

B. S. LACY.
NURSING BOTTLE NIPPLE.
APPLICATION FILED DEC. 6, 1910.

1,031,720.

Patented July 9, 1912.

Fig. 1.

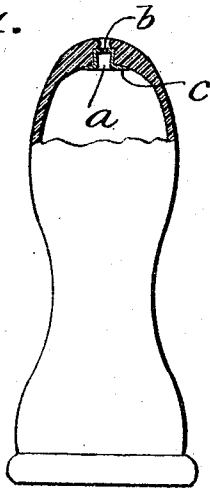


Fig. 2.

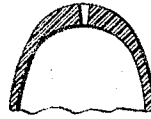


Fig. 3.

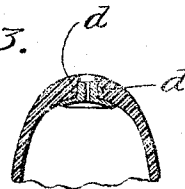
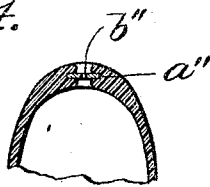


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

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NURSING-BOTTLE NIPPLE.

1,031,720.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BURRITT S. LACY, a citizen of the United States, and a resident of Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Nursing-Bottle Nipples, of which the following is a full and clear specification, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical sectional view of one desirable embodiment of my invention; Fig. 2 a similar view showing the preferred manner of forming the feed opening in the nipple body; and Figs. 3 and 4 views similar to Fig. 1 showing other possible embodiments of the invention.

The nursing nipples now in universal use are necessarily formed of thin, very flexible rubber. This renders it practically impossible to provide a feed opening whose capacity shall remain constant since the mouthing of the nipple by the infant during the act of feeding necessarily distorts the orifice and furthermore, the continued use of the nipple soon permanently enlarges the opening by stretching. As is well known, this is a serious objection for the reason that it is practically impossible to insure a uniform flow of a predetermined volume of food and this uniformity of flow being obviously highly desirable, it is the object of the present invention to so construct the nipple that without materially increasing the cost of its manufacture it will insure a uniform flow of food in any volume which it may be determined because of the kind of food used and the condition and age of the child, is needful for the infant's health.

As it is obvious that this invention may be embodied in many different forms it will be understood that I do not limit myself to the specific embodiments of the invention shown herein. In Fig. 1 I illustrate a desirable construction. In this form the upper or mouth end of a nipple of the usual thin flexible rubber type is thickened, this thickening material being added to the interior of the wall in order to preserve the exterior configuration of the mouth portion, and the discharge orifice in the center of this thickened portion of the wall. This orifice has a greater diameter than usual and into it, from the interior is forced a tube *a* of slightly greater diameter, this difference in diameter being just sufficient to firmly clasp the

tube and hold it against dislodgment while in use. This tube is closed at its upper end (which terminates below the upper end of the nipple) except for a central opening *b* which is the feed-opening proper. The lower end of the tube is provided with an annular flange *c*, which abuts against the inner face of the wall of the thickened part of the nipple, this face being flattened around the hole where this flange abuts. This tube is formed of a suitable non-collapsible or non-distortable substance such as hard-rubber, aluminum, etc., so that it forms a sort of nozzle for the nipple whose discharging area remains constant until the nipple is worn out and which is completely incased by the soft rubber of the nipple-body and is thus prevented from injuring or discommoding the infant.

To further insure the nozzle from being dislodged, the opening in the nipple body may be tapered outwardly (*i. e.* upwardly) and the body of the tube may taper slightly downwardly, toward its base. It is perhaps desirable to make the nozzle removable, so that it may be replaced by another nozzle having a larger or smaller feed opening. It will be observed also that it is possible to make the feed opening larger from time to time by reaming it out with a suitable sharp implement, without removing it from the nipple. As shown in Fig. 3, the exterior of the tube may be provided with little projections *d* to further insure it from being dislodged, and as further shown in this view, the top wall of the tube may be done away with and the tube made much smaller in its internal diameter so that the passage through the tube will constitute the feed opening.

As shown in Fig. 4, the nozzle plate may consist of a small disk *a''* provided with a central feed opening *b''* and having its annular marginal portion embedded, preferably by molding, in the wall of the orifice in the nipple; but in this modification it will of course not be feasible to make the nozzle removable and interchangeable.

It will be understood that by the terms non-collapsible and non-distortable material I means any material which in the ordinary use of the nipple will be sufficiently rigid to prevent the feed opening proper being altered in cross sectional area during the act of feeding, and it will be understood that I

have a wide choice of materials which will serve this purpose and at the same time avoid contamination of the food.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is—

1. A nursing nipple of the flexible bulb type having a discharge opening in its nose portion and having fastened to the wall of said nose portion a non-collapsible nozzle 10 having a feed opening smaller than and coincident with the discharge opening in the nipple nose, the body portion of said nozzle extending into said discharge opening from the interior side and being held in place by 15 the elasticity of the nipple body.

2. A nursing nipple of the flexible bulb type having a discharge opening in its nose portion and having fastened to the wall of 20 said nose portion a non-collapsible nozzle having a feed opening smaller than and coincident with the discharge opening in the nipple nose, the body portion of said nozzle

lying in said discharge opening and being held in place by the elasticity of the nipple 25 body.

3. A nursing nipple of the flexible bulb type having a discharge opening in its nose portion and having fastened to the wall of said nose portion a non-collapsible nozzle 30 having a feed opening smaller than and coincident with the discharge opening in the nipple nose, said nozzle having a flange lying against the inner face of the nose wall and having a tubular body portion extend- 35 ing into the discharge opening, said tubular body being larger than the normal diameter of the discharge opening so as to be clasped by the resiliency of the nipple body.

In testimony whereof I hereunto affix my 40 signature in the presence of two witnesses this 3 day of December 1910.

BURRITT S. LACY.

Witnesses:

CHAS. M. OLMSTED,
JAMES J. MEAGHER.