

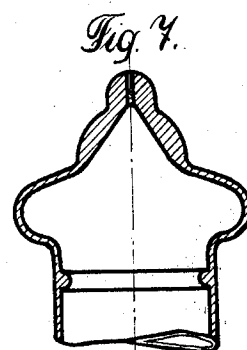
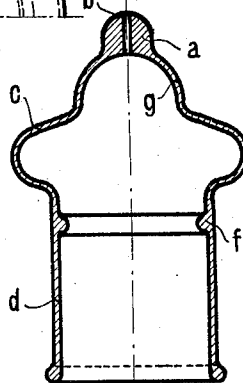
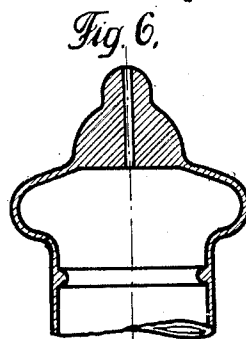
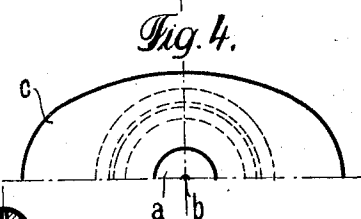
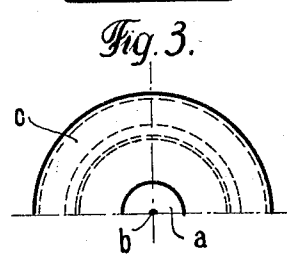
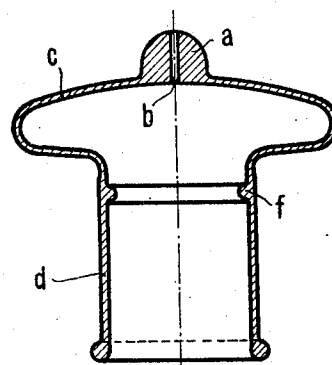
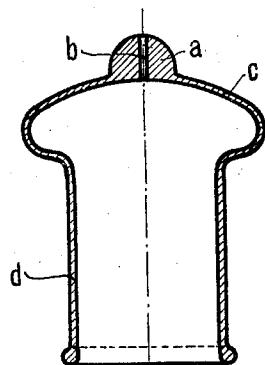
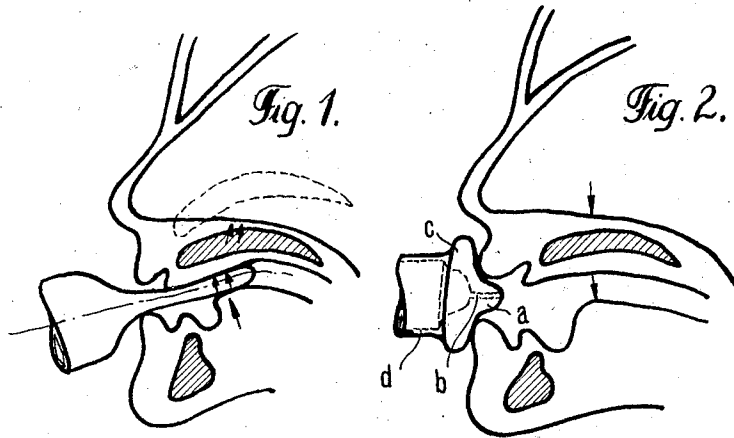
June 22, 1926.

1,590,152

S. DREYFUS

NURSING NIPPLE

Filed July 13, 1923



By *Inventor*
Fig. 5. marks *S. Dreyfus*
Attys.

UNITED STATES PATENT OFFICE.

SYLVAIN DREYFUS, OF LAUSANNE, SWITZERLAND.

NURSING NIPPLE.

Application filed July 13, 1923, Serial No. 651,382, and in Switzerland July 17, 1922.

This invention relates to teats for feeding bottles and the like.

In the case of a naturally fed infant it has been established that feeding cannot take place unless a pressure is produced against the nipple of the bosom. When sucking the child brings the lips in contact with the bosom, thereby emptying the cavity of the mouth by bringing the tongue into a rear position and by lowering the lower jaws. These movements have a favourable influence on the respective organs and conduce to the rational development thereof. By the repeated movements of the lower jaws the muscles, in due course, become strengthened.

Figure 1 of the annexed drawing shows a diagrammatic section of a teat of known form in position in the child's mouth, the extraction of milk contained in the nipple being obtained by the act of compressing the nipple between the tongue and the palate. The muscles of the lower jaw do not work, and the lips are inactive and the base of the nostrils (inwardly above the palate) yields only a little under the pressure of the tongue, but does not develop sufficiently to allow the air to pass without difficulty, thus assisting the deformation of the tonsils, especially with children susceptible to this danger. Often the child, when feeding keeps the mouth open, and later on it becomes too lazy to chew, thus afterwards eating without appreciable chewing.

