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[54] **PACIFIER**
8 Claims, 4 Drawing Figs.

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[50] Field of Search..... **128/359,**
360; 24/30.5, 72.5, 245

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ABSTRACT: A pacifier for infants in which a nipplelike mouthpiece is removably secured to a support by engagement between a post on which the mouthpiece is disposed and a clamp or holder which engages the mouthpiece and holds the same on the post to prevent removal of the mouthpiece by an infant. Such a pacifier in which the post has an enlarged end disposed in the mouthpiece to provide a shoulder under which the mouthpiece is clamped. Such a pacifier in which the post and clamp are integrally formed at the ends of a strap, which strap forms an enlarged handle for facilitating holding of the pacifier, the handle being composed of flexible material and also serving as a teething ring.

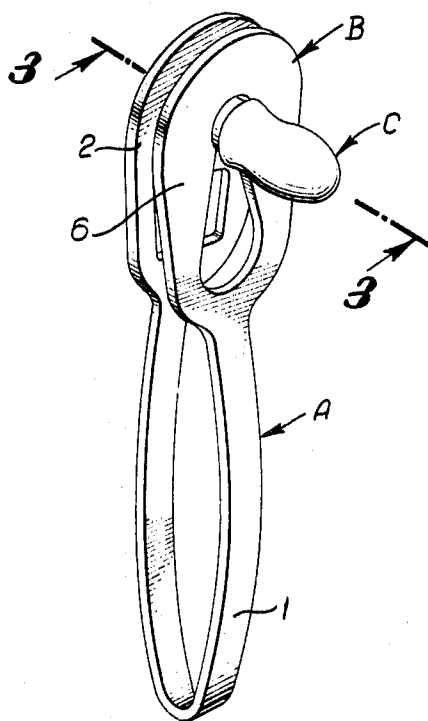


FIG. 1.

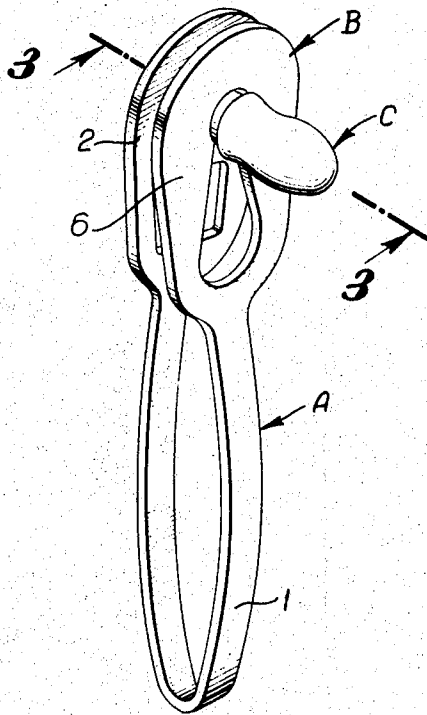


FIG. 2.

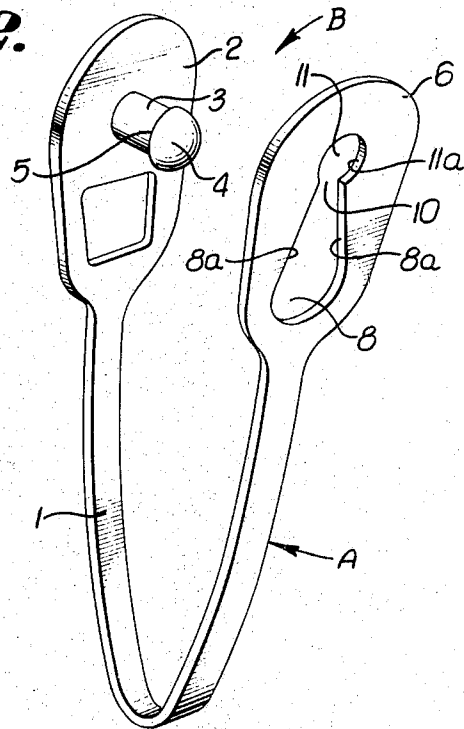


FIG. 4.

