

# PATENT SPECIFICATION

304,922

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COMPLETE SPECIFICATION.



## Improvements in or relating to Stylographic Pens or Ink Pencils.

I, ARTHUR STANLEY JONES, a British subject, of 8, Prebend Street, Islington, London, N. 1, 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 relates to, and has for its object the provision of improvements in stylographic pens or ink pencils.

In accordance with the invention means of access for replenishing ink and/or ink-replacing air are constituted by respective screw threads of reverse pitches formed on the outer periphery of an inner member (say the point member) and the inner periphery of an outer member (say the "section") said screw threads having their crests in engagement with each other substantially as specified.

In order that the invention may be the more clearly understood a pen in accordance therewith will now be described reference being made to the accompanying drawings wherein:—

Figure 1 is a sectional elevation of said pen.

Figure 2 is an elevation of a part of the same.

Thus referring to the drawings the pen comprises an ordinary rubber ink containing sac 1 the upper or open end of which is connected to the so called tubular "section" 2. This "section" 2 supports within it the hollow conical ended point member 3 the outer or pointed end of which carries the usual gold or platinum tube 3a and the inner end of which has fitted friction tight therein the feed web 4 which carries the feed wire 4a. The section 2 fits friction tight as shown into the open end of a barrel 5 fitted with a filler lever not visible whereby the sac 1 may be compressed and released.

The point member 3 is formed at its lower or inner end with an external screw thread *a* and the securement of said point member within the "section" 2 is adapted to be effected by the engagement as shown of said screw thread *a* within a complementary internal screw thread formed within said "section" 2 intermediate the ends thereof.

[Price 1/-]

Below said screw thread the bore of the "section" 2 may be reduced as shown.

Above said screw thread the bore of the "section" 2 is increased and a screw thread *b* is formed throughout part of the length of increased bore. The diameter of the point member 3 is also increased above the screw thread *a* and a screw thread *c* of opposite pitch to the screw thread *b* is formed throughout part of the length of the increased diameter portion. The arrangement is such that the crest of the screw thread *c* is of the same diameter as the crest of the screw thread *b*.

Above said screw thread *c* said point member 3 is formed with two circumferential ridges *r*, the lower of which is of slightly larger diameter than the upper. When said screw thread *a* is screwed into the complementary screw thread of the section, the lower of said ridges *r* abuts against the upper turn of the screw thread *b*. Said ridges *r* are formed with circumferentially spaced slots *r1* or equivalent holes, those in the one ridge being in staggered relation with those of the other.

Adjacent the lower end of the screw thread *c* three holes *x* are formed through the wall of the point member 3. The inner periphery of the "section" 2 is slightly recessed opposite these holes *x* as shown so that a space *y* is formed just outside these holes in which ink can collect freely.

When it is desired to charge the pen the sac 1 is compressed by the operation of the filling lever, the pen is submerged to a point beyond the outer end of the "section" 2 and said sac is released. Thereby ink is drawn through the slots *r1* through the network of tortuous passages provided by the cooperation of the screw threads *c* and *b*, into space *y*, through holes *x* into the interior of the point member 3 and thence through the lower part of the "section" into the sac.

When the pen is in use the ink flows straight through the lower part of the "section" and through the point member to the tube 3a. The ink is permitted to flow freely by virtue of the fact that it can be readily replaced by air flow-

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ing into the sac by the same path through which the ink was drawn during the charging operation.

5 Instead of the holes *x*, longitudinal channels cut across the thread *a* or its complementary thread may be provided for affording access from the space *y* to the interior of the sac.

10 It is clear that the tubular "section" could be secured to an ordinary ink containing barrel if a self filling pen is not required.

15 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:—

20 1. A stylograph pen or ink pencil wherein means of access for replenishing ink and/or ink-replacing air are constituted by respective screw threads of reverse pitches formed on the outer periphery of an inner member (say the point member) and the inner periphery of an  
25 outer member (say the "section") said screw threads having their crests in en-

gement with each other substantially as specified.

