

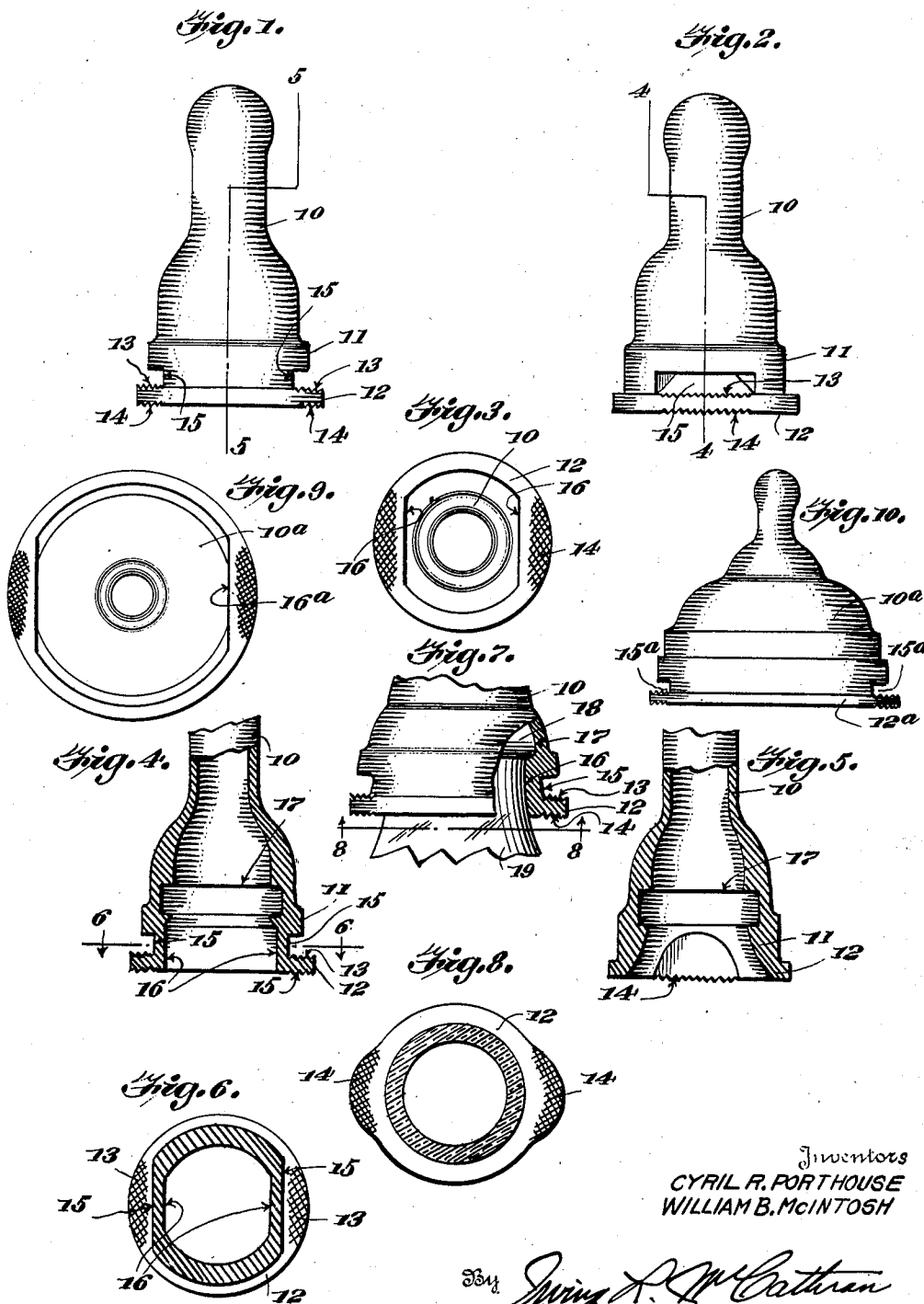
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This invention relates to flexible or elastic nipples and has for one of its objects the production of a simple and efficient nipple which is provided with means for facilitating the attachment of a nipple to a bottle and the removal of a nipple from a bottle.

A further object of this invention is the production of a simple and efficient nipple having a finger-engaging portion or portions whereby the fingers of an operator may conveniently grip the nipple for placing the nipple upon a bottle or removing the nipple from a bottle.

Other objects and advantages of the present invention will appear throughout the following specification and claims.

In the drawing:

Figure 1 is a side elevational view of the nipple;

Figure 2 is a side elevational view of the nipple looking at right-angles to Figure 1;

Figure 3 is a bottom plan view of the nipple;

Figure 4 is a vertical sectional view taken on line 4—4 of Figure 2, a portion of the nipple being shown in elevation;

Figure 5 is a vertical sectional view taken on line 5—5 of Figure 1, a portion of the nipple being shown in elevation;

Figure 6 is a horizontal sectional view taken on line 6—6 of Figure 4;

Figure 7 is a fragmentary side elevational view of a portion of the nipple and bottle, the nipple being shown partly in section;

Figure 8 is a horizontal sectional view taken on line 8—8 of Figure 7;

Figure 9 is a bottom plan view illustrating the invention as applied to a breast style nipple; and

Figure 10 is a side elevational view of the nipple shown in Figure 9.

