April 30, 1935. L. H. ASHMORE 1,999,177

FOUNTAIN PEN

Filed Jan. 31, 1933 2 Sheets-Sheet 1

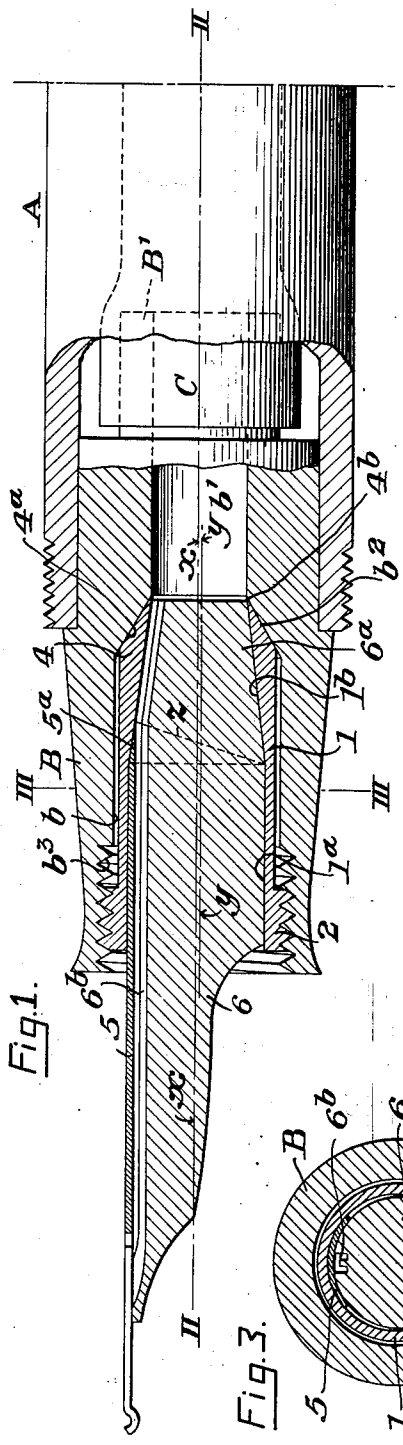


Fig. 1.

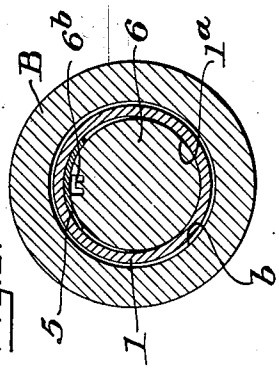


Fig. 3.

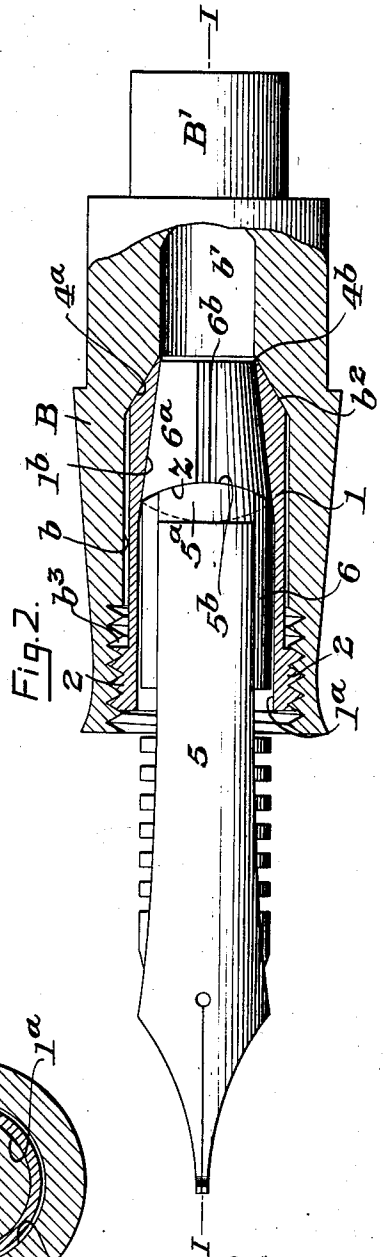


Fig. 2.