2. A pen according to Claim 1, wherein holes are bored through the wall of said point member in communication with the inner end of said means of access, the inner end of said point member beyond said holes being in screwed engagement within said "section." 30 35

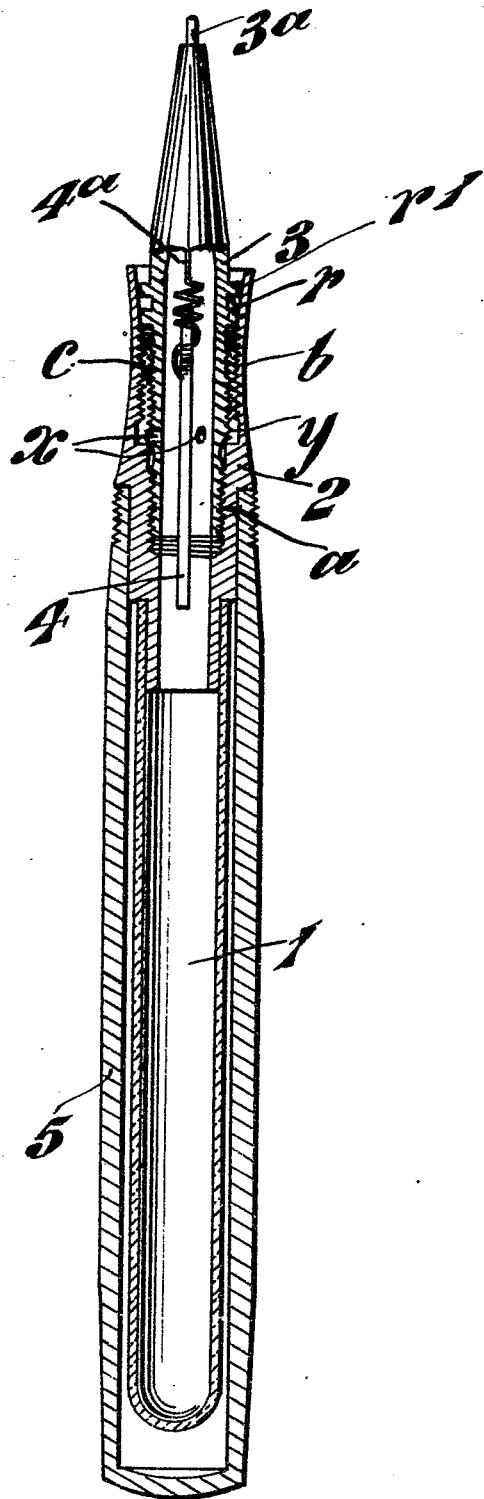
3. A pen according to Claim 1 or 2, wherein beyond the forward end of said means of access said point member is formed with spaced circumferential ridges which have staggered slots therein and the lower of which abuts against the upper turn of the internal screw thread of the "section" substantially as described. 40

4. A stylographic pen or ink pencil substantially as described with reference to the accompanying drawings. 45

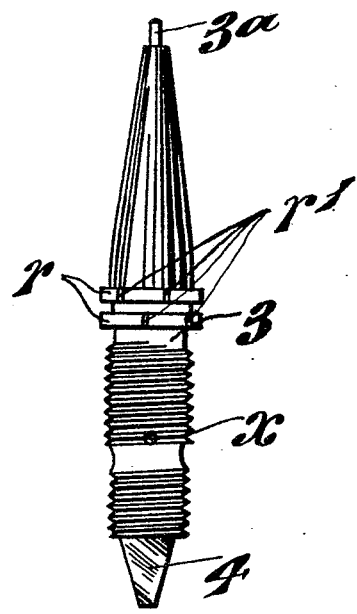
Dated this 19th day of March, 1928.

A. A. THORNTON,  
Chartered Patent Agent,  
7, Essex Street, Strand, London, W.C. 2,  
For the Applicant.

[This Drawing is a full-size reproduction of the Original]



**Fig. 1.**



**Fig. 2.**