

T. W. BROPHY.
ARTIFICIAL PALATE.
APPLICATION FILED FEB. 23, 1911.

1,012,980.

Patented Dec. 26, 1911.

Fig. 1.

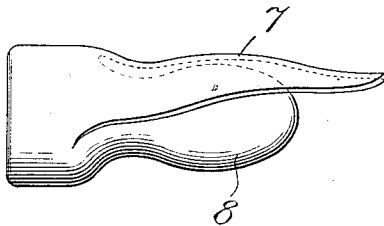


Fig. 2.

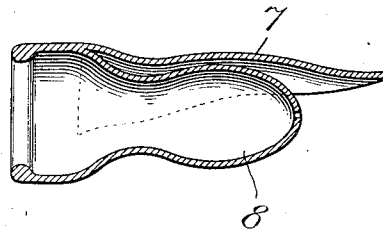


Fig. 3.

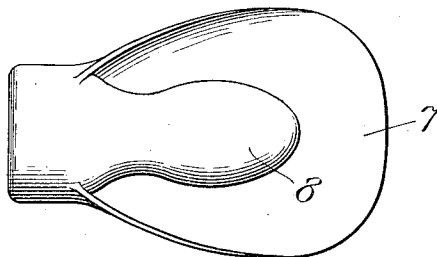


Fig. 4.

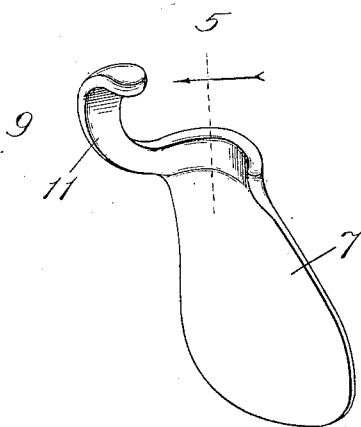
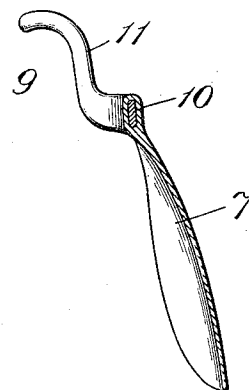


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

TRUMAN W. BROPHY, OF CHICAGO, ILLINOIS.

ARTIFICIAL PALATE.

1,012,980.

Specification of Letters Patent.

Patented Dec. 26, 1911.

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To all whom it may concern:

Be it known that I, TRUMAN W. BROPHY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Artificial Palates, of which the following is a specification.

The object of my invention is to provide a readily insertible and removable artificial palate for temporary use on infants with congenital cleft palate, to enable them to swallow their food in nursing. It is the fact that a large proportion of infants—about fifty per cent. of them—with the congenital deformity referred to, die of starvation before they can be subjected to the now well-known surgical operation for curing it, because the opening in the palate causes the act of nursing to force the nourishment out through the infant's nose. To counteract this tendency I provide an artificial palate of soft rubber, to render it properly smooth and flexible, and of suitable shape to fit the roof of the infant-mouth and close the opening therein. For a naturally-nursed infant the artificial palate may be equipped with a stiff handle on one end of suitable shape to permit the hand of the nurse to thereby hold the palate in the mouth of the infant while nursing; and for a bottle-nursing infant the artificial palate has a nipple combined with it as a holder for application to a bottle-neck.

In the accompanying drawing, Figure 1 shows my improved article by a view in side elevation, as combined nipple and palate. Fig. 2 is a view of the same in longitudinal sectional elevation; Fig. 3 is a plan view of the same; Fig. 4 is a perspective view of the palate with a handle on its outer end as the means for holding it in place, and Fig. 5 is a section on line 5, Fig. 4.

The palate 7 formed of sheet-rubber, vulcanized to the proper degree of softness to render it suitably soft and flexible, and in the preferred shape illustrated, of expanding toward its inner end, or approximating that shape, to adapt it to conform by suction to the contour of the interior of an infant's mouth and cover a cleft in the palate thereof. On the outer, narrower end of the palate 7 (Figs. 1, 2 and 3), is secured, as by being molded integrally with it or cemented there-

to, a nipple 8, which may be of the ordinary soft rubber, or any other suitable kind, extending along the face of the palate and adapted to be applied to the neck of a nursing bottle as a means for holding the palate in place to perform its function. In introducing the nipple, thus provided, into the infant's deformed mouth, the palate 7 is also introduced into position therein as an artificial substitute, enabling the infant to swallow the liquid nursed through the nipple from the bottle.

Where the palate 7 is not to be used for bottle-nursing, it is unprovided with the nipple-form of holder, and instead a suitable handle 9 is provided to project from the narrower outer end of the palate 7. This handle, which should be adequately stiff, may consist, as represented, of a strip of metal incased in a rubber sheath 11 fastened to the rubber of the palate, the handle being bent to a shape that will adapt it to be conveniently engaged by a finger or thumb of the hand of the nurse while the infant is in the nursing position, for meantime holding the palate in place.

While the material for my article of artificial palate must be waterproof and flexible, and soft-rubber is the material best suited for my purpose, so far as I am aware, it is my intention to include within my invention, as the equivalent of the soft-rubber, any material having these essential properties.

What I claim as new and desire to secure by Letters Patent is—

1. As a new article of manufacture, a flexible artificial palate composed of relatively thin soft rubber adapted to cover the roof of the mouth, and provided on its outer end with a relatively harder front portion adapted to extend beyond the mouth, whereby the device is held in position.

2. As a new article of manufacture, a flexible artificial palate having a rear wider portion composed of relatively thin soft rubber adapted to cover the roof of the mouth, and provided at its forward narrower end with a relatively harder portion adapted to extend beyond the mouth, whereby the device is held in position.

3. As a new article of manufacture, a flexible artificial palate, composed of soft-rubber

and provided with a nipple united to its outer end to extend toward the outer end of the palate and adapted for application to a nursing-bottle.

- 5 4. As a new article of manufacture, a flexible artificial palate, widening toward one end, and composed of soft rubber and pro-

vided with a nipple united to its opposite end to extend along the palate-face and adapted for application to a nursing-bottle.

TRUMAN W. BROPHY.

In presence of—

R. A. SCHAEFER,

JOHN WILSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
