Nov. 15, 1938. J. LITTLE 2,136,514

NIPPLE AND CAP CONSTRUCTION

Filed Nov. 9, 1935

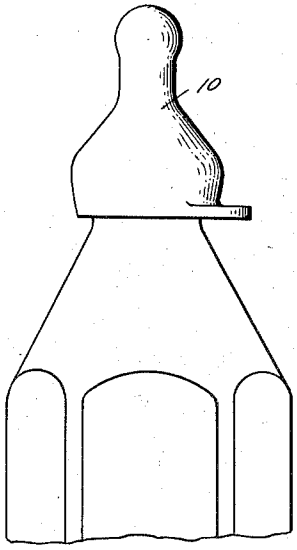


Fig. 1

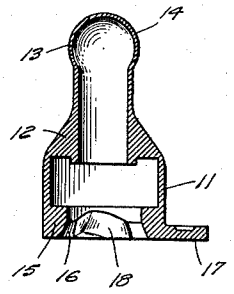


Fig. 2

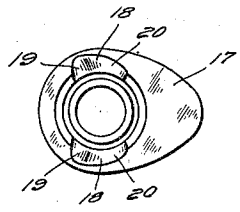


Fig. 3

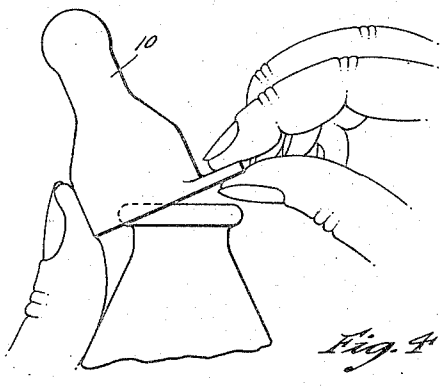


Fig. 4

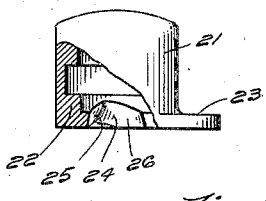


Fig. 5

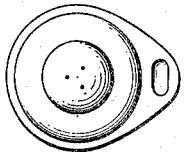


Fig. 6

Inventor
Jesse Little

By Nathaniel Fruckt
Attorney

Patented Nov. 15, 1938 2,136,514

UNITED STATES PATENT OFFICE

2,136,514

NIPPLE AND CAP CONSTRUCTION

Jesse Little, Warwick, R. I., assignor to Davol Rubber Company, a corporation of Rhode Island

Application November 9, 1935, Serial No. 49,060

2 Claims. (Cl. 215—41)

My present invention relates to nipples and caps used for nursing bottles and has particular reference to an improved construction therefor.

Nipples and caps used for nursing bottles are provided with bases having inner beads adapted to fit snugly under the rim of a nursing bottle neck, whereby placing the nipple or the cap on the bottle entails a distortion and spreading of the head to permit passage of the bead over the protruding rim of the bottle neck. Quickness and ease of mounting are particularly desirable when the bottle is full of hot milk.

It is the principal object of my invention to devise a novel construction for a nipple and cap which facilitates mounting the nipple or the cap on the bottle neck.

Another object of my invention is to provide a novel construction which guides the nurse when mounting the nipple or cap.

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

In the drawing,

Fig. 1 shows a nipple embodying the invention, mounted on a bottle neck;

Fig. 2 is a central vertical section thereof;

Fig. 3 is a bottom view of the base of the nipple;

Fig. 4 is a perspective view showing the preferred method of mounting the nipple, and

Fig. 5 is a view of a cap, partly in section, embodying the novel construction.

Fig. 6 is a top plan view of the structure shown in Figures 1, 2, and 3.

Referring to the drawing, the novel nipple **10** is made of rubber, and has the usual base **11**, intermediate portion **12** and tip **13** provided with perforations **14**. The base is formed with an inner bead **15**, which in the particular embodiment illustrated is an annular flange, and has a tapered edge **16** for facilitating pulling the rim over the bottle neck, and a laterally extending tab **17** adapted to be gripped by the fingers when placing the nipple on and removing the nipple from the bottle neck. The sides of the annular flange **15** are recessed, as indicated at **18**, to provide two spaced abutment shoulders as **19**, the two shoulders being in alignment and on a line perpendicular to the axial line of the tab **17**, whereby they may be set on a bottle neck as indicated in Fig. 4, to form abutments which cooperate with the thumb. Each recess **18** has a relatively long sloping portion **20** which cooperates with the tapered edge **16** and assists in guiding the inner flange **15** over the rim of the bottles; the improved construction thus embodies abutments which assist in holding the back of the nipple in proper mounting position, and sloping sides which facilitate spreading engagement of the sides of the annular flange with the rim of the bottle neck.

The formation of a recess as above described not only provides abutments for the bottle rim, and sloping portions for facilitating mounting, but also reduces the thickness of the flange or bead on the sides at points substantially 90 degrees from the axis of the tab, whereby pulling the tab when mounting the nipple permits a ready elongation of the thinner elastic material at the junction of the abutments **19** and slopes **20**, thus facilitating the forward movement of the front portion of the nipple and the mounting of the nipple or cap on the bottle rim. The nurse may thus quickly mount the nipple by placing the nipple as shown in Fig. 4, and pulling the tab forwardly.

The same construction is applicable to bottle caps, such as indicated at **21** in Fig. 5, these caps having an annular bead **22** and a finger engageable tab **23**, the bead as illustrated being in the form of an annular flange, although it may be rounded if desired, and having two aligned recesses **24** on the sides thereof, positioned as indicated in Fig. 3, to provide abutments **25** and sloping portions **26**, whereby the cap may be readily mounted by positioning it on a bottle rim in the manner indicated in Fig. 4.

While I have described a specific constructional embodiment of my invention particularly suitable for nipples and caps for nursing bottles, the invention may be used for any container closure which has flexible sides. The term "bottle" as used in the claims is intended to broadly designate containers having flanged rims.

While I have described specific constructional embodiments of my invention, it is obvious that changes in the material used, in the shape of the parts, and in their relative arrangement and functioning, may be made to suit the requirements for different container closures, without departing from the spirit and the scope of the invention as defined in the appended claims.

I claim:

1. In a device of the character described, a body having a base engageable with the rim of a bottle neck, said base being generally cylindri-

cal in form and having an annular bead with substantially diametrically opposite recesses.

2. In a device of the character described, a body having a base engageable with a rim of a bottle neck, said base being generally cylindrical in form and having an annular bead with substantially diametrically opposite recesses, said base having an outwardly extending tab positioned circumferentially between said recesses, each of said recesses having an abutment shoulder at the end furthest from said tab extending transversely of said bead, the walls of said recesses sloping at a decreasing angle with respect to the horizontal plane of said base away from said tab.

JESSE LITTLE.