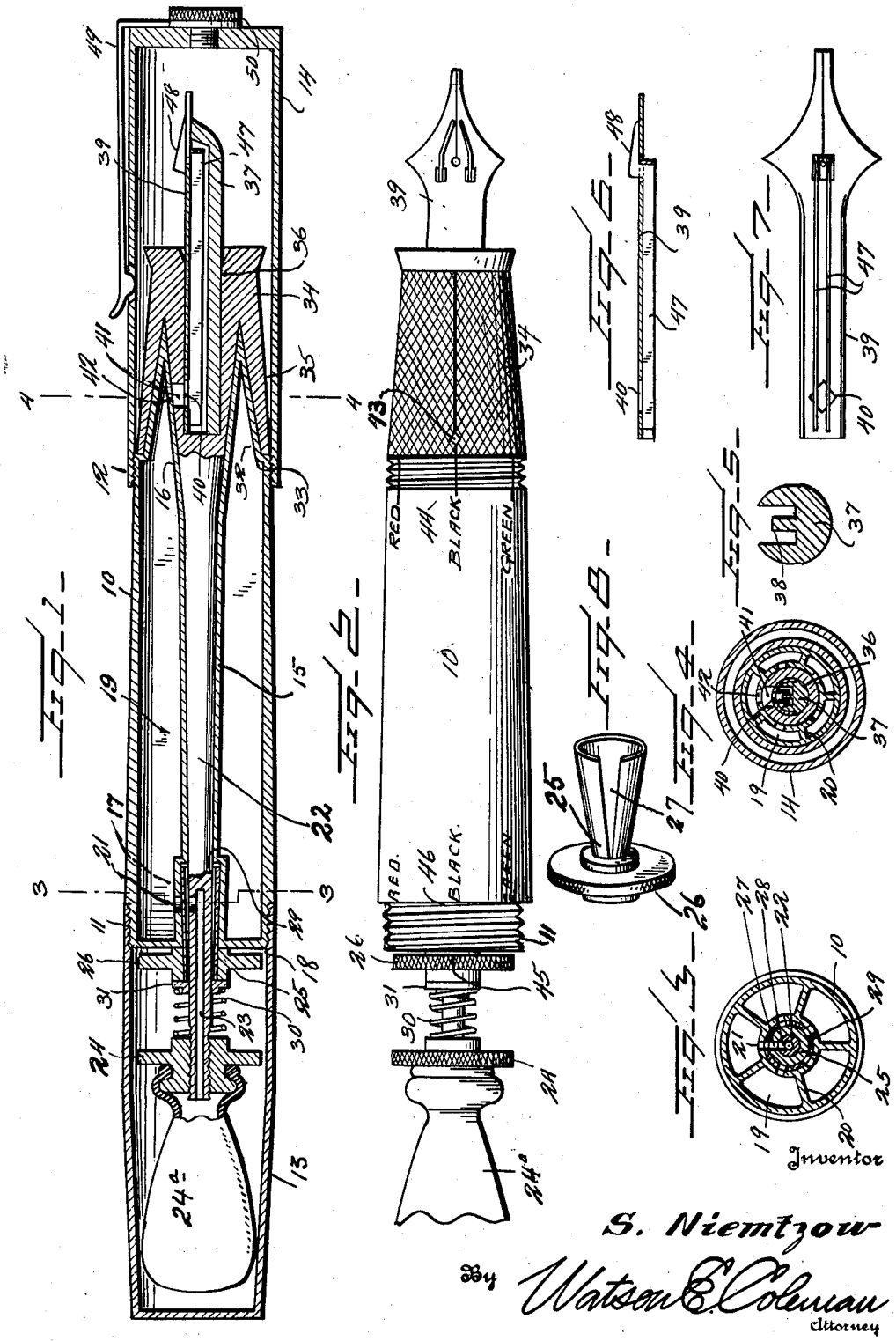
March 3, 1931. S. NIEMTZOW 1,794,533

FOUNTAIN WRITING IMPLEMENT

Filed Oct. 26, 1929 4 Sheets-Sheet 1



March 3, 1931. S. NIEMTZOW 1,794,533

FOUNTAIN WRITING IMPLEMENT

Filed Oct. 26, 1929 4 Sheets-Sheet 2

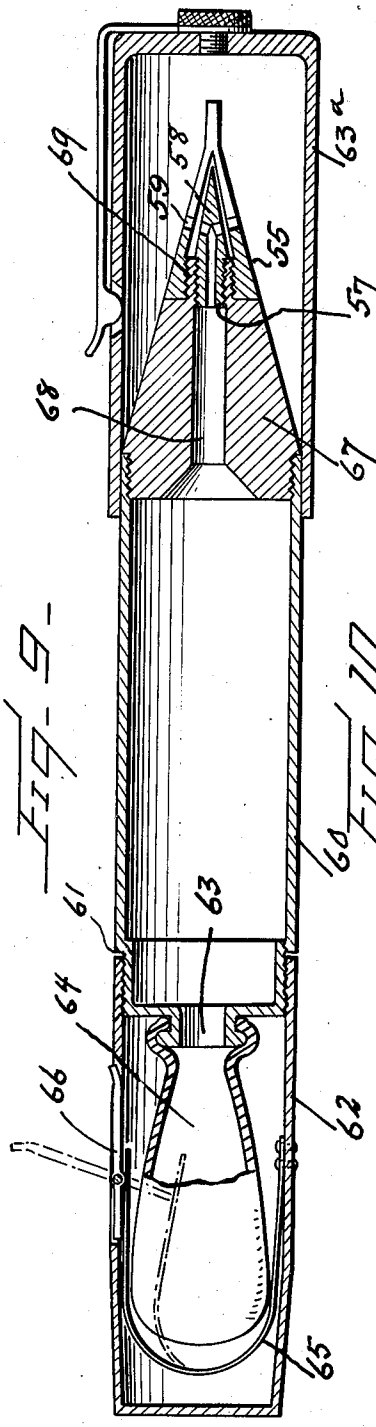


Fig. 9.

