March 8, 1955 D. F. WILLIAMS 2,703,689

BOTTLEHOLDER

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Fig. 1

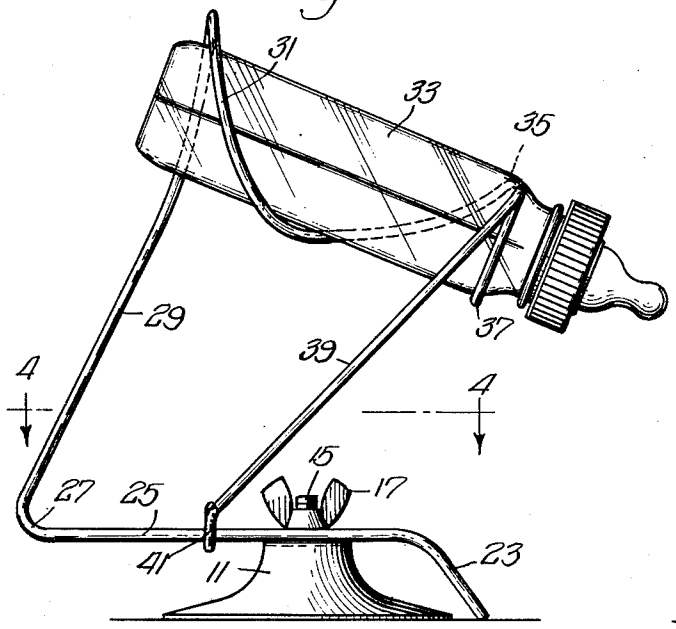


Fig. 2

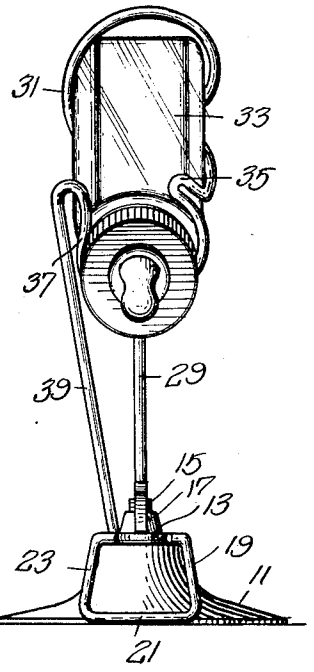


Fig. 3

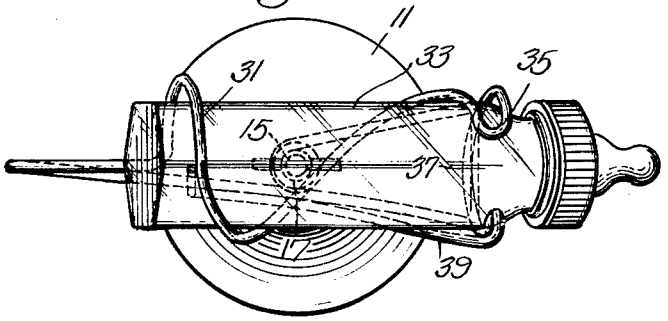


Fig. 4

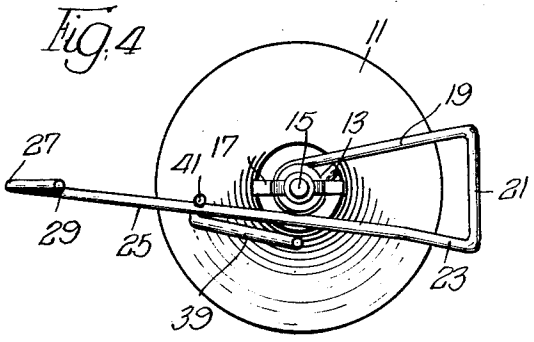
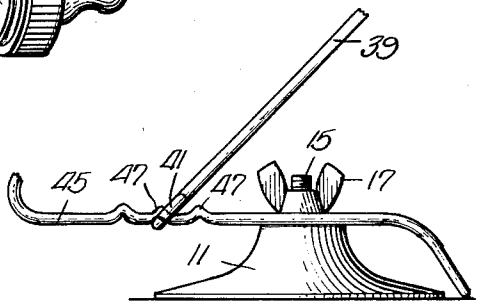


Fig. 5



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BOTTLEHOLDER

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This invention relates to a new and improved bottle holder and more particularly to a holder especially adapted for holding bottles for feeding infants.

