

[54] MILK COLLECTOR AND SHIELD FOR NURSING WOMEN

542,863 1955 Italy..... 128/280

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[58] Field of Search..... 128/280, 461

[56] References Cited

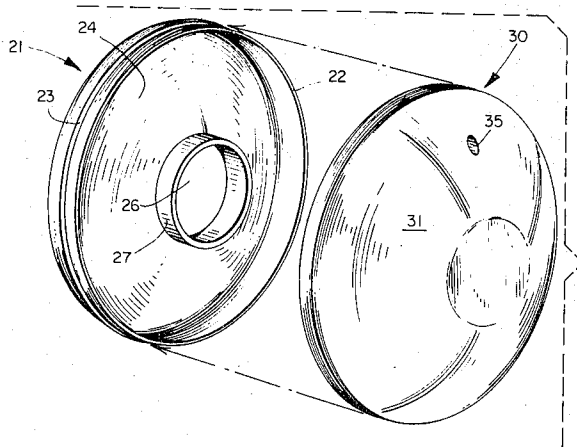
FOREIGN PATENTS OR APPLICATIONS

84,440 10/1954 Norway..... 128/280

[57] ABSTRACT

The embodiment shown is a two-piece device for protecting the breast nipple of a nursing woman and for collecting seeping milk. The breast-contacting component has a central opening for the nipple and a cover is provided to form a hollow interior compartment where the excess milk is stored.

