

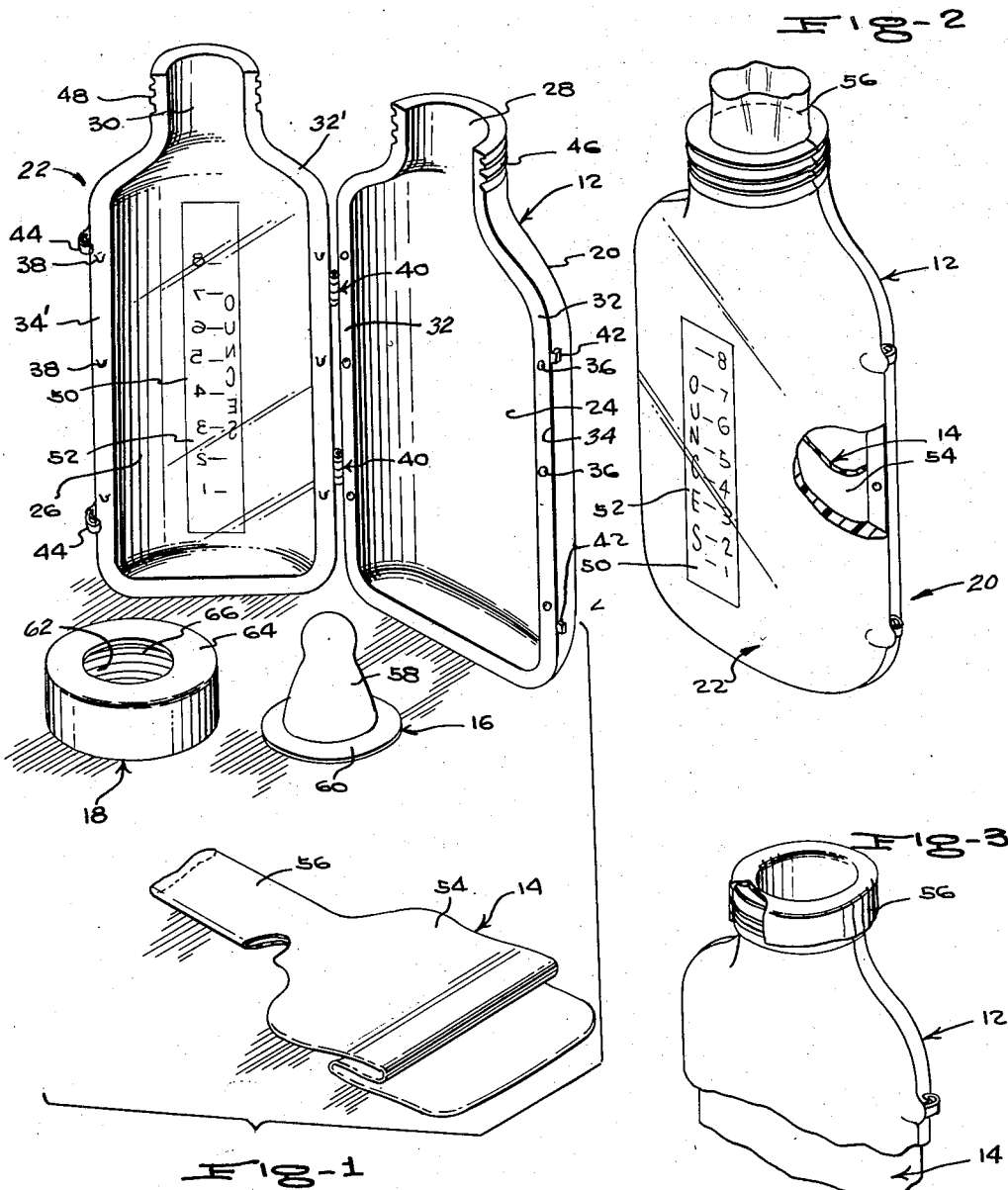
Nov. 11, 1958

G. V. CARKIN
NURSING BOTTLE

2,859,891

Filed Feb. 8, 1957

2 Sheets-Sheet 1



INVENTOR.
GORDON V. CARKIN
BY

Mc Morrow, Berman & Davidson
ATTORNEYS

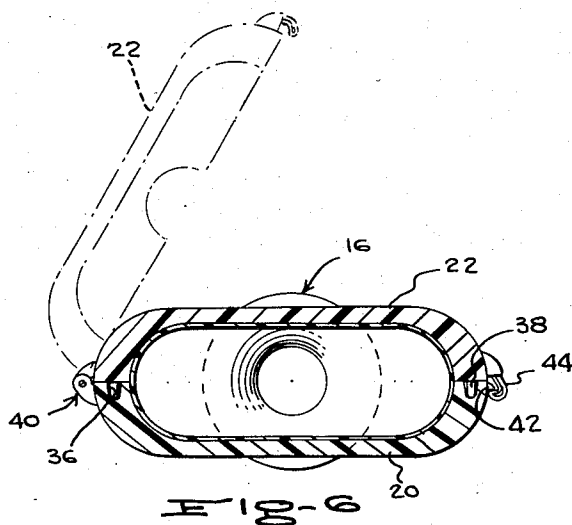
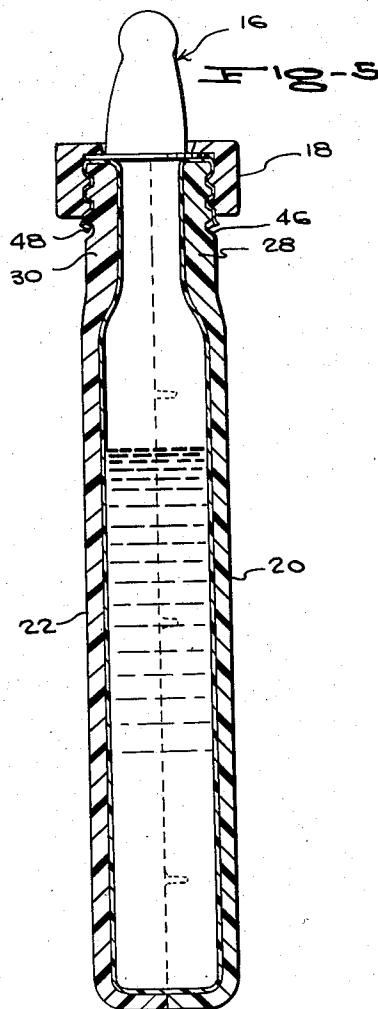
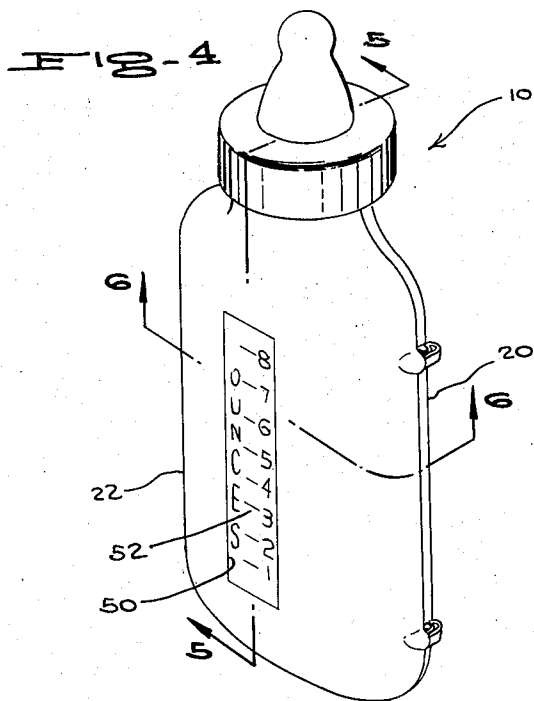
Nov. 11, 1958

G. V. CARKIN
NURSING BOTTLE

2,859,891

Filed Feb. 8, 1957

2 Sheets-Sheet 2



INVENTOR.

GORDON V. CARKIN

BY

Mc Morrow, Berman + Davidson
ATTORNEYS

1

2,859,891

NURSING BOTTLE

Gordon V. Carlin, Lincoln, N. H.

Application February 8, 1957, Serial No. 638,954

2 Claims. (Cl. 215—11)

This invention relates to an improved nursing bottle of the type involving a flask and a removable container therein.

The primary object of the invention is to provide a more practical and more sanitary device of this kind which involves a rigid flask composed of hinged sections which can be separated to enable thorough cleansing and sterilizing of the flask, and a thin, flexible container in the flask which can be readily removed therefrom and replaced or changed, the container being adapted to be separately cleaned and sterilized before being put in the flask. A number of such containers can be used with a single flask, so that milk or baby formula can be prepared in advance of anticipated use and be stored under refrigeration in such containers until wanted, and heated prior to use.

Another object of the invention is to provide an improved nursing bottle of the character indicated which can be made in attractive, rugged, and serviceable forms at relatively low cost.

These together with other objects and advantages which will become apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout the several views, and in which:

Figure 1 is an exploded perspective view showing the flask open and other separated components of a nursing bottle of the present invention;

Figure 2 is a perspective view of the bottle partially assembled, with portions broken away;

Figure 3 is a fragmentary perspective view of the bottle further partially assembled, portions being broken away and in section;

Figure 4 is a perspective view of the assembled bottle;

Figure 5 is a vertical transverse section, on an enlarged scale, taken substantially on the plane of line 5—5 of Figure 4; and

Figure 6 is a horizontal section, on an enlarged scale, taken substantially on the plane of line 6—6 of Figure 4, showing by means of phantom lines the manner in which one of the shell in phantom lines a section of the flask in open position.

Referring to the drawings in detail, the illustrated nursing bottle, indicated generally at 10, comprises a flat, oval or elliptical sectional flask 12, a thin flexible impervious container 14, a conventional nursing nipple 16, and a clamping collar 18.

