

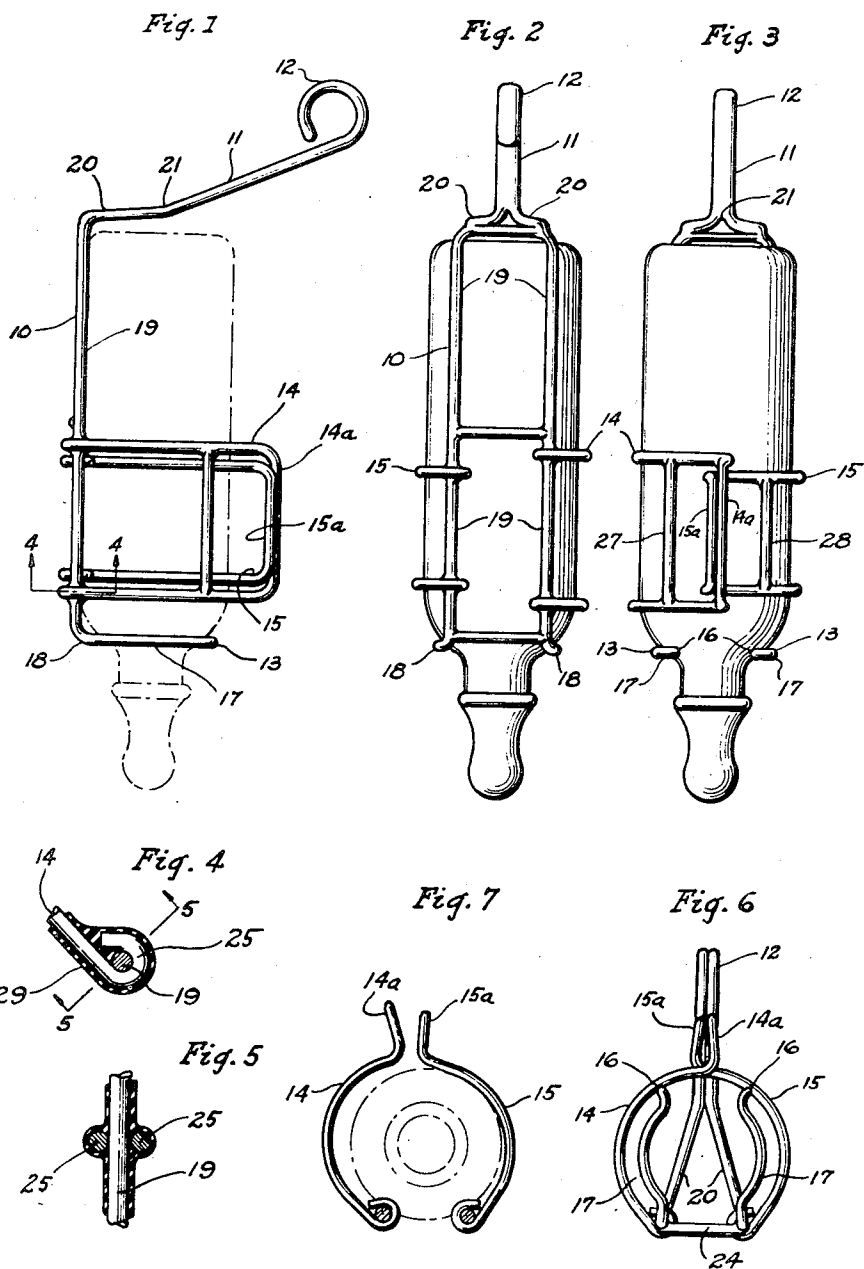
Dec. 16, 1958

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2,864,575

BOTTLE HOLDER

Original Filed March 7, 1946



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BOTTLE HOLDER

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Substituted for abandoned application Serial No. 652,589, March 7, 1946. This application July 24, 1956, Serial No. 599,847

4 Claims. (Cl. 248—103)

This invention relates to a bottle holder and particularly to a holder for a nursing bottle for baby feeding.

This application is a substitute for my previous application Serial No. 652,589, filed March 7, 1946, now abandoned.

An object of the invention is to provide a simple, cheap, and sturdy holder wherein a bottle may be suspended within easy reach of a baby in sitting or lying position, and which can be readily manipulated to a comfortable angle by the baby while the weight of the bottle is supported independently of the baby's efforts.

Other objects and advantages will be apparent from a study of the following specification in conjunction with the accompanying drawings, in which:

Fig. 1 is a side elevational view of a bottle holder embodying the present invention, the bottle being shown in broken line;

Fig. 2 is a rear elevational view as seen from the left of Fig. 1, the bottle being shown in full line;

Fig. 3 is a front elevational view, as seen from the right of Fig. 1, the bottle being shown in full line;

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 1;

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 4;

Fig. 6 is a bottom plan view looking upward at Fig. 1, but without showing the bottle;

Fig. 7 is a view showing a portion of the clamping arms before they are interlocked in operating position.

Speaking first generally, the bottle holder shown in the drawings consists of a skeleton frame formed from any suitable material such as steel wire of satisfactory stiffness. It comprises a body portion 10, an angular upward extension 11 provided with an eye 12 for suspension purposes, a stop 13, and a pair of swingable arms 14 and 15 which interlock to grip the bottle as will appear.

