

SUPERSEDED BY
AMENDED SPECIFICATION.

N^o 8313



A. D. 1907

Date of Application; 10th Apr., 1907

Complete Specification Left, 16th Aug., 1907—Accepted, 31st Dec., 1907

PROVISIONAL SPECIFICATION

“Improvements in Pen-nibs for use in connection with Fountain and other Pens.”

I, DUNCAN CAMERON, Managing Director of MacNiven and Cameron Limited, of Waverley Pen Works, Blair Street, Edinburgh, Manufacturers, do hereby declare the nature of this invention to be as follows:—

This invention has relation to pen nibs, principally for use in connection with fountain pens, but also applicable to ordinary pens; such nibs being of that type in which a flexible tongue or bar is disposed along the top of the nib so as to strengthen the pen and serve (when used in fountain pens) as a secondary ink-feed for supplementing the action of a grooved feed-bar which extends under a part of the head of the nib and whose ink-duct is in communication with the reservoir in the pen-body.

One of the objects of the present invention is to provide an improved construction of secondary ink-feed device which is adapted to act in such a manner that it automatically sets up or induces a constant and steady flow of ink when the pen is in use and provides for the delivery of a supply of ink to the nib point immediately the latter is applied to paper in commencing to write. Another object of the said invention is to provide an improved method of attaching the top bar or tongue to the body of the nib, whereby the use of soldering, or rivetting such as hitherto employed, is dispensed with.

According to my said invention, I propose to employ a metallic top bar or tongue whose after end is rigidly attached at by one two or more separated points to the shank of the nib and to the head thereof, but in such a manner as to leave the forward portion thereof, or the part that extends over the pierce-hole in the nib-head, free or flexible so that it may yield or flex itself in unison with the movements made by the point of the nib when the pen is in use. The pierce-hole in the nib is arranged, as is usual in pens of this type, to come over and communicate with the ink-duct in the vulcanite or other rigid feed-bar and admit of the induction of ink to the underside of the tongue, but according to my invention, the flexible forward portion of the top-tongue is also provided with a pierce-hole which coincides or registers with that in the nib-head and serves to allow air to pass to the underside of the said tongue and thus assist the capillary flow of the secondary feed ink, which, when the pen is being written with, is induced by the flexing action of the tongue and nib and is drawn from the primary feed duct through the pierce-hole in the nib body and passes thence underneath the tongue to the point of the said nib. The additional vent or pierce hole in the flexible portion of the tongue also ensures the automatic and immediate delivery of ink to the nib point on writing being commenced.

To provide for the rigid attachment of the shank of the pierced tongue to the shank of the nib without the use of solder, small ears or projections may be formed on the edges of said tongue and the nib is pierced with corresponding slits, wherethrough the ears are passed from the topside and then clenched or turned down against the underside of the shank. These connections are arranged at

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Improvements in Pen-nibs for use in connection with Fountain and other Pens.

suitably separated points so as to provide a rigid attachment and preserve the tongue in its proper position along the centre of the nib.

Or, as an alternative method of securing the forward part of the shank of the pierced tongue, the metal which is cut out in the piercing of the tongue is utilized and is turned down through the registering pierce-hole in the nib and then 5 turned back or clenched against the underside of the said nib so as to establish a rigid connection between the two parts.

Or a separate cleat or clip may be passed through the registering pierce-holes and clenched or closed over the rear edges of the said holes so as to hold the tongue rigidly in position. 10

Dated this 9th day of April 1907.

DUNCAN CAMERON.

By Henry Skerrett,
Agent for Applicant.

COMPLETE SPECIFICATION. 15

"Improvements in Pen-nibs for use in connection with Fountain and other Pens."

I, DUNCAN CAMERON, Managing Director of MacNiven and Cameron Limited, of Waverley Pen Works, Blair Street, Edinburgh, Manufacturers 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:— 20

This invention has relation to pen-nibs for use in connection with fountain pens of that type in which a flexible tongue or bar is disposed along the top of the nib so as to strengthen the pen and serve as a secondary ink-feed for supplementing the action of a grooved feed-bar which extends under a part of the head of the nib and whose ink-duct is in communication with the reservoir in the pen-body. 25

One of the objects of the present invention is to provide an improved construction of secondary ink-feed device which is adapted to act in such a manner that it automatically sets up or induces a constant and steady flow of ink when the pen is in use and provides for the delivery of a supply of ink from the grooved feed-bar to the nib point immediately the latter is applied to paper in commencing to write. Another object of the said invention is to provide an improved method of attaching the top bar or tongue to the body of the fountain-pen nib, whereby 35 the use of soldering, such as hitherto employed, is dispensed with:

Figure 1 of the accompanying drawings represents a top-side plan of a pen-nib provided with a top-feed bar or tongue which is formed and attached to the body of the pen in accordance with my invention.

Figure 2 is a cross section of Figure 1, upon the dotted line *x*, showing part 40 of the means by which the said top-feed device is rigidly secured to the head of the pen.

Figure 3 is another cross section of Figure 1 upon the dotted line *x'*.

Figure 4 is an edge view of the complete pen.

Figures 5 and 6 respectively show an edge view and an underside sectional plan 45 of the top-feed device separately.

Figure 7 shows an edge view and a plan of the body of the pen separately.

Improvements in Pen-nibs for use in connection with Fountain and other Pens.

The same letters of reference indicate corresponding parts in the said Figures 1 to 7.