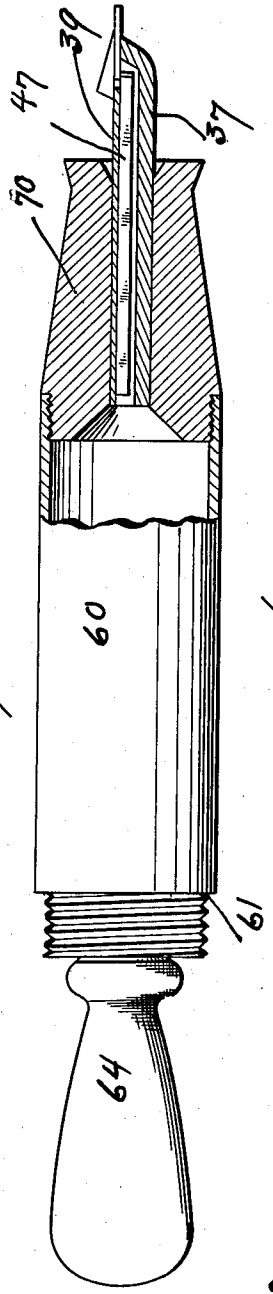


Fig. 10.

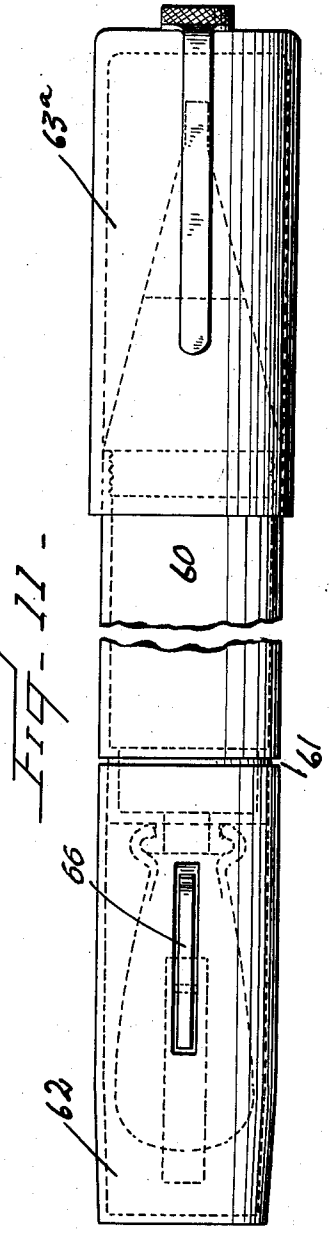


Fig. 11.

