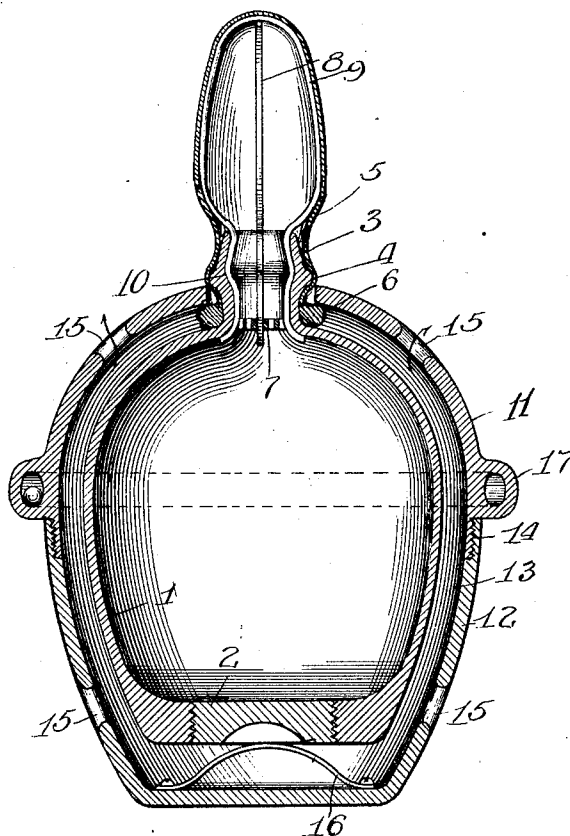


J. S. BRIDGES.
TEETHING DEVICE.
APPLICATION FILED MAY 7, 1908.

1,002,364.

Patented Sept. 5, 1911.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSIAH S. BRIDGES, OF CHICAGO, ILLINOIS.

TEETHING DEVICE.

1,002,364.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSIAH S. BRIDGES, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Teething Devices, of which the following is a full, clear, and exact specification.

This invention relates to improvements in teething devices for infants to bite upon in cutting their teeth, and which heretofore have been confined mainly to various forms of solid devices both hard and yielding to the pressure of the mouth of the infant, the former of which is more or less injurious to the gums, and the latter while not so injurious affords no relief to the feverish condition of the gums, which feverish condition, however, has to some extent been relieved by permitting the infant to bite upon a cloth containing ice, but this by reason of the hardness of the ice is not only injurious but at best is not sanitary, and for these reasons desirable to be avoided.

The prime object of my invention is a teething device for infants which shall not only be yielding but cooling to the gums to an extent reducing the pain and suffering of the infant without any of the cooling medium being absorbed by the stomach and may be handled by the infant without chilling its hands.

A further object of my invention is to have the teething device so constructed that it may be perfectly cleansed within as well as without and conveniently charged with ice or ice water, as may be, and particularly with the former.

Another object of my invention is to have the ice receptacle entirely isolated from contact with the infant's hands by means perfectly sanitary and which is a good non-conductor of cold.

A still further object of my invention is to provide an infant teething device with a yielding and constantly cooling biting surface, and which also may serve as a toy amusing and diverting the mind of the infant during its sufferings in cutting teeth.

With these ends in view, my invention finds embodiment in certain features of novelty in construction, combination and arrangement of parts by which the said ob-

jects and certain other objects hereinafter attained all as fully described with reference to the accompanying drawing and more particularly pointed out in the claims.

In the single figure of the drawing is an exaggerated illustration in central vertical section of one form of a teething device for infants embodying the invention hereinafter described, but which, as will clearly appear later on, may find embodiment in structures substantially varying therefrom in detail.

In said drawing: 1 indicates a hollow vessel preferably of aluminum or other light and thin material constituting an ice receptacle introduced therein through a bottom plug 2, preferably screw threaded into the receptacle to prevent its accidental detachment, the said receptacle terminating at its top in a neck portion 3 at a point between the ends of which is a bead or flange 4 upon which is secured a yielding imperforate mouth-piece 5 preferably of rubber which forces it over the bead 4 as shown, the said mouth-piece terminating at its open end in a yielding ring 6 of the same material preferably resting upon the wall of the receptacle adjacent the neck for the purposes hereinafter described.

In practice the plug 2 is removed and the ice receptacle filled or substantially filled with granulated ice confined therein by screwing the plug to place and prevented from escaping into the mouth-piece 5 by a strainer 7, which may be of hard rubber, metal or other suitable substance located in the neck and preferably toward the bottom thereof and removable therefrom or not as may be desired.

The strainer 7 may form a part of the wires of the ice receptacle but when distention springs are used for the mouth-piece, such as is indicated by the crossed loops of wires 8 and 9, it may be separate from the ice receptacle and secured to said wires so as to be removable therefrom, as indicated in the drawing by passing the ends of the wires through strainer perforations registering with them, as shown in the drawing, and in which event the wires may project in a plane below the strainer and be bent outwardly so as to clamp against the inner face of the walls of the ice receptacle to hold the distention springs and strainer re-

movably in place therein, the neck 3 of the receptacle may also have an inner concave portion 10 to receive bends in the wires of the springs to yieldingly hold them in their operative position, and the body of such springs should be of such a form as to conform to and hold the mouth-piece to whatever form it may be yieldingly distended. In this connection, however, it is proper to observe that the distending springs are preferably omitted and the mouth-piece made of such thickness that while yielding to the biting of the infant will be sufficiently stiff to prevent its undue collapsing, and at the same time permit a circulation of cold water therein and through the ice by the alternate biting thereon of the infant.