In the pen shown in these figures, *a* is the top-feed device which consists of a flexible bar or tongue whose shank or inner end *a*¹ is secured at a number of separated points to the shank and head of the nib *b*, as hereinafter described, so as to leave the forward portion *a*² of the said tongue, or the part that extends over the pierce-hole *b*¹ in the nib-head *b*², free or flexible so that it may yield or flex itself in unison with the movements made by the point of the nib when the pen is in use. The pierce-hole in the nib is arranged, as is usual in pens of this type, to come over and communicate with the ink-duct in the vulcanite or other rigid feed-bar and admit of the induction of ink to the underside of the tongue, but in order to realize the first object of my invention, the flexible forward portion of the top-tongue is also provided with a pierce-hole *a*³ which coincides or registers with that in the nib-head and serves to allow air to pass to the underside of the said tongue and thus assist the capillary flow of the secondary-ink-feed, which, when the pen is being written with, is induced by the flexing action of the tongue and nib and is drawn from the primary feed duct through the pierce-hole in the nib body and passes thence underneath the tongue to the point of the said nib. The additional vent or pierce hole in the flexible portion of the tongue also ensures the automatic and immediate delivery of ink to the nib point on writing being commenced.

To provide for the rigid attachment of the shank of the pierced tongue to the shank of the nib without the use of solder a series of small ears or projections *c* are formed on the edges of the shank of the said tongue and the nib is pierced with corresponding slits *d*, wherethrough the ears are passed from the topside and then clenched or turned down against the underside of the shank as shown in section in Figure 2. These connections are arranged at suitably separated points so as to provide a rigid attachment and preserve the tongue in its proper position along the centre of the nib, with its pierce-hole in register with the pierce hole of the said nib.

Instead of clenched or turning under the attachment ears, the ends may be headed up or rivetted after insertion through the slots in the pen.

Or, as an alternative method of securing the forward part of the shank of the pierced tongue, the metal which is cut out in the piercing of the tongue is utilized and is turned down through the registering pierce-hole in the nib and then turned back or clenched against the underside of the said nib so as to establish a rigid connection between the two parts.

A pen in which this method of attaching the tongue is used is shown in Figures 8 to 17 in which

Figure 8 represents a topside plan and Figure 9 an underside plan of the complete pen.

Figure 10 is a cross section thereof upon the dotted line *x*².

Figure 11 is a longitudinal section upon the dotted line *x*³.

Figure 12 is a cross section on the dotted line *x*⁴.

Figure 13 shows an underside sectional plan of the feed-tongue separately.

Figure 14 shows the body of the pen separately.

Figures 15 and 16 respectively represent longitudinal sections of the feed-tongue and nib body separately.

And Figure 17 shows an end view of the tongue and a cross section of the body of the nib separately.

In these figures, *c* are a pair of attachment ears on the shank of the tongue or feed bar and *d* are corresponding slits in the shank of the pen, wherethrough the said ears *c* are passed and clenched down against the underside of the said pen shank as in the arrangement described with reference to Figures 1 to 7. *e* is the piece of metal which is cut out in forming the pierce-hole of the tongue and which is inserted through the pierce hole in the nib head and clenched back against the underside of the said head, as shown in Figures 9, 10 and 11, so as

Improvements in Pen-nibs for use in connection with Fountain and other Pens.

to make the third rigid connection between the tongue and pen body whilst leaving the front portion of the said tongue free to flex or bend when the pen is being used.

In another alternative method of connecting a top feed-bar to a fountain-pen nib, a separate cleat or clip may be passed through the registering pierce-holes and clenched or closed over the rear edges of the said holes so as to hold the tongue rigidly in position.

Or instead of engaging the clench ears with holes or piercings in the body of the nib, certain of the said ears may be folded or turned round the edges of the said nib, preferably at the neck or narrow part which connects the head to the shank of the nib.

I am aware that, in reservoir nibs for use in connection with ordinary pen-holders, it has been proposed to provide for the attachment of an upper tongue to the body of the nib by means of ears or projections which are clenched to the said nib-body so as to effect the rigid attachment of the tongue without soldering.

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:—

First:—In a pen nib having a top-feed bar or tongue and adapted for use with a fountain pen having a grooved bottom-feed bar for delivering ink to the underside of the nib; providing the flexible part of the said tongue with a pierce-hole, substantially as and for the purposes herein described.

Secondly:—In a fountain-pen nib having a top-feed bar or tongue and adapted for use with a fountain pen having a grooved bottom-feed bar for delivering ink to the underside of the nib; providing the shank of the said tongue with a series of ears or projections which are clenched or rivetted to the body of the nib and effect the rigid attachment of the said bar without soldering, substantially as herein described.

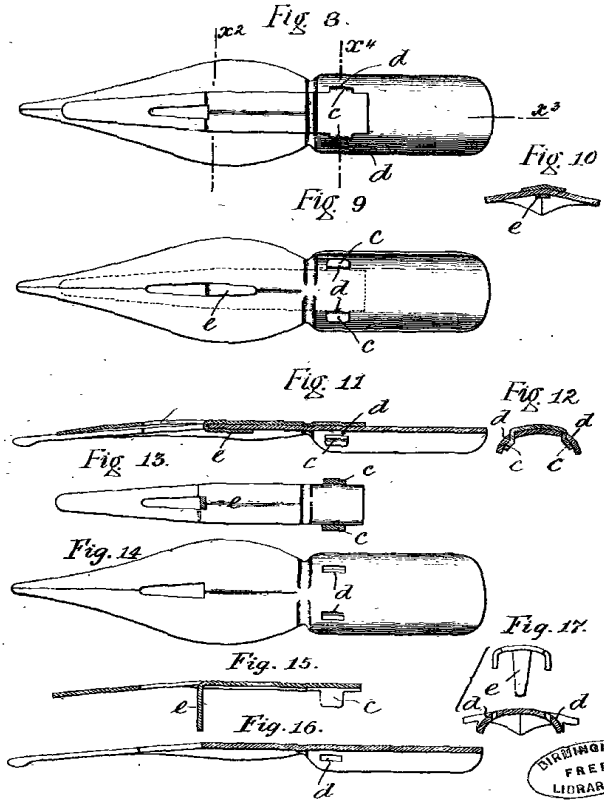
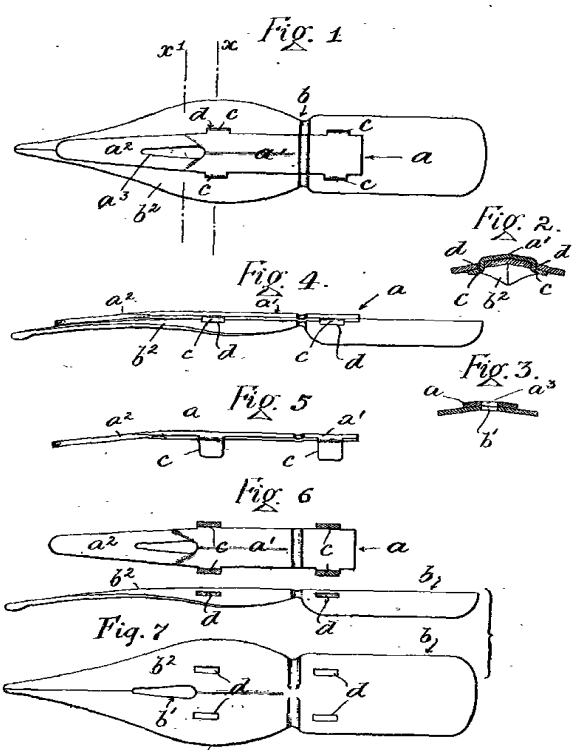
Thirdly:—In pen-nibs such as claimed in Claim 1; utilizing the metal which is cut out from the feed bar or tongue in producing its pierce hole as a means for securing the said tongue to the nib, substantially as herein-described with reference to Figures 8 to 17.

