Dec. 19, 1944.

H. Y. F. ZANE

2,365,236

INK CONTAINER

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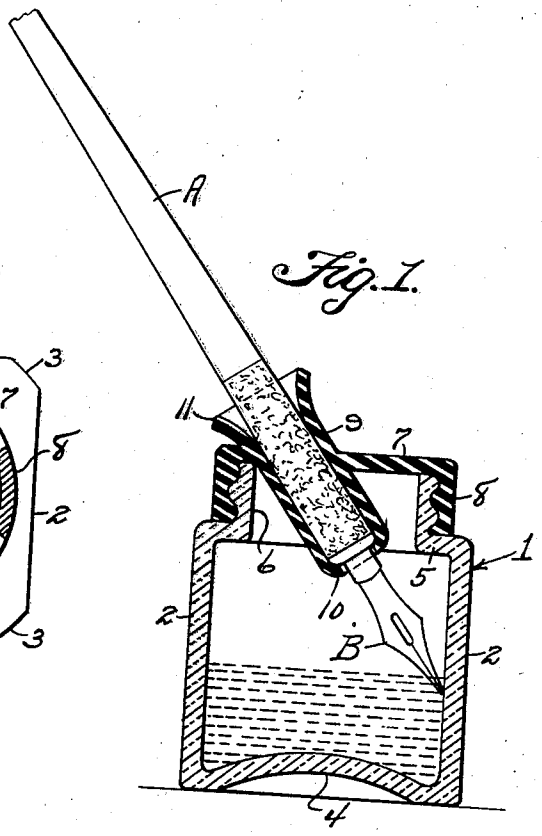


Fig. 1.

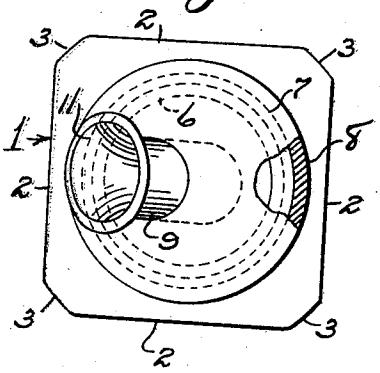


Fig. 2.

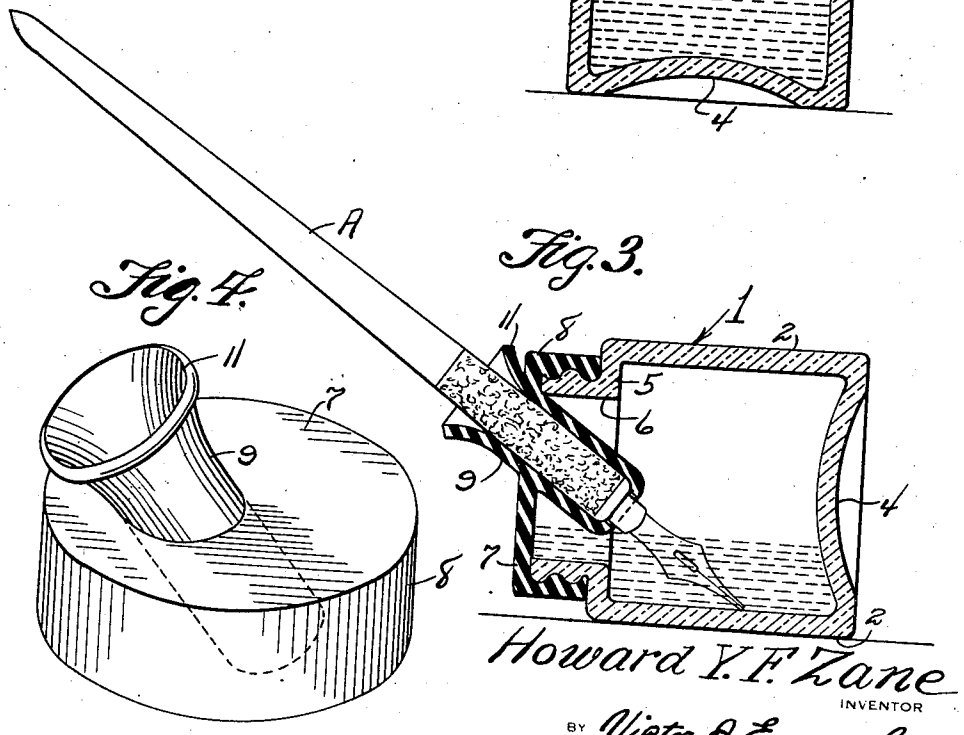


Fig. 3.

Fig. 4.

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INK CONTAINER

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3 Claims. (Cl. 120—57)

This invention relates to ink containers, and its general object is to provide a container or bottle of a dip-tube type that makes it possible to reach the ink with a pen regardless of the depth of the ink within the bottle.