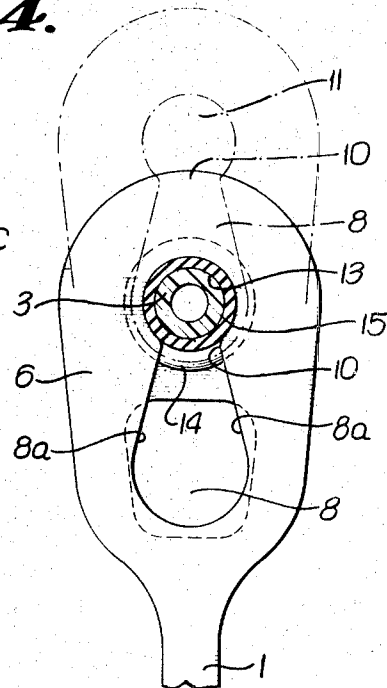
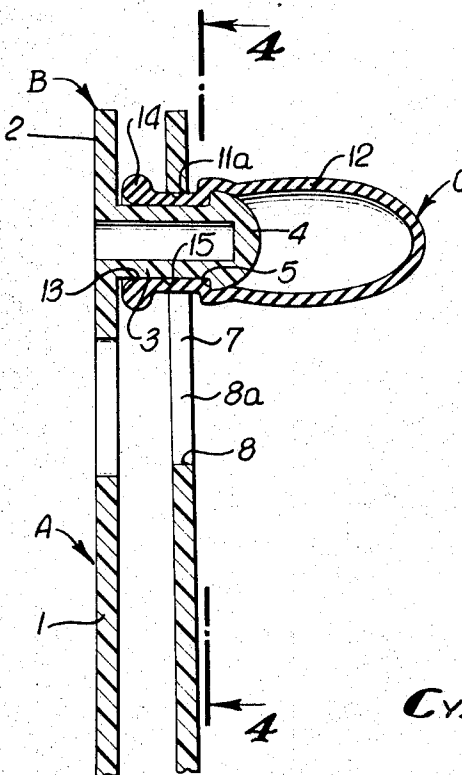


FIG. 3.



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PACIFIER

Heretofore, pacifier devices have been provided for use by infants, as well as for use by older children during teething, wherein a resilient nipplelike mouthpiece is supported on a handle adapted to be gripped by the infant, but such devices have not been altogether safe or satisfactory from the standpoint of hygiene. If the usual nursing bottle nipple is employed, the nipple may be so long as to enable the infant to choke or gag on the nipple. If the entire unit is small, the infant may dispose the unit in the mouth, causing danger of suffocation. Moreover, such devices are not susceptible of ease of nipple cleaning or change when the nipple is worn.

The present invention provides a pacifier for infants wherein a nipplelike mouthpiece is removably supported on a handle in such a manner that an infant or older child would have great difficulty in removing the mouthpiece from the support, but an adult can readily remove the mouthpiece for the purpose of cleansing the pacifier support and mouthpiece or for the purpose of replacing a worn or damaged mouthpiece.

More particularly, the invention provides a post or boss on which the open end of a nipple is disposed in tight fitting engagement, the boss having an enlargement or head thereon providing a shoulder. A clamp or retainer having a key slot opening therein is disposed about the mouthpiece on the boss and securely holds the mouthpiece on the boss, the shoulder on the boss not only assisting in the clamping action, but also serving to prevent endwise displacement of the clamp and mouthpiece from the boss. In addition, the mouthpiece may be removed by forcibly shifting the clamp to a position relative to the boss at which an enlarged key slot portion permits endwise removal of the clamp from the mouthpiece and the boss so as to enable subsequent removal of the mouthpiece from the boss. In order to resist movement of the clamp from a position at which the mouthpiece is clamped on the boss to a position at which the clamp may be removed to enable removal of the mouthpiece, the key slot is provided with a throat leading between the clamping portion of the key slot and the enlarged opening, the throat being smaller than the clamping portion of the key slot so as to require the application of a greater force tending to release the clamping action than can be applied by an infant.

A handle for the pacifier is provided by the invention which facilitates its handling by an infant. More specifically, the boss and the clamp are provided at the opposite ends of a strap folded to form a loop upon assembly of the pacifier, such loop also being useful as a teething device for the infant.