Fourthly:—The improved pen-nibs for fountain pens of the type herein referred to, in which the shanks of the top feed bars or tongues are attached mechanically to the nibs by clenched ears or clips and the forward flexible parts are provided with pierce holes registering with the pierce holes of the said nibs, for the purposes referred to.

Dated this 15th day of August 1907.

DUNCAN CAMERON,
By Henry Skerrett,
24 Temple Row Birmingham,
Agent for Applicant.

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



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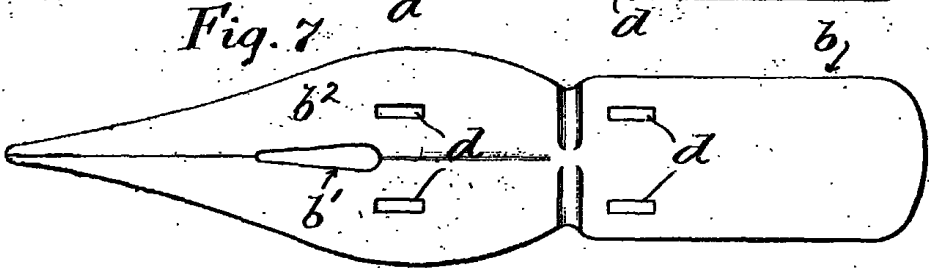
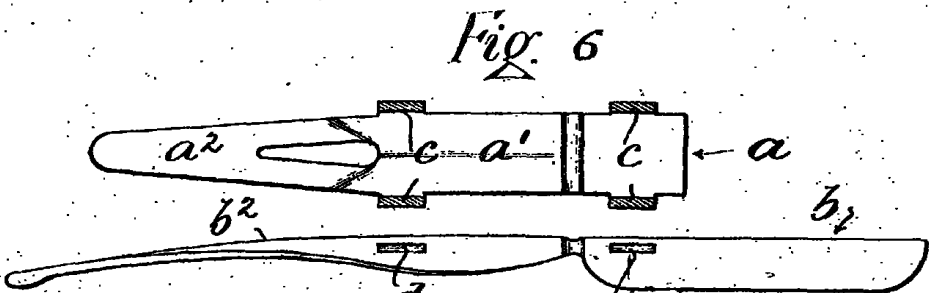
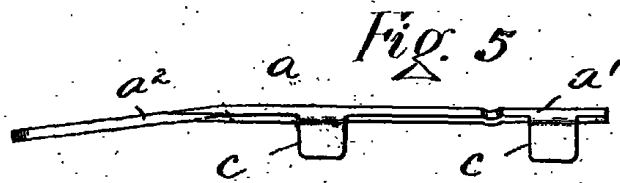
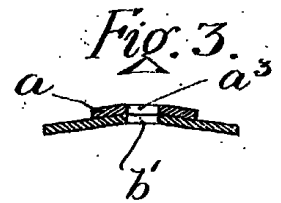
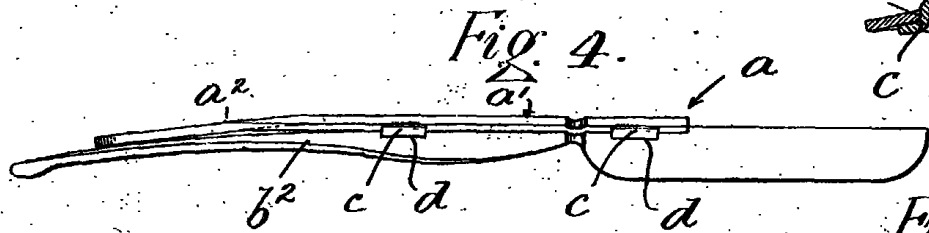
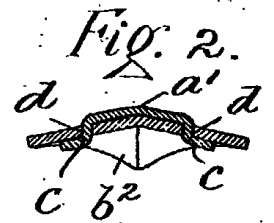
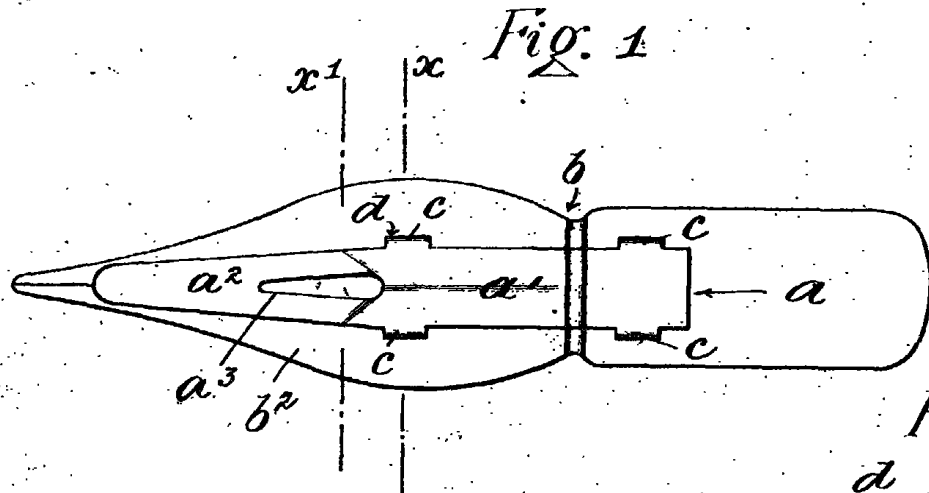


