

PATENT SPECIFICATION



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PROVISIONAL SPECIFICATION

Improvements in Fountain Pens

We, MENTMORE MANUFACTURING Co. LIMITED, a Company registered under the laws of Great Britain, of Tudor Grove, Well Street, Hackney, London, E.9, and

5 WILLIAM FREDERICK JOHNSON, a Subject of the King of Great Britain, of 13, Merrick Square, London, S.E.1, do hereby declare the nature of this invention to be as follows:—

10 This invention relates to fountain pens in which the nib and feed-carrying section is formed in two parts so that removal and replacement of the nib and feed may be facilitated.

15 Various proposals have previously been made in which the nib and feed are mounted in a removable part, such as a sleeve, a separate end-portion of the nib section proper or a thimble, which is

20 threadedly engaged with the nib section or the remaining portion thereof, as the case may be. When a sleeve is used machining operations are necessary in the production thereof and the feed and sleeve

25 must in some cases be pinned together and when a two-part nib section is employed the pen has not the same appearance as the more usual type of pen. Constructions embodying a thimble are

30 relatively expensive to produce.

It is the main object of the present invention to provide an improved construction of removable nib and feed-carrying part which shall be cheap to

35 produce and will result in the production of a pen of the same general appearance as one not having the advantage of an easily removable nib and feed.

40 According to the invention, a removable nib and feed-carrying part for a fountain pen, comprising a sleeve embracing both the nib and the feed to secure them together and adapted to be received substantially completely within the nib

45 section of the pen, is characterised in that the inner end of the feed projects freely from the sleeve to constitute the means for connecting the removable part to the said nib section. The projecting end of the

50 feed is preferably screw-threaded to engage in a correspondingly threaded bore in the section which latter may be formed with an internal shoulder against which

the end of the sleeve may be drawn to constitute a leak-preventing seal. The nib

55 section may be a push fit in or be screwed into the pen barrel and, in the case of self-filling pens provided with ink-containing sacs, preferably has a reduced extension over which the sac is secured.

60

In one example, applied to a self-filling pen having an ink-sac, the nib section is of the usual externally waisted tubular shape with a screw-threaded inner end of reduced diameter for engagement in the

65 mouth of the pen barrel. There is a further extension of the inner end of still lesser diameter over which the mouth of the ink-sac is secured. The bore in the nib section is of larger diameter at the

70 outer end, so that an internal shoulder is provided, and the narrower part of the bore is screw-threaded. The pen nib and feed are engaged in a thin sleeve of an external diameter and length approxi-

75 mately equal to the diameter and length of the outer end of the bore in the nib section. The feed is of the usual form at the nib end and is a close fit in the sleeve over the greater part of the rest of its

80 length. A short portion of the feed projects beyond the inner end of the sleeve, however, and is screw-threaded to engage the threaded portion of the bore in the

85 nib section. The ink-feed channel or channels, with the usual capillary grooves therein, extend across the threads of the end portion of the feed.

The nib and feed-carrying sleeve is engaged in the larger diameter bore of the

90 nib section and the inner end of the feed is screwed into the smaller diameter bore thereof until the inner end of the sleeve is brought tightly against the internal shoulder in the said section. The sleeve

95 is then completely received within the nib section so that the pen has the usual appearance. In addition, ink can only escape from the ink sac by way of the ink-feed channels in the feed. The

100 sleeve may be formed from a length of vulcanite tube and the feed may readily be threaded as required, so that the construction is inexpensive. Such removable nib and feed-carrying sleeves with

105 the nib and feed already fitted may be

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supplied separately from the pens so that the pen user may replace a worn nib simply and easily when required.

Dated this 3rd day of February, 1939.
For the Applicants,
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75, Victoria Street, London, S.W.1,
Chartered Patent Agents.

COMPLETE SPECIFICATION

Improvements in Fountain Pens

We, MENTMORE MANUFACTURING Co. LIMITED, a Company registered under the laws of Great Britain, of Tudor Grove, Well Street, Hackney, London, E.9, and WILLIAM FREDERICK JOHNSON, a Subject of the King of Great Britain, of 13, Merrick Square, London, S.E.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 fountain pens in which the nib and feed-carrying section is formed in two parts so that removal and replacement of the nib and feed may be facilitated.