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FOUNTAIN PEN

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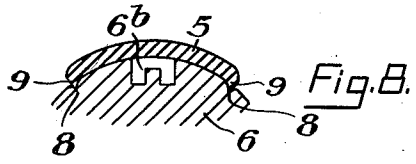
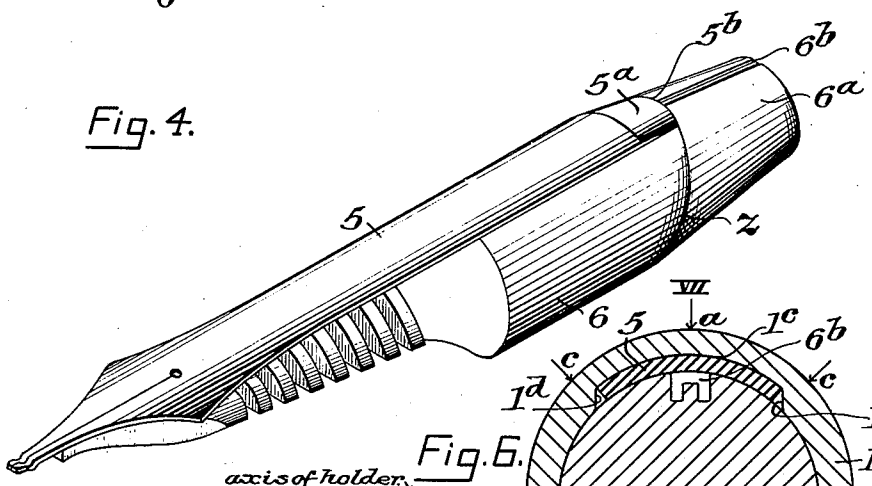


Fig. 8.

Fig. 4.



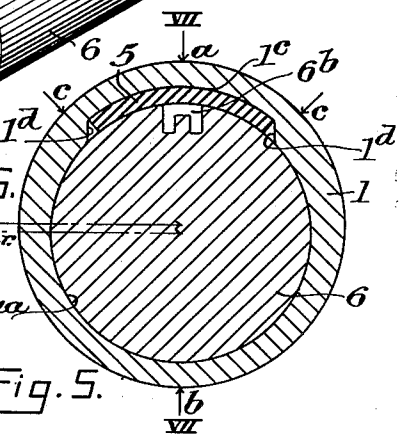


Fig. 6.

axis of holder.
axis of feeder member.

Fig. 9.

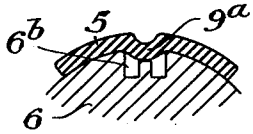


Fig. 10.

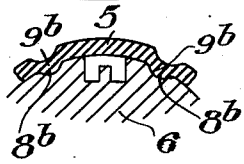


Fig. 5.

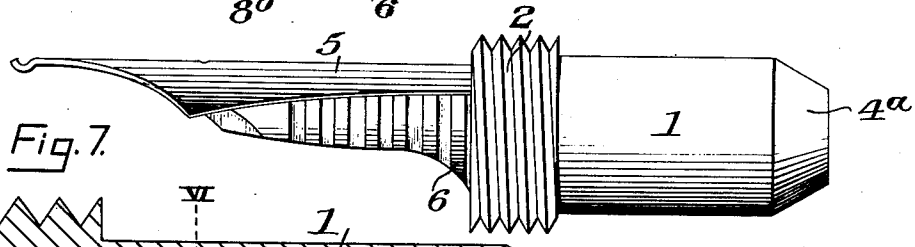
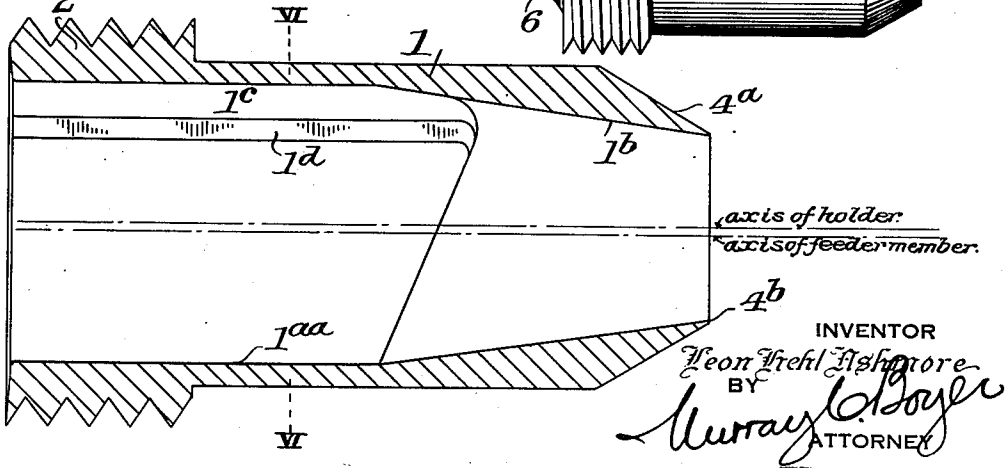


Fig. 7.