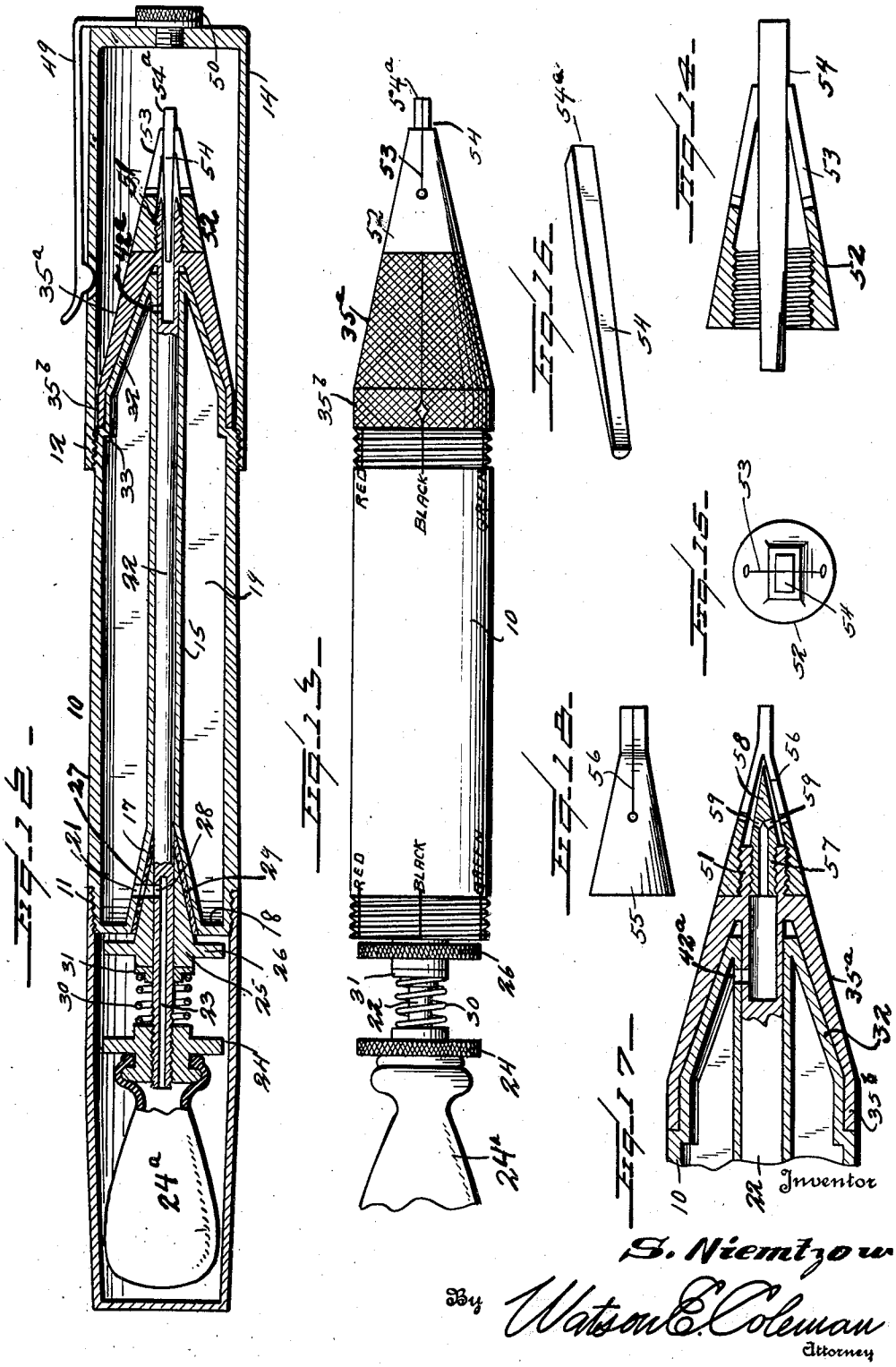
Inventor
S. Niemtzow

By Watson E. Coleman
Attorney

March 3, 1931. S. NIEMTZOW 1,794,533

FOUNTAIN WRITING IMPLEMENT

Filed Oct. 26, 1929 4 Sheets-Sheet 3



Inventor

S. Niemtzow

By Watson E. Coleman

Attorney

March 3, 1931. S. NIEMTZOW 1,794,533

FOUNTAIN WRITING IMPLEMENT

Filed Oct. 26, 1929 4 Sheets-Sheet 4

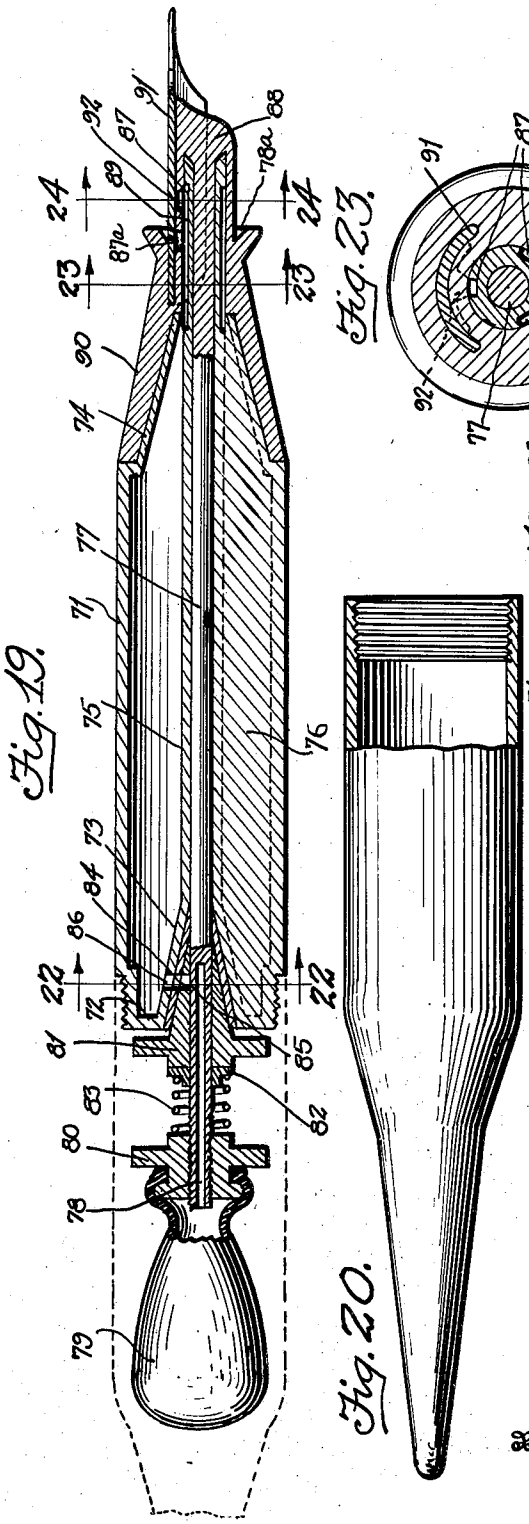


Fig. 19.

Fig. 20.

Fig. 23.

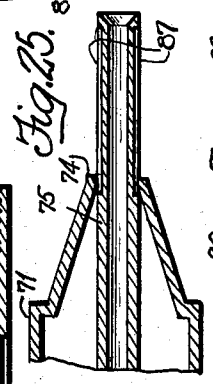


Fig. 25.

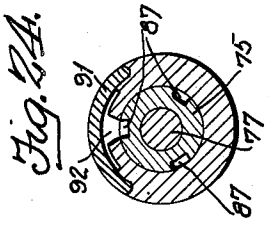


Fig. 24.

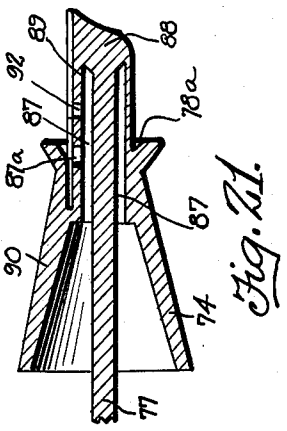


Fig. 21.

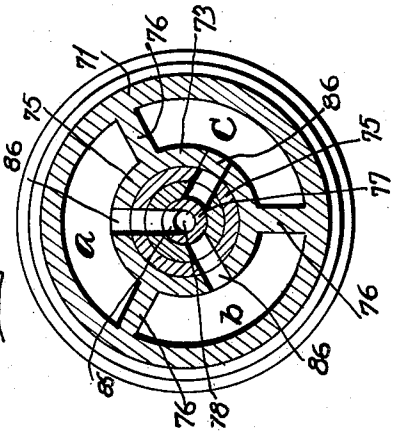


Fig. 22.

Inventor
S. Niemtzow
By Watson E. Coleman.
Attorney

Patented Mar. 3, 1931 1,794,533

UNITED STATES PATENT OFFICE

SAMUEL NIEMTZOW, OF FREEHOLD, NEW JERSEY

FOUNTAIN WRITING IMPLEMENT

Application filed October 26, 1929. Serial No. 402,700.

This invention relates to fountain pens and one of the objects of the present invention is to provide a fountain pen of a very simple construction having as a unitary part thereof an elastic bulb whereby ink may be drawn into the ink reservoir of the fountain pen or discharged entirely from the fountain pen if it be desired to do so, this bulb being normally enclosed by a cap, the cap being removable to permit the operation of the bulb by hand.