The flask 12 comprises a pair of substantially similar complementary flat substantially semi-elliptical hollow sections 20 and 22, having side walls 24 and 26, respectively, merging at their upper ends into reduced semi-cylindrical neck portions 28 and 30, respectively. The side walls of the sections have flat inner and outer edges 32 and 34, and 32' and 34', respectively. The edges 32 and 34 of the section 20 have vertically spaced sockets 36 therein for receiving orientation pins 38 projecting from the edges 32' and 34' of the section 22. Extending along

2

the inner edges 32 and 32' on the sidewalls of the sections 20 and 22 are hinge assemblies 40 which hinge the sections together. The section 20 has extending laterally along its outer edge 34 abutments 42 engageable by latches 44 spaced along the outer edge 34' of the section 22. The semi-cylindrical neck portions 28 and 30 incorporate on their outer sides complementary partial screw threads 46 and 48, respectively, which combine to form a continuous screw thread about the neck of the flask, when the sections are closed, as clearly seen in Figure 2, for example.

One of the sections, such as the section 22, incorporates in the side wall 26 a vertically elongated transparent window portion 50, including thereon graduations 52 providing a graduated scale for showing the number of fluid ounces of milk or baby formula contained in the bottle 10. The sections may be constructed of any suitable material, a suitable non-breakable plastic being especially suitable. By virtue of the flat shape of the flask, the bottle 10 can be readily maintained on a flat surface so that danger of the bottle rolling off such as a table is obviated.

The flexible, thin impervious container 14 is constructed of any suitable material, such as natural rubber, and comprises a body portion 54 conforming to the interior of the flask 12, said body portion having thereon an elongate tubular neck 56. As shown in Figure 2, when the container 14 is disposed within the flask 12 and the flask is closed, the neck portion 56 extends out of the neck of the flask. As shown in Figure 3, the container neck portion 56 is next stretched and rolled down around the neck of the flask 12 so as to cover the partial threads 46 and 48.

The nipple 16 is of conventional form and comprises a nipple portion 58 and an annular base flange 60, the flange 60 being engaged on the upper end of the flask neck on top of the rolled over neck portion 56 of the container 14. Thereafter, the collar 18 which has internal screw threads 62 and an inwardly directed flange 64 on its upper end, is threaded onto the upper end of the neck of the flask 12 with the nipple portion 58 of the nipple 16 extending through the central opening 66 of the collar 18.

The foregoing is considered as illustrative only of the principles of the invention. Since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, as fall within the scope of the appended claims.

What is claimed as new is as follows:

1. In a nursing bottle, a flask comprising a pair of substantially similar hollow registrable sections, having side walls terminating at opposite sides of the sections in flat coplanar outer and inner edges arranged to engage when the sections are closed and registered, hinge means on the section side walls along the inner edges of the sections hinging the sections together, pins projecting from the edges of one of said sections and sockets in the edges of the other section arranged to receive said pins when the sections are closed and registered, said section side walls being extended to provide reduced semi-cylindrical neck portions on one end of the sections, said neck portions having partial external screw threads thereon arranged to define a single screw thread when the sections are closed and said neck portions define a flask neck, and an internally screw threaded clamping collar arranged to be threaded on said continuous thread on the flask neck, said clamping collar having an upper end provided with an inwardly directed annular flange having a central opening therein, said bottle further comprising a thin flexible container having a body portion conforming to the interior of the flask including a neck portion.

3

2. In a nursing bottle, a flask comprising a pair of substantially similar hollow registrable sections, having side walls terminating at opposite sides of the sections in flat coplanar outer and inner edges arranged to engage when the sections are closed and registered, hinge means 5 on the section side walls along the inner edges of the sections hinging the sections together, pins projecting from the edges of one of said sections and sockets in the edges of the other section arranged to receive said pins when the sections are closed and registered, said section side walls 10 being extended to provide reduced semi-cylindrical neck portions on one end of the sections, said neck portions having partial external screw threads thereon arranged to define a single screw thread when the sections are closed and said neck portions define a flask neck, and an 15 internally screw threaded clamping collar arranged to be threaded on said continuous thread on the flask neck, said clamping collar having an upper end provided with an inwardly directed annular flange having a central opening therein, said bottle further comprising a thin flexible container having a body portion conforming to the interior 20 of the flask including a neck portion, said neck portion of

4

the container being rolled onto the external partial screw threads on the neck portions of the flask sections and engaged in the threads of the flask neck portions by the collar, and a nipple extending through the opening of the collar and having a flange engaged under the flange of the collar.

References Cited in the file of this patent

UNITED STATES PATENTS

761,775	Lewis et al. -----	June 7, 1904
770,528	Kestner -----	Sept. 20, 1904
2,110,928	DeBuys -----	Mar. 15, 1938
2,111,954	Urbany -----	Mar. 22, 1938
2,328,338	Hauptman -----	Aug. 31, 1943
2,376,064	Knapp -----	May 15, 1945
2,624,485	Boston -----	Jan. 6, 1953

FOREIGN PATENTS

1,670	Great Britain -----	1883
588,312	Germany -----	Nov. 17, 1933