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UNITED STATES PATENT OFFICE

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FOUNTAIN PEN

Leon Hehl Ashmore, Collingswood, N. J., assignor to The Esterbrook Steel Pen Manufacturing Co., Camden, N. J., a corporation of New Jersey

Application January 31, 1933, Serial No. 654,471

21 Claims. (Cl. 120—52)

My invention relates to fountain pens, and more particularly to a novel replaceable unit assembly comprising a holder for a pen nib and a feeder member operatively associated therewith, for detachable association with a fountain pen.

The object of my present invention is to provide a replaceable unit assembly of such character as to insure the proper positioning of a pen nib and a feeder member associated therewith within a detachable holder or insert which may be received within the end of the pen barrel or within a tubular section carried at the open end of the pen barrel and held in leak-proof position with respect to the barrel or such section; the inner end of the latter, when employed, carrying the usual ink-containing sac commonly employed in fountain pens.

A further object of my invention is to provide a leak-proof and substantially sealed joint between the inner end of the feeder member and the inner end of the pen nib associated therewith, and the interior of the detachable holder or insert in which such elements are detachably received.

A further feature of my invention consists in providing the holder or insert with a recess to accommodate the pen nib. In this latter arrangement, the pen nib is of the same contour on the inner surface of its shank as the feeder member with which it is associated, and the curvature of the recess receiving the pen nib may be on the arc of a circle struck from an axis coinciding with the axis of the feeder member. The holder or insert receiving these two elements, however, has a center eccentric to the axis of the feeder member in order that the wall of said holder opposite the recess receiving the pen nib shall be of the same thickness or cross-sectional dimension as the portion diametrically opposite the same, engaged by the feeder member. This cross-sectional contour of the holder or insert, which is provided with a bore tightly fitting the feeder member properly positioned within the same with respect to the pen nib fitting the recess, provides a slightly thicker wall for the holder or insert adjacent the shoulders or sides of the pen nib, and this greater thickness insures a greater resistance against distortion when assembling the feeder member and pen nib within such holder or insert.

And a still further object of my invention is to provide means for maintaining the pen nib and the feeder member in proper relative position or association with respect to each other, for insertion within the holder or insert and for their intended use when disposed therein.

The several features of my invention are further pointed out hereinafter and may be more fully understood upon reference to the accompanying drawings, in which:

Figure 1 is a longitudinal section, on an enlarged scale, of a fountain pen structure embodying features of my present invention, taken on the line I—I, Fig. 2.

Fig. 2 is a longitudinal section on the line II—II, Fig. 1, showing a plan view of the pen nib.

Fig. 3 is a cross-sectional view on the line III—III, Fig. 1.

Fig. 4 is a perspective view of the feeder member and the pen nib in associated relation detached from the holder or insert.

Fig. 5 is a longitudinal elevation of the holder or insert with the contained feeder member and pen nib, detached from the pen structure.

Figs. 6 and 7 illustrate a modified form of insertible holder within the scope of my invention; Fig. 6 being a cross-sectional view on the line VI—VI, Fig. 7, and Fig. 7 being a longitudinal section on the line VII—VII, Fig. 6.

Fig. 8 is a fragmentary sectional view illustrating cooperative engaging means carried by the feeder member and the pen nib for the purpose of maintaining the same in proper relative position with respect to each other when inserted in or removed from the holder and when lying within the same, and

Figs. 9 and 10 are similar views illustrating other forms of cooperative engaging means designed to keep these elements in proper relative position.

Referring to the drawings and more particularly to Fig. 1, the fountain pen structure may comprise the usual barrel A, receiving a tubular section B in its open end; the connection being usually a tight-fitting slip joint and the inner end of such tubular section B being provided with a reduced portion B', to which an ink-containing sac C, of usual type, may be attached.

