

Nov. 4, 1930.

M. KOLBER

1,780,527

FOUNTAIN PEN

Filed Aug. 17, 1929

Fig. 1

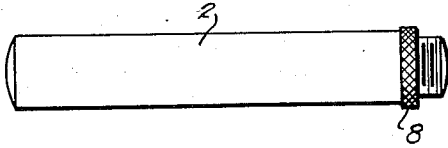


Fig. 2

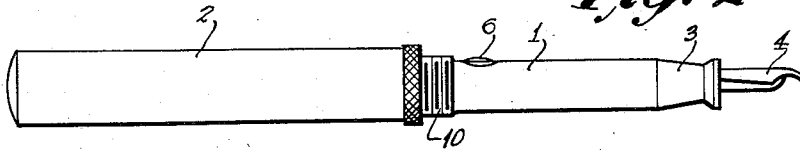


Fig. 3

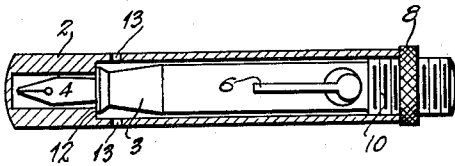


Fig. 4

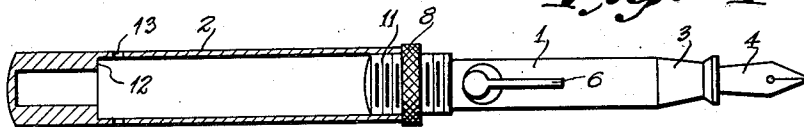
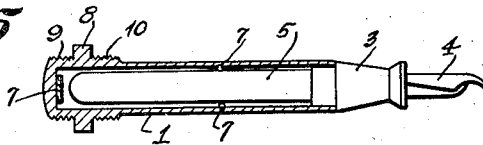


Fig. 5



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FOUNTAIN PEN

Application filed August 17, 1929. Serial No. 386,528.

This invention relates to fountain pens and is directed more particularly to pen construction whereby I am able to produce a pen which, when not in use, will be of relatively small size and can be carried in the vest pocket or in the purse, but which, when conditioned for use, will be of substantially the same length as a full sized conventional pen.

Pens as heretofore and as now usually constructed embody a relatively long barrel at one end of which is carried a writing point or nib fed from a reservoir or sack positioned within the barrel. A cap is provided adapted when the pen is not in use to cover the writing point, while when the pen is in use the cap is slipped over the back end of the barrel and retained there against loss. It has been the practice to make these caps only of such length as is required to adequately cover the point and ordinarily the length of the cap is approximately half the length of the barrel. With this arrangement the length of the pen when not in use is substantially equal to the length of the pen when in use.

The purpose of the present invention, in contradistinction, is to provide a pen the normal inactive length of which is materially less than the operative length thereof so that it may be conveniently carried in relatively small space when not in use but will afford ample length for convenient writing when in use. I am able to accomplish this general result by making the barrel relatively short as compared to the length of the cap so that when the pen is not in use substantially the entire length of the barrel may be contained within the cap, whereas when the pen is to be in use, substantially the entire length of the barrel will project beyond the end of the cap. Thus in the operative condition of the pen its length is substantially equal to the combined lengths of the barrel and cap whereas in its inoperative condition the overall length of the pen is substantially equal to the length of the cap alone.

An important feature of this invention in this connection consists in forming upon the barrel and near one end thereof, an annular flange. Directly adjacent each face of which flange the barrel is threaded while the cap is interiorly threaded at its open end to co-act with the threaded portion of the barrel at either side of said flange. The outer periphery of the flange is preferably knurled or roughened in any other equivalent manner so as to permit the threaded portions of the barrel to be screwed into the cap as may be desired and to permit of a rugged construction well able to withstand the strain of long usage. The threaded end of the barrel is preferably initially made in the form of a solid plug and its interior is subsequently hollowed out so as to permit of a sack of maximum capacity with a barrel of minimum length.

A further feature of the invention consists in the fact that the pen may be made of the self-filling type and when the pen is not in use the self-filling lever is enclosed within the cap so that it cannot inadvertently catch against extraneous articles with which it might otherwise come in contact. An important feature of this invention is inherent in the marked simplicity of the structure, its economy of manufacture and its thorough efficiency.

Features of the invention other than those specified will be apparent from the hereinafter detailed description when read in conjunction with the accompanying drawings and from the appended claims.

The accompanying drawings illustrate one practical embodiment of the invention but this showing is to be understood as illustrative only and not as defining the limits of the invention.

Figure 1 is a side elevation of a pen embodying the present invention in inoperative condition.

Figure 2 is a like view showing parts in operative condition.

Figure 3 is a view corresponding to Figure 1 but showing cap in section.

Figure 4 is a view corresponding to Figure 2 and also showing cap in section.

