March 11, 1952 F. H. SCHELLIN 2,588,991

NURSING BOTTLE

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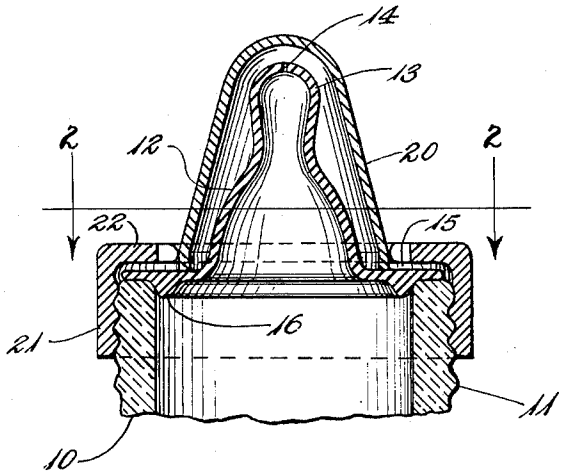


Fig - 1

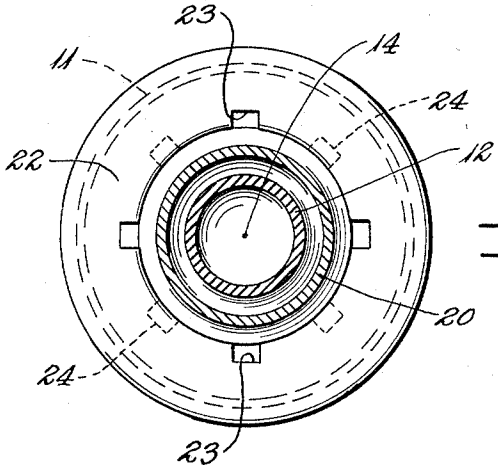


Fig - 2

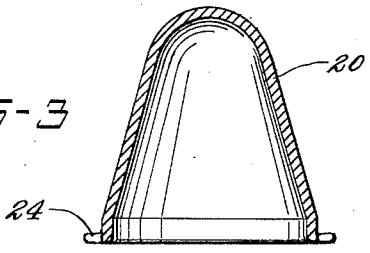


Fig - 3

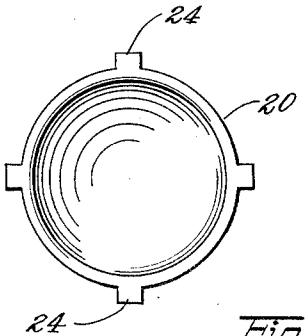


Fig - 4

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NURSING BOTTLE

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2 Claims. (Cl. 215—11)

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This invention relates to nursing bottles and is especially useful in nursing bottles of the wide mouth type although the invention is also of use on other nippled containers.

It is an object of the invention to provide with a wide mouthed bottle and a flanged nipple a protective cover for the nipple with a retaining means for securing either the nipple alone or the nipple and protector together to the bottle.

A further object is to provide an arrangement whereby the resilient material of the nipple is effective to cushion and hold the protector in place while nevertheless quick detachability and attachability of the protector are provided.

Other objects are to provide for removing the protector without disturbing the position of the nipple and seal or requiring handling of the latter.

These and other objects will appear from the following description and the accompanying drawings.

Of the drawings,

Fig. 1 is an axial cross sectional view of the upper part of a nursing bottle constructed in accordance with and embodying the invention, the lower part of the container being broken away.

Fig. 2 is a cross-sectional view thereof, taken on line 2—2 of Fig. 1.

Fig. 3 is an axial sectional view of the protector thereof.

Fig. 4 is an end view of the protector as seen from the base thereof.

Referring to the drawings, the numeral 10 designates a wide mouthed nursing bottle container having wedge attaching means, such as the screw threads 11 formed thereon adjacent its mouth on its outer surface.

The nipple 12 is of soft vulcanized rubber composition or other rubber-like material and has a teat portion 13 having an aperture 14. The lower part of the nipple is provided with an outwardly directed radial flange 15 which is adapted to overlie the mouth of the container. The flange has an annular rib 16 which enters the mouth of the container slightly and serves to center the nipple on the container.

For protecting the nipple from contamination a protector 20 of relatively stiff and preferably transparent molded plastic material is provided. The protector is hollow so as to enclose the nipple.

For retaining the nipple on the container, a retaining ring 21 is provided with wedge attaching means arranged to engage the threads 11 of

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the container and has an inwardly directed radial flange 22 extending over the flange of the nipple so as to clamp it against the mouth of the container.

For retaining the protector, the ring is formed with radial inwardly open slots 23 as equally spaced-apart intervals thereabout in its flange 22, and the protector is provided with corresponding equally spaced radial outwardly extending lugs 24 arranged to pass through the slots 23 when in alignment therewith but to be overlapped by the flange 22 in other positions. The lugs preferably extend radially short of the mouth of the container so that they are not tightly clamped thereover but are resiliently held against the retaining ring flange by the underlying flange of the nipple so as to be frictionally held against undesirable accidental displacement while permitting manual rotation of the protector relative to the nipple and retaining ring when the protector is to be removed. The lugs and slots provide a lock joint between the retaining ring and the protector which may be coupled or uncoupled without disturbing the nipple while the nipple acts as a spring and friction device to prevent accidental displacement.

Variations may be made without departing from the scope of the invention as it is defined by the following claims.

I claim:

1. A nursing bottle comprising a container having an outwardly threaded surface at its mouth, a nipple of resilient material having an outwardly directed radial flange for seating it on the container at the mouth thereof, a retaining ring internally screw-threaded for engaging the threaded surface of the container and an inwardly directed flange overlying the flange of said nipple, a hollow protector for enclosing the nipple, interlocking means on said protector and said retaining ring for detachably holding said protector in place, said interlocking means comprising radially extending tabs on said protector positionable beneath oppositely extending tabs of said flange of the retaining ring and over the resilient material of said nipple the tabs of said retaining ring and the resilient flange of said nipple being arranged to clamp the tabs of said protector when said retaining ring is screwed in place and to release the clamping pressure by slight rotation of said ring without removal thereof to release said protector for independent rotative movement so that the protector can be removed and the retaining ring retightened without manual contact with said nipple.

2. A nursing bottle comprising a container having an outwardly threaded surface at its mouth, a nipple of resilient rubber-like material having an outwardly directed radial flange for seating it on the container at the mouth thereof, said flange having an annular rib for entering the mouth of the container to center the nipple, a retaining ring having a cylindrical internally screw-threaded portion for engaging the threaded surface of the container and an inwardly directed flange for overlying the flange of said nipple, a hollow dome-shaped protector for enclosing the nipple, interlocking means on said protector and said retaining ring for detachably holding said protector in place, said interlocking means comprising radially extending tabs on said protector positionable beneath oppositely extending tabs of said flange of the retaining ring and over the resilient material of the flange of the nipple, the tabs of said retaining ring and the resilient flange of said nipple being arranged to clamp the tabs of said protector when said retaining ring is screwed in place and to release the clamping pressure by slight rotation of said ring without removal thereof to release said protector for independent rotative movement so that the protector can be removed and the protector ring retightened without manual contact with said nipple.

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