A still further object is to provide a fountain pen having a bulb of this character and having an annular ink carrying chamber or reservoir, there being a valve rotatable to bring the bulb into communication with the reservoir and there being means whereby the pen point may be brought into communication with the reservoir whereby, as the bulb is collapsed and then allowed to expand, ink will be drawn in through the pen point inserted in an ink bottle and drawn into the reservoir, the valve and the pen point being capable of being turned independently of each other to thereby cut off communication between the reservoir and either the pen point or the bulb, and the pen point and its carrier being rotatable at any time to open communication between the pen point and the interior of the reservoir to permit the ink to be used.

A further object is to provide a fountain pen capable of carrying a very large amount of ink or to so construct the pen as to provide an annular reservoir divided into a plurality of separate compartments for different colored inks.

A further object in this connection is to provide means whereby the pen point may be communicatively connected with any one of said compartments and provide means whereby the bulb may be adjusted to communicatively connect the bulb with any one of said compartments whereby any one of said compartments may be filled with ink or whereby the ink in any one of the compartments may be used for writing.

Another object is to provide an improved pen point having agitating blades therein so mounted as to move within the pen point to prevent the ink from clogging.

Other objects will appear in the course of the following description.

My invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a longitudinal sectional view of one form of pen constructed in accordance with my invention;

Figure 2 is a side elevation thereof;

Figure 3 is a section on the line 3—3 of Figure 1;

Figure 4 is a section on the line 4—4 of Figure 1;

Figure 5 is a sectional view through the stump which supports the pen point proper;

Figure 6 is a section of the pen point, one of the agitators being in section;

Figure 7 is an under side view of the pen point with the agitator blades therein;

Figure 8 is a perspective view of the valve shown in Figures 1 and 2, the valve being expanded by its resilience;

Figure 9 is a longitudinal section of a pen having a single large neck reservoir;

Figure 10 is an elevation partly in section of the pen shown in Figure 9, but showing a different form of point;

Figure 11 is an elevation of the structure shown in Figure 9;

Figure 12 is a longitudinal section of another form of pen which is akin to a stylographic pen and which I will call a pencil pen;

Figure 13 is a side elevation thereof;

Fig. 14 is a fragmentary longitudinal section through the point cap showing the chisel-shaped points therein;

Figure 15 is a front elevation of the cap;

Figure 16 is a perspective view of one of the chisel-shaped points;

Figure 17 is a longitudinal sectional view of the forward end of the pen shown in Figure 12 showing a modification of the point thereof;

Figure 18 is a top plan view of the point shown in Figure 17;

Figure 19 is a longitudinal sectional view of a modified form of fountain pen, constructed in accordance with my invention;

Figure 20 is an elevation of the cap therefor:

Figure 21 is a fragmentary longitudinal section through the head, the stub and the stem;

Figure 22 is a section on the line 22—22 of Figure 19;

Figure 23 is a section on the line 23—23 of Figure 19;

Figure 24 is a section on the line 24—24 of Figure 19.

Figure 25 is a longitudinal fragmentary sectional view of the forward end of the barrel of my pen and centrally disposed hollow stem thereof;

In Figures 1 and 2, 10 designates a barrel, screw-threaded at one end as at 11 for the reception of the cap 13 and tapered and screw-threaded at its opposite end at 12 for the cap 14. The barrel has a centrally disposed circular wall or tubular member 15, flared at its forward end as at 16 and gradually tapering down toward its rear end, the rear end being enlarged as at 17, this enlarged end being connected to the outer wall of the barrel 10 by means of the web 18. The space between the outer wall of the barrel and the inner wall 15 is divided into a plurality of compartments 19 by radiating webs 20 as shown in Figure 3, these compartments each being designed to contain a different character of ink, as for instance red, black, green, etc.

The portion 17 of the central tubular element or wall 15 is formed at a plurality of points with apertures 21, one for each of the compartments. Extending longitudinally through the circular wall 15 and fitting the same is a stem 22 which extends beyond the portion 17 and in that part of the stem 22 extending beyond the wall 17 is formed the longitudinal bore 23. The extremity of this stem 22 is exteriorly screw-threaded and engaged therewith is a nut 24 and engaged with this nut is the collapsible rubber bulb 24ª which is normally disposed within the cap 13. Surrounding that portion of the stem 22 adjacent the enlargement 17 of the wall 15 is a valve 25, this valve having a head 26 whereby the valve may be manipulated and this valve is slightly flared outwardly and forwardly so as to approximately fit the slight flare of the wall portion 17. See Figure 8. The valve is formed with a slit forming a port 27 adapted to register with any one of the openings 21 and also register with a port 28 extending into the bore 23. Disposed between the valve 25 and the face of the wall 17 is a split packing 29. A spring 30 bears at one end against the nut 24 and at its other end against a packing 31 bearing against the head 26. The valve is resiliently expansible and bears against the wall 17 so as to provide an ink-tight connection between the valve and the packing 29. It will be seen that with this construction, the valve 25 may be readily turned to bring the port 27 into register with any one of the ports 21 so as to afford communication between any one of the compartments 19 and the bulb 24ª and that the nut 24 may from time to time be turned up so as to force the valve more tightly against the packing to prevent any possible leakage of ink.

The opposite end of the stem 22 gradually increases in diameter so as to fit against the flared portion 16 of the wall 15. This flared portion 16 is connected to the wall 10 by the rearwardly and outwardly inclined wall 32.

As shown in Figure 1, this wall extends rearwardly and outwardly and joins the outer wall 10 at the shoulder 33. The head 34 of the stem 22 is formed with an annular rearwardly flaring portion or apron 35 bearing against the outer face of inclined wall 32 and against the shoulder 33. The head 34 is formed, as shown in Figure 4, with a bore 36 within which the stump 37 is disposed. This stump 37, as shown in Figure 5, is formed with a recess 38 having a medially disposed rib. A pen point 39 is disposed between the upper face of the stump 37 and the head 34 and projects out beyond the end of the stump. This pen point at its rear end has an opening or port 40 which coincides with a port 41 formed in the head 34 which in turn coincides with any one of a plurality of ports 42 formed in the wall 16, each port communicating with one of the compartments 19. Thus, it will be seen that when the head is rotated to a proper position, the pen communicates with any one of the several compartments and ink of the desired color is supplied to the pen.

