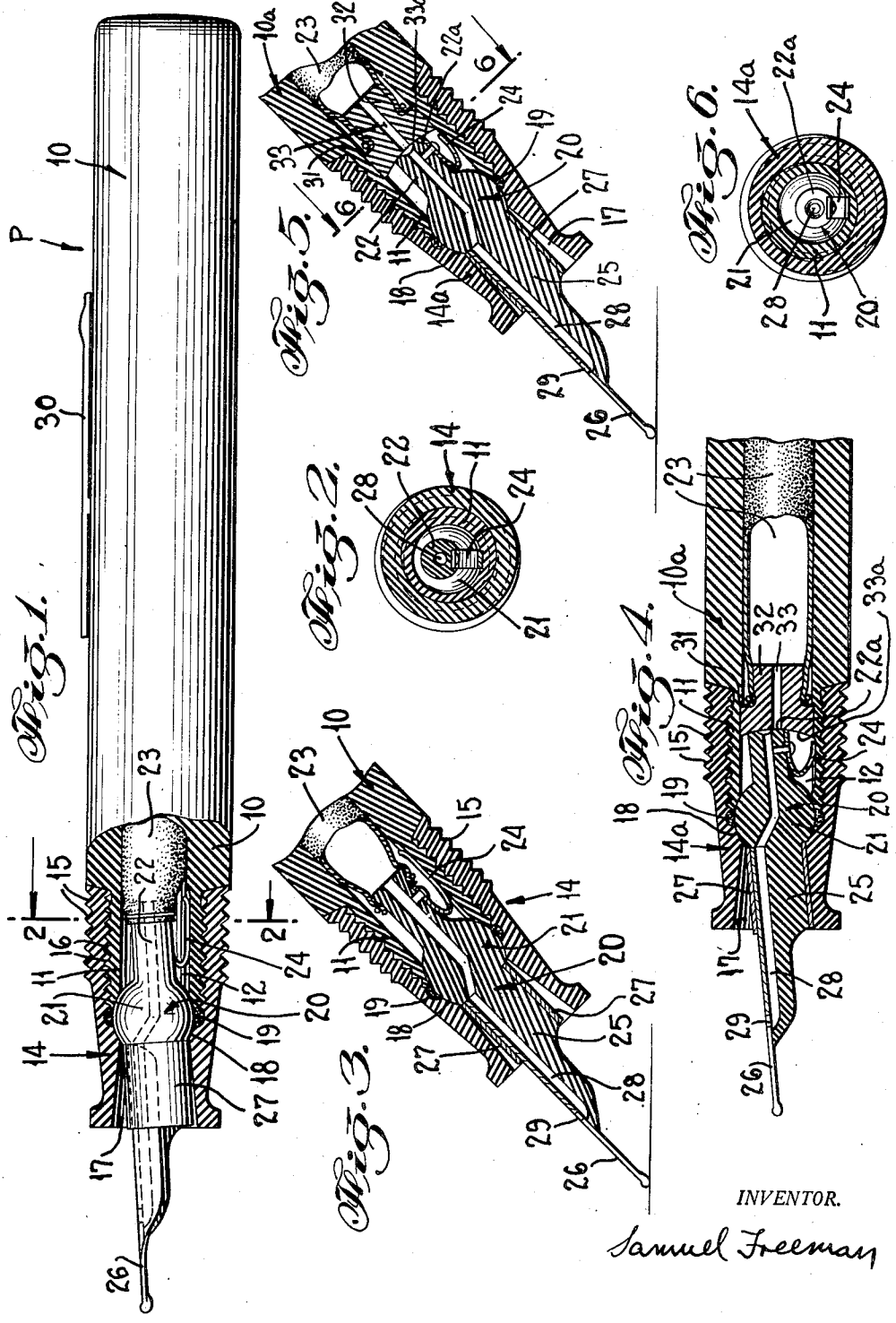
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FOUNTAIN PEN

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FOUNTAIN PEN

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2 Claims. (Cl. 120—48)

My invention relates to a new and improved fountain pen.

One of the objects of my invention is to provide a fountain pen that provides a flexible writing point.

Another object of my invention is to provide automatic means to prevent the ink from flowing when the pen is not in use.

Another object of my invention is to produce a device of simple and sturdy construction.

