## PATENT SPECIFICATION



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PROVISIONAL SPECIFICATION

## Improvements in and relating to Pen Nibs

We, THE LANG PEN COMPANY LIMITED. a Body Corporate duly organised under the Laws of Great Britain, and ARTHUR STANLEY JONES, a British Subject, both of the Company's address at 13, Hope Street, Liverpool, 1, in the County of Lancaster, do hereby declare the nature of this invention to be as follows:-

This invention relates to pen nibs and 10 has more especial reference to nibs for fountain pens of the so-called sheathed nib or streamlined type in which only the writing point of the nib protrudes from the pen body or from a shaped sleeve or 15 nih sheath furnished on the front end of

such body. In order that the external diameter of the sleeve or nib sheath shall not be too great to be held comfortably in the hand 20 for writing, it is usual for the nibs in these pens to be smaller than in a conventional fountain pen, but hitherto such nibs have been manufactured by the customary methods of forming a flat 25 blank of sheet gold or other metal, and then sinking the blank to the required curvature in a die press.

According to the present invention nibs are manufactured from tube which may 30 be extruded or drawn gold, or other appropriate metal, by cutting on the bias to form the shoulders of the nib adjacent the writing point and in such manner as to leave a tubular shank to be received 35 as a push fit in the pen section.

The tipping with iridium or other hard metal and the slitting of the nib point as well as piercing may be effected in any conventional or appropriate manner, and if desired the shoulders may be finished by machining to a concave or re-entrant contour where desired, or this shaping may be effected in one operation while the slitting is being accomplished, but it will be understood that by the improved 45 process the press-blanking and curving operations may be eliminated and the nib forms obtained by cutting from a continuous length of tube.

Not only is the manufacture simplified 50 according to the present invention, but an improved nib also results which may be more accurately fitted owing to its tubular shank being proportioned so as to be a push fit in the pen section around 50 the feed bar, whereby assembly is facilitated and a common source of leakage is removed.

In the practice of the invention according to one mode of carrying out the pro-60 cess of manufacture, the tubing is drawn to the required gauge and diameter and is then cut into sections or lengths each of which constitutes a nib body, alternate cuts being on the bias or inclined to give 65 the required shoulder angle of say 60° to the nib point, and intermediate cuts being at right angles to the axis of the tube to form a plain terminal to the tubular shank portion of the nib so that 70 the tube material is economically and fully utilised.

Thereafter the nibs are furnished with points of iridium or other hard metal, slit, pierced and finished.

By the present invention improved nibs for fountain pens are obtained by an improved and simplified method of manufacture.

Dated this 4th day of March, 1946. O'DONNELL, LIVSEY & CO., Chartered Patent Agents, 47, Victoria Street, London, S.W.1. Agents for Applicants.

## COMPLETE SPECIFICATION

## Improvements in and relating to Pen Nibs

We. THE LANG PEN COMPANY LAMITED. a Body Corporate duly organised under of the Company's address at 13, Hope the Laws of Great Britain, and Arthur Street, Liverpool, 1, in the County of [Price 2/-]

STANLEY JONES, a British Subject, both

Lancaster, 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

5 by the following statement:

This invention relates to pen nibs and has more especial reference to nibs for fountain pens of the so-called sheathed nib or streamlined type in which only the 10 writing point of the nib protrudes from the pen body or from a shaped sleeve or nib sheath furnished on the front end of

such body.

In order that the external diameter of 15 the sleeve or nib sheath shall not be too great to be held comfortably in the hand for writing, it is usual for the nibs in these pens to be smaller than in a conventional fountain pen, but hitherto such 20 nibs have been manufactured by the customary methods of forming a flat blank of sheet gold or other metal, and then sinking the blank to the required curvature in a die press.

According to the present invention nibs are manufactured from tube which may be extruded or drawn gold, or other appropriate metal, by cutting on the bias to form the shoulders of the nib adjacent 30 to the writing point and in such manner

as to leave a tubular shank to be received

as a push fit in the pen section.

The tipping with iridium or other hard metal and the slitting of the nib point as 35 well as piercing may be effected in any conventional or appropriate manner, and if desired the shoulders may be finished by machining to a concave or re-entrant contour where desired, or this shaping 40 may be effected in one operation while the slitting is being accomplished, but it will be understood that by the improved process the press-blanking and curving

operations may be eliminated and the nib 45 forms obtained by cutting from a con-

tinuous length of tube.

Not only is the manufacture simplified according to the present invention, but an improved nib also results which may 50 be more accurately fitted owing to its tubular shank being proportioned so as to be a push fit in the pen section around the feed bar, whereby assembly is facilitated and a common source of leakage is

55 removed.

In the practice of the invention according to one mode of carrying out the process of manufacture, the tubing is drawn to the required gauge and diameter and is then cut into sections or lengths each 60 of which constitutes a nib body, alternate cuts being on the bias or inclined to give the required shoulder angle of say 60° to the nib point, and intermediate cuts being at right angles to the axis of the 65 tube to form a plain terminal to the tubular shank portion of the nib so that the tube material is economically and fully utilised.

Thereafter the nibs are furnished with 70 points of iridium or other hard metal. slit, pierced and finished.

By the present invention improved nibs for fountain pens are obtained by an improved and simplified method of 76 manufacture.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we 80 claim is:-

1. A method of manufacturing pen nibs especially for sheathed nib fountain pens comprising the steps of cutting tubular metal on the bias to form the shoulders of the nib adjacent to the writing point leaving a tubular shank to be received as a push fit in the pen section. and thereafter slitting the writing point. 90

2. A method of manufacturing pen nibs from extruded or drawn gold tube according to the preceding Claim wherein prior to slitting, the writing point is tipped with iridium or other hard metal and the shoulders are finished by machining to a

concave or re-entrant contour.

3. A method of manufacturing pen nibs according to either of the preceding Claims wherein tubing drawn to the 100 required gauge is cut into lengths each of which constitutes a nib body, alternate cuts being on the bias to give the required shoulder angles to the nib point and intermediate cuts being at right angles to 105 the axis of the tube to form a plain terminal to the tubular shank portion of the

4. A method of manufacturing pen nibs according to any of the preceding 110 Claims substantially as described.

5. Pen nibs when manufactured from tubular material by the method substantially as herein described.

Dated this 22nd day of May, 1947. O'DONNELL, LÍVSEY & CO.,

Chartered Patent Agents, 47, Victoria Street, London, S.W.1, Agents for Applicants.

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