The outer face of the inclined head 34 is knurled or roughened as shown in Figure 2 so as to permit the ready adjustment of the head 34 with reference to the barrel 10 and it will be noted from Figure 2 that the head 34 is provided with an index mark 43 adapted to coincide with index marks 44 so that when the index mark 43 is turned to one of the index marks 44, communication will be established between one of the compartments, as for instance, the compartment containing the black ink and the pen point. The valve 25 has on its roughened head 26, an index mark 45 coinciding with index marks 46 on the barrel so that this valve may be turned to establish communication between any one of the several compartments 19 and the bulb 24ª.

Obviously, of course, the valve 25 may be turned to entirely cut off communication between any one of the compartments 19 and the bulb or cut off communication between the pen and any one of the compartments.

In order to prevent any clogging of the ink within the stump 37, I provide the blades designated 47 in Figures 6 and 7, these blades being thin, narrow strips and having their extremities offset at 48 and extended up through slots in the pen point proper and then extending along the length of the pen. These blades will have a tendency to rock as the pen point is depressed, thus preventing

the ink from clogging and securing a better action on the pen point.

The cap 14 is illustrated as being interiorly screw-threaded for engagement with the screw-threads 12. This cap is provided with the clasp 49 which extends angularly over the end of the cap 14 and is held in place by the large headed screw 50.

The pen which I have described is capable of writing or other use with as many different colors of ink as there are compartments 19. When any one of the compartments 19 is emptied and it is desired to refill this compartment, the head 34 is turned to bring the opening 42 of the proper compartment into communication with the opening 40 and the valve 25 is turned so that the port 27 is in communication with the proper opening 21. The bulb 24^a is then compressed and then expanded which will act to draw ink into this compartment. If it be desired to force the ink out of any compartment, it is obvious that this may be done by compressing the bulb 24^a.

By this means, the compartments may be filled with different kinds of ink and then these differently colored inks used in the manner indicated, it being entirely possible at any time, if the ink does not flow freely, to compress the bulb 24^a, thus forcing the ink from one of the compartments 19 out through the point of the pen, thus dislodging any matter which might tend to clog the pen and in a sense cleaning the pen of ink which had been previously used.

Before describing the structure shown in Figures 9 to 11, it will be convenient to describe the structure shown in Figures 12 to 18 as certain detailed structures found in Figures 12 to 18 are shown generally in Figures 8 to 10.

In Figures 12 to 16, I have shown a pen in the nature of a stylographic pen and which I denominate an interchangeable pencil pin, the word interchangeable referring to the fact that different colored inks may be used. The construction as regards the rear portion of this pen is precisely the same as that shown in Figures 1 to 11 and the same reference characters are used, but the tubular member or central wall 15 at its forward end is not flared outward as at 16 in Figure 1 but the forward end of the wall is uniform in diameter to its point of junction with the wall 32, this wall 32 extending rearward and outward and joining the outer wall of the shoulder as at 33 as previously described. The forward end of the stem 22 beyond the wall 32 is provided with rearwardly and outwardly extending wall or apron 35^a which at its rear end is extended straight rearward as at 35^b. This conical portion 35^a is roughened or knurled as shown in Figure 13 to permit it to be readily rotated by hand relative to the barrel. The several compartments 19 have each a port 42^a corresponding to the port 42 in Figure 1.

The forward end of the stem 22 extends beyond the conical portion 35^a as at 51, this being exteriorly screw-threaded for engagement with an interiorly screw-threaded tip 52, this tip tapering toward its forward end and being longitudinally split on its opposite faces as at 53.

Disposed within this tip and carried thereby are two longitudinally extending rods or pins 54 disposed side by side and chisel-shaped at their forward ends as at 55. The rear ends of these rods or pins are semi-circular in cross section and fit flat against each other, as shown in Figure 14.

In actually writing, these rods or pins 54 tend to vibrate so as to permit the flow of ink between these rods. By using a stylographic point formed of the members 54, I find that either a relatively wide and coarse line may be made or a relatively fine line as desired.

In Figures 17 and 18, I show a modification of stylographic point in which the prolongation 51 of the stem 22 carries upon it the exteriorly disposed conical tip 55 which is longitudinally split as at 56, while the interior of the extension 51 is screw-threaded for engagement by the tubular shank 57 of a conical member 58 having divergent ports 59 communicating with the tubular shank and discharging toward the enlargement at the inner ends of the slots 56. It will be understood that the pen points or stylographic points shown in Figures 12 to 18 might be used in conjunction with the pen body shown in Figures 8 and 9 where the interior of the barrel is not divided into sections or compartments but constitutes one large annular reservoir.

It will be seen that with this construction, it is an easy matter to fill the pen or discharge the contents thereof or to wash the interior of the barrel and that it is also an easy matter to replace the bulb 25 at any time that it is found desirable.

Furthermore, the bulb may be made relatively large so as to draw a relatively large amount of ink into the barrel 10 or into the relatively smaller chambers or reservoirs 19.

With the construction shown in Figures 1 to 7 and Figures 12 to 17, it is an easy matter to use any of the different colored inks contained within the barrel and if changing from one colored ink to another, to wash out, as it may be termed, the remainder of the ink from the compartment last used before using the ink from the selected compartment.