By referring to the drawing, it will be seen that 10 designates the neck of the nipple, which is supported by a thickened base 11. The thickened base 11 carries a projecting annular base flange 12 having a knurled or roughened upper face 13 and a knurled or roughened lower face 14 upon opposite sides of the nipple to provide tabs or finger-grip portions. The base 11 of the nipple is provided with a finger-receiving notch or recess 15 upon each side of the nipple adjacent the knurled or roughened upper face 13, as shown in the drawing.

The open lower end of the nipple is provided with a built-up portion 16 upon the inner face of the nipple opposite each notch 15, which built-up portions will cause the tabs or finger-grip portions to project outwardly beyond the normal

circumference of the nipple and cause the nipple to assume an elliptical shape at its bottom when the nipple is placed over the neck of a bottle, as shown in Figure 8. The tabs, when the nipple is placed upon the bottle, will have more prominence than under normal conditions and in this way will provide means whereby the operator may easily grip the tabs when removing the nipple from the bottle.

The nipple is provided with a conventional annular bead-receiving recess or channel 17 preferably located above the notches 15 and in the inner face of the nipple. The bead 18 of a bottle 19 is adapted to fit within the channel 17 in the manner shown in Figure 7, and the base 11 of the nipple is adapted to snugly grip the neck of the bottle 19, as shown to hold the nipple upon the bottle.

It should be noted that the built-up portions 16 which are formed upon the inner face of the nipple upon either side thereof will reinforce the nipple behind the notches 15 and will provide a wall to compensate for the cut-out portion of the elastic body of the nipple which provides the notches 15. The built-up portions 16 extend in a straight line across the sides of the inner wall of the nipple, as shown in Figure 3, when the nipple is in its normal position, but due to the fact that the nipple is formed of rubber or other elastic material, the nipple when stretched over the neck of a bottle will conform to the contour of the neck of a bottle and will assume the position shown in Figure 8, thereby causing the tabs 14 to extend or project beyond the normal circumference of the nipple, in this way presenting protruding tabs which may be readily engaged by the fingers. When the nipple is removed from the neck of a bottle, the tabs will automatically merge into or conform to the normal contour of the flange 12.

The notches 15 also will provide recesses into which the fingers may be extended to obtain an efficient grip and the notches 15 will further form pockets into which the finger or fingers may be extended, the edges of the notches snugly fitting around the fingers, thereby adding an additional gripping action. The built-up portions provide substantially flat areas when the nipple is in its normal position and these built-up portions are preferably rounded or tapered toward their upper ends as the built-up portions merge into the contour of the inner face of the nipple.

By referring to Figures 9 and 10, it will be noted that there is illustrated a breast style nip-

ple which is adapted to be applied to a wide-mouth bottle. In the structure shown in Figures 9 and 10 it will be noted that 10^a designates the nipple having notches 15^a similar to the notches 15 previously described formed upon the side of the nipple above the annular base flange 12^a which is similar to the flange 12 previously described. The nipple 10^a is provided with built-up portions 16^a similar to the previously described portions 16, said portions 16^a being formed upon the inner face of the nipple in back of the notches 15^a.

It should be noted that the present invention embodies as one important feature, the built-up portions which are formed along the inner face of the nipple directly in back of the notches which are formed on the outer face of the nipple making these portions of the nipple heavier adjacent the notches so as to reinforce the nipple at these points and cause the pull on the bead to be distributed over a maximum circumference of the bead when a pull is exerted thereon. These reinforcing or thickened portions will avoid the narrowing of the nipple opening at the bead when the nipple is being pulled by the operator when grasping the tabs or edge of the flange to fit the nipple over the neck of a bottle.

It should be understood that certain detail changes in the mechanical structure may be employed without departing from the spirit of the invention so long as such changes fall within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. An elastic nipple of the class described comprising a body having a base portion, the base portion having an annular base flange, the inner face of the nipple having oppositely located

built-up portions to reduce the normal diameter of the inner portion of the base of the nipple and being adapted to cause the portion of the flange opposite the built-up portions to protrude beyond the normal diameter and contour of the flange when the nipple is flexed over the neck of a bottle thereby producing projecting finger-gripping tabs to facilitate the removal of the nipple from a bottle, the projecting finger-gripping tabs being adapted to automatically merge into the normal contour of the flange when the nipple is removed from the neck of a bottle.

2. An elastic nipple of the class described comprising a body having a base portion, the base portion having an annular base flange, the inner face of the nipple having oppositely arranged built-up portions to span a portion of and reduce the normal diameter of the inner portion of the base of the nipple and being adapted to cause the flange opposite the built-up portions to protrude beyond the normal diameter of the flange when the nipple is flexed over the neck of a bottle thereby producing finger-gripping tabs protruding beyond the normal contour of the annular base flange to facilitate the removal of the nipple from a bottle, and said base having finger-receiving notches formed in the outer face thereof opposite the built-up portions to reduce the thickness of the nipple adjacent the built-up portions and thereby facilitate the flexing of the nipple adjacent the notches when placing the nipple over a bottle to constitute finger-receiving pockets and provide maximum finger-gripping areas for the flange adjacent the pockets.

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