In the bottle feeding of infants it is necessary for the mother or an attendant to hold the bottle for infants too small to hold the bottle or too young to be trusted with the bottle as they may drop or otherwise move the bottle beyond their reach. Since it takes a substantial period of time for such infants to consume the contents of a bottle a device of the present character is highly desirable to avoid the loss of time of the mother or other attendant in holding the bottle.

It is an object of the present invention to provide a new and improved holder for infants' feeding bottles.

It is a further object to provide a device of this character into which a filled bottle may be readily inserted and from which a used bottle may be removed, but which effectively holds the bottle for use by the infant.

It is an additional object to provide a device which may be firmly but detachably secured to a supporting surface while permitting a limited movement of the bottle with a minimum pull upon the connection to the supporting surface.

It is also an object to provide a construction in which the angular position of the supported bottle and its elevation above the supporting surface may be adjusted.

It is another object to provide a bottle holder of this character which is simple in design and construction and adapted for commercial production and use.

Other and further objects will appear as the description proceeds.

I have shown certain preferred embodiments of my invention in the accompanying drawings in which—

Figure 1 is a side elevation of the device with a bottle supported therein;

Figure 2 is a view of the device of Figure 1 as seen from the right;

Figure 3 is a plan view of the device as shown in Figure 1;

Figure 4 is a section taken on line 4—4 of Figure 1; and

Figure 5 is a fragmentary view showing the lower portion of a modified form of construction.

The bottle holder, as shown, comprises a vacuum cup **11** which supports the bottle holding wire member. This member has a loop **13** fitted around a threaded stud **15** molded into the cup **11**, the loop **13** being clamped in place by a wing nut **17**. The wire member is formed of material such as heavy steel or brass wire which is substantially firm and maintains its shape while having a certain amount of resilience whereby it will yield under pressure or a pull, but will return to its original shape. The wire may be painted, enameled or covered with a plastic coating if desired, it being understood that any coating used should be non-toxic because of the use to which the device is to be put. It will be further understood that as an alternative the wire may have a metallic coating or plating of any substantially non-tarnishing and non-rusting metal.

The wire member extends from the loop **13** to form a first leg **19** which extends outwardly of the cup **11** and downwardly to join a foot portion **21** spaced from the edge of the cup **11**. The wire member continues through an upwardly inclined portion **23** to form a horizontal support leg **25**. This support leg **25**, as best shown in Figures 1 and 4, engages and rests upon the upper face of cup **11** and is so angled in the horizontal plane that

it terminates in elbow **27** located on a line drawn from the center of foot portion **21** through the axis of the stud **15**. The arm portion **29** extends forwardly and upwardly from elbow **27** to join a spiral supporting loop portion **31** adapted to go over and under a supported bottle **33** as shown.

The supporting loop **31** makes a reverse bend at **35** to join a generally U-shaped neck supporting yoke **37**. From the yoke **37** a front arm **39** extends downwardly to terminate in a loop or collar **41** about the horizontal leg **25**. This collar **41** is preferably formed so as to frictionally grip the leg **25** and thus to maintain the front arm **39** at the angle to which it may be adjusted. The elbow **27** and rear arm **29** will bend and flex to permit adjustment of collar **41** along leg **25**. A modified construction is shown in Figure 5 where a leg **45**, similar to leg **25**, is shown as provided with a series of reversely bent portions **47** which serve to maintain the loop **41** more positively located in the position to which it may be adjusted.

When in use the device is secured to a smooth surface such as a table or the tray of a high chair by pressing down firmly on the suction cup **11**. It will be understood that the cup may be wet or otherwise treated as is usual with such cups to render the suction grip most effective. The first leg **19** and the inclined portion **23** of the support leg **25** are so inclined and proportioned that the foot **21** just engages the support surface when the cup **11** is firmly pressed into place. Thus the legs and foot have no tendency to lift up on the cup to release it. On the contrary, in the normal position, shown in Figure 1, the horizontal leg **25** rests on the top of cup **11** and aids in urging it in place as the entire weight of the bottle **33** and the upper portion of the device itself is transmitted to the leg **25**.

