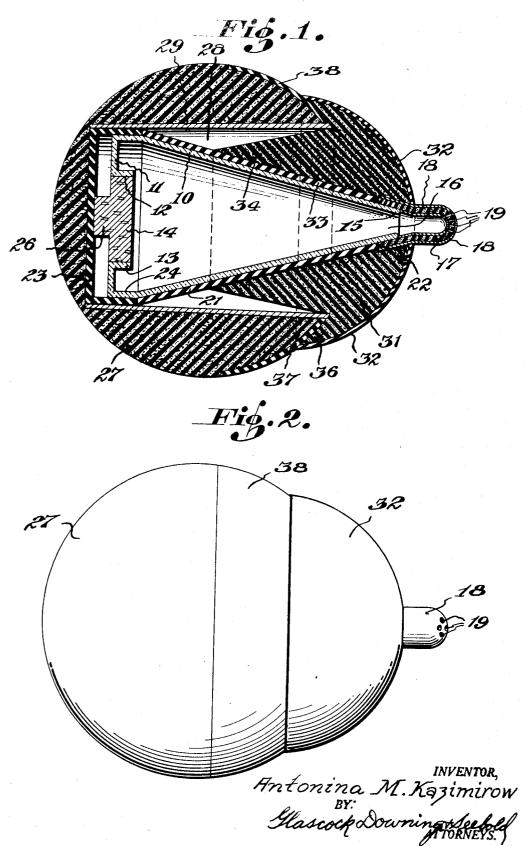
NURSING DEVICE

Filed March 3, 1938



10

UNITED STATES PATENT OFFICE

2,150,835

NURSING DEVICE

Antonina M. Kazimirow, Shanghai, China Application March 3, 1938, Serial No. 193,784

3 Claims. (Cl. 215-11)

The present invention relates to nursing devices and more particularly pertains to a baby feeder which is so designed that the shape, color and arrangement of feeder will be such that an infant in using the device will be provided with all of the mental and physical benefits derived from feeding from the mother's breast.

One of the positive habits so essential to life as to become an instinct transmitted hereditarily, 10 is the act of a baby sucking at the mother's breast. This all necessary function exercises the jaws, lips and masticatory muscles creating normal foundations of the entire dental structure, as well as the form of the oral cavity. Another habit of a similar nature is that of chewing which should be developed at the time when the infant is still sucking and the deciduous teeth start with their inner formation and gradual eruption.

The act of sucking is not only a manner in consequence of which milk penetrates into the stomach of the child, but when feeding as nature intended from the breast the act is also accompanied with a state of psychological satisfaction, which obviously acts upon the appetite and digestion and is connected with a series of very important functions. These beneficial psychological developments promoting normal anatomy relate to the proper formation of the dental arches, development of the jaws, stimulation of the process of deciduous teeth formation and the degree of their morphological perfection to provide conditions influencing the nature of the permanent denture.

Accordingly it is an object of the present invention to provide a nursing device wherein the elements thereof are so constructed and arranged as permit the child in the use thereof to derive the benefits therefrom as hereinabove referred to.

40 Another object of the invention resides in the provision of a nursing device which will evoke manifestation of the sucking instinct and contribute to the entire process of nutrition under conditions simulating normal so as to lead to normal movements of the jaws and normal dental formations.

A still further object of the invention is to provide a feeding device for an infant wherein the pleasantness of the artificial feeding proc50 esses is made possible by a device which also serves to prevent deformation of the dental arch.

Another object of the invention is to provide a nursing device which will allow the sucking process to be longer than that of known devices thus providing more exercise to the psychological ele-

ments in formation and thereby contribute to the maximum normal development thereof.

Other and further features and objects of the invention will be more apparent to those skilled in the art and those in practice of infant development upon a consideration of the accompanying drawing and the following description wherein an exemplary embodiment of the invention is disclosed.

In the drawing:

Figure 1 is a central sectional view of the assembled nursing device.

Figure 2 is an elevational view of the device shown in Fig. 1.

Referring to the drawing there is shown at 10 a conical shaped milk container which may be formed of some non-porous material such as glass or porcelain. The container or bottle 10 is provided with a relatively flat base 11 having therein a relatively large opening 12 for admitting milk. The base wall may be turned inwardly adjacent the opening 12 to provide an annular flange 13 and thus present a larger surface to which the periphery of a stopper or plug 14 may frictionally adhere. The stopper 14 may be 25 formed of any yieldable material such as cork or rubber.

The apex of the conical shaped container is preferably terminated as indicated at 15 to provide a frustoconical shaped milk bottle having 30 an opening 16 from which the fluid contained within the chamber 10 may discharge into a nipple 17. The nipple is preferably formed of relatively soft spongy rubber lined interiorly and covered exteriorly with layers 18 of silky rubber. 35 The tip of the nipple has a series of small openings 19 and preferably about ten pores passing entirely through the composite rubber structure so that milk from the container 10 will be released therefrom only by sucking. The 40 lower portion of the nipple flares outwardly or is shaped to fit over the apex portion of the milk bottle as shown in Figure 1. The container 10 is removable from other parts of the nursing device as hereinafter described for purposes of 45 cleansing and filling the bottle and when the receptacle 10 is so removed the nipple may be detached, cleaned and replaced by removing the outwardly flaring skirt from the portion of the bottle adjacent the opening 16.

