

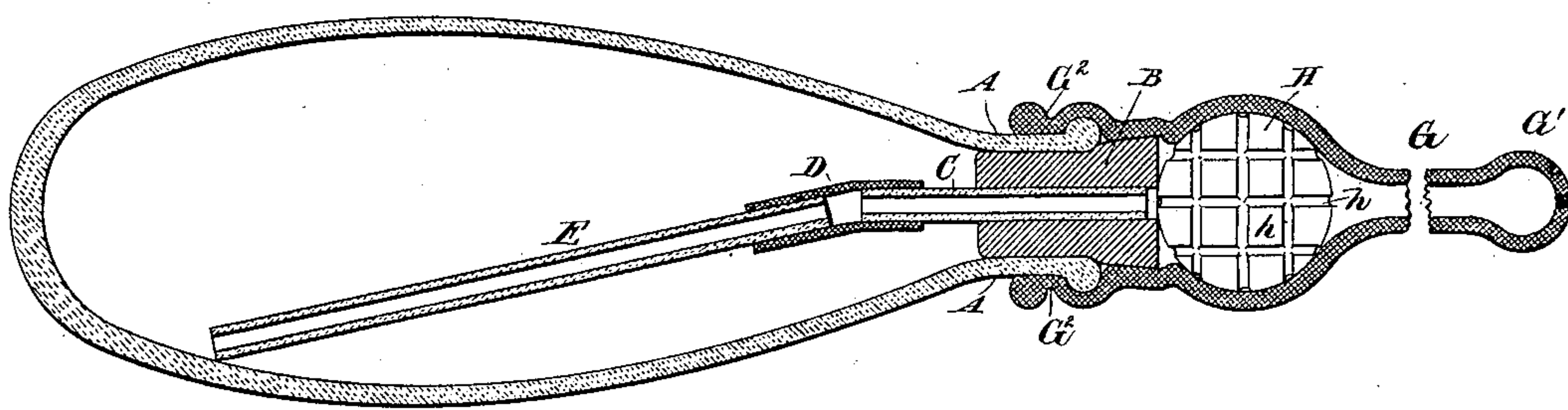
(No Model.)

F. E. FORSTER.

NURSING BOTTLE.

No. 335,347.

Patented Feb. 2, 1886.



*Witnesses:*

Charles R. Searle,

Marianne Ellison.

*Inventor:*

My  
Ferdinand E Foster

by his attorney

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 his attorney  
 Thos Brew Station

# UNITED STATES PATENT OFFICE.

FERDINAND E. FORSTER, OF NEW YORK, N. Y.

## NURSING-BOTTLE.

SPECIFICATION forming part of Letters Patent No. 335,347, dated February 2, 1886.

Application filed July 20, 1885. Serial No. 172,141. (No model.)

*To all whom it may concern:*

Be it known that I, FERDINAND E. FORSTER, of New York city, in the county and State of New York, have invented a certain new and  
5 useful Improvement relating to Nursing-Bottles, of which the following is a specification.

The object is to provide means for just sufficiently restraining the movement of the milk, which shall be simple and cheap, and  
10 capable of being thoroughly cleaned with little trouble or delay.

I employ a ball of glass or other suitable material having a grooved or roughened exterior. I introduce this in the soft tube of  
15 vulcanized india-rubber or analogous material, which is applied on the mouth of the bottle, and connects with the nozzle in the ordinary way. The ball should be of such size that the contractile force of the soft tube causes it  
20 to hug closely around the ball, leaving only small spaces between its roughened surfaces and the rubber. These spaces should be sufficient to allow the proper slow passage of the milk. The ball is introduced previous to ap-  
25 plying the tube upon the neck of the bottle. It preferably remains near that end of the tube. The tube is removed from the bottle for filling. The ball may be then easily squeezed out. Its construction makes it emi-  
30 nently easy to wash the tube, and the bottle being also washed by any ordinary or suitable means.

The parts may be kept separate or together until the next use.

35 The apparatus is simple and of small cost. It requires only a moderate degree of skill for its successful operation.

The accompanying drawing forms a part of this specification, and is a longitudinal section  
40 representing what I consider the best means of carrying out the invention as equipped with the ordinary cork and connections.

Referring to the drawing, and to the letters of reference marked thereon, A is the mouth  
45 of a bottle, and B an ordinary cork fitted therein.

C is a glass tube inserted tightly in the cork, and connected by a short length of rubber tube, D, with an extension of glass, E, which  
50 latter drops by gravity into the lowest position in the bottle.

G is a rubber tube, which may be of the form and proportions usually employed for this purpose. Additional marks, as G' G<sup>2</sup>, will be used when necessary to indicate cer-  
55 tain portions. One end, G', is adapted to serve as the nipple or mouth-piece. The other end, G<sup>2</sup>, is adapted to be sprung on the bottle-neck A.

H is a ball or sphere of solid glass, having  
60 its periphery grooved with shallow grooves *h*, crossing each other in various directions. These grooves should be plentiful, and so arranged that they allow a proper flow of the milk past the ball, no matter in what position  
65 the ball chances to lie.

The device is used in the ordinary manner. It restrains the flow of the milk, and even if the bottle is full and lies at a level above the  
70 baby's mouth the milk cannot come too rapidly. It insures the proper slowness in the supply of nutriment under all ordinary or extraordinary conditions. To clean it the tube is pulled away from the bottle and the ball squeezed out and all the parts washed.  
75

My invention, by retarding the flow of the milk past the ball, allows the mouth-piece to be made with any sized orifice which may be preferred. The small orifices commonly used  
80 to retard the flow at the mouth are objectionable for various reasons. I propose to make the mouth-orifice large.

Modifications may be made in the details without departing from the principle or sac-  
85 rificing the advantages of the invention. Instead of grooves *h*, the surface of the ball may be studded with sufficient spurs. It is only important that a moderate space be insured for the flow of milk between the ball and the rubber and that the surfaces be presented so  
90 as to be easily cleaned when the parts are separated.

My invention can be used with the cork B, as shown, without the tubes C D E. It can be used even without the cork B. In such  
95 case the ball may be forced into the tube G to a less extent than here shown, and may rest against the mouth of the bottle, the grooves or roughnesses insuring that a sufficient space be left for the moderate flow required.  
100

The ball H may be egg-shaped, pear-shaped, or variously modified in form, so long as it is



of sufficient size to fill the tube and so formed as to present only the limited spaces required for the passage of the milk and to expose them for easy cleaning when required.

5 I claim as my invention—

The grooved or roughened ball H *h*, in combination with a nursing-bottle, arranged within the exit-tube thereof, substantially as herein specified.

In testimony whereof I have hereunto set to my hand, at New York city, this 17th day of July, 1885, in the presence of two subscribing witnesses.

FERDINAND E. FORSTER.

Witnesses:

H. A. JOHNSTONE,  
MANIENE ELLISON.