The tubular section B may be generally of the form of a hollow cylinder having an internal through bore of two diameters, indicated at b and b', respectively, with a relatively long beveled seat b^2 between the same. The outer and larger bore b receives a detachable and replaceable holder 1 for a pen nib and feeder member and such bore may be internally threaded adjacent its open end, as at b^3, to receive the threaded end 2 of said detachable holder 1.

The detachable holder 1 is of cylindrical form externally and is substantially tubular; preferably terminating at its inner or upper end in the form of a hollow truncated cone 4, whose

outer beveled surface 4^a is designed to exactly fit the seat b^2 of the tubular section B, and insure a leak-proof joint; the end of the holder terminating at the junction of the beveled seat b^2 and the smaller bore b'. The tubular section B may be made of hard rubber or a suitable composition having some elasticity, and it is possible, upon screwing the holder into place, to jam the beveled surface 4^a at the end of said holder against the beveled seat b^2 of the tubular section B, and insure a leak-proof joint. It will be understood, of course, that other means of securing the holder 1 in place that will insure a leak-proof joint at its point of seating in the tubular section B may be employed. Interiorly, the holder has a straight bore portion 1^a which may be about one-half its total depth or length, with a tapered bore portion 1^b beyond such straight bore portion and joining the external conical portion 4 at a substantial feather edge, indicated at 4^b, at its inner or upper terminal; the area of such opening of the holder substantially coinciding with the area of the bore b' of the tubular section. The surface of the internal tapered bore portion 1^b of the holder forms an abutment against which the end of a pen nib 5, which may be of any suitable character, and the end of a feeder member 6, are intended to seat in leak-proof contact; such seating also determining the longitudinal position of the feeder bar and pen nib with respect to each other within the holder.

The feeder member 6 may be of any usual or suitable shape as to the portion thereof disposed externally of the holder 1, but within the holder such feeder member is preferably of truly cylindrical form for the greater part of the portion within such holder, with its inner or upper end 6^a tapered to fit the internally tapered wall portion 1^b of the holder.

The pen nib is positioned between the feeder member and the wall of the straight bore portion 1^a of the holder, and since the feeder member is of cylindrical form at this point of engagement with the pen nib, its axial position relative to the axis of the carrier has been displaced or shifted hence, while the tapering portion 6^a of the feeder member 6 is concentric with respect to the axis of the tapered portion 1^b of the holder 1, by reason of the fact that the pen nib retained within the holder by such feeder member has displaced the latter relatively to the holder, the tapered end 6^a of such feeder member is eccentric with respect to the cylindrical portion fitting within the straight bore portion 1^a of said holder. This relation is clearly brought out in Figs. 1 and 2, where the lines x represent the axis of the holder and lines y represent the axis of the feeder member. It is also clearly indicated in the perspective view, Fig. 4.

The tapered end of the feeder member 6 closely fits the tapered inner wall portion of the holder 1 in leak-proof contact. In addition, the shank of the pen nib 5 is tapered at the upper surface of its inner end, as indicated at 5^a, in exact conformity with the taper applied to the end of such feeder member and it is positioned within the holder with such feeder member so that its tapered upper surface is an exact continuation of the tapered surface at the inner or upper end of the feeder member for the entire width of the pen nib. These parts occupy the position shown in Figs. 1, 2, and 4, from which it is clear that the tapered inner surface 1^b at the inner or upper end of the bore of the holder 1 forms an abutment against which the tapered end of the feeder member and the tapered end of the pen nib seat in leak-proof engagement.

By reason of the eccentricity of the tapered end of said feed member, the change from its truly circular portion to such eccentric portion provides an annular line of demarcation substantially oval in contour, as indicated at z, Figs. 1, 2, and 4. The inner end of the pen nib shank, in addition to being beveled or tapered complementarily to the surface of the feeder member, has its end curved as indicated at 5^b in conformity with the curve developed by the annular line z, as clearly shown in Fig. 2, so as to conform at all points to the surface of the internally tapered wall portion 1^b of the holder 1, and closely fit the same.

The feeder member 6 may be formed with the usual ink groove 6^b parallel to its longitudinal axis and extending substantially the full length thereof; such groove following the tapered portion at the inner or upper end of the same and opening into the bore b' of the section B. This ink groove 6^b is of uniform depth in the cylindrical portion of the feeder member and in the diagonal extension thereof following the tapered end, and provides a continuous channel for the passage of ink from the bore b' of the tubular section B without interruption or change; thereby precluding the possibility of the formation of an air pocket. It will be noted that the inner or upper end of the feeder member stops just short of the end of the holder. The ink groove 6^b may be single, or it may be the duplex form illustrated.