Fig. 8.

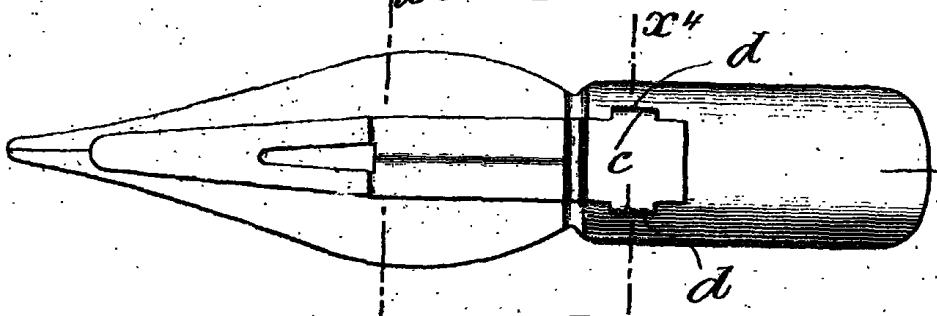


Fig. 9

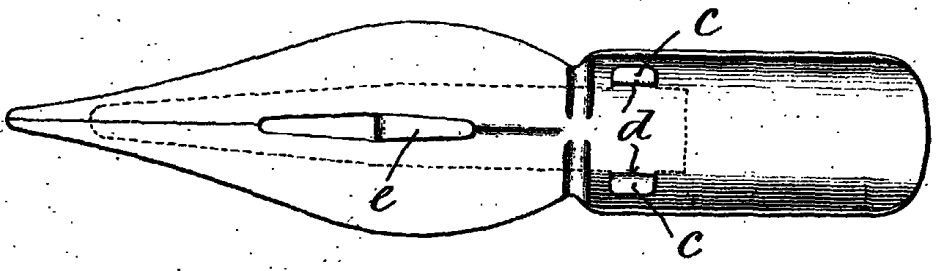


Fig. 10



Fig. 11

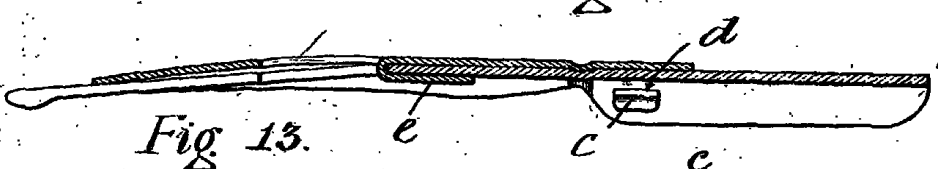


Fig. 12

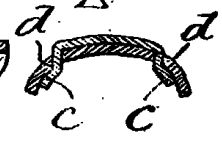


Fig. 13.

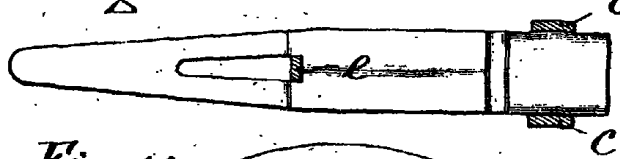


Fig. 14

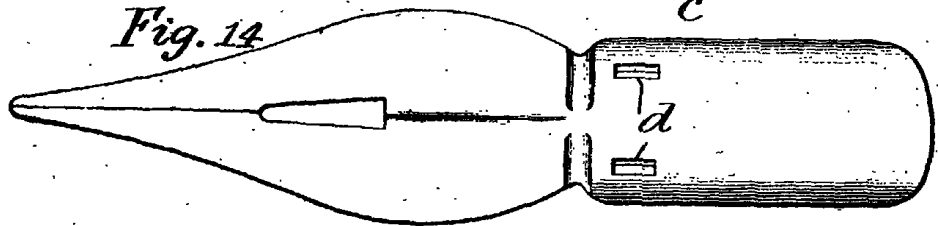


Fig. 17.

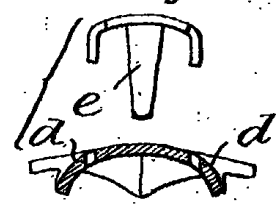


Fig. 15.

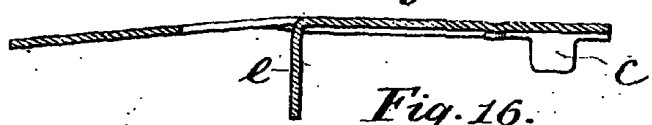
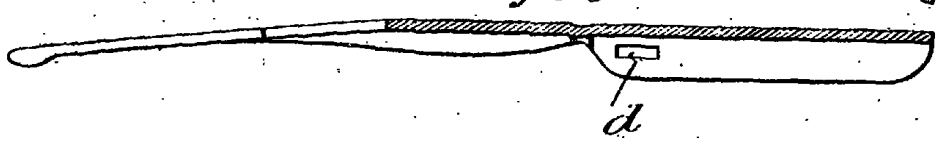


Fig. 16.



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AMENDED SPECIFICATION!

