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R. T. GRIFFITHS

BOTTLE NIPPLE

Filed March 30, 1926

Fig. 1.

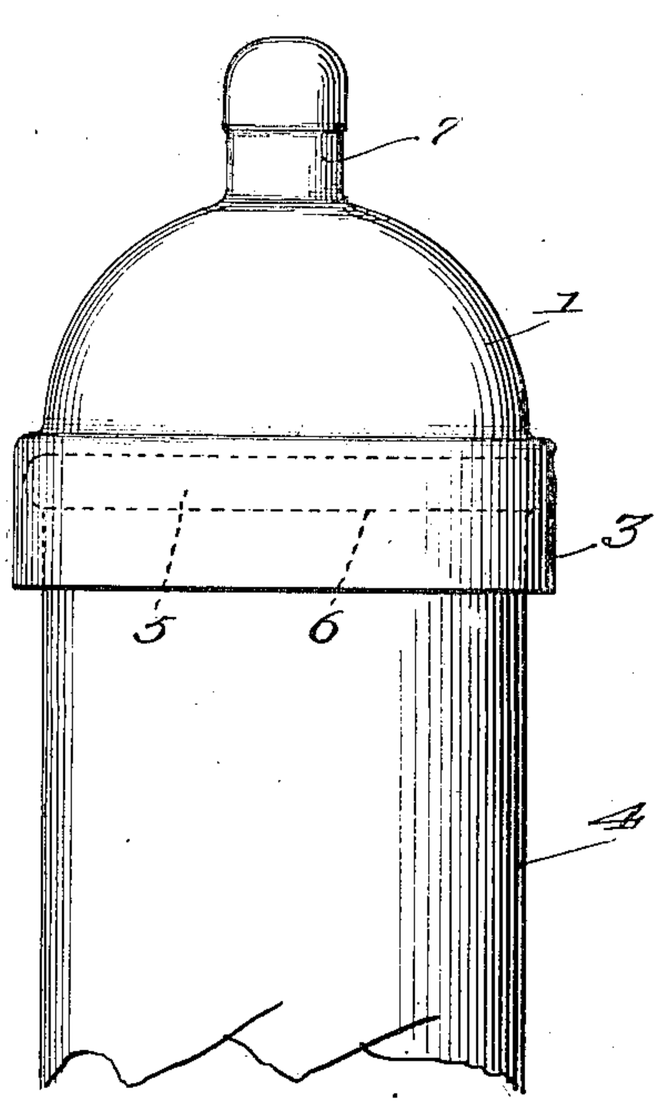


Fig. 2.

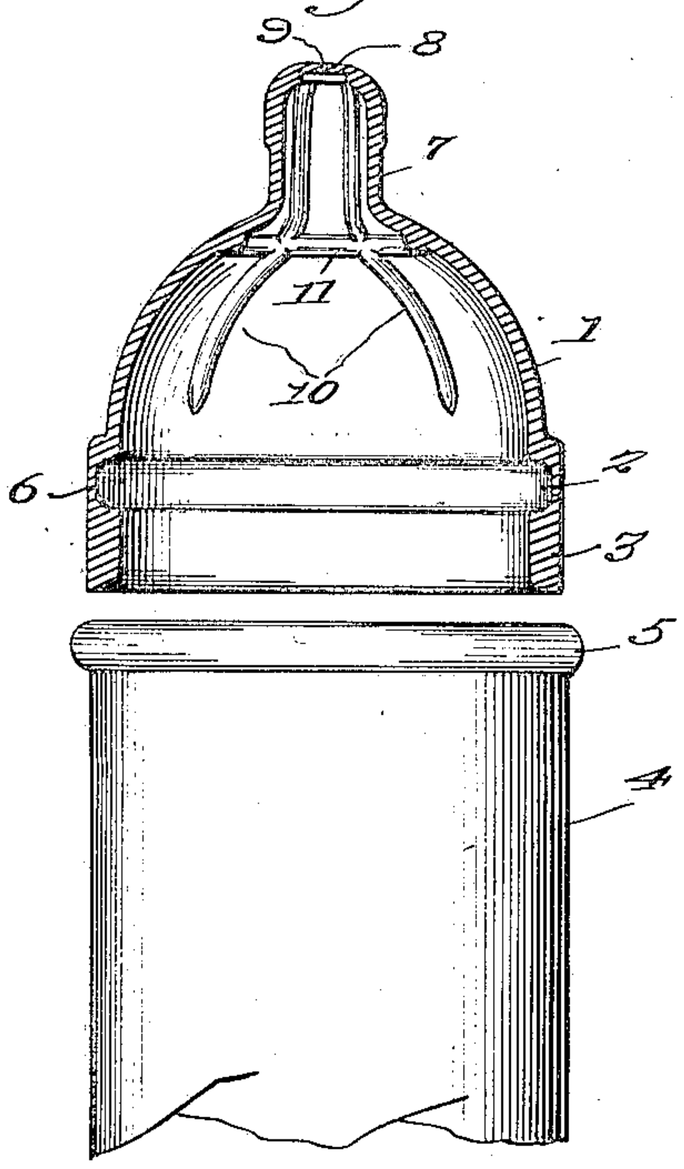
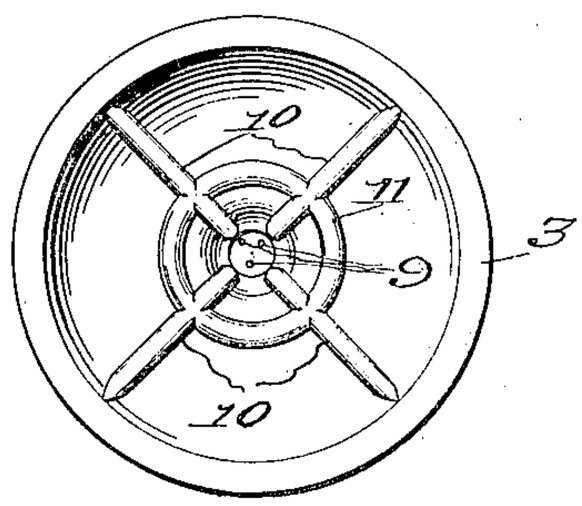


Fig. 3.