In the form of insertible holder shown in Figs. 6 and 7, the bore of the same receiving the feeder member and pen nib is recessed at one side to accommodate said pen nib, as indicated at 1^c. This recess follows the cross-sectional curvature or contour of the pen nib which, in turn, is of the same curvature or contour as the feeder member, as indicated in Fig. 6. In forming this recess, however, the wall of the holder is not reduced opposite the same, and the circular bore 1^{aa} of the holder receiving the feeder member is eccentric with respect to the external wall of the holder so that the thickness of the wall of the holder is the same at the point opposite the recess, as well as the point diametrically opposite the same; as indicated at a and b, respectively. This results in a slight thickening of the wall of the holder at the points indicated at c substantially opposite the shoulders or sides of the pen nib fitting within the recess. Preferably, the recess receiving the pen nib has side or lateral walls 1^d parallel to a line passing vertically through the axis of the bore receiving the feeder member and the axis of the external wall of the holder, considering Fig. 6, and these thickened portions of the wall resist any tendency of the holder to collapse or change its external contour when fitting the assembled pen nib and feeder member within the same; such parts being very tightly fitted within the holder.

The feeder member and pen nib assembled within a holder of the type shown in Figs. 6 and 7 are of the same character as those illustrated with reference to the holder shown in Figs. 1 and 2, et seq.; having tapered ends which fit against the wall of the tapered seat at the end of the bore within the holder and forming an ink-tight joint within the interior of the holder, with the exception of the necessary ink groove provided in such feeder member.

In assembling the insertible units of the type

shown in Figs. 1, 2, et seq., the pen nib is placed in proper position over the ink groove of the feeder member centrally thereof with the beveled rear end of the shank of such pen nib occupying the proper position lengthwise of the feeder member with respect to the beveled portion at the inner or upper end of the same. With these parts in such related position, they may then be inserted in the holder in any position of the latter; the truly circular bore of such holder receiving the pen nib and feeder member in their associated condition, and the tapered portion of such bore forming a close fitting seat for the reception of the tapered end of the feeder member and the beveled end of the pen nib.

When assembling the type of structure illustrated in Figs. 6 and 7, the nib and feeder member are placed in proper position with the pen nib over the ink groove of the feeder member, and then, by relative movement of such assembled parts and the holder, they may be placed together, with the pen nib entering the recess of the holder. The fit is a tight one to insure that the inserted parts will properly seat within the holder and that the tapered end of the feeder member engages the seat at the end of the bore receiving the same, and that the tapered end of the pen nib lies in its proper relative position with respect to the feeder member and engages the tapered wall of the holder in the same manner as indicated in Fig. 1.

It is within the scope of my invention to provide means for positioning the pen nib with respect to the feeder member by the use of cooperative engaging portions carried by the respective members. In Figs. 8, 9, and 10, I have shown several forms of cooperative engaging portions carried by the pen nib and feeder member. In Fig. 8, the feeder member is shown as provided with recesses **8**, adapted to receive projections **9**, carried by the pen nib. These projections **9** may be formed by bending over portions of the sides of the pen nib to engage the recesses **8** in the feeder member. In Fig. 9, I have shown the pen nib as provided with a struck up portion **9a** formed in the shank and adapted to fit the ink groove **6b** in the feeder member. And in Fig. 10 I have shown the shank of the pen nib as provided with a pair of projections **9b** adapted to fit into the recesses **8b** in the feeder member. By such means, or other equivalent means within the scope of my invention, the proper relative position of the pen nib and the feeder member are insured and the pen nib maintained centrally with respect to the ink groove of the feeder member. Other forms of cooperative engaging portions for the pen nib and feeder member to insure this result may be employed without departing from my invention.

It will be apparent from the foregoing and from a consideration of the several views of the drawings, that the inner tapered end **6a** of the feeder member **6** is in close engagement with the inner tapered wall portion **1b** of the holder **1**, and except for the opening provided by the ink groove **6b**, forms a completely sealed end across the inner end of the holder. In addition, the pen nib, by reason of its close contact with the feeder member and of its curved and beveled end, seals such ink groove and prevents leakage around the same. From the straight portion of the feeder member, the holder tapers both internally and externally rearwardly toward its axis; the surface **4a** of the externally tapered portion **4** fitting the similarly tapered seat b^2 in the tubular section B.

