April 3, 1951 P. ADAMS 2,547,803

PEN CAP

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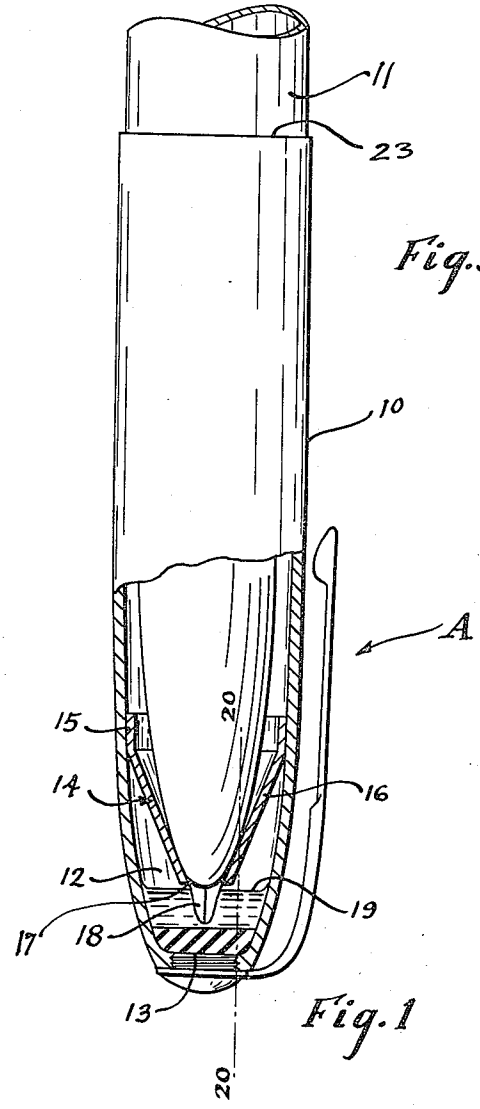


Fig. 1

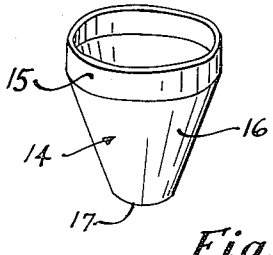


Fig. 2

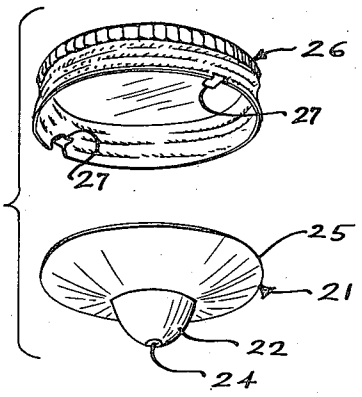


Fig. 3

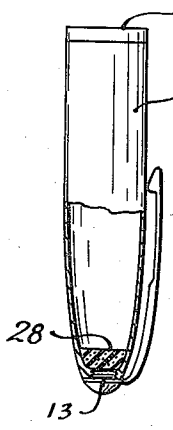


Fig. 4

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PEN CAP

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1 Claim. (Cl. 120—42.05)

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This invention relates to a pen cap which has a means for retaining ink therein so that the nib of the pen can be moistened with ink whenever necessary.

Users of fountain pens, and especially pens which use the new quick drying type ink, often find that the nibs become dry on exposure to the air and often find it necessary to depress the ink sac for the purpose of starting the ink to flow. This is very inconvenient and in many cases causes ink to drop from the pen and blot on the paper. It also frequently happens that fountain pens run out of ink when there is no ink supply available. My invention overcomes these disadvantages.

It is, therefore, an object of this invention to provide a pen cap, into which the pen nib can be inserted for the purpose of moistening it and starting the ink to flow by capillary action in a normal manner after it has become dry.

It is a further object of this invention to provide a pen cap for the above purpose which will not spill ink.

It is also an object of this invention to provide a cap from which the pen can be refilled in an emergency when it runs out of ink.

