March 11, 1941. L. W. HUMPHREY 2,234,409

NURSING BOTTLE HOLDER

Filed June 22, 1939

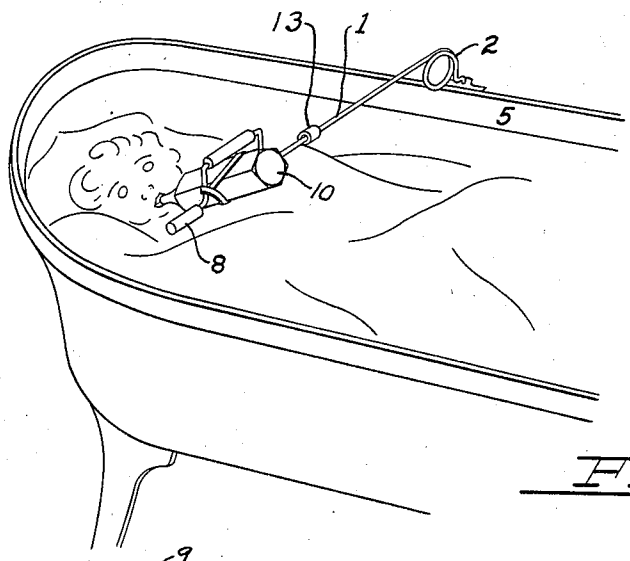


Fig. 1.

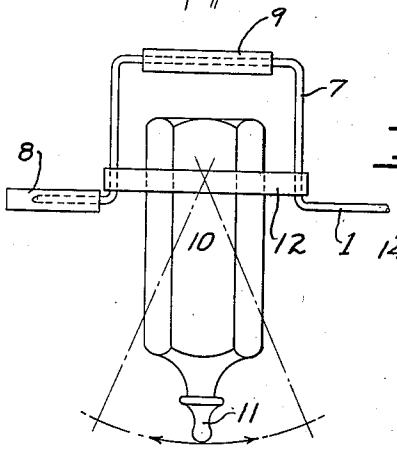
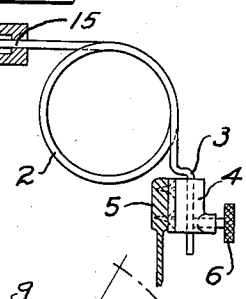


Fig. 2.



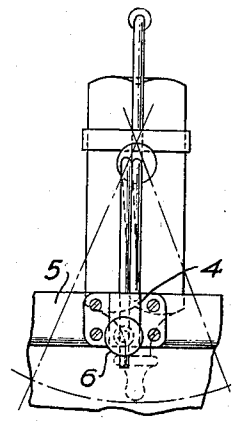


Fig. 3.

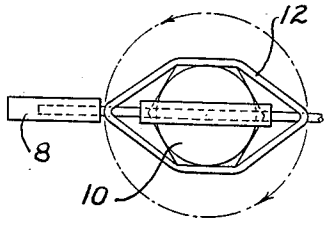


Fig. 4.

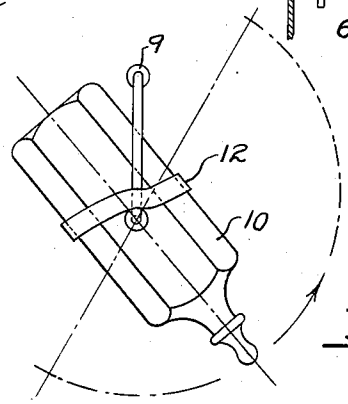


Fig. 5.

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NURSING BOTTLE HOLDER

Loyd W. Humphrey, Detroit, Mich.

Application June 22, 1939, Serial No. 280,615

4 Claims. (Cl. 248—104)

This invention relates to nursing bottle holders and is a continuation, in respect to all common subject matter, of my application for Letters Patent of the United States, Serial No. 231,747, filed Sept. 26, 1938 for Mechanical feeding device.

The principal object of the invention is to provide a holder for a nursing bottle wherein the bottle is flexibly supported and adjustable to impend at various angles in a vertical plane to desirably position the nipple in respect to a feeding baby and the bottle is further so flexibly or yieldably supported as to permit the nipple end of the bottle to be turned to various angles to the vertical or in a circle.

It is also a purpose of the invention to provide a holder for a nursing bottle wherein the bottle is flexibly supported with its longitudinal axis in a vertical plane or supported at an angle to the vertical plane under tension restraining movement in one direction and limiting movement in the opposite direction in the same plane.

A further object and feature of the invention is to provide a nursing bottle holder which includes an arm normally positioned in a horizontal plane and yieldable to permit displacement from the horizontal plane and having a portion thereof offset providing a yoke of substantially U form in which the bottle is yieldably supported by a rubber band frictionally engaging the opposite sides of the bottle under tension and engaging about the portion of the arm forming the offset or U shaped portion.