From a consideration of the several figures of the drawings, it will be obvious that the tapered end of the pen shank lies closely against the tapered end of the feed member, and these elements together closely fit the tapered seat within the holder and insure proper positioning of such parts, and that the groove **6a** forms a continuous and uninterrupted passage for ink.

I thus provide a structure in which, not only a tight, leak-proof fit may be obtained between the tapered inner surface of the holder and the pen nib and the feeder member which holds the pen nib in fixed assembled position, but I also eliminate the possibility of any air pocket forming within or adjacent to the ink passage of the feeder member.

The holder **1** may be made of any suitable material—any materials commonly employed in the manufacture of fountain pens, including hard rubber, various synthetic products, and various forms of plastic materials more or less of the nature of hard rubber. In like manner, I may employ metal in producing these holders. They may be made in any manner common in the arts and the recess of the type of structure shown in Figs. 6 and 7 may be formed during the making operation or it may be afterwards formed. They may be pressed or suitably shaped into blank form, and the recess to receive the pen nib may be formed during such shaping or pressing, together with the external beveled portion **4a** to seat within the pen structure, and a shoulder surrounding the forward end, which is subsequently threaded, as indicated at **2**. When made, the rear end of the blank from which the holder is finally produced may be closed as an incident in its preparation, and this end is subsequently opened so that the tapered end of the feeder member with its ink groove may extend properly into the end of the tapered bore of the holder and seat against the tapered end wall of the same in ink-tight engagement therewith with the exception of the groove **6b** for the passage of ink.

The assembly of pen nib and feeder member within the holder is an operation requiring careful workmanship and is performed in the factory; the insertible unit comprising the holder with the contained pen nib and feeder member in proper position being sold as an entity for insertion within a fountain pen structure, without other attention upon the part of the user. By reason of such preparation, the unit carriers containing the pen nib and feeder member are always ready for use with such parts in proper position.

Various modifications may be made in the foregoing embodiment of my invention without departing from the spirit and scope thereof as set forth in the appended claims.

I claim:

1. The combination, in a fountain pen structure, of a tubular section at the open end of the same having an internal beveled seat, a tubular holder disposed wholly within said section and having a beveled inner end fitting said beveled seat; said holder having a central bore terminating in an internally tapered portion of material length, a feeder member having a longitudinal ink groove disposed in said holder, and a pen nib confined in said holder by the feeder member and disposed over its ink groove; said feeder member and pen nib having tapered inner ends closely fitting and seating against the tapered bore of the holder.

2. The combination, in a fountain pen struc-

ture, of a tubular section at the open end of the same having a through bore of two diameters; the respective portions of such bore being connected by a beveled seat, a tubular holder disposed wholly within said section and occupying the outer and larger portion of said bore; said holder having a beveled inner end fitting said beveled seat and a central bore terminating in an internally tapered portion of material length, a feeder member having a longitudinal ink groove disposed in said holder, and a pen nib confined in said holder by the feeder member and disposed over its ink groove; said feeder member and pen nib having tapered inner ends closely fitting and seating against the tapered bore of the holder.

3. The combination, in a fountain pen structure, of a tubular section at the open end of the same having a through bore provided with a beveled seat disposed some distance inwardly of its forward end, a tubular holder disposed wholly within said section and having a beveled inner end fitting said beveled seat; said holder having a central bore terminating in an internally tapered portion of material length with a diameter at its end substantially the same as the diameter of the bore at the inner end of the tubular section, a feeder member having a longitudinal ink groove disposed in said holder, and a pen nib confined in said holder by the feeder member and disposed over its ink groove; said feeder member and pen nib having tapered inner ends closely fitting and seating against the tapered bore of the holder whereby said elements may be definitely positioned within said holder.

4. The combination, in a fountain pen structure, of a tubular section fitting the open end of the pen barrel and having an internal beveled seat, a tubular holder disposed wholly within said section and having a beveled inner end fitting said beveled seat; said holder having a central bore terminating in an internally tapered portion of material length whose wall meets the outer beveled seat portion of said holder at its inner or upper end, a cylindrical feeder member having a longitudinal ink groove disposed in said holder, and a pen nib confined in said holder by the feeder member; the positioning of said pen nib effecting lateral displacement of the feeder member within the holder and said feeder member and pen nib having cooperating tapered inner ends closely fitting and seating against the tapered bore of the holder.