The boss, the clamp, and the interconnecting strap may be molded as an integral unit of pliable, nontoxic plastic material, and the mouthpiece may be similar to a conventional nursing bottle nipple, thereby rendering the assembly easy and inexpensive to manufacture, as well as inexpensive to replace nipples or mouthpieces.

Accordingly, an object of the invention is to provide a pacifier including a nipplelike mouthpiece, the nipple having a relatively short exposed portion insertable into an infant's mouth so as to minimize the likelihood of the infant choking on the nipple.

Another object of the invention is to provide a pacifier including a nipple or mouthpiece which may be readily replaced when worn or damaged, but which, nevertheless, is securely held in assembly with the nipple support during use by an infant so as to prevent the infant from removing the nipple and swallowing the same or suffocating thereon. In this connection, a further object of the invention is to provide a pacifier assembly which is not susceptible to being swallowed or suffocating an infant.

Still another object of the invention is to provide a one-piece holder for the nipple of the pacifier, the holder being formed of relatively soft, flexible or pliant material, and providing when assembled with the nipple a handle that is easy for an infant to grasp and which also may serve the purpose of a teething device or ring.

This invention possesses many other advantages, and has other objects which may be made more clearly apparent from a consideration of a form in which it may be embodied. This form is shown in the drawings accompanying and forming part of the present specification. It will now be described in detail, for the purpose of illustrating the general principles of the invention; but it is to be understood that such detailed description is not to be taken in a limiting sense, since the scope of the invention is best defined by the appended claims.

Referring to the drawings:

FIG. 1 is a view in perspective illustrating a pacifier made in accordance with the invention;

FIG. 2 is a view in perspective illustrating the one-piece handle, boss, and clamp for the nipple of the pacifier;

FIG. 3 is a view in longitudinal section, as taken on the line 3-3 of FIG. 1; and

FIG. 4 is a view in section, as taken on the line 4-4 of FIG. 3, showing the nipple clamped to the boss in full lines, and in broken lines showing the clamp moved to a nipple releasing position.

As seen in the drawings, the pacifier comprises a handle, generally denoted at A, having nipple retaining and supporting means, generally denoted at B, for supporting a nipple, generally denoted at C, the handle being adapted to be gripped by an infant so as to support the nipple for insertion into the infant's mouth.

The handle A and the nipple retaining and supporting means B are preferably, as best seen in FIG. 2, integral, the handle comprising an elongated strap 1 and the nipple retaining and supporting means including a base part 2 at one end of the strap 1 and being of enlarged size so as to be difficult to insert in the infant's mouth. The base part 2 has a boss 3 projecting therefrom and having at its outer extremity an enlarged head 4, the head 4 providing a shoulder 5 opposing the base part 2 to assist in the retention of the nipple thereon when engaged by a clamping or retaining part 6 which is integrally formed with the strap 1 at the other end thereof from the base part 2. Like the base part 2, the clamp part 6 is enlarged in relation to the strap 1, making it difficult to insert in the infant's mouth. In the clamp part 6 is a key slot 7 having an enlarged end section 8 through which the boss 3 and the head 4 thereon are adapted to be inserted. The enlarged end section 8 of the key slot 7 is defined by sidewalls 8a which converge toward one another to form a narrow throat section 10 of the key slot 7. The throat section 10 of the key slot 7 opens into a slightly enlarged end section 11 of the key slot which is defined by an arcuate wall 11a and which conforms in shape to the boss 3. The enlarged end section 11 of the key slot 7 is slightly larger than the boss 3 so as to accommodate the nipple C. As best seen in FIG. 3, the nipple C is similar to a conventional nursing bottle nipple having a hollow body 12 provided with an open end 13 circumscribed by an enlarged bead 14 extending circumferentially about the open end 13 of the body 12 of the nipple C.

The boss 3 between the shoulder 5 and the base part 2 of the nipple retaining and supporting means B has a cylindrical wall 15 which may be of a diameter slightly larger than the opening in the open end 13 of the nipple body 12 so that the bead 14 will tightly fit about the cylindrical wall 15 when the boss 3 is inserted into the open end 13 of the nipple body 12.