In order that the infant may handle and play with the device without being subjected to ill effects from the cold surface of the ice receptacle, said receptacle is entirely removed by a two-part jacket 11 and 12, preferably composed of vulcanized rubber, celluloid, papier mâché, wood or other substantially as good non-conductors of cold, and providing an air space 13 entirely surrounding the ice receptacle, the two parts 11 and 12 being connected by screw threads 14 for the purposes of access to the plug 2 in the ice receptacle their cleansing and the detachment and cleansing of the mouth-piece, a circulation of air being maintained throughout the air space 13 by means of a number of perforations 15 in the two-part jacket and of which there may be any desired and necessary number.

In the bottom of the nonconducting jacket formed by the parts 11 and 12 is a curved spring 16 which when the two parts are screwed together serves to lift the ice receptacle in such a manner as to pinch and clamp the ring 6 of the mouth-piece between the outer wall of the receptacle and the inner wall of the jacket, but any other means may be employed for maintaining the ice receptacle and its jacket in proper relation to each other as indicated in the drawing.

For the purposes of amusing and distracting the mind and attention of the infant the jacket may be surrounded by a hollow tube 17 either formed with or held in place by any suitable means in which to insert bells, balls or other devices which will make a rattling noise in the hands of the infant or attendant, the tubular structure not only serving that purpose but preventing the hands of the infant from being exposed to injury as they might be if bells, for example, were suspended from the outside of the non-conducting jacket, while at the same time the structure as a whole becomes a desirable toy.

As shown the tubular receptacle is mounted upon the upper half of the sectional jacket, but it may be arranged on the lower half

and there be as many of them at any point as may be desired or useful.

My invention is not limited to the special form or arrangement of parts as shown in the drawing, for obviously there may be many variations therein and in the general and particular appearance of the device as a whole without departing from the spirit of my invention, the object of which, generally and broadly speaking, is to provide a biting surface for a teething infant presenting a continuously cooling, if not quite cold surface, to the gums and to that extent reducing their feverish condition and the general peevish condition of the infant and thereby not only promote the cutting of the teeth but reducing the peevish condition of the infant to that extent promoting its restfulness and general health.

While I have described ice as a cooling medium and devised a device by which it may be practically used for cooling purposes without presenting its hard surface to the gums of the infant and shown a receptacle adapted for its convenient use, it would be no substantial departure from my invention to use any other substantially as good cooling medium or liquid therein, as for example a chemical, the reaction of which maintains the contents of the receptacle in a cooling condition for a substantial length of time.

In conclusion it is proper to observe that as shown in the drawing an important and desirable feature of my invention is that it may be embodied in a structure all parts of which are readily accessible for cleansing purposes and maintaining it in a perfectly antiseptic condition both inside and out, and of its construction of materials adapted for that purpose as well as for retaining the cooling medium as isolating the hands of the infant from contact with all cooling surfaces except with the mouth-piece.

Having described my invention what I claim and desire to secure by Letters Patent is,

1. A teething device for infants comprising in combination a cooling receptacle and an imperforate mouth-piece mounted directly upon said receptacle for the infant to bite upon, said mouth-piece being internally in direct open communication with the cooling receptacle, substantially as described.

2. A teething device for infants comprising in combination a cooling receptacle, an imperforate mouth-piece for the infant to bite upon in open communication therewith and a surface surrounding said receptacle preventing contact of the hands of the infant with the cooling surface of the receptacle, substantially as described.

3. A teething device for infants comprising in combination a cooling receptacle, an

imperforate mouth-piece for the infant to bite upon in open communication with said receptacle, a nonconducting jacket surrounding said cooling receptacle, substantially as described.

4. A teething device for infants comprising in combination a cooling receptacle, an imperforate yielding mouth-piece in open communication with said receptacle, a jacket surrounding said receptacle and a chamber for air between said receptacle and jacket, substantially as described.

5. A teething device for infants comprising in combination a cooling receptacle, a mouth-piece for the infant to bite upon internally in open communication with said receptacle, a surrounding jacket and air chamber between the receptacle and jacket, and a series of perforations in the jacket whereby a circulation of air is maintained in said air chamber, substantially as described.

6. A teething device for infants comprising in combination a cooling receptacle, a discharge therefor, a strainer in said opening, a mouth-piece for the infant to bite upon in open communication with and secured across the opening of said receptacle, substantially as described.

7. A teething device for infants comprising in combination a cooling receptacle, a jacket surrounding the same, a mouth-piece

for the infant to bite upon provided with a yielding ring and means whereby said ring is confined between the cooling receptacle and jacket, substantially as described.

8. A teething device for infants comprising in combination a cooling receptacle, provided at one end with a neck and at its other end with a filled opening closed by a removable plug, a mouth-piece surrounding said neck and provided with a yielding ring, a jacket surrounding said receptacle, and means whereby said ring is yieldingly clamped between the receptacle and jacket, substantially as described.

9. A teething device for infants comprising in combination a cooling receptacle, a mouth-piece for the infant to bite upon, internally in open communication with said receptacle, a nonconducting jacket surrounding said receptacle and a hollow tubular ring surrounding said jacket and rattling devices confined within said ring, substantially as described.

In witness whereof, I have hereunto set my hand and affixed my seal, this 2nd day of May A. D. 1908.

JOSIAH S. BRIDGES. [L. S.]

Witnesses:

JNO. G. ELLIOTT,

W. G. FITZSIMMONS.