5. The combination, in a fountain pen structure, of a tubular section fitting the open end of the pen barrel and having a through bore of two diameters; the respective portions of such bore being connected by a beveled seat, a tubular holder disposed wholly within said section and occupying the outer and larger portion of said bore; said holder having a beveled inner end fitting said beveled seat and a central bore terminating in an internally tapered portion of material length whose wall meets the outer beveled seat portion of said holder at its inner or upper end, a cylindrical feeder member having a longitudinal ink groove disposed in said holder, and a pen nib confined in said holder by the feeder member; the positioning of said pen nib effecting lateral displacement of the feeder member within the holder and said feeder member and pen nib having cooperating tapered inner ends closely fitting and seating against the tapered bore of the holder; the tapered end of said feeder member being eccentric to its cylindrical portion engaging the pin nib.

6. The combination, in a fountain pen structure, of a tubular section fitting the open end of the pen barrel and having a through bore of two diameters and a beveled seat connecting said bore portions, a tubular holder disposed wholly within the larger bore portion of said section and having a beveled inner end fitting said beveled seat; said holder having a central bore terminating in an internally tapered portion of material length whose wall meets the outer beveled seat portion of said holder at its inner or upper end and having a diameter coincident with the smaller bore of said tubular section, a cylindrical feeder member having a longitudinal ink groove disposed in said holder, and a pen nib confined in said holder by the feeder member; the positioning of said pen nib effecting lateral displacement of the feeder member within the holder and said feeder member and pen nib having cooperating tapered inner ends closely fitting and seating against the tapered bore of the holder.

7. The combination, in a fountain pen structure, of a tubular section fitting the open end of the pen barrel and having an internal beveled seat and being internally threaded at its open end, a tubular holder having a threaded portion engaging the threads of said section and a beveled inner end fitting said beveled seat; the threaded connection affording means for causing the holder to engage the seat and said holder having a central bore terminating in an internally tapered portion of material length, a feeder member having a longitudinal ink groove disposed in said holder, and a pen nib confined in said holder by the feeder member; said feeder member and pen nib having tapered inner ends cooperating to closely fit and seat against the tapered bore of the holder whereby the ink groove of the feeder bar is effectively sealed against air pockets.

8. A fountain pen structure presenting at its forward end a bore and an inner taper at the end of the bore, an externally tapered insert for the bore fitting the taper of the pen structure and itself having a bore and a taper at the inner end of the bore concentric with the bore, in combination with a feed member at its inner end concentric with and fitting the taper of the insert, and at its outer end eccentric to the taper and to the bore of the insert, and a pen nib fitting the feeder member and filling out the eccentric portion of the feeder member into concentricity with the taper so that the feed member and pen together as a unit are concentric with the taper portion of said insert.

9. A fountain pen structure having an ink-containing sac and presenting at its forward end a bore and an inner taper at the end of the bore, an externally tapered insert for the bore fitting the taper of the pen structure and itself having a bore and a taper at the inner end of the bore concentric with the bore, in combination with a feed member at its inner end concentric with and fitting the taper of the insert and at its outer end eccentric to the taper and to the bore of the insert, and a pen nib fitting the feeder member and filling out the eccentric portion of the feeder member into concentricity with the taper so that the feed member and pen together as a unit are concentric with the taper portion of said insert.

10. A fountain pen structure, an insert therefor having a forwardly opening bore and a taper

concentric thereto at the inner end of the bore, in combination with a longitudinally movable feeder member having a taper adapted to engage the taper at the inner end of the bore and having an outer cylindrical portion fitting within the bore and eccentric in a direction away from the curve with respect to the bore, and a pen nib adapted to fit over the curve of the feeder member and filling out the combined contour of filler member and nib into concentricity with the bore; the inner end of the nib being tapered to fill out the taper of the feeder member and fit the taper at the inner end of the counterbore.

11. A fountain pen structure, an insert therefor having a forwardly opening bore and a taper concentric thereto at the inner end of the bore, in combination with a feeder member having an outer body and an inner end taper eccentric to each other, and a pen nib lying on the side of the taper axis away from the axis of the body conforming generally to the body of the feeder member and fitting against the bore and taper.

