H. W. Libbey,

Nursing Nipple.

No. 78,881. Patented June 16, 1868.

Fig. 1.

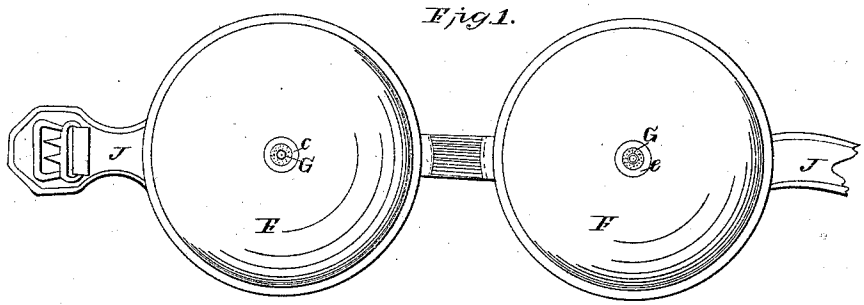


Fig. 4.

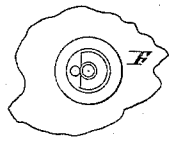


Fig. 2.

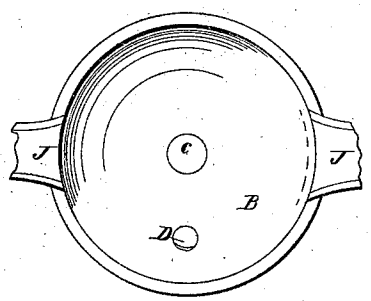
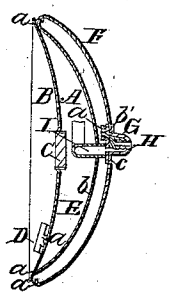


Fig. 3.



Witnesses:
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Letters Patent No. 78,881, *dated June* 16, 1868.

IMPROVEMENT IN NURSING-BOTTLES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, H. W. LIBBEY, M. D., of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Mammiferous Forms for Nursing; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a front view of the forms.

Figure 2 is a view of the inner side.

Figure 3 is a transverse section.

Figure 4 is a detached section.

Like letters of reference refer to like parts in the views.

In fig. 3, A represents a convex disk, which may be constructed of metal, porcelain, or of any other suitable material. To the inner margin of this disk, at the point *a*, is tightly connected a convex side or disk, B, consisting of a similar material, and provided with a central opening, C, also with a marginal opening, D, fitted with a screw-cap, *a'*. Between these two disks is a chamber or cell, E, for holding the lacteous fluid. F is an elastic covering, secured to the extreme edges of the disk as follows:

The verge of each disk, beyond the point of union, is spread outward, forming a groove, *b*. The edges of the elastic covering referred to, when laid upon the disk, drop over the groove, which is luted with some elastic varnish or other tenacious material. On and around the edges of the covering is then laid a piece of tape, a cord is then bound tightly around, thereby pressing the covering and tape down into the groove.

The whole is by this means made permanently secure and air-tight.

G, fig. 3, is a mouth-piece or nipple, which may be constructed of metal, ivory, or of any other material suitable for the purpose, but in this case I propose to use soft rubber or a covering of rubber, whereas the inner part may be of some harder material.

This nipple consists of a central tube, H, the base of which is provided with a flange, *b*. To the tube is screwed a shell or form of the nipple, perforated with fine holes, as shown in fig. 1. The manner of securing the covering to the tube is as follows: The tube referred to is inserted through the covering from the inside, thereby bringing the broad flange to the rubber. On the outer side is then placed a washer, *c*, down upon which the shell or form referred to is screwed, thus clamping the covering between the flange and washer, making a strong air-tight joint.

To the under side of the flange *b* is attached an elastic tube, I, which is seen to extend down into the lactile cell. This tube communicates with the space between the tube and shell, and through which the lacteous fluid is drawn from the cell by the child, it ascending up around the tube H and out of the perforations.

The tube H is for the purpose of inflating the elastic covering, which is done by applying the mouth to the nipple, the tube communicating with the space between the covering and disk by the small channel *a'*, which conveys the impelled air to the inside of the covering, but which is prevented from escaping by a valve, *b'*, placed on the inner end of the channel.

By this it will be seen that the nipple is made to perform two offices, viz, for the conveying out of the fluid, and for inflating the covering.

The peculiar advantages resulting from the use of this form is, first, its great convenience, as they are placed in a natural position on the person, and secured thereto by the straps J. The child can therefore be held without fatigue by the nurse, and comfortably to itself, no great effort being required to hold the child while nursing, which can be held by the nurse in a lying or sitting posture equally well.

The fluid being placed in the forms, and near where it is kept at all times warm and of easy access, thereby avoiding the necessity of warming the food by artificial means, and the nipple being made of soft elastic material, and the whole surface inflated, it is at once soft and agreeable to the touch of the child, and, being padded with some soft material, it is easy and gentle to the wearer.

The central and marginal openings C D, referred to, are for the purpose of giving access to the cell, for filling, cleansing, &c., and by means of the elastic tube, reaching far into the chamber, the fluid is thereby all taken up from the outer edges of the chamber.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The disk A B, provided with central and marginal openings C D, for the purpose specified.

2. The elastic covering F, in combination with the disks A B, for the purpose set forth.

3. The tube H, shell G, valve *b'*, and elastic tube I, all constructed and arranged to operate in the manner and for the purpose substantially as set forth.

H. W. LIBBEY, M. D.

Witnesses:

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