3 Claims, 3 Drawing Figures



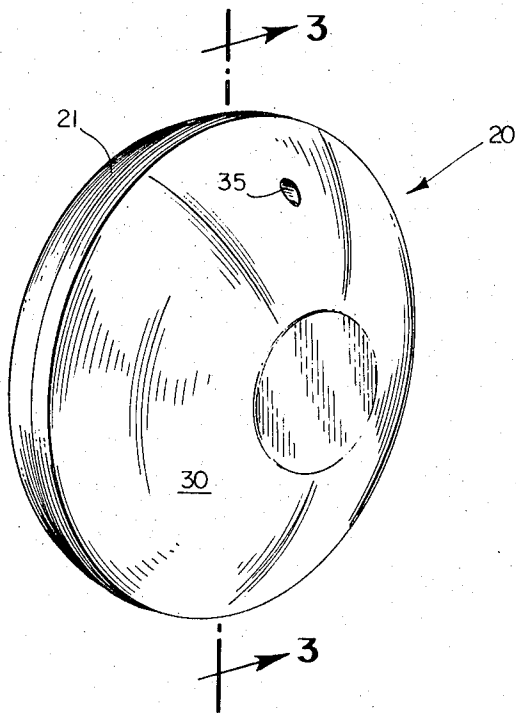


Fig. 1

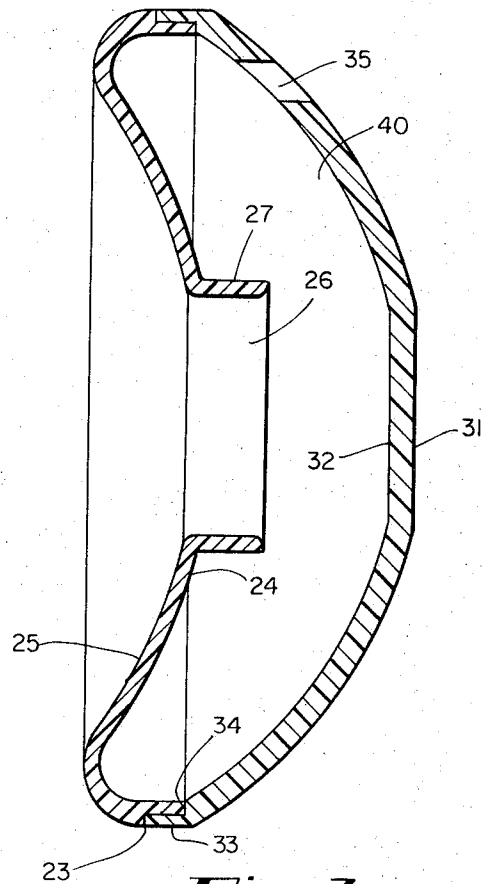


Fig. 3

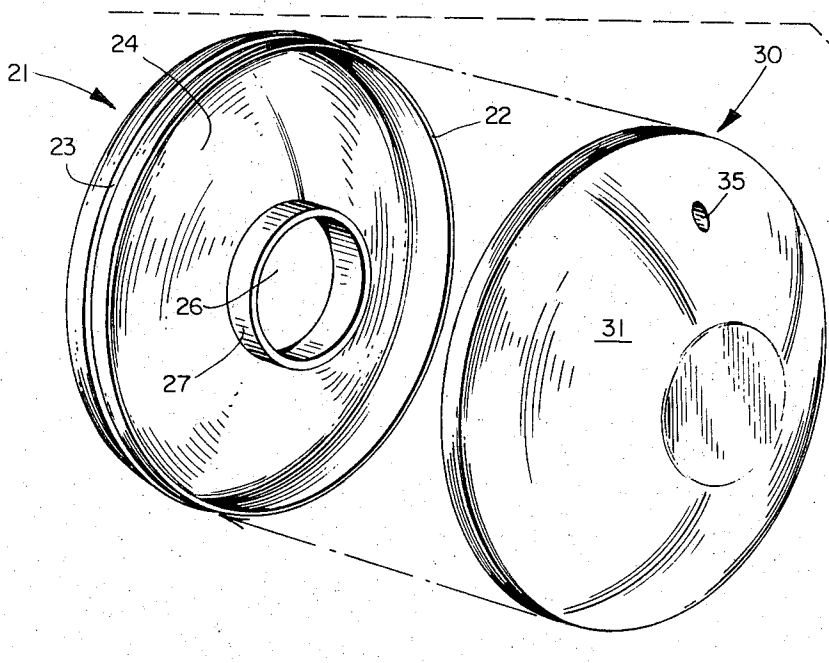


Fig. 2

MILK COLLECTOR AND SHIELD FOR NURSING WOMEN

BRIEF SUMMARY

For many women, the breast feeding of their infants is a desired objective. But this practice has an associated undesirable side effect, namely, the "leaking" of milk by the mother in the periods between nursing. Such milk soils clothing and can be embarrassing. In addition, the breasts and nipples of the nursing mother become sensitive and can easily be painfully irritated if not protected.

These annoying problems, of course, are not new. For example Daniels U.S. Pat. No. 166,686 granted in 1875 states: "It is a well-known fact that many females suffer great annoyance and inconvenience from the escape of milk from their breasts." And in Seidl U.S. Pat. No. 3,532,096 (1970) the inventor observes "it is a known fact that a substantial percentage of mothers who are breast feeding babies are suffering from irritated breast nipples."

These practical problems and related aspects have been the subject of numerous prior art efforts. See, eg, Wilder U.S. Pat. No. 66,978 (1867); Parker U.S. Pat. No. 16,396 (1857); McLaughlin U.S. Pat. No. 77,393 (1868); Pattee U.S. Pat. No. 296,609; Stern U.S. Pat. No. 1,012,473 (1911); Meynier U.S. Pat. No. 2,364,866 (1944); Abramson U.S. Pat. No. 2,495,307 (1950); London U.S. Pat. No. 2,891,544 (1959); and Fitzgerald U.S. Pat. No. 2,896,623 (1959).

None of the aforementioned prior efforts have proved entirely satisfactory, however. For example, the Daniels patent requires the use of tubes leading from breast covers to a flask, a cumbersome assembly. The device, like the others mentioned, utilizes rubber caps or covers which creates a certain sanitation problem, since rubber is difficult to clean. In the case of devices such as that shown in Pattee U.S. Pat. No. 296,609 (1884) involving the use of closed hollow rubber devices, adequate cleanliness would be most difficult to maintain as a practical matter.

Abramson U.S. Pat. No. 2,495,307 (1950) discloses a single piece shield and discloses the use of plastic to improve the ability of the device to be cleaned. This device has an internal open pocket for the collection of seeping milk, but suffers from the drawback, inter alia, that the collected milk will spill out when the pocket is full or when the mother bends over.

London U.S. Pat. No. 2,891,544 (1959) and Fitzgerald U.S. Pat. No. 2,896,623 (1959) both show breast pads designed to absorb excess lacteal fluid. These devices are expensive because they must be discarded after use and preclude collection of the milk for subsequent use.

The purpose of the present invention is to provide an improved breast protector-milk collection device for nursing women.