The structure shown in Figures 9 to 11 is designed to contain a large amount of ink of one color. In these figures, 60 designates the pen barrel formed with a shoulder 61 at its rear end. A cap 62 fits over this shoulder 61 flush with the outer surface of the barrel

60. A cap 63ª has a sliding fit over the opposite end of the barrel and is adapted to fit the tapered rear end of the cap 62 when the pen is in use. This cap 63ª is provided with the clip illustrated in Figures 1 and 12. The rear end of the barrel 60 is formed with the nipple 63 having an outwardly extending flange and engaged with this flange is the rubber bulb 64. This may be compressible by hand in the same manner as the bulb shown in Figures 1 and 12, but I have illustrated for the purpose of compressing the bulb a spring 65 and extending over the bulb 64 and I have illustrated a lever 66 mounted in a slot in the cap 62, which lever when compressed will compress the spring to thus compress the bulb 64. The forward end of the pen barrel is illustrated in Figure 9 as constructed in essentially the same manner as the forward end of the pen shown in Figure 17, that is, the forward end of the barrel is interiorly screw-threaded for engagement with a member 67 having a longitudinally extending bore 68.

The forward end of this member 67 is provided with the forwardly projecting screw-threaded nipple 69. Fitting over this nipple 69 is the tapered or conical tip 55. A conical member 58 is disposed within the tip, this member having divergent ports 59 as previously described which communicate with the tubular shank 57. Inasmuch as this particular form of writing tip or point has been previously described with reference to Figures 17 and 18, it is not believed necessary to particularly redescribe this feature.

In Figure 10, the forward end of the barrel 60 is closed by a head 70 having a longitudinally extending bore precisely like the head 34 shown in Figure 1 and carrying within it the stump 37 with the pen point 39 and the blades 47 all as previously described with reference to Figures 1 to 7. It will be seen that the difference between the pen as shown in Figures 9 to 11 over the pen shown in Figure 1, principally is that the barrel is not divided into a plurality of longitudinally extending ink containing chambers, but there is one large chamber provided for holding ink. There is no valve structure such as shown in Figure 1 for connecting the bulb 64 with the interior of the barrel, nor any valve structure needed at the forward end of the pen. When it is desired to fill this pen, the bulb 64 is compressed, the pen is dipped in the ink and the bulb allowed to expand, drawing ink into the barrel. If the ink should not flow freely the bulb may be compressed to eject a small portion of the ink through the point.

In Figures 19 to 24 I have illustrated a slightly modified form of my fountain pen which is somewhat like the construction shown in Figure 1 and like that in Figure 12.

The barrel 71 is formed with a rear wall 72 having a portion 73 which extends inward and centrally. The forward end of the barrel 71 is centrally and forwardly extended as at 74. An annular wall 75 extends through the center of this barrel and the space between the annular wall 75 and the outer wall 71 is divided by radial partitions 76 into a plurality of chambers *a*, *b* and *c* designed to contain different colors of ink as in the construction shown in Figures 1 to 8. Extending through the center of the annular wall 75 is a stem 77. This stem at its rear end projects out beyond the barrel and is formed with the longitudinally extending duct 78 which is the equivalent of the duct 23 in Figure 1. The rear end of this projecting portion of the stem is connected to a bulb 79 by the nut 80 precisely in the same manner as shown in Figure 1. Surrounding the stem is a valve 81 and bearing against this valve is the washer 82 against which the spring 83 bears. The valve is provided with a port 84 adapted to register with the port 85 in the stem and with a port 86 formed in the wall 73. By turning the valve, therefore, communication may be established between the duct 78 and the interior of any one of the chambers *a*, *b*, or *c*. This is the same construction as provided for in Figure 1 but modified more or less with the construction shown in Figure 12.

The forward end of the tubular wall 75 of the chamber projects beyond the forward wall 74 of the chamber and is provided with a plurality of longitudinally extending ducts 87 there being three of these ducts 87, one for each of the chambers *a*, *b* and *c*. The forward end of the stem 77 is provided with a head 88 and bearing against this head is an apron or sleeve 89 which is formed as part of a head 90 which surrounds the forwardly conical wall 74 and is rotatable thereon.

This member 90 is slotted for the reception of the stump of the pen designated 91. The apron or sleeve 89 is formed immediately beneath the pen stump 91 with an opening 92 and when the head 90 is rotated, it will carry this opening into coincidence with any one of the longitudinally extending troughs, channels or ducts 87 so that thus the pen point will be brought into communication with any one of the several chambers *a*, *b* and *c* and permit this particular color of ink to flow out to the pen, in the same general way as is secured by the construction shown in Figure 1. With the present construction, however, just described, there is practically no ink retained in the pen which has to be discharged before the pen will write a different color whereas in the construction shown in Figure 1, ink of one color will be retained within the stump 37 and this ink will have to be discharged out of the stump before the pen will write anything of a different color.

In the use of this device, when it is desired

to shift the parts so as to bring the chamber containing a different color into communication with the pen point, it is only necessary to take hold of the head 90 and rotate it relative to the barrel, thus carrying the port 92 into coincidence with any one of the ducts 87.

While I have illustrated certain details of construction and arrangement of parts, I do not wish to be limited thereto as it is obvious that many minor changes might be made without departing from the spirit of the invention as regards particularly the details of the pen or stylographic points. Preferably, as shown in Figures 19 and 21, the forward end of the stump receiving member 90 is flared so as to provide an annular cavity around the stump and pen.

The pen is provided with an opening in the annular cavity 78a and as shown the wall between the annular cavity 78a and the adjacent duct 87 is provided with an opening 87a so that if the pen be carried with its point upward, any ink on the pen will flow downward into the pocket 78a and thence into the duct 87 and back into the barrel. I do not wish to be limited to this construction but it is preferable.

I claim:—

1. A fountain pen having a barrel, the barrel being annular and having an opening in the rear end of its inner wall and an opening in the forward end of its inner wall, a stem extending through and fitting the inner wall of the barrel, the stem having a bore at its forward and rear ends, and ports at its forward and rear ends adapted to communicate with the openings in the forward and rear ends of the barrel, a compressible bulb connected to the rear end of the stem, a writing point carried by the forward end of the stem and communicating with the bore thereof, the stem being manually rotatable relative to the barrel to establish or cut off communication between the ports of the stem and the ports of the barrel.