With these and other objects in view the invention generally comprises a cap into which the pen nib can be inserted and which has means in connection therewith for retaining ink. The nib, on being inserted into the cap, becomes moistened with ink and restarts the normal flow of ink from the ink sac for writing purposes by capillary action. The invention will be clearly understood after reference to the following detailed specification read in conjunction with the drawings.

In the drawings,

Figure 1 shows the nib end of a pen and a cap of this invention partly broken away to show construction.

Figure 2 shows a detailed view of a funnel shaped ink well cover, used in the cap of Figure 1.

Figure 3 shows a measuring funnel adapted to fill the ink well in the cap of Figure 1 to the correct level.

Figure 4 shows an alternative pen cap of this invention.

Referring to the drawings and especially to Figure 1, A generally indicates a cap of this invention which comprises a cover 10 normally adapted to cover the point of the pen 11 when it is not in use. The cover 10 has an ink well 12 adjacent its bottom end 13 and a funnel shaped cover therefor 14. The cover 14 comprises a

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cylindrical upper wall 15 adapted to abut the interior of the cap A in a sealed engagement and has a downwardly sloping wall 16 adapted to extend into the well substantially as shown. An opening 17 in the bottom of the funnel shaped ink well cover 14 permits the pen nib 18 to enter the well 12.

The well 12 is filled with ink 19 to a predetermined level beneath the opening 17 when the cap is in position as shown in Figure 1. The sloping sides 16 of the cover 14 are designed such that when the cap A is tilted from the vertical position shown in Figure 1 the ink can not spill out of the opening. The dotted line 20 indicates the ink level when the cap is in the horizontal position.

When the pen nib 18 becomes dry in use due to exposure to the air, it is merely necessary to insert it into the cap A to moisten with the ink 19. When the nib is so moistened the ink will again begin to flow from the sac due to capillary action. The operation is extremely fast and there is no danger of causing a blot. As explained above, the sloping walls 16 are designed so that ink can never spill from the ink well 12 as the cap is tilted.

In order that ink will not spill out of the ink well 12, however, it is necessary that the level of the ink should not be higher than the predetermined safety level. I, therefore, provide a device for measuring the correct amount of ink to be inserted in the ink well 12. This device is shown in Figure 3 and comprises a funnel 21 having a bulb 22 which holds the correct amount of ink for insertion into the ink well 12. In operation the bulb 22 is filled with ink and is then placed over the top 23 of the cap A thereby to permit the ink in the bulb to drop from the hole 24 through the opening 17 and into the well 12. The funnel 21 is preferably formed with a flange 25 extending from its upper edge so that it can be retained in the cap 26 of an ink bottle by means of diametrically opposed lugs 27.

In Figure 4, I show an alternative pen cap of my invention in which I mount a viscose sponge 28. The viscose sponge 28 is adapted to retain ink and is so positioned that when the nib is inserted into the cap the nib will enter the sponge and become moistened with ink to restart the ink flow.

From the above, it will be apparent that I have provided a pen cap which eliminates the necessity for squeezing the ink sac to start the flow of ink when the nib becomes dry and which eliminates any danger of causing blots from such

an operation. Changes and modifications in the forms of my invention shown will be apparent to those skilled in the art and it is, therefore, intended that the specification should not be read in a limiting sense except for the limitations expressed in the following claim.

What I claim as my invention is:

In a sleeve like fountain pen cap closed at one end to form an ink well and open at its other end; a funnel like ink well cap, said funnel like cap being opened at its wide and at its narrow ends, means for sealing the peripheral edges of the wide end of said ink well cap to the sides of the interior of the fountain pen cap in spaced apart relation to the end thereof that is open to dispose the narrow end of said ink well cap in spaced relation to the ink well formed in the bottom thereof, the open narrow end of said ink well cap being aligned with the open large end and being large enough to admit a pen nib as said pen cap is extended over the pen.

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