The tension of the band is sufficient to frictionally sustain the bottle in position and by spreading the band permits the bottle to be moved longitudinally through the band and the selected position of the bottle longitudinally within the band determines the angle which the bottle will assume under restraint of the band thereby permitting the bottle to be quickly adjusted at any desired angle within an arc of 180 degrees.

A further object of the invention is to provide a nursing bottle supporting unit wherein the bottle may be positioned to assume the desired angle in respect to the vertical under the restraint of the band and readily movable in any direction under restraint of the band enabling the infant to instantly free itself of the nipple thus avoiding possibility of strangulation or of the infant becoming frightened through inability to remove the bottle from the nursing position.

The construction further permits the baby to release its hold on the bottle during a feeding period without the bottle moving out of its reach.

These and other objects and novel features of the invention are hereinafter more fully described and claimed and the preferred form of construction of a nursing bottle holder embodying my invention is shown in the accompanying drawing in which—

Fig. 1 is a perspective view showing my improved bottle holder in use by a feeding baby.

Fig. 2 is a side elevation of my improved holder showing means of attaching the bottle supporting arm to the edge of a crib or bassinet.

Fig. 3 is an end elevation taken from the right hand side of Fig. 2.

Fig. 4 is a plan view of the bottle holding end of the arm looking down from the upper side of Fig. 2.

Fig. 5 is an end view of the bottle holder taken from the left hand side of Fig. 2 and showing a different position of the bottle than is shown in Fig. 2.

Nursing bottles heretofore are usually laid on a pillow or blanket which supports the bottle in respect to the infant, which previous method requires considerable attention of the mother or an attendant due to the fact that the bottle becomes displaced or out of reach of the child. This invention seeks to avoid such necessary attention and loss of time by providing a device that may be mounted on the edge of a crib or bassinet or other convenient device that not only sustains the bottle in position for nursing but that cannot be displaced by the child out of its reach and may be so arranged that if the infant ceases suckling and releases its hold thereof to automatically turn with the nipple uppermost to prevent possibility of the contents of the bottle dripping therefrom and furthermore to so hold the bottle that the infant may turn its head while the nipple is in its mouth without dislocation of the bottle which is so flexibly supported that it may be pulled by the infant toward itself or released entirely without its moving out of reach.

An essential feature of the invention resides in the provision of a flexible arm 1 which may be of any desired form insofar as flexibility is concerned and the mounting of the arm may also be varied as the specific structure shown is merely illustrative and not essential to the invention herein disclosed and claimed.

The arm 1 here shown is of a wire or rod like character formed with a loop 2 having a terminal end portion 3 for insertion in a bracket 4 secured to the edge of the supporting member, as a crib, indicated at 5. A thumb screw 6 is employed for holding the end 2 in position in the bracket.

The loop provides for flexibility of the member 1 both in a vertical plane or at an angle thereto. An essential feature of the rod or arm construction resides in forming the same to provide an offset loop or yoke 7 here shown as being of an inverted U form the width between the legs of which is greater than the diameter of the bottle 10 suspended therein as hereinafter described. The end of the rod opposite the end secured to the bracket or support is preferably formed with a handle portion 8 which the child may grasp and the base of the U part or yoke is preferably provided with a rubber or other desired covering 9 against which a portion of the bottle may engage under certain conditions without danger of breakage.

The bottle 10, as shown in Figs. 2 and 4, is of hexagonal form having a nipple 11 at one end and the bottle is supported in place in the yoke 7 by means of a rubber band 12 which engages about the two arms of the yoke in engagement under tension with the opposite sides of the bottle as will be understood from Fig. 2. The friction of the band under tension with the bottle is sufficient to sustain the bottle and to prevent its withdrawal from the band by such pulling strains as an infant would apply thereto. The bottle may be of any desired shape in cross section as any other cross sectional form of bottle will be equally as well supported by the band.

Irrespective of the form of the bottle in cross section, the turning of the bottle in a direction end to end in the yoke 7 has a tendency to twist the band and this tendency causes the bottle to assume a vertical position upon release thereof. Thus any turning of the bottle from the vertical to a position at an angle to the vertical is under restraint by the band.

In the position of the bottle shown in Fig. 2 the bottle is capable of being moved longitudinally either in a vertical plane or when at an angle thereto as shown in Figs. 1 and 5. When in the depending position shown in Fig. 2 the infant may move the bottle laterally, in the direction shown by the arrows, or the nipple end may be turned in either direction about a circle as indicated by the dotted arrow lines shown in Fig. 4. In fact my improved mounting for the bottle provides for a universal movement of the bottle at any angle as may be permitted by the structure and may be moved upwardly or downwardly in respect to the arm or rotatably.