A feature of the present invention resides in the provision of a device which securely collects and stores lacteal fluid discharges in a sanitary fashion so that the milk can be subsequently used.

Another feature comprises the provision of a cleanable collector-protector device which, in one embodiment, may comprise a pair of mating or inter-locking clear plastic shells designed to be disassembled after use and subjected to complete sterilization and washing.

Another feature comprises the provision of a pair of hollow shells, each having a base designed to fit flush against the female breast, an opening for the nipple thereof connecting with the hollow interior of the shell, whereby milk secreted from the nipple is collected and prevented from soiling the wearer's garments.

Another object of the present invention is the provision of a device which functions both as a milk-collector and breast protector and, in the latter regard, includes a substantially rigid outer cover for protecting the female nipple.

DESCRIPTION OF THE DRAWINGS

Additional objects and advantages of my invention are set forth in the following detailed description of one preferred embodiment, claims and in the drawings, wherein

FIG. 1 is a perspective view of a preferred embodiment of the combination shield-milk collector showing the device as assembled for wearing.

FIG. 2 is a perspective view showing the components of the device disassembled.

FIG. 3 is a sectional view along the lines 3-3 of FIG. 1.

DETAILED DESCRIPTION

The breast protector-milk collection device (hereinafter "collector" for simplicity) can be in the form of the device 20 shown in FIGS. 1-3.

Thus, the collector 20 comprises a base 21 in the form of a generally round member having an upstanding peripheral lip 22 the top portion of which is reduced in thickness to form a peripheral shoulder 23. The base 21 may be considered to have a front 24 and a rear 25. The rear surface 25 is concave to receive the breast and the corresponding front surface 24 is convex, as shown. The center of the base 21 has a hole 26 surrounded by a collar 27 which extends from the front surface 24. The hole 26 and collar 27 receive the nipple of the nursing mother's breast.

The other component of the collector 20 is a cover 30. Cover 30 is roughly semi-hemispherical or cup-shaped and has a convex outer surface 31 and a corresponding concave inner surface 32. The edge of the component 30 is formed into a lip 33 substantially parallel to the central axis thereof and has a reduced terminal portion which forms a peripheral shoulder 34. The shoulder 34 is formed on the interior of the cover 30 and the shoulder 23 is formed on the exterior of base 21. The base 21 and cover 30 are of the same diameter and their lips 22 and 33 are designed to fit together in a sealed relationship, as shown, simply by a pressure fit. Of course, if desired, the edges could be threaded to provide a screw-on arrangement.

When assembled as shown in FIGS. 1 and 3, the rear surface 25 is placed against the breast so that the nipple thereof protrudes through the hole 26. Seeping milk then drops into the hollow cavity 40 of the device and is thereby collected. A small port 35 may be provided at the top of the device for pouring out the collected milk, if desired.

The devices 20 are worn under the bassiere and are maintained in position thereby.

In addition to collecting seeping milk and thereby preventing annoying and embarrassing stains and wet spots on clothing, the device 20 also functions as a shield which protects the tender nipples of the nursing

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mother from irritating contact with the brassiere or other clothing.

The device is designed to be disassembled, as indicated, to facilitate cleaning. This makes it possible to thoroughly clean the inside of the device in contrast to certain prior art devices. Preferably, the devices 20 are made of clear plastic. This feature aids in sanitation, as plastic can be readily sterilized and mechanically washed.

The foregoing description illustrates preferred embodiments of my invention. However, the concepts employed may, based upon such description, be employed in other embodiments without departing from the scope of the invention. Accordingly, the following claims are intended to protect the invention broadly, as well as in the specific forms shown herein.

I claim:

1. A two-piece, cleanable, re-usable milk collector for nursing women comprising:

- a. A substantially round base having
 - i. An upstanding circumferential lip;

4

ii. An interior portion sloping upwardly and inwardly from said lip and terminating to form an opening substantially in the middle of the base;

iii. An upstanding collar surrounding said opening;

b. A substantially round, convex cover having a lower circumferential lip;

c. Said base and cover being connected by friction engagement of the said circumferential lips to provide an interior milk storage compartment whereby the device receives milk through the collar and stores the same in said compartment and whereby the milk can be removed from said compartment and the device disconnected for a thorough, sanitary cleaning after each use.

2. The invention of claim 1 wherein the cover has a port for discharging collected milk.

3. The invention of claim 1 wherein the collector is plastic.

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