2. A fountain pen having a barrel, the barrel being annular and having an opening in the rear end of its inner wall and an opening in the forward end of the inner wall, a stem extending through and fitting the inner wall of the barrel, the stem having a bore at its forward and rear ends, and ports at its forward and rear ends adapted to communicate with the openings in the forward and rear ends of the barrel, a compressible bulb connected to the rear end of the stem, a writing point carried by the forward end of the stem and communicating with the bore thereof, the stem being manually rotatable relative to the barrel to establish or cut off communication between the ports of the stem and the ports of the barrel, and a rotatable valve disposed between the rear end of the stem and the rear end of the barrel and rotatable to establish communication between the interior of the barrel and the interior of the rear end of the stem or cut off such communication.

3. A fountain pen having a barrel, the barrel being annular and having an opening in the rear end of its inner wall and an opening in the forward end of the inner wall, a stem extending through and fitting the inner wall of the barrel, the stem having a bore at its forward and rear ends, and ports at its forward and rear ends adapted to communicate with the openings in the forward and rear ends of the barrel, a compressible bulb connected to the rear end of the stem, a writing point carried by the forward end of the stem and communicating with the bore thereof, the stem being manually rotatable relative to the barrel to establish or cut off communication between the ports of the stem and the ports of the barrel, a rotatable valve disposed between the rear end of the stem and the rear end of the barrel and rotatable to establish communication between the interior of the barrel and the interior of the rear end of the stem or cut off such communication, and a spring urging the valve to its seat.

4. A fountain pen of the character described, including a barrel having a central annular wall, the wall being flared at its rear end, the forward end of the barrel being tapered, a stem extending longitudinally through the central wall of the barrel and fitting the same, the stem having a longitudinally extending bore at its forward and rear ends and at its forward end having a portion extending rearward over the outer face of the tapered portion at the forward end of the barrel whereby the stem may be rotated within the barrel, a writing point disposed within the bore at the forward end of the stem, the stem and the forward end of the inner wall of the barrel having ports adapted to register with each other when the stem is rotated to a predetermined position, a conical valve slidably mounted upon the rear end of the stem and fitting the rearwardly flared end of the inner wall of the barrel, the stem, the valve and said rearwardly flared end of the inner wall being provided with ports adapted to be brought into register when the valve is rotated to a predetermined position, a nut carried upon the rear end of the stem, a spring bearing against the nut and operatively against said valve to urge the valve to its seat, and a compressible bulb mounted upon said nut.

5. In a fountain pen, a barrel divided into a plurality of compartments, each for a different colored ink, a manually compressible bulb, a writing point carried by the barrel, the writing point being adjustable to operatively connect it with any one of said compartments to receive ink therefrom, and means being provided whereby the bulb may

be communicatively connected to any one of said compartments.

6. In a fountain pen of the character described, a barrel tapered at its forward end and having a central annular wall, the rear end of the annular wall being flared outward and rearward, the interior of the barrel being divided into a plurality of longitudinally extending compartments containing different colored ink, a stem extending longitudinally through the inner wall and having a longitudinally extending bore at its inner end and a longitudinally extending bore at its forward end, a manually compressible bulb mounted upon the rear end of the stem and communicating with the bore thereof, a manually rotatable conical valve disposed between said stem and the outwardly flared portion of the central wall, the valve having a radial port communicatable with a port formed in the stem and with a port formed in the flared portion of the inner wall, the forward end of the inner wall having a port and the forward end of the stem having a port in one position of the stem communicating with said port in the inner wall.

7. In a fountain pen of the character described, a barrel tapered at its forward end and having a central annular wall, the rear end of the annular wall being flared outward and rearward, the interior of the barrel being divided into a plurality of longitudinally extending compartments containing different colored ink, a stem extending longitudinally through the inner wall and having a longitudinally extending bore at its inner end and a longitudinally extending bore at its forward end, a manually compressible bulb mounted upon the rear end of the stem and communicating with the bore thereof, a manually rotatable conical valve disposed between said stem and the outwardly flared portion of the central wall, the valve having a radial port communicatable with a port formed in the stem and with a port formed in the flared portion of the inner wall, the forward end of the inner wall having a port and the forward end of the stem having a port in one position of the stem communicating with said port in the inner wall, the exterior of the barrel having index marks thereon indicating the position of the several ports leading from the interior of the forward end of the barrel and the forward end of the stem having a portion carrying an index mark adapted to be brought into coincidence with the index marks on the forward end of the barrel, the rear end of the barrel having index marks indicating the position of the ports in the inner wall of the barrel and the valve having an index mark adapted to coincide therewith when its port is in coincidence with any one of the ports in the inner wall of the barrel.

8. In a stylographic pen, a barrel, a member carried by the barrel and having a screw-threaded extension, a conical tip fitting the said screw-threaded extension and longitudinally slitted, and a member disposed within the tip and communicatively connected to the barrel and affording means whereby ink may be discharged to said split tip.

9. A fountain pen of the character described, including a barrel having a central annular wall, the barrel being divided by radial partitions into a plurality of compartments, adapted to contain different colored inks, a central wall projecting beyond the forward end of the barrel and being formed with a plurality of longitudinally extending ducts opening at their rear ends into the several chambers, a sleeve extending around the projecting end of the central wall and having a port, the sleeve being rotatable to bring the port into coincidence with any one of said ducts, a head carried upon the forward end of the barrel and engaging said sleeve, and means on the head for supporting a pen point immediately above said duct.

10. A fountain pen having a barrel, the barrel being annular to provide a tubular central portion and an outer wall, the tubular portion at its rear end having an opening, a stem extending through and fitting the inner wall of the barrel, the stem having a bore at its rear end, and a port at its rear end adapted to communicate with the opening in the rear end of the tubular portion of the barrel, a principal bulb connected to the rear end of the stem, a writing point carried by the forward end of the stem and barrel and communicating with the interior of the barrel, and a valve rotatably mounted on the stem to establish or cut off communication between the ports at the rear end of the tubular portion and the stem.