12. In a fountain pen structure, a pen-carrying tubular insert therefor having a forwardly opening cylindrical bore eccentrically disposed with respect to the external surface of said insert; said bore having an inwardly-disposed taper at the inner end of the same, in combination with a feeder member having a taper adapted to engage the taper at the inner end of the bore and having a cylindrical portion fitting within the bore; the bore of said insert being recessed longitudinally thereof at one side, and a pen nib fitting the curve of the feeder member and lying within said recess.

13. In a fountain pen structure, a pen-carrying tubular insert therefor having a forwardly opening cylindrical bore eccentrically disposed with respect to the external surface of said insert; said bore having an inwardly-disposed taper concentric thereto at the inner end of the bore, in combination with a feeder member having a taper adapted to engage the taper at the inner end of the bore and having a cylindrical portion fitting within the bore; the bore of said insert being recessed longitudinally thereof at one side, and a pen nib fitting the curve of the feeder member and lying within said recess; the inner end of the nib being tapered to fill out the taper of the feeder member and to fit the taper at the inner end of the counterbore.

14. In a fountain pen structure, a pen-carrying tubular insert therefor having a forwardly opening cylindrical bore eccentrically disposed with respect to the external surface of said insert; said bore having an inwardly-disposed taper concentric thereto at the inner end of the bore in combination with a feeder member having a taper adapted to engage the taper at the inner end of the bore and having a cylindrical portion tightly fitting within the bore; the bore of said insert being recessed longitudinally thereof at one side, and a pen nib fitting the curve of the feeder member and lying within said recess; said insert having its wall opposite the recess no less in thickness than the portion diametrically opposite said recess and in engagement with the feeder member.

15. In a fountain pen structure, a pen-carrying insert therefor having a forwardly opening cylindrical bore and an inwardly directed taper at its inner end concentric with said bore, in combination with a longitudinal feeder member having a tapered end adapted to engage the taper at the inner end of the insert bore and having an outer cylindrical portion lying within the bore and eccentric to its tapered portion whereby a space is left between said feeder member and the wall of the bore, and a pen nib occupying said space and fitting over the curve of said feeder member.

16. In a fountain pen structure, a pen-carrying insert therefor having a forwardly opening cylindrical bore and a taper at the inner end of the bore concentric therewith, in combination with a feeder member having a tapered end and a pen nib associated therewith and together filling out the taper at the inner end of the bore, and together filling out the cylindrical bore of the insert; the body of said feeder member having an axis eccentric to its tapered end.

17. A pen nib having the inner end of its shank tapered from the outside rearwardly and inwardly, in combination with an insert member having a cylindrical bore with an inwardly tapered portion at its inner end and within which said pen nib fits and with whose taper the tapered end of the pen nib shank engages, and a cylindrical feeder member having a tapered inner end and serving to hold the pen nib against the wall of the cylindrical bore and the tapered inner end of said insert.

18. A feeder member for fountain pens having a body with a tapered inner end concentric with one axis; said body intermediate the length of the feeder member being generally cylindrical and having a different axis from that of the tapered inner end and being longitudinally grooved upon that face in the direction of the taper of the axis.

19. A fountain pen structure comprising a body section, an insert therefor presenting a front bore; the latter being inwardly tapered at its inner end, in combination with a cylindrical feeder member having an ink groove and fitting the part of the tapered portion of the insert on the side away from the pen nib position and of smaller diameter in its body portion than the bore of said insert, and a pen nib extending over the groove of the feeder member; said feeder member engaging the wall of the insert on one side and the pen nib engaging the opposite wall of said insert.

20. In a fountain pen structure including a hollow body, an insert therefor having a forwardly opening cylindrical bore, in combination with a cylindrical feeder member fitting the bore; said insert being recessed longitudinally of the bore at one side of the same, and a pen nib lying within said recess and fitting over the curved surface of the feeder member and together seating in the inner end of the insert.

21. In a fountain pen structure including a body, an insert therefor having a forwardly opening bore and an inwardly disposed taper at the inner end of said bore, in combination with a feeder member having a tapered end adapted to engage the taper at the inner end of the bore and having a cylindrical portion fitting the bore; said insert being internally recessed longitudinally of the bore at one side of the same, and a pen nib fitting over the curved surface of the feeder member and lying within said recess; the inner end of the shank of the pen nib being tapered to fill out the taper of the feeder member and together to fit the taper at the inner end of the bore.

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