The stop, body and suspending portion may be formed from a single length of wire developed as follows:

Starting from the stop, at the two spaced free ends 16 of the wire, said stop is formed by bending the wire into two opposed arcs 17, 17, which are suitably curved to support the shoulder of the nursing bottle, while preventing it from slipping through the stop. The converging portions 18 of arcs 17 are bent upwardly substantially normal to the plane of the stop to provide two opposed parallel body portions 19 (Fig. 2) at the upper ends of which the two wire strands are intuned at 20 to occupy a position above the upturned bottom of the nursing bottle, the strands there converging to a point of contact 21. From said contact point the wire strands remain in contact through a suitable length 11 extending upwardly and away from the body 10 and terminating in the eye 12. It will be apparent that the angularity of the bottle in its eventual suspended position will depend on the disposition, length, and angularity of the parts 10, 11 and 12, these factors establishing

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the center of gravity of the frame and bottle assembly with respect to eye 12.

I have further provided a plurality of transverse stiffeners 24 which span the space between the body elements 19, the opposed ends of the stiffeners being attached to their respective elements 19 in any suitable way, for example by welding, soldering, or otherwise.

The swingable gripping arms 14 and 15 will now be described. Each arm comprises an arcuate member formed from a length of wire bent to a U-shape, the legs of the U being curved to surround approximately one-half of the circumference of a nursing bottle. The ends of the parallel legs of the U are bent to form retaining eyes 25 each of which embraces a respective one of the body members 19. The free swinging end of the gripping arms near the stop are turned radially outwardly for a purpose best shown in Figs. 1, 3 and 6. It will be observed that the spacing between the legs of gripping arm 14 is wider than that between the legs of arm 15, so that when the arms are swung inwardly towards clamping position the tip end 15a of arm 15 swings within the tip end 14a of arm 14, and said tip ends are interlockable. This interlock may be achieved in various ways, depending on the relative length of the arms, the amount of interlock desired, the yieldability of the wire, etc. It may be done, for example, by placing a bottle in the position of Fig. 7 and forcing the locking end 15a beyond the locking end 14a in the position of Fig. 6. So long as the bottle remains in place the interlock of the arm tips will not be normally released except by the exercise of such positive pressure as will not be usually exerted by a child of nursing age. By making one arm definitely longer than the other the locking action is facilitated. It will be apparent that arms 14 and 15 may be of such length, and may be curved to such shape, as to suitably accommodate the particular style of bottle being used. Arms 14 and 15 may further be provided with respective stiffeners 27 and 28 as best shown, for example, in Fig. 3.

While the bottle carrier just described will satisfactorily serve its purpose, I prefer to improve it by spraying, dipping, or otherwise coating it with a resilient coating 29 such as natural rubber, or one of the synthetic rubber-like materials so as to intimately bond the coating material to the holder frame. This affords a soft but positive grip, and a better interlocking action of the arm tips. It further provides a surface which will not mar or scratch furniture, and which protects the infant from sharp corners, wire ends, and the like. The coating also makes the device more sanitary and easily cleanable. The rubber coating will also tend to resiliently maintain the arms 14 and 15 in the position they occupied when the rubber was applied, for example, in the interlocked position shown in Fig. 3. It will be found that when the bottle carrier is coated with rubber as just described, the arms may be swung widely from any pre-established position, but will immediately swing back toward each other when the biasing force is released. Referring to Fig. 4, when it is realized that coating 29 is firmly attached to the member 19 on opposite sides of arm 14, it will be understood how the rubber-like coating 29 is stretched when the arm is bent outwardly.

When in use, and with a bottle held between the arms, the eye 12 may be threaded over a wire or cord which stretches across the baby's crib, for example. In this position the bottle may be freely moved to any position along the suspending wire or cord.

Figs. 6 and 7 are shown as if made of bare wire. As explained above, my invention is useful if made this way and these views are more easily understood as

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shown. Certain advantages are added by the rubber coating as explained above.

What is claimed is:

1. Holding means for a nursing bottle comprising a body portion, a pair of arms pivotally connected to said body portion on pivots always a fixed distance apart, said arms bending outwardly away from each other and adapted to hold a nursing bottle between them, the free ends of said arms being adapted to meet around said bottle with one of said ends passing behind the other, each of said arms being generally of U-form and each having spaced legs connected at their outer ends by a crossbar, the inner ends of the legs of each U-form arm being pivotally connected to said body portion, said arms following the curve of said bottle approximately to a point where said arms are adjacent, said arms being then bent outwardly from the bottle approximately equal distances to the crossbars of the respective U-form arms, the legs of one U-form arm being spaced apart a less distance than the legs of the other U-form arm so that the free end of one arm may overlap the free end of the other and one of said crossbars will lie behind and in engagement with the other of said crossbars, whereby with a bottle resting between said arms, neither arm is free to turn about its pivot but is held with its crossbar behind the crossbar of the other arm.

2. A nursing bottle holding means as defined in claim 1, wherein at least said arms have a coating of rubber-

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like material whereby said crossbars are frictionally held to each other in engaged overlapping position.

3. A nursing bottle holding means as defined in claim 1, including stop means integral with the lower end of said body portion below said arms adapted to engage the lower end of said bottle for preventing downward slippage of the bottle relative to said body portion.

4. A nursing bottle holding means as defined in claim 3, wherein said body portion comprises a pair of parallel wire strands generally parallel to the axis of a supported bottle and spaced apart a distance less than the diameter of such bottle and means holding said strands a fixed distance apart, each of said arms being pivotally connected respectively to one of said strands and extending forwardly therefrom, and said stop means comprising the lower ends of said strands bent forwardly and spaced to embrace a bottle neck between them.

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