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UNITED STATES PATENT OFFICE.

RICHARD T. GRIFFITHS, OF AKRON, OHIO, ASSIGNOR TO THE MILLER RUBBER COMPANY, OF AKRON, OHIO, A CORPORATION OF OHIO.

BOTTLE NIPPLE.

Application filed March 30, 1926. Serial No. 98,581.

My present invention relates to nipples of rubber such as are adapted to be inserted over the open end of a nursing bottle.

The principal object of the invention is the provision of a nipple of the above type, which will be so reinforced within that it will not collapse in use, of such construction that the exit holes in the nursing tip will keep open, which will tightly grip the bottle below the open mouth so as to insure a fluid-tight joint, and which will provide a channel or recess within which the bead of the bottle will seat.

To this end the invention consists in a rubber nipple having a nursing tip, a breast portion, a retaining band below the breast portion, an intermediate weakened portion between breast and band, such intermediate portion forming an interior bead receiving groove. The greatest diameter of the thickened retaining band is preferably no greater than the diameter of the bottle minus its bead, so that the band will tightly hug the bottle and insure a fluid-tight joint. Both breast and tip are interiorly reinforced with radial ribs and an annular ring intersects these ribs at substantially the base of the nursing tip. The extreme end of the tip is made thinner than the remainder of the tip, that is, it is provided with a weakened portion, and this portion is perforated to allow the fluid within the bottle to be removed through the nipple.

I have illustrated in the accompanying drawing, one embodiment of my invention, in which:—

Figure 1 is a view of a bottle with the nipple of this invention.

Fig. 2 is a sectional elevation of the device of Fig. 1.

Fig. 3 is a bottom plan view.

In these drawings I have shown a nipple to consist of a breast portion 1 having joined thereto by a weakened intermediate portion 2, a thickened retaining band 3. It is to be noted that the band 3 is provided with substantially parallel walls and is of considerable thickness.

A wide mouth nursing bottle of the ordinary type is shown at 4 having a bead 5 surrounding the open mouth, which bead is adapted to seat within the groove 6 formed in the weakened intermediate portion of the nipple.

The greatest width of the retaining band 3 is preferably no greater than the diameter of the bottle 4 minus its bead, so that when the nipple is in place on the bottle, the band 3 is stretched to considerable extent, thus insuring a snug and fluid-tight joint.

The weakened intermediate portion 2, by reason of its thinness, takes up any distortion which might result in stretching the band over the bottle mouth and prevents this distortion from affecting the breast portion 1.

A nursing tip 7 rises from the breast portion in the usual manner, and is provided at its extremity with a weakened section 8, which is perforated at a plurality of places such as 9. These holes allow the milk or other fluid to be readily withdrawn from the bottle. It has been found that these perforations are difficult to keep open when that part of the nursing tip is of material thickness, but that a weakened portion as shown can be readily pierced and when so perforated, the holes remain open.

Interior bracing radial ribs 10 are provided being common to both breast portion 1 and nursing tip 7. These ribs comprise thickened portions of rubber and are preferably diametrically opposed, particularly in the nursing tip. Such an arrangement of ribs therein prevents the tip from collapsing and thereby cutting off the flow of milk. The ribs in the breast portion make this part of the nipple more rigid, and help to hold its shape.

An interior bracing rib 11 is provided at substantially the juncture of the breast and nursing tip portions, and intersects the bracing ribs 10, that is, the ribs pass through the ring 11.

It is to be noted that in the form shown the ribs 10 terminate in the nursing tip at the weakened portion 8, and at their opposite end, short of the weakened intermediate portion 2.

Having thus described my invention, what I claim is:—

1. A nursing nipple for wide mouthed bottles comprising a one piece article having a breast portion which will not be distorted on application to the bottle, and a relatively wide retaining band at the base of the breast portion adapted to be stretched over the bottle mouth, and a thin annular portion connecting the retaining band with the base of the said breast portion, said thin portion being of sufficient elasticity to permit stretching of the band for application to and removal from the bottle without distorting the nipple.

2. The article of claim 1 in which the breast portion is provided with a nursing nipple of reduced dimensions and the breast portion is provided with interior cantilever ribs which extend up into and to the apex of the nursing nipple.

3. A nursing nipple for wide mouthed bottles comprising a breast portion having at the base an external relatively wide annular flange, forming a base ring, said ring being provided with an annular channel in its inner face adjacent the lower edge of the breast and extending into proximity to the outer periphery of the flange providing a relatively wide and strong retaining band connected to the breast portion by a thin elastic web at the bottom of the annular channel.

In testimony whereof, I affix my signature.

RICHARD T. GRIFFITHS.