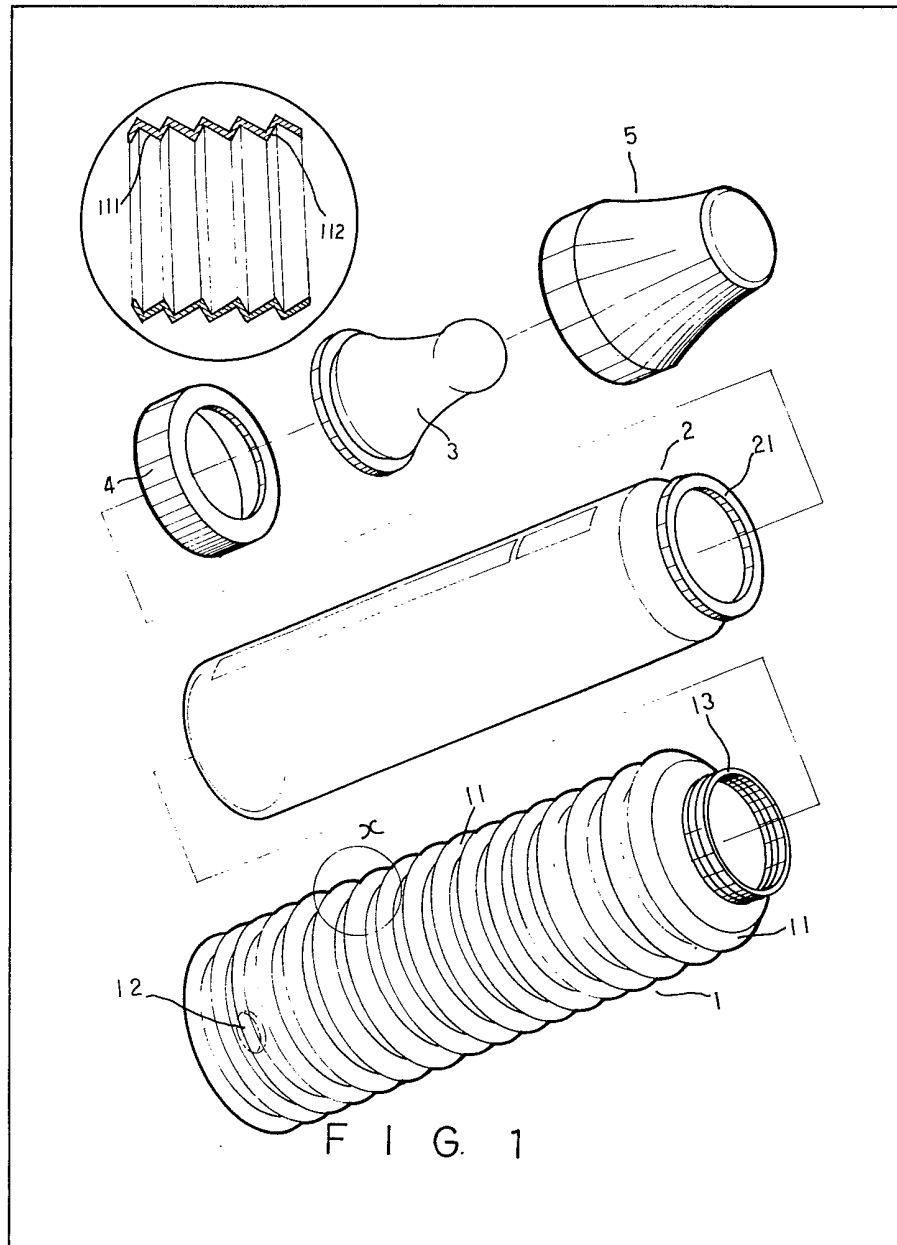
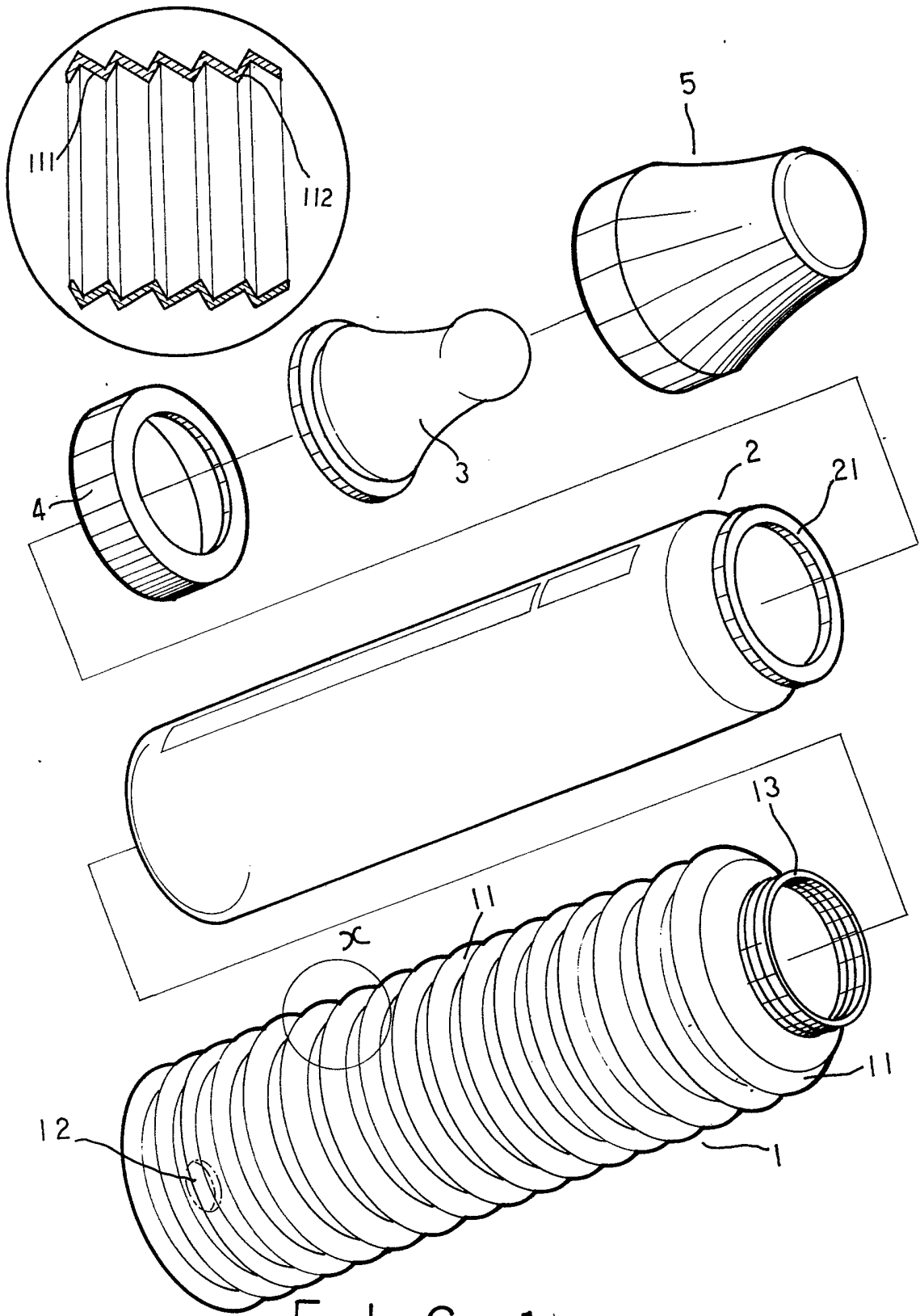


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- (71) Applicants Shen Kuang Hsu, 2F 6 Lane 168, Chi Lin Road, Taipei, Taiwan.
- (72) Inventors Ten Chueng Tzeng
- (74) Agent and/or Address for Service Wilson, Gunn and Ellis, 41-51 Royal Exchange, Cross Street, Manchester M2 7BD.

