

(No Model.)

R. LOCKWOOD.
NURSING NIPPLE.

No. 401,505.

Patented Apr. 16, 1889.

Fig. 1.

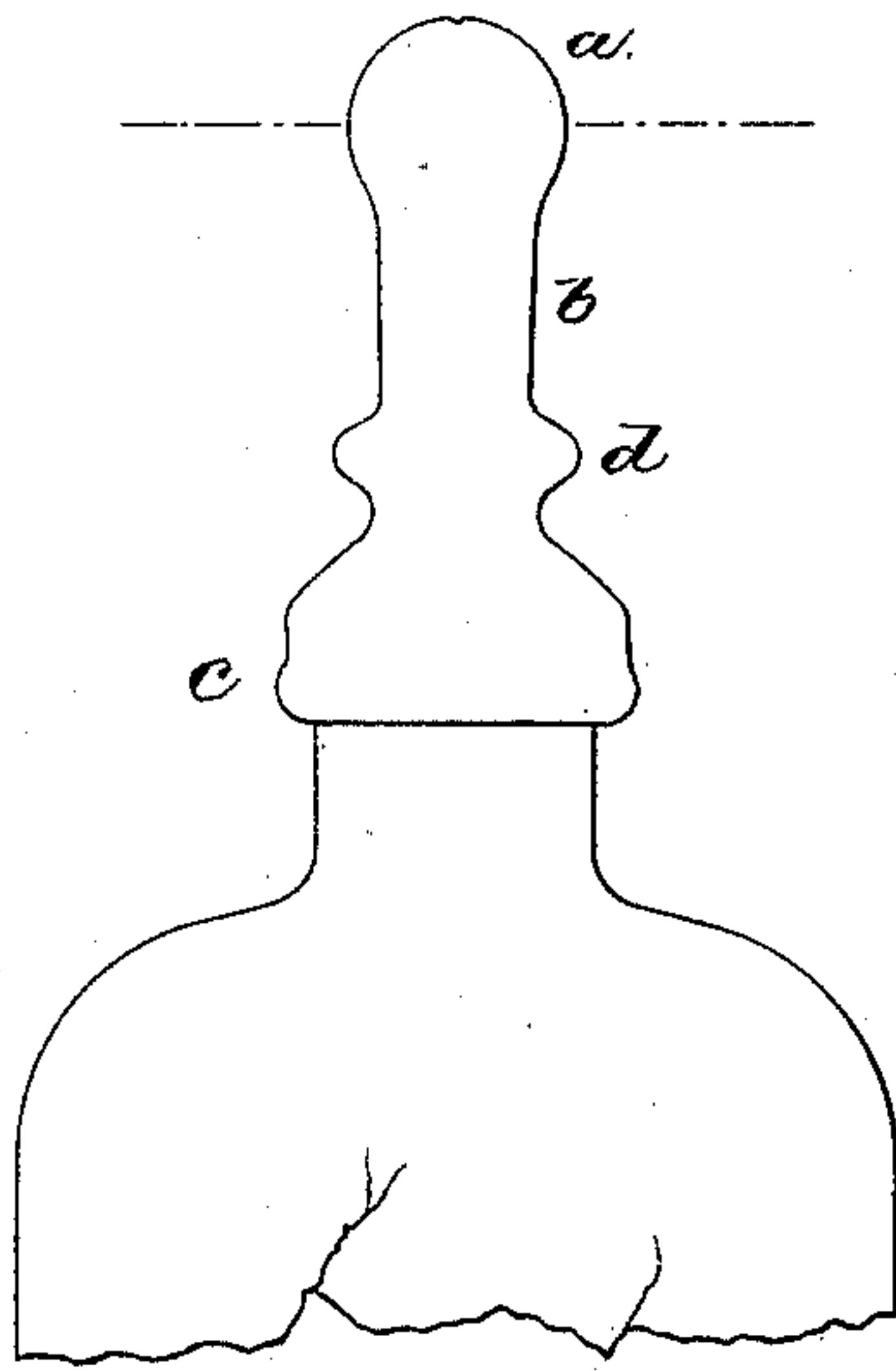


Fig. 2.

