink duct through

it either for the whole or part of its length.

More than one shoulder or fillet may be employed. The improved style may be constructed of metal, glass, quartz, or any suit-When metal is used it may be tipped with a harder material able material.

50 in the usual way.

The tendency of the pieces of the style to gape apart in the act of writing may be further increased by placing an arm on the inner end of each of the pieces or on some of them, making the piece of style roughly L shaped, the arms projecting radially outwards from the centre of the penholder. As the use 55 of these arms, however, renders the construction more difficult, and as the style writes very well indeed without the arms, I do not show any drawing of this construction. I desire to emphasize the point that this particular con-

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struction, and a variety of other constructions, may be employed in connection with the improved style.

Although I have referred to the invention as being for an improved style, it will be seen that the mounting of the style in an india rubber or other elastic setting is an essential feature of the invention.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

(1). A pen nib or style consisting of two or more separate pieces held in an india rubber or other elastic setting, substantially as set forth.

(2). The arrangement, construction, and combination of parts, substantially as herein set forth and illustrated in Figures 1, 7, 8, 9, and 10.

Dated the 15th day of June, 1911.

ALEXANDER MUNRO.

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