Oct. 15, 1929. J. W. ERRINGER 1,731,302

TEETHING DEVICE

Filed April 22, 1929

Fig. 1.

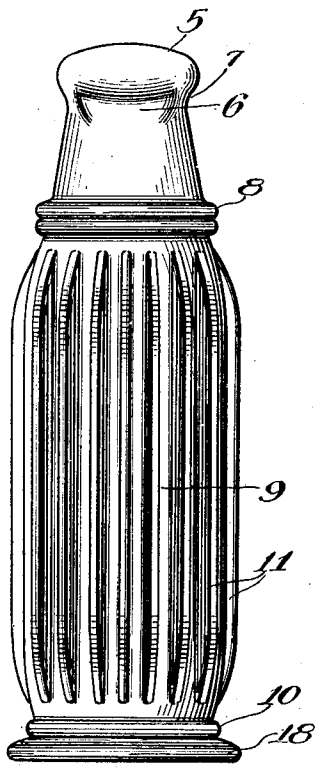


Fig. 2.

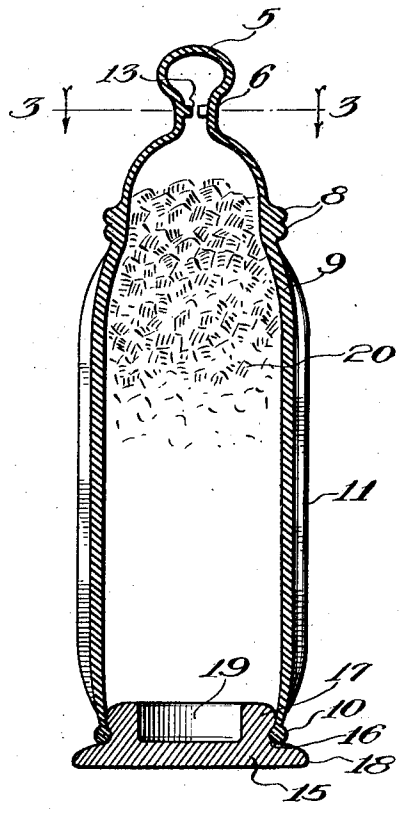


Fig. 3.

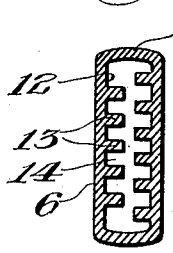
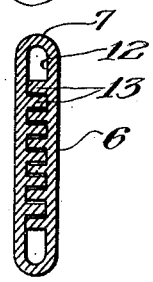


Fig. 4.



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UNITED STATES PATENT OFFICE

JAMES W. ERRINGER, OF CHICAGO, ILLINOIS

TEETHING DEVICE

Application filed April 22, 1929. Serial No. 356,923.

This invention relates to devices for use in treating inflammation of the mouth and throat where dry cold or other applications are indicated, and is particularly adapted for use as a teething device for infants.

The main object of the invention is to produce a teething device which shall not only be yielding, but cooling to the gums, so as to reduce inflammation and suffering without the cooling medium being absorbed by the stomach of the infant.

A further object is to so construct the device that it may be held by the infant without chilling the hands.

A further object is to so construct the device that the part which will be held in the mouth and pressed between the gums will not collapse and will present yielding but desirably firm, pressure-resisting surfaces, to aid the teething operation.

Another feature of the invention is the means for closing the opening through which the device may be filled with ice or other treatment medium.

When used to allay inflammation of the gums due to teething, the nipple shown is particularly desirable for the reason that it is designed to provide a maximum of contact surface for the inflamed parts to engage, whereby the effectiveness of the treatment is increased.

While I have shown my invention as embodied in a device more particularly adapted for use in allaying inflammation of infants' gums due to teething and for assisting the process of dentition without injury to the parts, it is to be understood that the invention may be used in the treatment of stomatitis, tonsilitis and post operations in the oral cavity and throat.

In the drawings:—

Figure 1 is an elevation of a teething device embodying my invention.

Figure 2 is a vertical section.

Figure 3 is a horizontal section taken on the line 3—3 of Figure 2.

Figure 4 is a view similar to Figure 3, showing the cross section of the neck of the nipple when the gum contact surfaces have been pressed toward each other.

In that embodiment of my invention shown in the drawings, the teething device comprises an imperforate nipple and a container body, integral with each other, and preferably made of rubber. The closed top or head of the nipple is indicated at 5 and it is wider in one dimension than in the other. The head merges into a slightly reduced neck portion having relatively wide contact surfaces 6 connected together by relatively narrow side walls 7. Below the walls 6 and 7 of the neck, the nipple gradually becomes substantially circular in cross section and widens outwardly until it merges into the container body. Preferably the surfaces 6 are curved to conform to the shape of the gums when the nipple is held in the mouth.

If desired, one or more ribs 8 may be formed at the top of the container body 9, which is substantially cylindrical and terminates in a bead 10 which surrounds the lower open end.