Reprinted as amended in accordance with the decision of the Chief Examiner dated the 3rd day of March, 1909.

(The amendments are shown in erased and italic type.)

N° 8313*



A.D. 1907

Date of Application, 10th Apr., 1907

Complete Specification Left, 16th Aug., 1907—Accepted, 31st Dec., 1907

PROVISIONAL SPECIFICATION.

"Improvements in Pen-nibs for use in connection with Fountain and other Pens."

I, DUNCAN CAMERON, Managing Director of MacNiven and Cameron Limited, of Waverley Pen Works, Blair Street, Edinburgh, Manufacturers, do hereby declare the nature of this invention to be as follows:—

5 This invention has relation to pen nibs, principally for use in connection with fountain pens, but also applicable to ordinary pens; such nibs being of that type in which a flexible tongue or bar is disposed along the top of the nib so as to strengthen the pen and serve (when used in fountain pens) as a secondary ink-feed for supplementing the action of a grooved feed-bar which extends under a part of the head of the nib and whose ink-duct is in communication with the
10 reservoir in the pen-body.

One of the objects of the present invention is to provide an improved construction of secondary ink-feed device which is adapted to act in such a manner that it automatically sets up or induces a constant and steady flow of ink when the pen is in use and provides for the delivery of a supply of ink to the nib point immediately the latter is applied to paper in commencing to write. Another object of the said invention is to provide an improved method of attaching the top bar or tongue to the body of the nib, whereby the use of soldering, or riveting such as hitherto employed, is dispensed with.

According to my said invention, I propose to employ a metallic top bar or tongue whose after end is rigidly attached at by one two or more separated joints to the shank of the nib and to the head thereof, but in such a manner as to leave the forward portion thereof, or the part that extends over the pierce-hole in the nib-head, free or flexible so that it may yield or flex itself in unison with the movements made by the point of the nib when the pen is in use. The pierce-hole in the nib is arranged, as is usual in pens of this type, to come over and communicate with the ink-duct in the vulcanite or other rigid feed-bar and admit of the induction of ink to the underside of the tongue, but according to my invention, the flexible forward portion of the top-tongue is also provided with a pierce-hole which coincides or registers with that in the nib-head and serves to allow air to pass to the underside of the said tongue and thus assist the capillary flow of the secondary feed ink, which, when the pen is being written with, is induced by the flexing action of the tongue and nib and is drawn from the primary feed duct through the pierce-hole in the nib body and passes thence underneath the tongue to the point of the said nib. The additional vent or pierce hole in the flexible portion of the tongue also ensures the automatic and immediate delivery of ink to the nib point on writing being commenced.

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To provide for the rigid attachment of the shank of the pierced tongue to the shank of the nib without the use of solder, small ears or projections may be formed on the edges of said tongue and the nib is pierced with corresponding slits, wherethrough the ears are passed from the topside and then clenched or turned down against the underside of the shank. These connections are arranged at suitably separated points so as to provide a rigid attachment and preserve the tongue in its proper position along the centre of the nib. 5

Or, as an alternative method of securing the forward part of the shank of the pierced tongue, the metal which is cut out in the piercing of the tongue is utilized and is turned down through the registering pierce-hole in the nib and then turned back or clenched against the underside of the said nib so as to establish a rigid connection between the two parts. 10

Or a separate cleat or clip may be passed through the registering pierce-holes and clenched or closed over the rear edges of the said holes so as to hold the tongue rigidly in position. 15

Dated this 9th day of April 1907.

DUNCAN CAMERON.

By Henry Skerrett,
Agent for Applicant.

COMPLETE SPECIFICATION (AMENDED). 20

"Improvements in Pen-nibs for use in connection with Fountain and other Pens."

I, DUNCAN CAMERON, Managing Director of MacNiven and Cameron Limited, of Waverley Pen Works, Blair Street, Edinburgh, Manufacturers, 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:— 25

This invention has relation to pen-nibs for use in connection with fountain pens of that type in which a flexible tongue or bar is disposed along the top of the nib so as to ~~strengthen the pen and~~ serve as a secondary ink-feed for supplementing the action of a grooved feed-bar which extends under a part of the head of the nib and whose ink-duct is in communication with the reservoir in the pen-body. 30

~~One of the~~ *The* objects of the present invention is to provide an improved ~~construction of secondary ink feed device which is adapted to act in such a manner that it automatically sets up or induces a constant and steady flow of ink when the pen is in use and provides for the delivery of a supply of ink from the grooved feed bar to the nib point immediately the latter is applied to paper in commencing to write.~~ Another object of the said invention is to provide an improved method of attaching the top bar or tongue to the body of the fountain-pen nib, whereby the use of soldering, such as hitherto employed, is dispensed with. 35 40

Figure 1 of the accompanying drawings represents a top-side plan of a pen-nib provided with a top-feed bar or tongue which is formed and attached to the body of the pen in accordance with my invention.

Figure 2 is a cross section of Figure 1, upon the dotted line *x*, showing part of the means by which the said top-feed device is rigidly secured to the head of the pen. 45

Figure 3 is another cross section of Figure 1 upon the dotted line *x*¹.

Figure 4 is an edge view of the complete pen.

Figures 5 and 6 respectively show an edge view and an underside sectional plan of the top-feed device separately. 50

Improvements in Pen-nibs for use in connection with Fountain and other Pens.

Figure 7 shows an edge view and a plan of the body of the pen separately.

The same letters of reference indicate corresponding parts in the said Figures 1 to 7.