Other objects of my invention will be set forth in the following description and drawing which illustrate a preferred embodiment thereof, it being understood that the above general statement of the objects of my invention is intended merely to generally explain the same and not to limit it in any manner.

Fig. 1 is a side view partially in section, showing the ball-socket arrangement.

Fig. 2 is a section taken along the lines 2—2 of Fig. 1.

Fig. 3 is an elevation in section and broken away, to show the pen in the position to be used.

Fig. 4 is a sectional view showing valve arrangement.

Fig. 5 is a view similar to Fig. 3, showing the pen in the position to be used, with the ports in line.

Fig. 6 is a section on the lines 6—6 of Fig. 5.

The pen P has the usual casing member 10, provided with a threaded end portion 11, the member 10 being hollow as designated by numeral 12.

The casing member 14, has external threads 15, to allow a cap not shown, to be held in position to protect the pen point. The member 14 has also internal threads 16, so that member 14 can be fastened to member 10 by screwing threads 16 on to threads of member 11. The member 14 has a bore 17, the bore 17 being straight, and joining a seat 18. The seat 18 has a groove to receive packing 19. The member 11 also forms part of the seat 18.

The pen point holder 20 is shaped as shown in Figures 1, 2 and 3, having a ball portion 21 and when said pen is assembled, the ball portion 21 is seated on the member 18. The holder 20, is provided with a neck portion 22, to which an ink bag 23, can be attached. Also provided on the neck portion 22 is a spring 24, to which it is secured. One portion of the spring 24, abuts the inner wall of the member 10. This spring 24 tends to overcome the pressure exerted on the point when used, so as to keep the pen point as shown in position as in Figure 3. The member 20 has another neck portion 25 and shaped as shown, having a cut out portion for the pen point 26. The pen point 26 is held fast to the member 20 by means of a fastening ring 27.

The passage way for the flow of ink as shown in Figure 3 is designated as 28, which passage 28 connects with an opening 29 in the pen point 26.

The ordinary lever 30, pivoted to member 10 may be employed for self-filling.

To assemble the pen, the member 20, has affixed to it, the rubber ink container 23, the pen point 26 is fast to the member 20 by means of the member 27. The packing 19 has been placed in the groove, the pen point is then passed through opening 17 until the ball portion 21 rests on the seat 18. The member 10 is then screwed to the member 14, and the pen is assembled as shown in Figures 1, and 3.

As shown in Figures 4, 5 and 6 which is the preferred embodiment of my invention, the ball and socket means is employed in conjunction with the valve means which will be described.

The member 14*a* is similar to casing member 14, having exactly the same construction. The member 10*a* is of similar construction as member 10, except that in the hollow portion for holding the rubber tube 23, and as shown in Figure 5, the diameter of the hollow portion is enlarged for a certain depth to allow for a shoulder 31 in order to support the rubber tube holding means 32. This member 32 has a port 33, so that when, as shown in Figure 5, the ink has a clear passageway to allow the ink to flow from the rubber tube 23, to the opening 29 of the pen point 26, so that the pen can be used. When the pen is not in use, the port 33 is not in alignment with the port 28 and so the ink cannot travel through the pen point. The spring 24 throws the ports out of alignment.

The end surface 22*a* of the neck portion 22 abuts slidably the surface 33*a* of the member 33. The bag 23 is fastened to the member 33 as shown in Figure 5.

Thus the pen point has a ball and socket arrangement and also a valve arrangement.

I claim:

1. A fountain pen comprising a barrel opened at one end and closed at its opposite end, an ink reservoir positioned in said barrel, a movable feed member located in the open end of said barrel and adjacent said reservoir, said feed member comprising a pen holder, a ball member and an extension of said ball member, said ball member and extension having a bore communicating with each other and with said reservoir, said feed

member adapted to feed ink to the pen point when pressure is placed upon said pen point.

2. A fountain pen comprising a barrel and a cap holder, a movable feed member positioned in said barrel and cap holder, said feed member comprising a pen holder, a ball member and an extension of said ball member, said feed member adapted to swing on a seat positioned on the inner surfaces of the cap holder and barrel, a valve member positioned and seated inside said barrel and abutting the extension of said feed member, an ink sac secured to said valve member, said feed and valve members having bores adapted to communicate with each other and with said reservoir when pressure is placed upon the point of the pen, and spring means secured to the extension member adapted to throw the bores of the feed member and valve seat out of alignment when the pen is not in use.

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