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3,022,915  
PACIFIER

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Filed Aug. 14, 1959, Ser. No. 833,798  
5 Claims. (Cl. 215-11)

The present invention relates, broadly construed, to certain new and useful improvements in pacifiers used by infants. Specifically, however, the concept has to do with means characterized by intimately cooperating components which, collectively interpreted, provide a novel pacifier.

More particularly, and as will be hereinafter clarified it is an aim, in carrying out the invention, to provide a new and feasible assemblage of expedients which, when working together as an assemblage, provide an outstandingly unique combination which when properly used provides an advanced type of pacifier. One of the components thereof is a conventional type nursing bottle which is empty but nevertheless, and being familiar to the infant user, becomes a holder or "handle" whereby to provide familiar and practical handling means for the infant.

When one thinks of a pacifier, a conventional type comes to mind, that is a commonly marketed one comprising a hollow elastic nipple attached at its bottom to a central portion of a round or disk-like guard with or without a finger ring or an equivalent handling or trying expedient. To an extent the instant adaptation, in an over-all structural sense, embodies as one of its essential components a similar unit except, of course, the part thereof resembling a nipple is no longer used as such but becomes a stabilizing core and an anti-collapsing rigidifier for a hollow nipple into which it is inserted.

As will be evident from the description so far given and more particularly from the views of the drawing collectively read, the pacifier, not including the readily applicable and removable protector cap, is herein a dual type of construction; namely, a hollow flexibly pliant rubber or an equivalent nipple which is imperforate, said nipple having its base or breast portion effectually joined with a comparatively rigid plastic attaching collar, that is, a collar which may be screwed on the usual screw threads of a conventional large-neck nursing bottle. To prevent complete distortion of the hollow nipple it is fitted over and encloses the flexibly resilient nipple-like insert or core, the imperforate disk-like base of the latter being removably clamped on the lip of the mouth of the nursing bottle by the screw-type collar in a manner and for purposes to be hereinafter described.

It follows that novelty is predicated on a dual or two-part pacifier embodying inner and outer nipples, the outer nipple being hollow and of suitable erectile rubber or the like, and the inner nipple which in effect is a stabilizer, is of compressibly resilient rubber having the desired cushioning properties and yet offering the desired biting and teething properties so desirable in the instant pacifier.

Looking toward ultimate practical usefulness, keeping in mind the factors of manufacturing economies, and the expected needs of users it will be noted that both inner and outer components or units are of one-piece construction. At any rate the preferred embodiment of the inner anti-collapsing unit is such in substance and properties that it promotes sanitation to the utmost. In fact, the outer unit too is preferably one-piece and it eliminates poor joints, openings or ridges and reduces to a minimum the likelihood of the accumulation of germ bearing foreign matter and bacteria on the surfaces. These surfaces may be sanitized in an ordinary bottle sterilizer or simply dropped into a pan or kettle of boiling water for thorough cleaning results.

Other objects, features and advantages will become

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more readily apparent from the following description and the accompanying illustrative drawing.

In the drawing, wherein like numerals are employed to designate like parts throughout the views:

5 FIG. 1 is an exploded perspective view showing the overall combination with the outer protector cap removed.

FIG. 2 is a section on the vertical line 2-2 of FIG. 1 with the parts assembled and with the cap appearing in phantom lines.

10 FIG. 3 is a perspective view of the inner unit or insert of the dual or two-part pacifier.

FIG. 4 is a view in section and elevation and showing a modification of this inner unit or insert.

15 An ordinary or conventional type of a pacifier might bear considerable resemblance to the inner unit or component of the over-all two part improved pacifier herein under consideration, that is, the inner part appearing in FIG. 3 and designated generally by the numeral 6. This part 6 however does not require a finger ring to hold it nor does it require a hollow nipple. On the contrary and in the preferred embodiment it is a one piece comprising a disk-like base providing an attaching and retaining flange 8. Joined centrally to the top of the base is the nipple-shaped core or rigidifier. It comprises a bulbous body portion 10 integrated with the disk or base and carrying an outstanding teat portion 12. As seen in FIG. 4 this rigidifier, in the sense that it is a stabilizing insert and prevents collapsing of the outer nipple, is of firm but pliant construction. It is fashioned or molded from compressibly resilient rubber or plastic material. The only difference in FIG. 4 is that the base 14 of the body portion has a reduced neck 16 extending through a hole 18 in the disk and held in place by a retaining head 20.

20 The outer part or component of this two-part pacifier is in effect a nipple. That is to say, it comprises a nipple 22 of appropriate sterile rubber. The teat portion 24 merges into a reduced neck 26 which in turn merges into the breast-like enlargement 28 which in turn is vulcanized or in some seamless manner "welded" as at 29 to the annular portion 30 of the screw-threaded collar 32. The collar is of relatively hard commercial plastics of an appropriate grade which lends itself to the provision on the interior of suitable screw-threads 34 which screw-threads are adapted to join with screw-threads 36 on the mouth portion 38 of the neck 40 of a more or less conventional type infant's nursing bottle 42. The lip of the mouth is denoted at 44 for convenience of description.

25 The numeral 46 designates a plastic or an equivalent friction retained dust guard or covering cap which has a hollow nipple-like dome or equivalent portion 48 to fit over the aforementioned nipple 22 and which has its bottom joined at 50 with an attaching rim. The rim has a reinforcing bead 52 and the components of the rim are formed into individual circumferentially spaced friction retaining ribs 54 which fit removably into the accommodation seats 56 forming the exterior or peripheral surface of the collar 32.