When the infant using the bottle pulls the bottle forwardly or forwardly and downwardly the wire will flex and permit such movement while resiliently resisting it. The major point of flexure is the junction between the inclined leg portion **23** and the foot **21** and the reaction of the foot **21** against the supporting surface prevents more than a very slight lifting force from being transmitted through leg **19** to the center of the cup **11** through stud **15**. Thus the device will remain firmly anchored in place by the cup **11** even though the bottle **33** is pulled about rather actively by an infant using the bottle. Upon release the bottle and holder will return to normal position.

While the wire is stiff and resilient and fully supports the bottle without any permanent deformation of the wire, yet the wire is of such character that it may be manually permanently deformed and set to adjust the height of the bottle or for other purposes. For example, the rear arm **29** and front arm **39** may be bowed to lower the bottle when feeding a small infant and may later be restored to their shape as shown in the drawing as the infant grows.

It will be understood that the bottle supporting and holding portions of the device may be modified to fit different shapes and sizes of bottles. The arrangement of parts may be varied to meet differing conditions and requirements and I contemplate such modifications as come within the spirit and scope of the appended claims.

I claim:

1. A bottle holder comprising a base member adapted to be secured to a supporting surface, the base member having spaced upper and lower surfaces, a bottle holder member secured to the upper surface of the base member and having a leg and foot extending in one direction from the base member, the foot extending downwardly from the leg for a distance approximately the height of the base and adapted to engage the supporting surface adjacent the base member, said bottle holder further having a horizontal support leg extending from the foot across and beyond the base member in the opposite direction with a connected arm extending upwardly from the support leg to join a bottle holding loop adjacent the rear of a bottle being held, the loop joining a yoke to fit the neck of a bottle and a second arm extending downwardly from the yoke to join the horizontal leg on the side of the base toward the first named arm.

2. A bottle holder comprising a base member adapted to be secured to a supporting surface, a bottle holder member secured to the base member and having a leg and foot extending in one direction from the base member and adapted to engage the supporting surface adjacent the base member, said bottle holder further having a horizontal support leg extending from the foot across and beyond the base member in the opposite direction with a connected arm extending upwardly from the support leg to join a bottle holding loop adjacent the rear of a bottle being held, the loop joining a yoke to fit the neck of a bottle and a second arm extending downwardly from the yoke and having a loop fitted about the horizontal leg to frictionally grip the leg in adjusted position, adjustment of the loop along the leg varying the slope of the second arm and of a bottle supported in the bottle holding loop.

3. A bottle holder comprising a suction cup base member adapted to be secured to a supporting surface, said cup having a top, a stud extending upwardly from said cup, a wire bottle holder member having an end secured to the stud, said holder extending in one direction from the stud to form a foot adapted to engage the supporting surface, a horizontal leg connected to the foot and extending across the top of the cup for engagement therewith adjacent the stud, the horizontal leg extending across the top of the cup to join a rear arm extending upwardly from said leg to join a bottle supporting loop which joins a yoke for engaging and supporting the neck of the bottle, and a front arm extending downwardly from the yoke to adjustably engage the horizontal leg.

4. A bottle holder comprising a suction cup base member adapted to be secured to a supporting surface, said cup having a top, a stud extending upwardly from said cup, a wire bottle holder member having an end secured to the stud, said holder extending in one direction from the stud to form a foot adapted to engage the supporting

surface, a horizontal leg connected to the foot and extending across the top of the cup for engagement therewith adjacent the stud, the horizontal leg extending across the top of the cup to join a rear arm extending upwardly from said leg to join a bottle supporting loop which joins a yoke for engaging and supporting the neck of the bottle, and a front arm extending downwardly from the yoke to adjustably engage the horizontal leg at a point between the top of the base member and the rear arm.

5. A bottle holder comprising a suction cup base member adapted to be secured to a supporting surface, said cup having a top, a stud extending upwardly from said cup, a wire bottle holder member having an end secured to the stud, said holder extending in one direction from the stud to form a foot adapted to engage the supporting surface, a horizontal leg connected to the foot and extending across the top of the cup for engagement therewith adjacent the stud, the horizontal leg extending across the top of the cup to join a rear arm extending upwardly from said leg to join a bottle supporting loop which joins a yoke for engaging and supporting the neck of the bottle, and a front arm extending downwardly from the yoke to terminate in a loop about the horizontal leg, said loop frictionally engaging the leg to maintain an adjusted position, the bottle holder member comprising a single length of stiff, resilient wire.

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