11. In a fountain pen, a barrel, the barrel being annular to provide an outer wall and an inner central tubular wall, the central tubular wall at its rear end being flared and provided with a port, a stem extending through the central tubular wall, the rear end of the stem being formed with a bore, a compressible bulb operatively connected to the rear end of the stem and discharging into the bore thereof, a tapering valve rotatably mounted upon the stem and fitting within the flared rear end of the central wall and having a port whereby to establish or cut off communication between the bore of the stem and the port in said central wall, and a spring bearing against said valve and urging it to its seat, the spring being operatively mounted upon the stem.

12. In a fountain pen, a barrel having an outer wall and a central tubular wall, the tubular wall being enlarged at its rear end and provided with a port, a stem extending through the tubular wall and projecting rearward beyond the same, and having a longi-

tudinal bore at its rear end, the enlarged portion of the central wall and said stem having coacting ports, a valve rotatably mounted upon the stem and extending into the space between the stem and the enlarged portion of the tubular wall, the valve having a port to establish or disestablish communication between the bore of the stem and the interior of the barrel, a member mounted upon the rear end of the stem, a bulb connected with the member and discharging into the stem, and a spring bearing at one end against said member and at the other end against said valve and holding the valve to its seat.

13. In a fountain pen, a barrel formed to provide an outer wall and a central tubular wall, a stem disposed within the central wall and extending rearward therefrom and at its rear end having a longitudinally extending bore, a bulb mounted upon the rear end of the stem, means whereby the bore of the stem may be communicatively connected to the interior of the barrel, means at the forward end of the barrel for supporting a writing point, and means at the forward end of the barrel whereby the writing point may be communicatively connected with the interior of the barrel.

14. In a fountain pen, a barrel having a central tubular wall, the forward end of the barrel being tapered, a stem mounted in the barrel and extending beyond the same and having a passage at its forward end communicating with the interior of the barrel, the stem having a head extending rearward over the tapering end of the barrel and a writing point carried by said stem and communicating through said stem with the interior of the barrel.

15. A fountain pen having a barrel and a central tubular wall, the barrel being divided by radial partitions into a plurality of ink chambers, a stem disposed within the tubular wall of the barrel and projecting beyond the forward end thereof, each of said chambers at its forward end having a port and a stem having a longitudinally extending bore and a port adapted when the stem is rotated to register with any one of the ports of the several chambers, said stem having a head exterior to the forward end of the barrel whereby the stem may be rotated, and means on the stem for supporting a writing point, the stem being provided with a duct whereby ink may be carried to the writing point.

16. In a fountain pen, a barrel having a central tubular wall, the interior of the barrel being divided into a plurality of ink chambers by radial partitions, each of said chambers at its forward end having a port, a stem disposed within the tubular wall and rotatable therein, the stem having a head extending beyond the forward extremity of the barrel and then extending over and outward of the forward extremity of the barrel, the head having a central bore formed at its rear end with a port adapted as the stem is rotated to engage with any one of the ports of the several chambers, a pen supporting stump inserted in the central bore, and a pen carried thereby.

17. In a fountain pen, a barrel having a central tubular wall, the interior of the barrel being divided into a plurality of ink chambers by radial partitions, each of said chambers at its forward end having a port, a stem disposed within the tubular wall and rotatable therein, the stem having a head extending beyond the forward extremity of the barrel and then extending over and outward of the forward extremity of the barrel, the head having a central bore formed at its rear end with a port adapted as the stem is rotated to engage with any one of the ports of the several chambers, a pen supporting stump inserted in the central bore, and a pen carried thereby, the stump being formed with longitudinal grooves disposed just beneath the shank of the pin, and blades disposed in said grooves and extending upward through the nib of the pen.

18. A fountain pen including a barrel having a central tubular wall at the forward end of the barrel, the barrel being divided by radial partitions into a plurality of ink chambers, the forward end of the barrel tapering toward the central wall, and the central wall at its forward end having ports one for each of said chambers, a head surrounding the tapering end of the barrel and having a hollow stem extending into the central wall, the stem being provided with a port whereby when the head and stem are rotated, the port may be carried into register with any one of the ports of the several chambers, and a writing point carried by said head, there being passageways communicating with the interior of the stem and leading to said point.

19. In a fountain pen, a barrel formed to provide a plurality of chambers divided from each other by radial partitions, the forward end of the barrel being tapered, a head rotatably surrounding the forward end of the barrel and having a stem extending into the tubular portion of the barrel, the head at its forward end having an interior circular recess and being formed with a centrally disposed stem extending through said recess and rearward thereof, the central wall of the barrel being extended beyond the tapering end of the barrel to extend into said circular recess and said circular wall being formed with a plurality of longitudinally extending ducts, one for each of said ink chambers, the extension of the head being formed with apertures which when the head is rotated, communicate with any one of said ducts and a pen point mounted in said head

and disposed over the apertures in the extended portion of the head and receiving ink therefrom.

20. A fountain pen of the character described including a barrel having a central annular wall, the wall being flared at its rear end, the forward end of the barrel being tapered, a stem extending longitudinally through the central wall of the barrel and fitting the same, the stem having a longitudinally extending bore at its forward and rear ends and at its forward end having a portion extending rearward over the outer face of the tapered portion at the forward end of the barrel whereby the stem may be rotated within the barrel, a writing point disposed within the bore at the forward end of the stem, the stem and the forward end of the inner wall of the barrel having ports adapted to register with each other when the stem is rotated to a predetermined position, a conical valve slidably mounted upon the rear end of the stem and fitting the rearwardly flared end of the inner wall of the barrel, the stem, the valve and said rearwardly flared end of the inner wall being provided with ports adapted to be brought into register when the valve is rotated to a predetermined position, a packing disposed between the flared inner wall of the barrel and said valve and having a port coinciding with the port in the inner wall, a nut carried upon the rear end of the stem, a spring bearing against the nut and operatively against said valve to urge the valve to its seat, and a compressible bulb mounted upon said nut.

In testimony whereof I hereunto affix my signature.

SAMUEL NIEMTZOW.