30 With the construction shown and described it will be evident that the protector cap 46 may be, obviously, of any suitable material, shape and size so long as it is applicable and removable and such that when it has been intentionally closed it will remain closed. Actually, the friction fitted construction illustrated on FIGS. 1 and 2 is ideal. Ordinarily and strange though it may seem pacifiers, at least the type that are available to parents now are usually not protected when not in use. With this arrangement the provision of a cap constitutes a sanitary shield and for this reason it is believed that the readily applicable and removable cap 46 should be construed as a part of the combination. It promotes unqualified endorsement of the over-all product in relation to econ-

omy, practical achievement and more efficient usefulness. The construction revealed is the only pacifier which allows for and provides inserts into the nipple of varying degrees of hardness as required in changes in the growth and developing of the nursing and biting abilities of daily changing infants. It is evident that the idea of attaching the two-part pacifier to the threaded neck of a conventional nursing bottle is indeed an innovation inasmuch as the bottle then becomes a support as well as a handle and the infant, particularly if he has acquired an affinity for the feel of the bottle, takes to the pacifier almost instinctively. It is to be stressed, of course, that the crown or convex terminal end of the teat 24 in this construction is obviously without apertures or holes. This distinguishes the pacifying properties of the nipple 22 from a similar but nevertheless distinct "feeding" nipple.

Referring to the space-filling and rigidifying inserts (FIGS. 3 and 4) and any equivalent flexibly resilient means, many and varied devices (the variations limited only by the many consistencies of rubber or appropriate plastic materials desired or needed) embody a disk or the like 8 which fits on the lip of the bottle neck, the same being securely clamped by the threaded collar 32 of the pacifier unit. The term "bottle" comprehends any conventional-type nursing bottle or commonly popular infant's water bottle. Obviously, these inserts are made to provide varying degrees of hardness, stiffness and flexibility and fit, in the manner shown, spaced from but inside the outer sucking nipple of the pacifier unit. This significant variable flexibility of the pacifier unit is of importance. By the same token, the insert is likewise significant, especially when considered in conjunction with the pacifier unit.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. In combination, a nursing bottle having a threaded neck at the upper end of the bottle, a composite pacifier removably mounted on said neck and including a hollow flexibly resilient imperforate teat-like sucking member provided with a rigid screw-threaded collar screwed on the neck of said bottle, a protector cap which is readily applicable and removable and which encloses said sucking member and collar and has a fluted portion providing retaining ribs fitting into grooves provided therefor on the outer peripheral surface of said collar and a pliant core removably mounted atop the lip of said neck and projecting upwardly therefrom into the hollow portion of said sucking member.

2. In combination, a nursing bottle having a screw threaded neck at the usual open upper end of the bottle, said neck terminating in a lip, a solid disk-like member of a diameter corresponding approximately to the diameter of the neck of the nursing bottle and resting removably upon said lip and provided centrally with an outstanding axially disposed solid but compressibly resilient teat-like core, and an imperforate hollow rubber teat-like

pacifier conforming in shape to enclosing but spaced from said core and integrally attached to an interiorly screw-threaded collar, said screw-threaded collar being rigid and the threads thereof being adapted to engage the usual threads on the neck of said bottle, the junctionally connected ends of said pacifier and collar providing an endless shoulder, said shoulder resting clampingly atop the outer peripheral edge of said disk in a manner to hold the disk removably on said lip.

3. For use on and in conjunction with a nursing bottle, a readily applicable and removable pacifier unit embodying a hollow imperforate rubber sucking teat constituting a pacifier and having a shouldered collar by way of which said pacifier may be seated and mounted for use atop said neck, and an inner teat-like core projecting removably into the hollow portion of said pacifier and provided with means at the base thereof adapted to rest atop the lip of the neck and to span and close the mouth of the nursing bottle, the shouldered portion of the collar resting atop and removably clamping said means in its intended sealed-tight position on said lip, said means comprising a disc, said core being solid but flexibly and compressibly resilient, the flexible and resilient properties of said core being selectively variable from soft to hard to cope with progressively changing infant biting and teething needs.

4. For use on and in conjunction with the customarily screw-threaded neck of a nursing bottle, a two-part infant pacifier comprising, in combination, a unitary first-part embodying a hollow elastic outer nipple providing a pacifier and having an integral companion collar which is screw-threaded, the threads of the collar adapted to be screwed on the screw threads on said neck, said nipple being wholly imperforate, and a second part complementary to the first part and embodying a solid imperforate disk member of a diameter that the outer peripheral edge may rest atop a lip of the bottle neck in a manner to lid over and completely cover the mouth portion of said neck and also adapted to fit within the encompassing limits of the collar, the collar having an endless annular shoulder for pressing upon and clamping the edge portions of the disk in place on said lip, the top of said disk being centrally provided with an axial outstanding nipple-like stabilizing core telescoping in spaced relation into the hollow portion of the enclosing outer nipple, said core being constructed of a mass of flexibly and compressibly resilient spongy rubber.

5. The combination of claim 4, and said core being at right angles to integrate with the disk and the two components, disk and core, when thought of together constituting an easy-to-clean unit and the compressibility of the core being predetermined but variable depending on the bite resisting properties required by growing infants.

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