The band may engage the bottle near the bottom when in its inverted position shown in Fig. 2 or the bottle may be supported by the band nearer the center of the bottle as shown in Fig. 5. In such latter arrangement of the parts, if the infant releases its hold of the bottle the nipple end may move upwardly in the direction indicated by the arrow shown in Fig. 5 in which case there would be no leakage from the nipple and still the bottle is not beyond reach of the child. By drawing the bottle in one direction or the other through the band the bottle will, under restraint by the band, assume a position at various angles to the vertical and the covering 9 for the base of the yoke portion would be engaged by the bottle end when a sufficient weight of bottle and contents is below the turning axis. By use of the elastic band, the bottle will remain stationary at the point of balance between the action of the force of gravity and the restraint of the band and the bottle will be yieldably suspended at the angle of balance. It is also pointed out that by sliding the bottle upwardly or downwardly through the band, the tendency of the band by its tension to turn the bottle, may be increased or decreased thus permitting the bottle to be positioned for use by the child without discomfort and such adjustment may be made without removing the nipple from the child's mouth while nursing.

The holder is very simple and inexpensive in form and construction and to position the bottle in or to withdraw the same from the band only requires that the band be spread by the thumb and fingers of one hand and the bottle inserted within the band or varied in position depending upon whether the bottle is desired to hang in a true vertical plane or at an angle thereto.

With the bottle supported by the flexible arm the child may grasp the arm or the bottle turning the same toward itself and it is out of the way of the child's face when it has been released from the nursing position. The bottle, however, is always within easy reach which is a desirable condition as a child may not empty the bottle at one nursing and desire to continue at intervals. A desirable feature of this invention resides in the fact that by the construction and arrangement described the nipple end of the bottle is maintained filled with the liquid food under which condition it is practically impossible for a child to swallow air in the nursing act.

The contents of the nursing bottle vary in weight due to different characters of liquid foods contained therein. That is, at one feeding an ounce or two of orange juice may be provided and at the next feeding a full bottle of milk. Due to the flexibility of the arm or rod 1 the nursing bottle would occupy different positions toward or from the infant. It is therefore desirable that a weight 13 be provided on the arm and slidable thereon toward or from the bottle end thereof to thus conveniently position the nipple end of the nursing bottle for use by the infant who may not be old enough to grasp the bottle or the handle end to pull the nipple to position.

The structure of the weight may be varied but a convenient and simple form is shown in section in Fig. 2 wherein the center of the weight has a recess 14 of greater diameter than the rod extending into the weight from one end and terminating near the opposite end which end has an aperture 15 of such diameter as to be readily slidable on the arm 1. The arrangement shown provides for binding engagement of the weight on the rod at the aperture 15 as gravity tends to pull the forward end of the weight downwardly to cause a binding engagement of the weight and arm at the aperture 15. This avoids the use of set screws or other fastening means yet permits an instant movement by hand of the weight on the rod to properly balance the weight of the rod end and bottle and its contents.

It is therefore to be realized that the bottle is not only flexibly supported due to the flexibility of the arm but also and principally by use of the rubber band or equivalent elastic member having frictional contact with the bottle when under tension by which a practically universal movement of the nipple and the bottle is permitted by the construction shown and that the various objects and novel features of the invention are attained by the construction described.

Having thus fully described my invention, its utility and mode of operation, what I claim and desire to secure by Letters Patent of the United States is—

1. A nursing bottle holder comprising a bottle holding arm fixed at one end and formed with an offset portion near its opposite free end, said offset portion having spaced parallel parts and a flat rubber band of greater width than thickness placed under tension in positioning the same on the said opposite parallel parts, said band supporting the bottle inserted therewithin out of contact with and free from rigid alignment by the said parallel parts and permitting movement of the bottle in any direction under restraint by the band.

2. A nursing bottle holder comprising a flexible arm bent near one end to form a U shaped portion, a flexible and resilient band of normally less diameter than the width of the U shaped portion and placed under tension in positioning the same about the legs thereof adjacent the arm, said band providing a means for frictionally and resiliently supporting a bottle having its body inserted within the band the bottle being free from contact with, or stationarily aligned by, the said U shaped portion, the said band yieldably resisting turning of the bottle in a direction at an angle to its normal position or in an end to end direction.

3. A nursing bottle holder comprising a flexible arm fixed at one end, the opposite end being unsupported and free to be moved, a nursing bottle supported at the free end of the arm, and a weight slidable on the arm toward or from the bottle end to flex the arm and thereby vary the position of the nursing bottle in respect to a nursing child.

4. A nursing bottle holder comprising an arm having two spaced members intermediate its ends, an elastic band placed under tension in positioning the same on the spaced members, the nursing bottle being positioned within the band and adjustable longitudinally therein to normally lie at various angles to the vertical to suspend the bottle with its nipple end in a desired position, the distance between the spaced members being greater than the width of the bottle supported therebetween and the bottle being out of contact with the said spaced members, said band further permitting movement of the nipple end by a nursing child in any direction subject only to the restraint imposed on the bottle by the band.

LOYD W. HUMPHREY.