Various proposals have previously been made in which the nib and feed are mounted in a removable part, such as a sleeve, a separate end-portion of the nib section proper or a thimble, which is threadedly engaged with the nib section or the remaining portion thereof, as the case may be. When a sleeve is used machining operations are necessary in the production thereof and the feed and sleeve must in some cases be pinned together and when a two-part nib section is employed the pen has not the same appearance as the more usual type of pen. Constructions embodying a thimble are relatively expensive to produce.

It is the main object of the present invention to provide an improved construction of removable nib and feed-carrying part which shall be cheap to produce and will result in the production of a pen of the same general appearance as one not having the advantage of an easily removable nib and feed.

According to the invention, a removable nib and feed-carrying part for a fountain pen, comprising a sleeve embracing both the nib and the feed to secure them together and adapted to be received substantially completely within the nib section of the pen, is characterised in that the inner end of the feed projects freely from the sleeve to constitute the means for connecting the removable part to the said nib section. The projecting end of the feed is preferably screw-threaded to engage in a correspondingly threaded bore

in the section which latter may be formed with an internal shoulder against which the end of the sleeve may be drawn to constitute a leak-preventing seal. The nib section may be a push fit in or be screwed into the pen barrel and, in the case of self-filling pens provided with ink-containing sacs, preferably has a reduced extension over which the sac is secured.

One example of the invention, as applied to a self-filling pen having an ink-sac, will now be described with reference to the accompanying drawings, wherein:—

Fig. 1 is an elevation showing parts of the pen separated from each other with some portions broken away, and

Fig. 2 is a sectional elevation showing the pen assembled ready for use.

In the example shown, the nib section 1 is of the usual externally waisted tubular shape with a screw-threaded inner end 1a of reduced diameter for engagement in the mouth of the pen barrel 2. There is a further extension 1b of the inner end of still lesser diameter over which the mouth of the ink-sac 3 is secured. The bore in the nib section is of larger diameter at the outer end, so that an internal shoulder 4 is provided, and the narrower part of the bore is screw-threaded. The pen nib 5 and feed 6 are engaged in a thin sleeve 7 of an external diameter and length approximately equal to the diameter and length of the outer end of the bore in the nib section 1. The feed 6 is of the usual form at the nib end and is a close fit in the sleeve 7 over the greater part of the rest of its length. A short portion 6a of the feed projects beyond the inner end of the sleeve 7, however, and is screw-threaded to engage the threaded portion of the bore in the nib section 1. The ink-feed channel or channels 8, with the usual capillary grooves 8a therein, extend across the threads of the end portion 6a of the feed.

The nib and feed-carrying sleeve 7 is engaged in the larger diameter bore of the nib section 1 and the inner end 6a of the feed 6 is screwed into the smaller diameter bore thereof until the inner end of the sleeve 7 is brought tightly against the

internal shoulder 4 in the said section. The sleeve 7 is then completely received within the nib section 1 so that the pen has the usual appearance. In addition, ink can only escape from the ink sac 3 by way of the ink-feed channels 8, 8a in the feed. The sleeve 7 may be formed from a length of vulcanite tube and the feed 6 may readily be threaded as required, so that the construction is inexpensive. Such removable nib and feed-carrying sleeves 7 with the nib 5 and feed 6 already fitted may be supplied separately from the pens so that the pen user may replace a worn nib simply and easily when required.

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 claim is:—

1. A removable nib and feed-carrying part for a fountain pen, comprising a sleeve embracing both the nib and the feed to secure them together and adapted to be received substantially completely within the nib section of the pen, characterised in that the inner end of the feed projects freely from the sleeve to consti-

tute the means for connecting the removable part to the said nib section.

2. A removable part for a fountain pen as claimed in Claim 1, wherein the projecting end of the feed is screw-threaded to engage in a correspondingly threaded bore in the section.