The outer surface of the container 10 is provided with a removable conical shaped cover 21 formed of relatively hard rubber and so dimensioned as to fit snugly over the bottle. The cover 21 is preferably of a thickness substantially equal 55

to that of the nipple 17 and the cover is terminated short of the bottle end 14 so as to abut the end 22 of the nipple and thus permit the skirt of the nipple to engage the outer surface of the bottle 10.

The base of the bottle is likewise provided with a cup-shaped removable cover 23 formed of relative hard rubber. The cover 23 is designed to embrace the cylindrical portion 24 of the bottle and the base thereof engages the head 26 of the stopper 14 to thus more securely retain the same within the opening 12.

In carrying out the invention the entire bottle is covered with a ball-like padding of soft rubber to provide an overall shape and particularly the nipple end of the device with a character similar to that of a natural mammary gland. For this purpose a spherical shaped base 27 formed of sponge rubber is provided. The base 20 member 27 has a cylindrical shaped opening 28 for receiving the lower end of the bottle 10 and the cup-shaped cover 23. A metal bushing 29 formed of some light metal such as aluminum may be arranged within the opening 28 which provides some rigidity to the soft spongy rubber. Thus the thin metal bushing provides means for maintaining the shape of the base member.

The nipple end of the device is also provided with a soft arcuate shaped covering member 31.

The body portion of the member 31 is formed of soft spongy rubber so as to correspond to the yieldable nature of a mother's breast and it is this portion of the device which is of fundamental importance in providing means for fulfilling the objects of the invention. The exterior contour of the member 31 is therefore shaped and arranged with respect to the nipple 17 so as to be similar to a mammary gland in appearance, yieldability and shape. A thin layer of silky rubber 40 32 is therefore arranged over the outer surface of the member 31, and flesh colored.

The member 31 is provided with an outwardly flaring central opening 33 so as to fit over the conical shaped cover 21. The central portion of the member 31 is terminated in a skirt portion 34 which extends into the cylindrical opening 28 when the separate parts of the device are entirely assembled as shown in Figure 1. The member 31 adjacent the external surface is provided with an inverted V-shaped groove when viewed in section so that the annular downwardly extending portion 36 may overlap the tapered section 37 of the base member 27.

In order that the similarity to human flesh may be represented over the necessary portion of the generally ball-shaped exterior surface the silky rubber layer may be continued on the base member as indicated at 38.

Assuming that the container 10 is filled with a supply of milk the infant or child may derive all of the benefits obtained from feeding from a mother's breast when using the nursing devices as hereinabove described. The beneficial effect of the nursing device will result in an improve-

ment in health of the child by increasing the exercise of the oral cavity with all of the beneficial consequences in infant development so as to avoid dental deformations and disorders. Moreover, the manipulation of the mouth will be longer and prolonged which will more perfectly resemble the feeding intended by nature and thus faulty habit tendencies will be eliminated.

With the parts of the device assembled as shown in Figures 1 and 2, the bottle 10 may be removed, to cleaned and refilled by first removing the member 31. Thereafter the hollow spherical base 27 may be moved away permitting the cup-shaped member 23 to be removed when the stopper 14 may be withdrawn. After the member 31 is removed the nipple 17 is then free to be pulled off the narrow end of the bottle. The conical cover 21 may also be removed so that the container 10 can be thoroughly sterilized.

Although a preferred embodiment of the invention has been shown and described, it is apparent that modifications and changes may be made by those skilled in the art. Such modifications may be made without departing from the spirit and scope of the invention as set forth in the appended claims.

I claim:

1. In a nursing device, a conical shaped bottle having an opening at the apex thereof, a sponge rubber member having a conical shaped central 30 opening and a body portion covering the tapered end of the bottle, said member having a spherical shaped exterior surface, a layer of smooth silky rubber covering the exterior surface of said member, and a nipple attached to the open end of the bottle and extending through the central opening of said member so as to project beyond the spherical surface.

2. In a nursing device, a bottle having a tapered neck portion, a yieldable member arranged around and extending over the neck portion of the bottle, and said member having a body portion formed with an arcuate outer surface curved away from the bottle opening to provide a yieldable mass surrounding the bottle neck, a nipple attached to the neck portion of the bottle, said nipple being formed of sponge rubber, said nipple extending beyond the curved outer surface of said yieldable member, and said nipple having at least the outer surface thereof covered with a layer of silky rubber.

3. In a nursing device, a conical shaped bottle having an opening at the apex thereof, a sponge rubber member having a tapered central opening and a body portion covering the apex end of the bottle to provide a yieldable mass therearound, said member having an arcuate outer surface curved away from the bottle opening, a layer of flesh colored silky rubber covering the outer surface of said member, and a nipple attached to the apex end of the bottle extending through the central opening of said member and projecting slightly beyond the arcuate surface thereof.

ANTONINA M. KAZIMIROW.