In the pen shown in these figures, *a* is the top-feed device which consists of a flexible bar or tongue whose shank or inner end *a*¹ is secured at a number of separated points to the shank and head of the nib *b*, as hereinafter described, so as to leave the forward portion *a*² of the said tongue, or the part that extends over the pierce-hole *b*¹ in the nib-head *b*², free or flexible so that it may yield or flex itself in unison with the movements made by the point of the nib when the pen is in use. The pierce-hole in the nib is arranged, as is usual in pens of this type, to come over and communicate with the ink-duct in the vulcanite or other rigid feed-bar and admit of the induction of ink to the underside of the tongue, ~~but in order to realize the first object of my invention~~ whilst the flexible forward portion of the top-tongue is also provided with a pierce-hole *a*³ which coincides or registers with that in the nib-head and serves to allow air to pass to the underside of the said tongue and thus assist the capillary flow of the secondary-ink-feed, which, when the pen is being written with, is induced by the flexing action of the tongue and nib and is drawn from the primary feed duct through the pierce-hole in the nib body and passes thence underneath the tongue to the point of the said nib. The additional vent or pierce hole in the flexible portion of the tongue also ensures the automatic and immediate delivery of ink to the nib point on writing being commenced.

To provide for the rigid attachment of the shank of the pierced tongue to the shank of the nib without the use of solder a series of small ears or projections *e* are formed on the edges of the shank of the said tongue and the nib is pierced with corresponding slits *d*, wherethrough the ears are passed from the topside and then clenched or turned down against the underside of the shank as shown in section in Figure 2. These connections are arranged in pairs at or near the middle and the rear ends respectively ~~at suitably separated points~~ so as to provide a rigid attachment and preserve the tongue in its proper position along the centre of the nib, with its pierce-hole in register with the pierce hole of the said nib.

Instead of clenching or turning under the attachment ears, the ends may be headed up or rivetted after insertion through the slots in the pen.

Or, as an alternative method of securing the forward part of the shank of the pierced tongue, the metal which is cut out in the piercing of the tongue is utilized and is turned down through the registering pierce-hole in the nib and then turned back or clenched against the underside of the said nib so as to establish a rigid connection between the two parts.

A pen in which this method of attaching the tongue is used is shown in Figures 8 to 17 in which

Figure 8 represents a topside plan and Figure 9 an underside plan of the complete pen.

Figure 10 is a cross section thereof upon the dotted line *x*².

Figure 11 is a longitudinal section upon the dotted line *x*³.

Figure 12 is a cross section on the dotted line *x*⁴.

Figure 13 shows an underside sectional plan of the feed-tongue separately.

Figure 14 shows the body of the pen separately.

Figures 15 and 16 respectively represent longitudinal sections of the feed-tongue and nib body separately.

And Figure 17 shows an end view of the tongue and a cross section of the body of the nib separately.

In these figures, *e* are a pair of attachment ears on the shank of the tongue or feed bar and *d* are corresponding slits in the shank of the pen, wherethrough the said ears *e* are passed and clenched down against the underside of the said pen shank as in the arrangement described with reference to Figures 1 to 7. *e* is the piece of metal which is cut out in forming the pierce-hole of the tongue

Improvements in Pen-nibs for use in connection with Fountain and other Pens.

and which is inserted through the pierce hole in the nib head and clenched back against the underside of the said head, as shown in Figures 9, 10 and 11, so as to make the third rigid connection between the tongue and pen body whilst leaving the front portion of the said tongue free to flex or bend when the pen is being used. 5

~~In another alternative method of connection connecting a top feed bar to a fountain pen nib, a separate cleat or clip may be passed through the registering pierce holes and clenched or closed over the rear edges of the said holes so as to hold the tongue rigidly in position.~~

~~Or instead of engaging the clench ears with holes or piercings in the body of the nib, certain of the said ears may be folded or turned round the edges of the said nib, preferably at the neck or narrow part which connects the head to the shank of the nib.~~ 10

I am aware that, in reservoir nibs for use in connection with ordinary pen-holders, it has been proposed to provide for the attachment of an upper tongue to the body of the nib by means of ears or projections which are clenched to the said nib-body so as to effect the rigid attachment of the tongue without soldering. 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

~~First:—In a pen nib having a top feed bar or tongue and adapted for use with a fountain pen having a grooved bottom feed bar for delivering ink to the underside of the nib, providing the flexible part of the said tongue with a pierce hole, substantially as and for the purposes herein described.~~ 25

~~First Secondly:—In a fountain-pen nib having a top-feed bar or tongue and adapted for use with a fountain pen having a grooved bottom-feed bar for delivering ink to the underside of the nib; providing the shank of the said tongue, at or near the middle and the rear end respectively, with two pairs a series of ears or projections which are clenched or rivetted to the body of the nib so as to and effect the a rigid attachment of the said bar without soldering, and so as to leave the forward portion of the tongue flexible, substantially as described and set forth in Figures 1. to 7 substantially as herein described.~~ 30