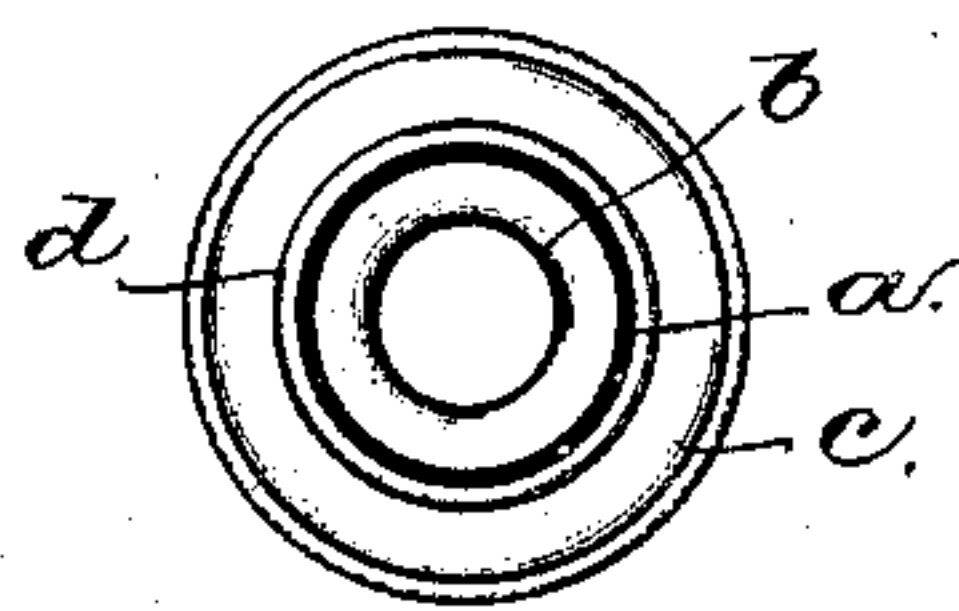
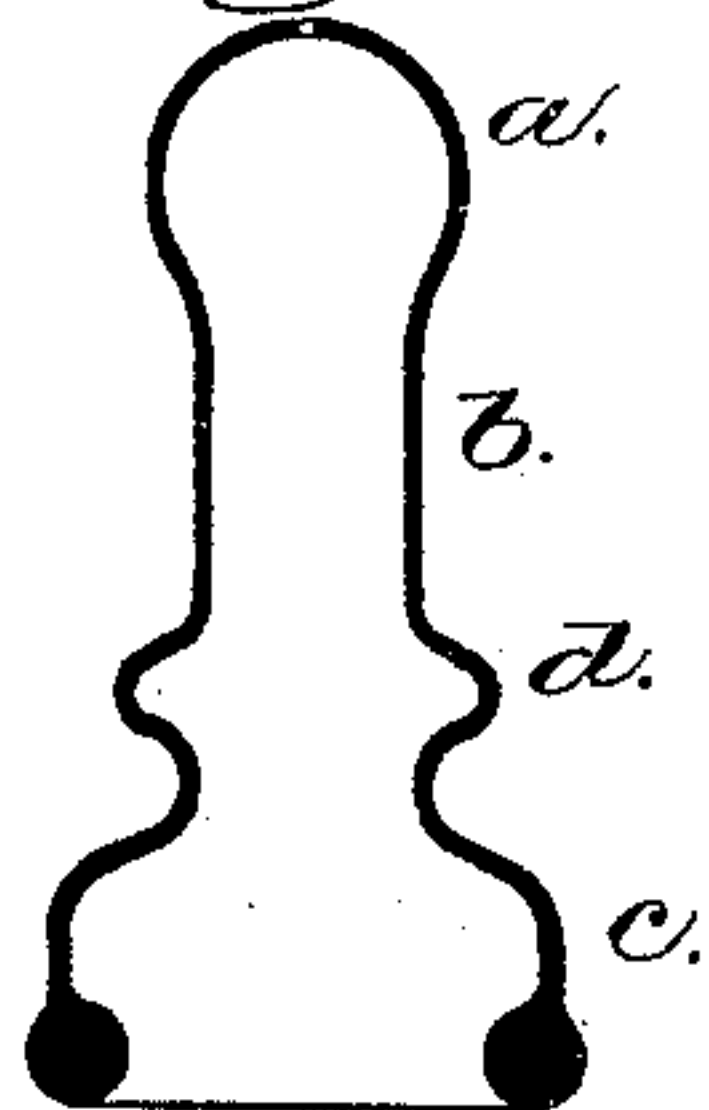


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

RHODES LOCKWOOD, OF BOSTON, MASSACHUSETTS.