Externally of the body 9, and extending longitudinally and substantially from the top to the bottom of the body, between the ribs 8 and bead 10, are a plurality of radially directed fins 11. The function of the fins is to prevent direct contact of the infant's hands with the surface of the container 9, and to make it comfortable for the infant to hold the device when filled with ice.

The walls 6 of the neck of the nipple are provided on their inner surfaces 12 with a plurality of inwardly directed teeth 13. The teeth on each side of the surfaces 12 are spaced apart from each other a distance substantially equal to the width of a tooth, and the teeth on one surface 12 are positioned so as to be opposite the spaces 14 between the teeth on the opposite surfaces 12. When the surfaces 6 are pressed between the gums of the infant using the device, the teeth 13 assume the position shown in Figure 4 and the nipple will be prevented from collapsing, and at the same time, firm, though yielding, pressure-resisting surfaces are presented for the gums of the infant to contact with, whereby teething is facilitated.

To close the open lower end of the container, a closure button 15 is provided. It

comprises a disk having a circumferential groove 16 in its edge, about midway between its upper and lower surfaces, forming an annular shoulder 17 and a flange 18. The disk may be solid or may be recessed as indicated at 19. The bead 10 of the container 9 is adapted to fit snugly in the groove 16, the flange 18 preventing the closure member from being pushed into the container and the shoulder 17 functioning to prevent the closure member from being easily pulled away from the container. By this arrangement a moisture-proof fit is secured between the closure button and container.

The treatment medium, in this instance ice, is indicated at 20.

Changes may be made in details of construction without departing from the scope of my invention.

I claim as my invention :—

1. A teething device comprising an imperforate nipple, a cooling medium container in communication with the interior of said nipple, having an opening in the container for the reception of cooling medium, and means for closing said opening, the head of the nipple being narrower in one dimension than in the other and having two oppositely positioned, relatively wide and flat gum-contact surfaces connected together by narrower side walls.

2. A teething device comprising an imperforate nipple, a cooling medium container in communication with the interior of said nipple, having an opening in the container for the reception of cooling medium, and means for closing said opening, the head of the nipple being narrower in one dimension than in the other and having two oppositely positioned, relatively wide and flat gum-contact surfaces connected together by narrower side walls, said contact walls having a plurality of inwardly directed teeth on their inner surfaces.

3. A teething device comprising an imperforate nipple, a cooling medium container in communication with the interior of said nipple, having an opening in the container for the reception of cooling medium, and means for closing said opening, said nipple having a plurality of horizontally disposed, inwardly directed, spaced apart teeth on the inner surfaces of opposite walls, the teeth on one wall being opposite the spaces between the teeth on the opposite wall.

4. A teething device comprising an imperforate nipple, a cooling medium container in communication with the interior of said nipple, having an opening in the container for the reception of cooling medium, and means for closing said opening, the container having a plurality of radially directed, longitudinally extending fins on its outer surface.

5. A teething device comprising an imperforate nipple, a cooling medium container in communication with the interior of said nipple, having an opening in the container for the reception of cooling medium, and means for closing said opening, the container having a plurality of radially directed, longitudinally extending fins on its outer surface, the head of the nipple being narrower in one dimension than in the other, and having two oppositely positioned, relatively wide and flat gum-contact walls connected together by narrower side walls, and a plurality of inwardly-directed teeth on the inner surfaces of said contact walls.

6. A teething device comprising an imperforate nipple, a cooling medium container in communication with the interior of said nipple, having an opening in the container for the reception of cooling medium, and means for closing said opening, the container having a plurality of radially directed, longitudinally extending fins on its outer surface, said nipple having a plurality of horizontally disposed, inwardly directed, spaced apart teeth on the inner surfaces of opposite walls, the teeth on one wall being opposite the spaces between the teeth on the opposite wall.

7. A teething device comprising an imperforate nipple and a cooling medium container in communication with the interior of said nipple, the container having an opening at its end opposite the nipple, a bead surrounding said opening, and means for closing said opening comprising a disk having a circumferential groove in its edge in which said bead is seated.

8. A teething device comprising an imperforate nipple and a cooling medium container integral with the nipple and made of yielding material, such as rubber, the container having an opening for the reception of the cooling medium, and means for closing said opening, said closing means comprising a disk of non-yielding material having a groove in its edge in which the bottom of the container may be seated.

9. A teething device comprising an imperforate nipple and a cooling medium container integral with the nipple and made of yielding material, such as rubber, the container having an opening for the reception of the cooling medium, radially directed, longitudinally extending fins, formed integrally with the body member on its outer surface, and means for closing said opening, said closing means comprising a disk of non-yielding material having a groove in its edge in which the bottom of the container may be seated.

In testimony, that I, claim the foregoing as my invention, I affix my signature, this 18th day of April, 1929.

JAMES W. ERRINGER.