3. A fountain pen embodying a removable nib and feed-carrying part as claimed in Claim 1 or 2.

4. A fountain pen as claimed in Claim 3, wherein the nib section is formed with an internal shoulder against which the end of the sleeve may be drawn to constitute a leak-preventing seal.

5. A fountain pen constructed and adapted to operate as herein described with reference to the accompanying drawings.

6. A removable nib and feed-carrying part for a fountain pen substantially as herein described with reference to the accompanying drawings.

Dated this 14th day of September, 1939.

For the Applicants,
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FIG. 1.

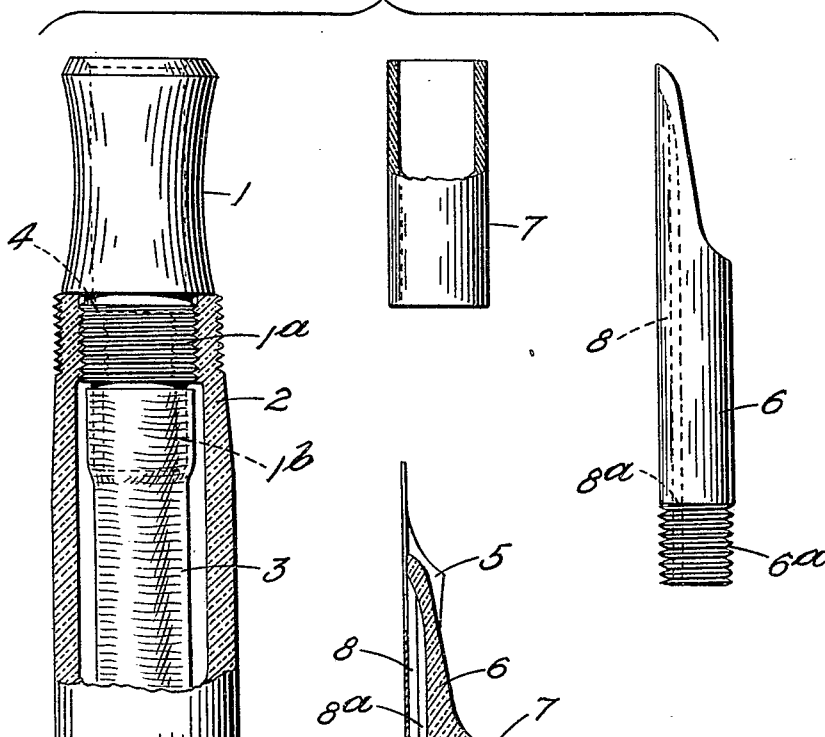
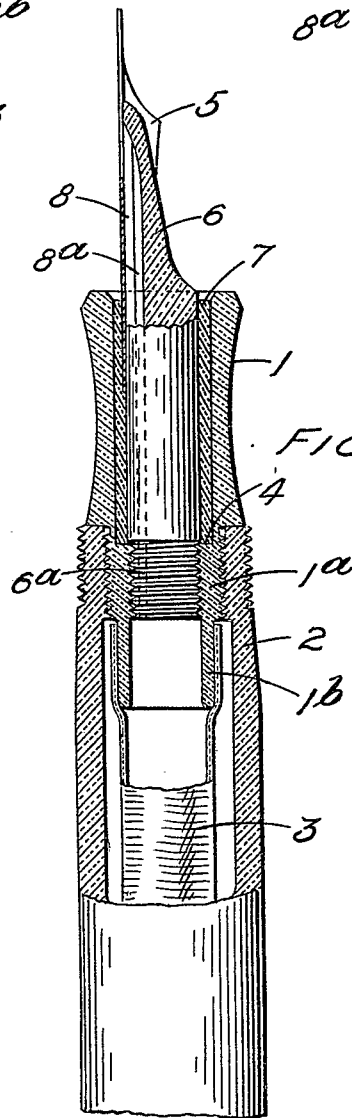


FIG. 2.



[This Drawing is a reproduction of the Original on a reduced scale.]