(No Model.)

J. T. McBRIDE.

NURSING BOTTLE.

No. 533,726. Patented Feb. 5, 1895.

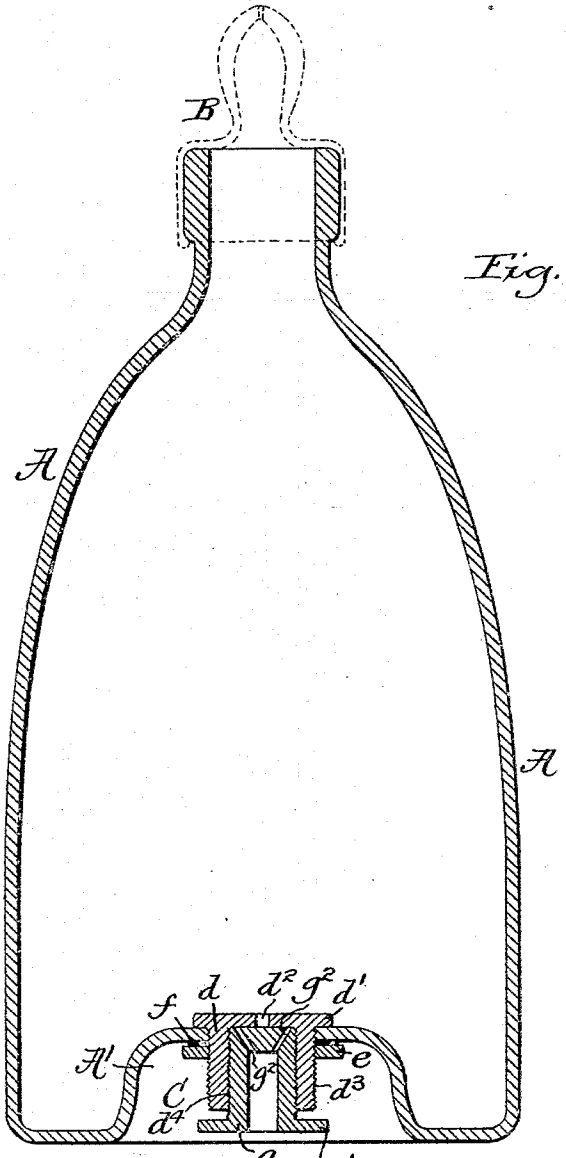
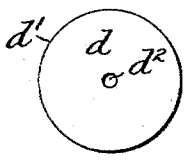


Fig. 1.

Fig. 3.



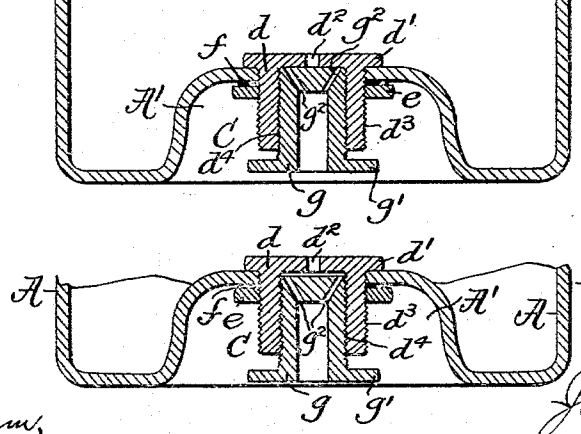
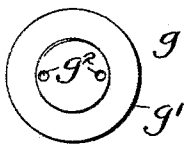


Fig. 2.

Fig. 4.



WITNESSES:

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NURSING-BOTTLE.

SPECIFICATION forming part of Letters Patent No. 533,726, dated February 5, 1895.

Application filed April 21, 1894. Serial No. 508,470. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. McBRIDE, a citizen of the United States of America, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Vents for Nursing-Bottles, of which the following is a specification.

This invention relates generally to bottles and particularly to a vent for nursing bottles.

It is now well understood among physicians that much of the distress of nursing children is caused by the drawing in of air with the milk in feeding from a bottle, and that such distress may be entirely prevented by providing a vent which will only allow an amount of air to enter the bottle exactly equivalent to the food withdrawn therefrom by the child. It is also understood that where a bottle is not provided with a vent that the child has difficulty to draw the food from the bottle.

The present invention is designed to simplify and improve the vents of bottles whereby the supply of air admitted to the bottle may be controlled and also whereby the accumulation of food with its tendency to sour or ferment in the parts of the vent is prevented.

The accompanying drawings illustrate a practical embodiment of the invention, in which—

Figure 1 is a sectional elevation of a bottle provided with the improved vent, the vent being closed. Fig. 2 is a sectional detail with the vent in an open position. Fig. 3 is a plan view of the fixed part of the vent with the single central opening, and Fig. 4 is a similar view of the adjustable portion of the vent with the two out-of-center openings.

Referring to said drawings the bottle A may be of any approved form adapted when used as a nursing bottle to support a flexible nipple B of any approved form. The vent C is preferably provided at the bottom of this bottle and in order to adapt the bottle to stand on its bottom without the vent forming an obstruction thereto, its center is recessed and the bottom wall is curved inwardly so as provide a suitable space A′ to receive the vent. The center of the bottom of the bottle is provided with a perforation in which the vent is inserted.

The vent C consists of a fixed portion d of socket or cup-shape inserted through the mouth of the bottle to its interior and projected through the central opening in the bottom with the horizontal flange d' resting against the bottom and the vertical annular wall projecting therethrough. The inner end is closed by a head having a central porforation d^2. Both the inside and the outside of the vertical annular wall of this fixed portion is screw threaded, the outer screw threads d^3 being left handed ones to receive a nut e screwed thereon from its lower side to clamp and confine the fixed portion in place in the perforation in the bottom, an interposed washer f being provided to pack the joint if deemed necessary.

The other portion of the vent is formed by a removable thimble-formed portion g having a horizontal flange g' for convenience of adjusting it and screw threaded exteriorly to engage with the inner screw threads d^4 of the fixed portion of the vent. The thimble portion is partially hollow and is provided at its closed end or head with a pair of channels or passages g^2 which lie at points distant from the center of the vent, and out of alignment with the central opening d^2 in the head of the fixed portion d. When the movable or adjustable portion of the vent g is in its closed position, the inner head of said portion fits snugly and bottoms against the head of the fixed portion d, so that the central opening d^2 is closed by a solid portion of the head of the removable portion g and its out-of-center passages g^2 are likewise closed by the solid portion of the head of the fixed portion d.

From the fact that the movable or adjustable portions of the vent when in its closing position entirely fill the space between the walls of the fixed portion, as in Fig. 1, it results that no food or liquid contained in the bottle can become pocketed in the vent to remain there to get sour or ferment.

It will be observed that any freedom of air may be permitted to the interior of the bottle through the vent by a more or less adjustment of the movable portion g of the vent. A portion of a turn of the movable portion may in some cases, be all that is needed, and in other cases a full or more than a full turn may be needed, as in Fig. 2, to give the full opening for the air through the passages of

the vent, and in this way the supply of air to the bottle may be controlled to a nicety.

What is claimed is—

A nursing bottle adapted to receive a nipple, and provided with a fixed screw-threaded socket portion having an end wall formed with an air opening to the interior of the bottle, combined with an adjustable screw-threaded plug portion shaped to correspond with the interior of the socket, and adapted to close said opening and entirely fill the said socket, one of said parts having also a second air opening out of line with the first air opening and adapted to admit air thereto when said plug is screwed outward, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two witnesses.

JOHN T. McBRIDE.

Witnesses:

GEO. H. GRAHAM,

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