Nov. 2, 1954 E. V. PERREAULT 2,693,187

VENTED NIPPLE CONSTRUCTION

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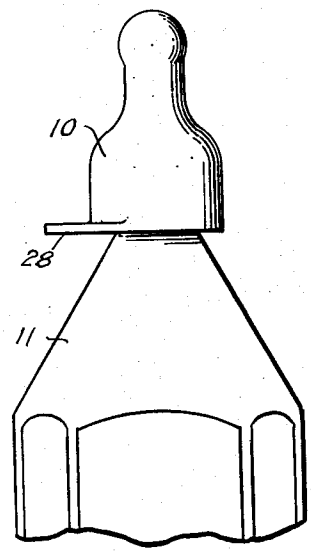


FIG. 1

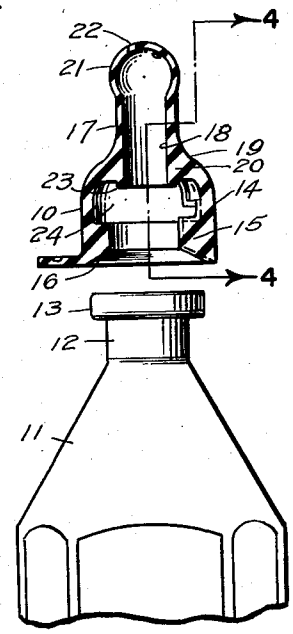


FIG. 3

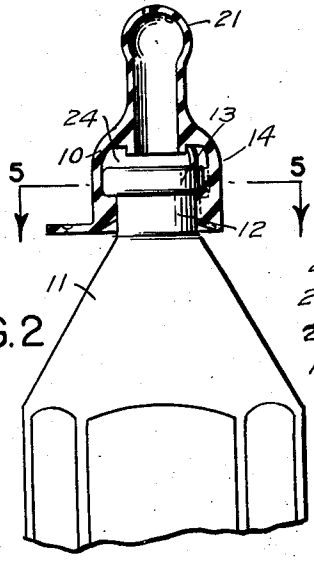


FIG. 2

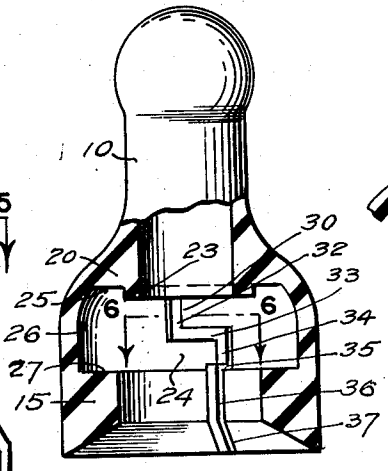


FIG. 5



FIG. 6

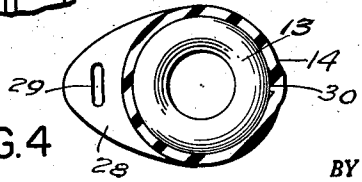


FIG. 4

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VENTED NIPPLE CONSTRUCTION

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3 Claims. (Cl. 128—252)

The present invention relates to infant feeding, and has particular reference to a novel construction for a feeding nipple.

The principal object of the invention is to provide an improved nipple for use with a small mouth nursing bottle.

Another object of the invention is to provide a nipple for a small mouth nursing bottle which has a continuously open air vent.

A further object of the invention is to provide a nipple air vent which does not leak when the nipple is in use.

With the above and other objects and advantageous features in view, the invention consists of a novel arrangement of parts more fully disclosed in the detailed description following, in conjunction with the accompanying drawings, and more specifically defined in the claims appended thereto.

In the drawings,

Fig. 1 is an elevation view showing a preferred embodiment of the invention as mounted on a small mouth nursing bottle.

Fig. 2 is a view similar to Fig. 1 with the nipple in vertical section;

Fig. 3 is a view similar to Fig. 2, the nipple being separated from the bottle;

Fig. 4 is a section on the line 4—4 of Fig. 2;

Fig. 5 is an enlarged view of the nipple, partly in section, on the line 5—5 of Fig. 3; and

Fig. 6 is a partial section on the line 6—6 of Fig. 5.

It has been found desirable to provide a nipple for a small mouth nursing botle, which has a continuously open air vent, the air vent being tortuous so that it will not leak nursing fluid under normal conditions of use. To this end, I have devised a nipple with a novel zigzag inner head which provides a restricted open vent when the nipple is mounted on the rim of a nursing bottle, the zigzag permititng inflow of air while restricting outflow of nursing fluid.