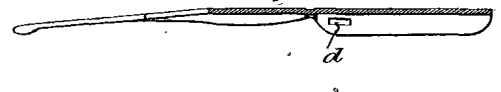
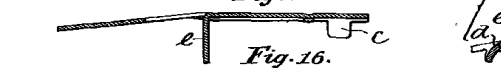
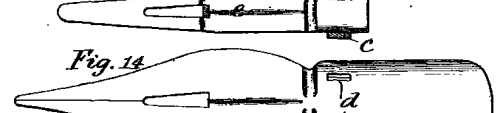
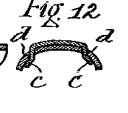
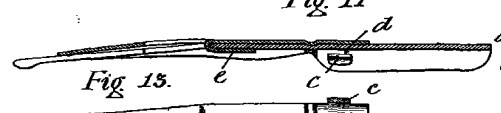
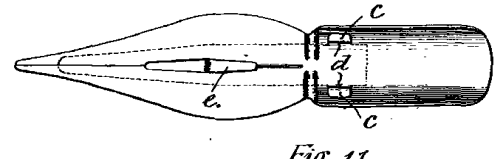
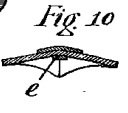
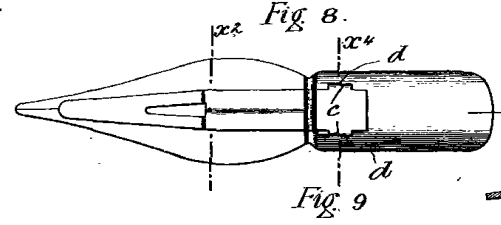
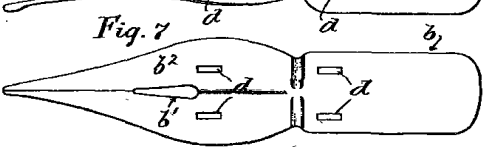
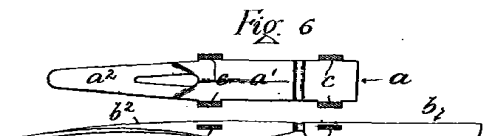
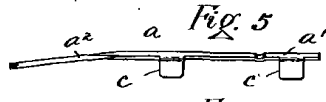
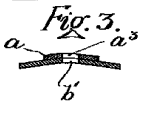
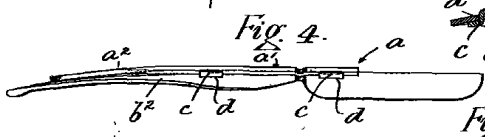
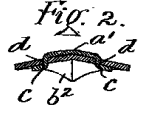
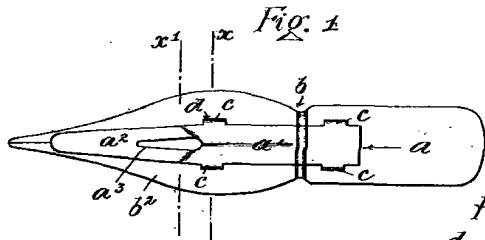
~~Thirdly:—In pen nibs such as claimed in Claim 1, utilizing the metal which Secondly:—In fountain pen nibs having a top-feed bar or tongue provided with a pierce hole; utilizing the metal which is cut out from the said feed bar or tongue in producing its pierce hole, as a means for securing the said tongue to the nib, substantially as herein described with reference to Figures 8 to 17.~~ 35

~~Fourthly:—The improved pen-nibs for fountain pens of the type herein referred to, in which the shanks of the top feed bars or tongues are attached mechanically to the nibs by clenched ears or clips and the forward flexible parts are provided with pierce holes registering with the pierce holes of the said nibs, for the purposes referred to.~~ 40

Dated this 15th day of August 1907.

DUNCAN CAMERON, 45
By Henry Skerrett,
24 Temple Row Birmingham.
Agent for Applicant.

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



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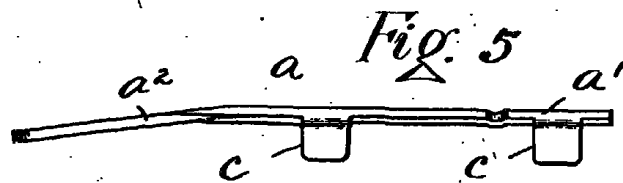
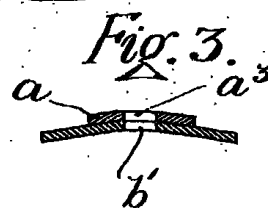
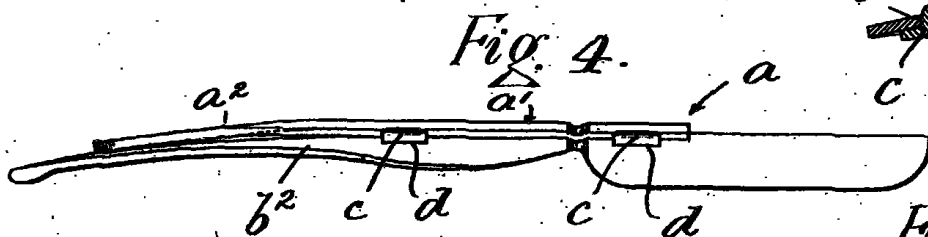
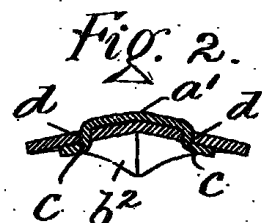
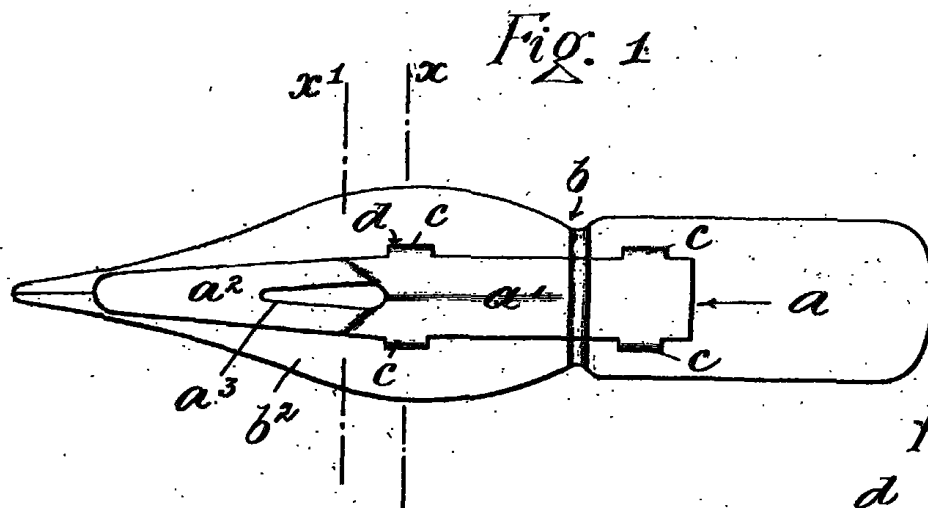