The object of the present invention is to provide a teat the construction of which has been specially studied to overcome the disadvantages which the usual type of teat in use involves and to allow feeding to proceed in the same manner as if the child were fed naturally.

It has previously been suggested to form teats of a shape similar to that of the maternal bosom, and comprising a nipple projecting from a base of larger diameter. It has also been proposed to stretch the base over the neck of the feeding bottle to give the same a certain resistance to pressure.

In one construction a bulb is provided of larger diameter than the neck of the bottle sloping off into a protuberance of much less diameter than the neck and about the size of the nipple of the human breast.

In a further construction the nipple and base have been formed of a hollow air-tight construction resembling the human breast,

having a central orifice to allow of the passage of milk, the presence of the sealed air jacket preventing the collapse of the teat and the broad base causing the mouth of the child to be expanded during sucking.

According to the present invention, a teat formed of elastic material and having a nipple projecting from a base of larger diameter, the nipple is of substantially solid construction with a narrow conducting channel and is of a length to allow of seizure by the child's lips only in order that the lips of the child must exercise an axial pressure on the base to force liquid through the channel in the nipple.

Figure 2 of the enclosed drawing shows, for example, one form of carrying out the object of this invention, and represents a teat and the position of the various organs of the child's mouth used therewith when sucking.

Figures 3, 4, 5, 6 and 7 are sectional views.

This teat is constructed of elastic material, aseptic, stable and easy to clean, for example of vulcanized india-rubber or of gutta-percha.

It has a nipple *a*, which is solid and cannot be seized with the tongue. The nipple is also pierced by a passage *b* through which the liquid is sucked, this canal being the end part of a cap *c*, which is also solid and has the form of the maternal bosom. The cap *c* is longitudinally extended by a tubular casing *d* which serves for affixing the teat to the neck of a bottle containing the liquid.

When feeding with this kind of teat the child exercises the same reflex movements as would be exercised on the maternal bosom, the lips are brought to bear against the cap, an empty space in the cavity of the mouth is formed so that the development of the organs concerned in the mouth, nose and larynx are exercised in the manner hereinbefore mentioned.

It will be much easier to wean a child from the use of the described teat than to wean it from those hitherto used. The change from the teat to the bosom and vice versa will cause less difficulties. The danger of the deformation of the palate is avoided which, with the usual form of teat, was caused through the pressure of the tongue.

It has been observed that in some cases it is advantageous to give the parts which come into contact with the child's mouth,

specially suitable forms which should augment still more the resemblance of the teat with the maternal bosom.

It has previously been suggested to form teats comprising hollow bases having a hollow nipple at one end, the walls of the latter having been thickened to offer resistance to total collapse or having double walls separated by an air space.

According to the present invention the teat comprises the combination of a hollow base adapted to become filled with milk and a solid nipple having an axial channel. Further, by this invention a secondary nipple is arranged between the base and the first mentioned nipple.

The hollow cap as shown in Figure 2 has an oval-shaped outline if looked at in the direction of the axis as shown in Fig. 5. A rib *f* is provided in order to prevent the neck of the bottle from penetrating too deeply into the cap, which when filled with the liquid also yields to the pressure of the lips like a diaphragm as is the case with the maternal bosom. The milk is obtained from the nipple by means of the pressure thereon of the child's lips in the direction of the axis of the teat. This elastic pressure is analogous to the one created during breast feeding, and tends to produce a rational development of the gingival arcade.

With the teat as shown in Figure 3 a secondary hollow nipple *g* is inserted between the cap and the solid nipple, which allows a better hold for the child's lips.

This construction can be varied according to the particular case and especially in

view of the desired effect by making this secondary nipple either solid or with a cone-shaped hollowing out. In the former case the material of the secondary nipple can be, for instance, made of a finer quality of vulcanized india-rubber than the end nipple, rendering the nipple more pliable.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be carried out, I declare that what I claim is:—

1. In a teat for nursing bottles the combination of a hemispherical solid rubber nipple having a narrow axial channel, a cylindrical part adapted to be stretched over the mouth of a bottle and an enlarged thin walled intermediate portion of thin lenticular form adapted, upon application of pressure, to be collapsed against the end of a bottle mouth.

2. In a teat for nursing bottles the combination of a hemispherical solid rubber nipple having a narrow axial channel, a hemispherical resilient part connected with the nipple, a cylindrical part adapted to be stretched over the mouth of a bottle and an enlarged thin walled intermediate portion of lenticular form adapted, upon application of pressure, to be collapsed against the end of a bottle mouth.

3. In a teat for nursing bottles the combination of a hemispherical solid nipple, and a flexible enlarged portion of such size as to overlie and be collapsed against the mouth of a bottle.

In testimony whereof I affix my signature.
SYLVAIN DREYFUS.