Referring to the drawings, the nipple **10** is of flexible material such as rubber for mounting on a small mouth standard type nursing bottle **11** as illustrated in Fig. 1, the bottle having a reduced neck **12** and a rim **13**, see Fig. 2. The nipple **10** includes a lower hollow generally cylindrical base **14** having an annular lower flange **15** with a bevelled lower surface **16**, an upstanding neck **17** of less width than the base and having a vertical inner cylindrical surface **18** and an outer surface **19** flaring at its lower portion to merge with the outer surface of the base, whereby a thickened annulus **20** of generally triangular cross-section is provided at the juncture of the neck and the base. The neck has a spherical type tip **21** at its upper end which is provided with one or more feeding passages **22**, and the annulus **20** provides an elastic resistance to the lips of an infant which prevents collapsing of the nipple when in use and also exercises the gums during feeding. The neck depends downwardly below the annulus **20** to provide a circular tongue **23**, whereby an annular recess **24** is formed by the tongue **23**, the lower surface **25** of the annulus **20**, the inner surface **26** of the base **14**, and the upper surface **27** of the flange **15**, the recess **24** receiving the rim **13** of the bottle when the flange **15** is snapped over the rim, with the tongue **23** extending into the bottle opening. The snap insertion of the bottle rim into the recess and its removal therefrom is facilitated by a finger graspable tab **28** which extends outwardly from the lower portion of the base **14**,

and which may be provided with a depression **29** on its upper surface for better manual grasping.

Referring now to Figs. 5 and 6, the lower inner portion of the nipple is provided with a zigzag head **30** of shallow depth and with a relatively extended flat surface width, the bead having a section **32** extending from the tongue **23** across the lower surface of the thickened annulus and vertically downwardly on the inner wall of the base, a section **33** extending laterally on the inner wall of the base, a lower section **34** extending vertically downwardly on the inner surface **26** of the base, a section **35** extending radially on the upper surface **27**, a section **36** extending downwardly on the inner surface **31**, and a section **37** extending radially out-wardly in the bevelled lower surface **16** of the flange **15**.

When the nipple is mounted on the nursing bottle as illustrated in Fig. 2, the bead **30** contacts the neck and rim of the bottle under tension, but the sides **32**, **33** of the bead remain spaced above the inner wall of the base to provide tortuous air flow passages which, however, restrict outward flow of nursing fluid sufficiently due to the sharp turns to prevent leaking.

Although I have disclosed a specific construction of a nipple embodying the invention, it is obvious that changes in the size, shape, and arrangement of the parts may be made to meet different nursing requirements, without departing from the spirit or the scope of the invention as defined in the appended claims.

I claim:

1. A nursing nipple having a generally cylindrical hollow base, an upstanding reduced neck terminating in a feeding tip having a passageway therethrough, the outer surface of the neck flaring at its lower portion to merge with the outer surface of the base, and the inner surface of the neck being vertical to provide a thickened annulus at the juncture of the base and neck, the wall of said neck extending downwardly to form a circular depending tongue, said base having a lower annular interior flange having a bevelled lower surface, whereby a recess for receiving a bottle rim is provided between the lower flange, the base wall, the thickened annulus and the depending tongue, and a zigzag bead of shallow depth and relatively extended width extending from the depending tongue over the recess wall, the inner surface of the flange, and the bevelled lower surface of the flange, the portion of the bead on the inner wall of the base having an upper vertical, a lateral, and a lower vertical section.

2. A nursing nipple having a generally cylindrical hollow base, an upstanding reduced neck terminating in a feeding tip having a passageway therethrough, the outer surface of the neck flaring at its lower portion to merge with the outer surface of the base, and the inner surface of the neck being vertical to provide a thickened annulus at the juncture of the base and neck, the wall of said neck extending downwardly to form a circular depending tongue, said base having a lower annular interior flange, whereby a recess for receiving a bottle rim is provided between the lower flange, the base wall, the thickened annulus and the depending tongue, and a zigzag bead of shallow depth and relatively extended width across the lower surface of the thickened annulus, then vertically downwardly, horizontally, and again vertically downwardly on the inner wall of the base, then radially on the upper surface of the flange and vertically downwardly on the inner surface of the flange.

3. A nursing nipple having a generally cylindrical hollow base, an upstanding reduced neck terminating in a feeding tip having a passageway therethrough, the outer surface of the neck flaring at its lower portion to merge with the outer surface of the base, and the inner surface of the neck being vertical to provide a thickened annulus at the juncture of the base and neck, the wall of said neck extending downwardly to form a circular depending tongue, said base having a lower annular interior flange having a bevelled lower surface, whereby a recess for receiving a bottle rim is provided between the lower flange, the base wall, the thickened annulus and the depending tongue, and a zigzag bead of shallow depth and relatively extended width extending across the lower surface of the thickened annulus, then vertically downwardly,

horizontally and again vertically downwardly on the inner wall of the base, then radially on the upper surface of the flange, vertically downwardly on the inner surface of the flange, and radially outwardly on the bevelled lower surface of the flange.

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