Figure 5 shows the barrel detached from the cap and in central section.

The pen of this invention embodies, generally speaking, two distinct parts, namely, a barrel 1 and a cap 2. The barrel 1 is closed at its open end by a plug 3 which carries the pen point or nib 4 and to the plug is secured a sack 5 from which ink is fed to the point 4. The pen is preferably of the self-filling type, a filler lever being indicated at 6 and the other parts of the filler mechanism being indicated generally by the reference character 7.

The barrel 1 is made in the form of a relatively thin tubular shell but at the end thereof opposite the point 4 it is in the form of a heavy solid plug and subsequently hollowed out so that the sack may extend substantially for the full length of the barrel. About midway of the length of the plug portion to which I have referred it is formed with an annular flange 8 at either side of which are cut threads 9 and 10. The outer circumference of the flange 8 is knurled or roughened in any other suitable manner so as to afford a firm grip whereby the threads 9 and 10 may be screwed into internal threads indicated at 11 in the drawings and formed in the open end of the cap 2. This arrangement renders the threaded end of the barrel strong and rugged so that it is well able to withstand the strains of long continued use.

The cap 2 is of tubular form open at one end and closed at the other. It is of sufficient length to receive within its confines the entire length of the pen as measured from the point to the adjacent face of the knurled flange and formed within the cap near its closed end is a shell 12 against which the end of the plug 3 is adapted to seat when the threads 10 are screwed into the threads 11 to seat the flange 8 against the end of the cap. This engagement of the plug 3 with the seat 12 as shown in Figure 3 precludes leakage of ink from the pen when the pen is not in use. A vent hole or perforation 13 is formed in the cap adjacent the seat 12 to vent the interior of the cap when introducing barrel thereinto and removing it.

As a result of the arrangement which I have described, it will be apparent that when the pen is not in use the threads 10 will be screwed into the threads 11 with the result that the parts will appear as shown in Figures 1 and 3. The entire barrel, pen point and plug will be contained in concealed position within the cap and the entire assembly will be but slightly greater in length than the over-all length of the cap. The construc-

tion may therefore be conveniently carried in a vest pocket or purse and the non-leakable character of the device is such that ink cannot possibly escape from the confines of the cap. When it is desired to use the device, the threads 10 may unscrew from the threads 11 to remove the barrel from the cap and by thereupon reversing the barrel the threads 9 may screw into the threads 11 as shown in Figures 2 and 4. By so doing the barrel and cap are made rigid with respect to one another while the over-all length of the resulting construction will be substantially equal to the combined length of both the barrel and cap thereby giving sufficient over-all length for convenient manipulation of pen. If, in the particular showing of the drawings, the overall length of the pen as exhibited in Figures 2 and 4 is equal to the length of a standard conventional pen, then the inoperative position of the parts as exhibited in Figures 1 and 3 will be about one-half of the conventional pen of standard size. I am thus able to obtain a construction providing a very short carrying pen with a full length writing pen. Such an arrangement, so far as I am aware, has never before been produced. It fulfills a long felt want of those persons who desire a compact pen when not in use but require a full length pen for writing.

The knurled flange, while relatively narrow provides an efficient means of attaching and detaching the parts through affording a firm grip and when the parts are in compact position the filler lever 6 is so housed within the cap that it cannot catch onto the garment and cause compression of the sack with consequent spilling of the ink.

The accompanying drawings show the invention in its preferred practical form but the invention is to be understood as fully commensurate with the appended claims.

Having thus fully described my invention, what I claim as new and desired to secure by Letters Patent is:

1. As a new article of manufacture, a self filling fountain pen embodying a barrel having a relatively thin tubular wall for the greater portion of its length, one end of the barrel terminating in a chambered, exteriorly threaded portion having a wall of greater thickness than the wall of the barrel and provided exteriorly and intermediate the ends of the threaded portion with a rigid annular flange, a suitable plug carrying a pen point and closing the other end of the barrel, a self-filling mechanism associated with the barrel intermediate the said plug and the threaded portion whereby the threaded portion at either side of the flange is adapted to be screwed into a suitable cap which serves to house and conceal the self-filling mechanism when the pen is not in use.

2. As a new article of manufacture, a self filling fountain pen embodying a tubular

barrel carrying at one end a writing point, an
annular flange encircling the barrel near its
other end, and self filling mechanism inter-
mediate the ends of the barrel, said barrel
5 being enlarged and threaded adjacent the
opposite faces of the flange, whereby the
threaded portion on either side of the flange
may be screwed into a suitable cap to either
house the greater portion of the barrel, in-
10 cluding the filling mechanism, within the cap
or to mount the barrel on the cap with the
greater portion of the barrel extending be-
yond the open end of the cap.

In testimony whereof I have signed the
15 foregoing specification.

MORRIS KOLBER.

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