NURSING-NIPPLE.

SPECIFICATION forming part of Letters Patent No. 401,505, dated April 16, 1889.

Application filed January 12, 1889. Serial No. 296,164. (No model.)

To all whom it may concern:

Be it known that I, RHODES LOCKWOOD, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Nipples, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

Prior to my invention nipples for nursing-bottles have been made either substantially conical or have been made oblong in cross-section.

In india-rubber nipples such as heretofore made the nipple may be inserted into the mouth of the child substantially up to the end of the bottle or device to which the nipple is connected, and the portion of the nipple which may enter the mouth of the child is so long as to frequently cause gagging. To obviate the liability of the nipple entering the mouth too far, I have provided it with an independent enlargement or guard, which is located in the body of the nipple between its delivery end and the enlargement at the base of the nipple which fits the neck of the bottle, the contracted or waist portion of the nipple between the said guard and the base of the nipple constituting a free bending-point for the nipple between the base of the nipple on the neck of the bottle and the guard. The guard is an integral part of the body of the nipple, and, as shown, is made hollow, whereby it is made more soft and elastic.

I have shown the nipple as made substantially round in cross-section, as such shape is better adapted to a child's mouth than a nipple which is oval in cross-section. The enlargement or guard is herein represented as of the same thickness as the body of the nipple near it, and consequently the said enlargement, as shown in the drawings, constitutes what may be called a "hollow ring." By making the enlargement or guard hollow, as shown, the nipple is made to bend easily at that point which will be just outside the mouth of the child, and the said hollow ring also obviates any undue contraction of the milk-space when the nipple is bent. I have also found that a nipple having the enlargement referred to causes the milk to be delivered

more uniformly than were the enlargement omitted.

Figure 1 in elevation represents a nipple embodying my invention applied to the neck of a bottle; Fig. 2, a cross-section in the line x , and Fig. 3 a vertical section of the nipple.

The delivery end of the nipple properly perforated is located at the end of a short body, b , which in practice will preferably be substantially circular in cross-section, the said nipple having an enlarged base, as c , which is applied to the mouth or delivery end of the bottle or other article containing the milk in usual manner between its base and the delivery end.

The body b is provided with an enlargement, d , between the base c and the delivery end of the nipple, the said enlargement d serving the purpose of a guard, the said enlargement or guard being represented as forming a sort of hollow projecting ring, the nipple between the base and guard being contracted to leave a waist, f , which constitutes a bending-point where the nipple may be bent freely between the guard and base or bottle and yet not stop the flow of milk.

The enlargement or guard determines the extent to which the nipple will enter the mouth of a child and it also forms an easy bending-point outside the end of the bottle and between the base and that part of the body of the nipple which is held in the mouth of the child. Further, the elongation and contraction of the nipple as it is pulled by the child causes the rubber of the nipple at the enlargement to aid in forcing or expelling the milk.

The nipple is very flexible and in practice is made from the best of rubber.

By reason of the enlargement d the efficient area of the passage through the nipple as measured in the neck proper, b , is not contracted when the nipple is bent partially over and when in the mouth of a child.

I claim—

1. The herein-described india-rubber nipple, it having a body, as b , a base, c , to embrace the bottle, a contracted waist, f , and an independent enlargement or ring intermediate the delivery end of the nipple and the con-

tracted waist *f*, the said waist constituting a free bending-point between the base *c*, which fits the neck of the bottle, and the said guard, substantially as described.

- 5 2. An india-rubber nipple having a neck, a base, and an independent enlargement made as a hollow ring and located between the said base and delivery end of the nipple, to operate substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RHODES LOCKWOOD.

Witnesses:

G. W. GREGORY,
BLANCHE DEWAR.