Fig. 6

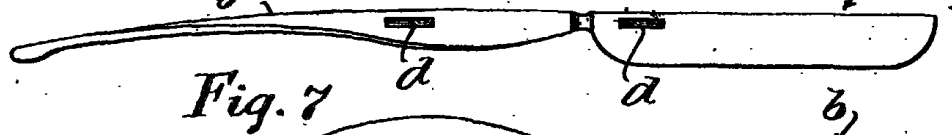
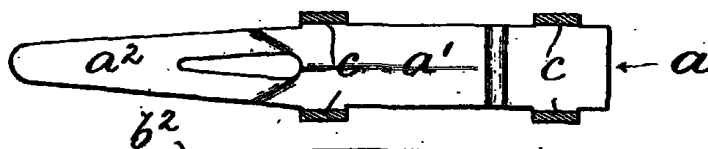
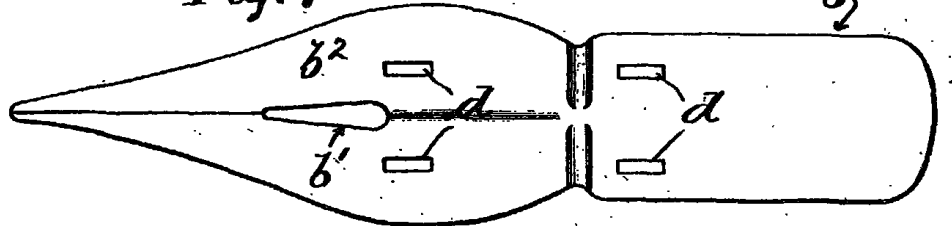


Fig. 7



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

Fig. 8.

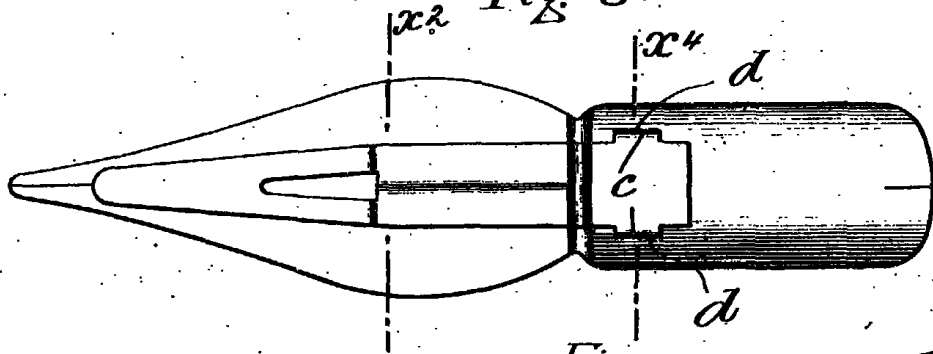


Fig. 9.

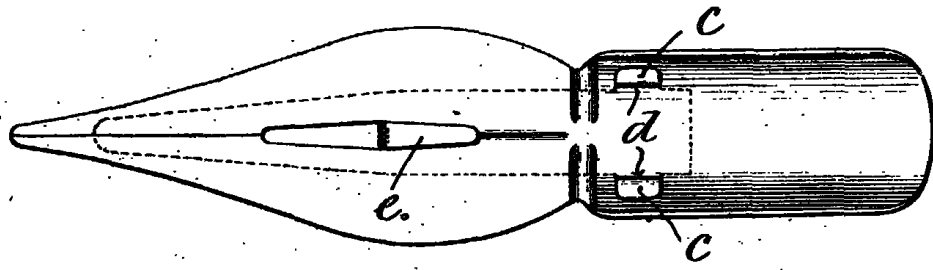


Fig. 10.

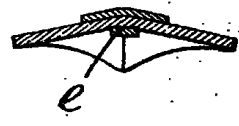


Fig. 11.

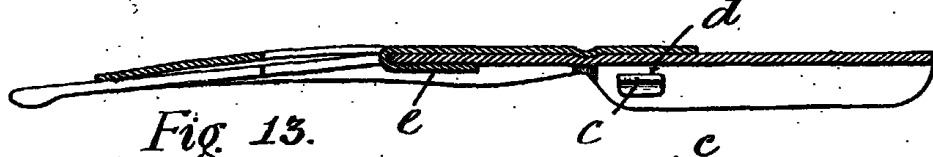


Fig. 12.

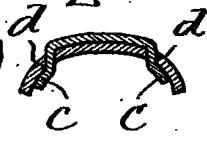


Fig. 13.

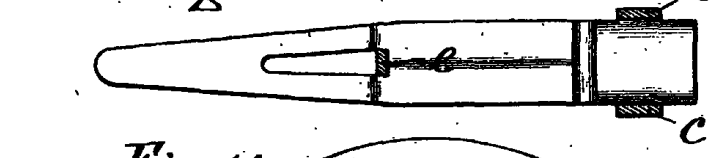


Fig. 14.

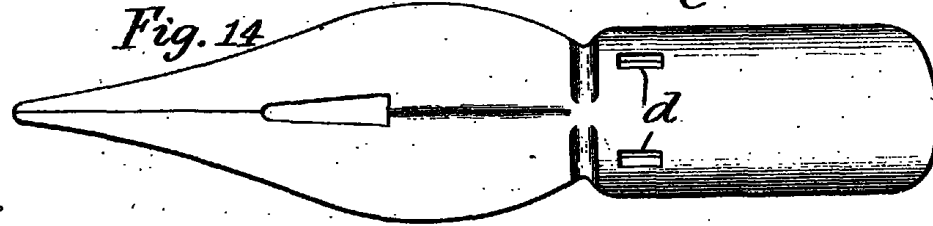


Fig. 17.

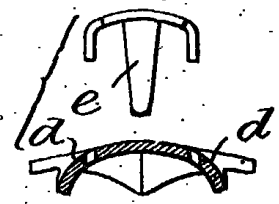


Fig. 15.

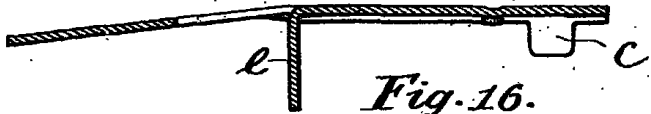


Fig. 16.



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