A further object is to provide an ink bottle that includes a closure for the body thereof, the closure being formed with a dip-tube for fittingly receiving the pen holder to be normally closed thereby, to prevent evaporation of the ink when the bottle is not in use, and the body is formed with at least one flat side face or wall, whereby it can be arranged to rest upon that face, when the level of the ink within the body becomes low, so that the ink can be reached by the pen.

Another object is to provide an ink bottle of the character set forth, that is simple in construction, inexpensive to manufacture, and extremely efficient in use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a vertical sectional view taken through my bottle, arranged in an upright position and with a pen holder inserted in the dip-tube for closing the same.

Figure 2 is a top plan view of the bottle per se.

Figure 3 is a view similar to Figure 1, but with the bottle resting upon one of the flat sides of the body thereof, so that the ink which has reached a low level, will be disposed in the path of the pen.

Figure 4 is a perspective view of the cap.

Referring to the drawing in detail, it will be noted that the body 1 of the container or bottle shown is provided with four equal side walls 2, and flat corner portions 3, but the flat corner portions may be eliminated and the body can be of any other shape, providing it includes at least one flat side wall. The bottom wall 4 is upwardly arched and formed on the flat side walls 2 at the upper ends thereof is an inturned flange 5, the latter having formed on its upper end an exteriorly threaded neck 6.

The flange 5 provides an abutment shoulder for receiving the inner edge of the cap when the latter is in closed position, and the cap includes a disk shaped top wall 7 having formed thereon an interiorly threaded annular skirt 8 that is threaded on the neck for ready application and removal with respect thereto.

Formed on and extending through the top wall 7 adjacent to the periphery thereof is a dip-tube 9 which is disposed at an angle of approximately forty-five degrees with respect to the top wall and the inner end of the tube extends slightly inwardly beyond the flange 5. The inner end of the tube is inwardly flared or reduced to provide a stop flange 10 for the lower end of a pen holder A that has the usual pen or nib B mounted therein, and the upper end portion of the tube is outwardly flared as at 11 in funnel formation to facilitate guiding the pen into the tube, as will be apparent.

From the above description and disclosure in the drawing, it will be obvious that when the pen holder is mounted in the tube 9, the lower or base portion of the holder closes the tube to prevent evaporation of ink from the bottle, and so long as a high level of ink is maintained within the bottle, the holder can be inserted within the tube a sufficient distance for the pen B to reach the ink, when the bottle is in the upright position of Figure 1. However, when the level of ink becomes low and to an extent that it cannot be reached by the pen, when the bottle is in its upright position, the latter is tilted to a position, as shown in Figure 3, to rest upon the side wall that has the tube 9 directed toward the same, and as the pen substantially engages that wall, when the holder is fully inserted within the tube, it will be obvious that the ink can then be readily reached by the pen.

A leakproof connection is of course, provided between the cap and the body, and for that purpose a rubber or like gasket may be arranged about the neck to rest upon the shoulder for disposal between the latter and the skirt, as will be apparent.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:

1. An ink container comprising a body having a flat side wall, a removable closure for the body, a dip-tube secured to and extending through

the closure for receiving a pen holder having a nib secured thereto, and said tube being disposed at an angle with respect to the top of the closure and directed toward said wall for the nib to substantially contact the same when the holder is fully inserted within the tube, whereby when the level of ink within the body becomes low, the container can be tilted to rest upon said wall for the nib to reach the ink.

2. An ink container comprising a body having a flat side wall, a removable closure for the body, a dip-tube secured to and extending through the closure for receiving a pen holder having a nib secured thereto, said tube having an inwardly flared lower end providing a stop for the holder to limit inward movement thereof and the upper end portion of the tube being outwardly flared in funnel formation, and said tube being disposed at an angle with respect to the top of the closure and directed toward said wall for the nib to substantially contact the same when the holder is fully inserted within the tube, whereby when the level of ink within the body becomes low, the container can be tilted to rest upon said wall for the nib to reach the ink.

3. An ink container comprising a body having a flat side wall, an inturned flange formed on the upper end of the body, a threaded neck formed on the flange and rising therefrom, a cap including a skirt threadedly secured to the neck in a leakproof manner, a disk shaped top wall for the cap, a dip-tube secured to and extending through the top wall for receiving a pen holder having a nib secured thereto, said tube being of a diameter for the holder to fit the same to close said tube, said tube having an inwardly flared lower end providing a stop for the holder to limit inward movement thereof and the upper end portion of the tube being outwardly flared in funnel formation, and said tube being disposed at an angle with respect to the top wall and directed toward said flat side wall for the nib to substantially contact the same when the holder is fully inserted within the tube, whereby when the level of ink within the body becomes low, the container can be tilted to rest upon said flat side wall for the nib to reach the ink.

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