The wall 11a which defines the opening 11 is adapted to tightly fit about the body 12 of the nipple C between the bead 14 on the nipple body 12 and the shoulder 5 on the boss 3; and the throat 10 of the key slot 7 is narrower than the diameter of the cylindrical wall 15 of the boss 3, so that substantial force must be applied to the clamp part 6 of the nipple retaining and supporting means B in order to force the nipple body 12 and the boss 3 through the throat 10 of the key slot 7. As seen in FIG. 4, when the clamp part 6 is moved in the direction to force the nipple body 12 and the boss 3 through the throat 10 of the key slot 7 to the broken line position, the nipple body 12 and the boss 3 will be disposed in the enlarged end section 8 of the key slot 7 so as to allow endwise retraction of the nipple body and the boss from the key slot portion 8.

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When the nipple C on the boss 3 is retracted from the key slot 7, as just indicated above, the nipple C may be pulled endwise from the boss 3 to remove the same for the purpose of its cleaning or replacement by a new nipple, in the event that the previous nipple is worn or damaged.

It will now be apparent that the strap 1, which forms the handle A, the base part 2, boss 3, and clamp part 6 of the nipple retaining and supporting means B may be molded as a unit and may be formed of suitable molded plastic material which is nontoxic and flexible or pliant, such as polyethylene. It will also be apparent that when the pacifier is assembled, as shown in FIGS. 1 and 3, the strap 1 provides a loop in the handle A which facilitates the gripping of the pacifier assembly by an infant. Such looped handle A also may be employed by the infant as a teething device or teething ring.

Moreover, it will be noted that in the use of the pacifier by an infant, a portion of the usual length of the nipple C is employed in securing the nipple on the boss 3 and, therefore, the free portion of the nipple body 12 is comparatively short, minimizing the possibility of an infant chocking on the nipple body 12. In addition, inasmuch as the nipple retaining and supporting means B is composed of the base part 2 and the clamp part 6 of substantial length and breadth, the nipple retaining and supporting means is not susceptible of easy insertion into the infant's mouth, thereby minimizing the possibility of choking or suffocation of an infant.

I claim:

1. A pacifier device comprising: a support having a base portion and a cylindrical boss projecting from said base portion and terminating in an enlarged head at its outer extremity to provide a transverse shoulder facing said base portion; a resilient hollow nipple disposed over said boss and its enlarged head and projecting axially from said head; a retainer having a key slot therein including a first portion wider than the diameter of said nipple when mounted on said boss, a second portion of a diameter slightly greater than said cylindrical boss, but smaller than said nipple when mounted on said boss to provide

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an arcuate retainer wall tightly fitting said nipple when disposed therearound and securing a portion of said nipple between said retainer and shoulder, said key slot further including a third throat portion interconnecting said first and second portions and having a width less than the diameter of said second portion to resist movement of said boss and nipple laterally from said second portion to said first portion.

2. A pacifier device as defined in claim 1; wherein the width of said throat portion is less than the diameter of said cylindrical boss.

3. A pacifier device as defined in claim 1; said nipple having a bead adjacent to said base portion larger in diameter than said arcuate retainer wall.

4. A pacifier device as defined in claim 1; wherein the width of said throat portion is less than the diameter of said cylindrical boss; said nipple having a bead adjacent to said base portion larger in diameter than said arcuate retainer wall.

5. A pacifier device as defined in claim 1; said support and said retainer being integral with each other and consisting of a pliant material.

6. A pacifier device as defined in claim 1; a strap interconnecting said support and retainer; said support, strap and retainer being integral with each other and consisting of a pliant material.

7. A pacifier device as defined in claim 1; wherein the width of said throat portion is less than the diameter of said cylindrical boss; said nipple having a bead adjacent to said base portion larger in diameter than said arcuate retainer wall; said support and said retainer being integral with each other and consisting of a pliant material.

8. A pacifier device as defined in claim 1; wherein the width of said throat portion is less than the diameter of said cylindrical boss; said nipple having a bead adjacent to said base portion larger in diameter than said arcuate retainer wall; a strap interconnecting said support and retainer; said support, strap and retainer being integral with each other and consisting of a pliant material.

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