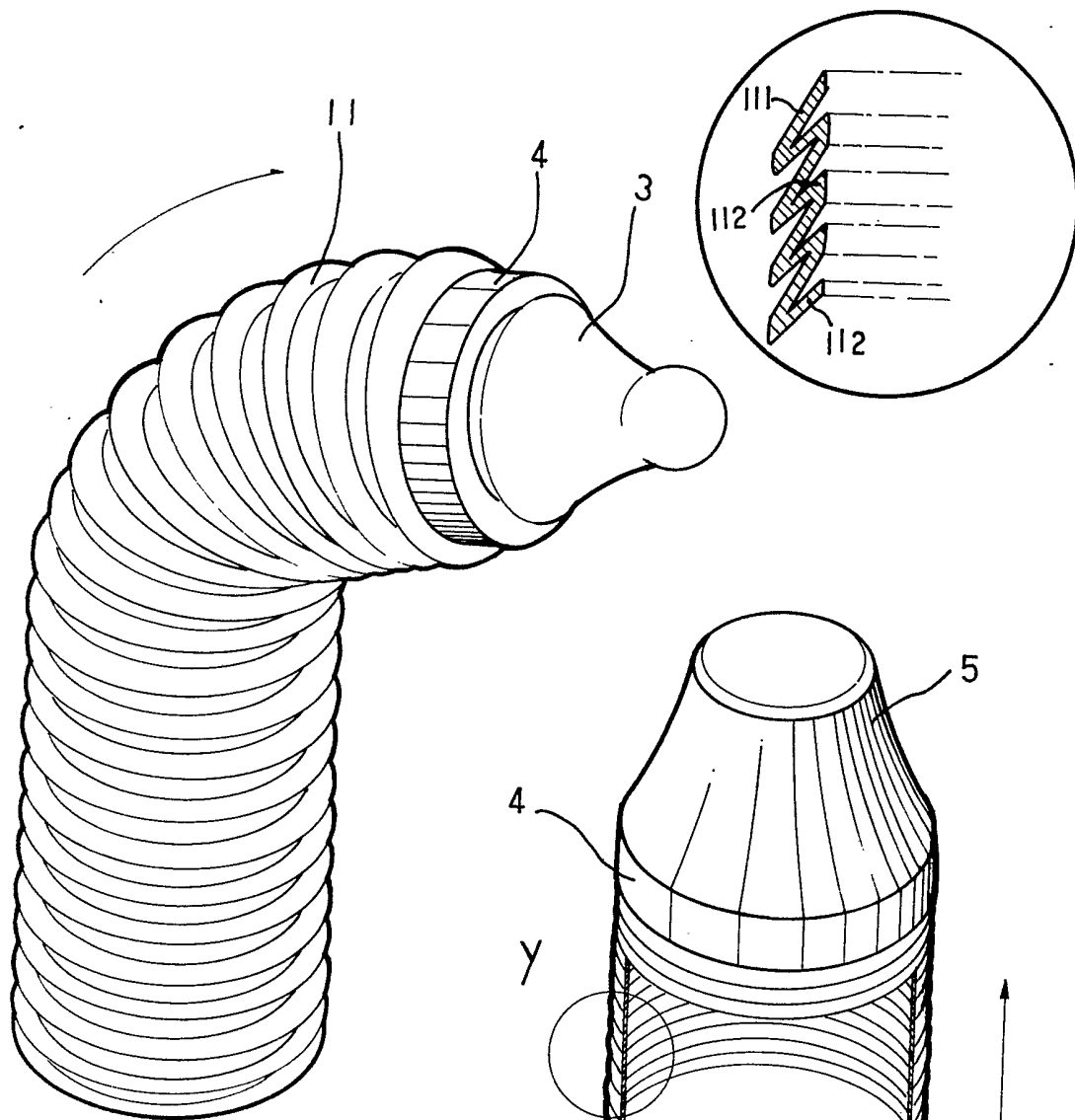
(54) Nursing bottle

(57) A nursing bottle comprises a collapsible container 1 in which there is dismountably secured a disposable collapsible milk tube or container 2. The invention obviates the need to provide more than one sterilised container 1 for a baby while in transit.

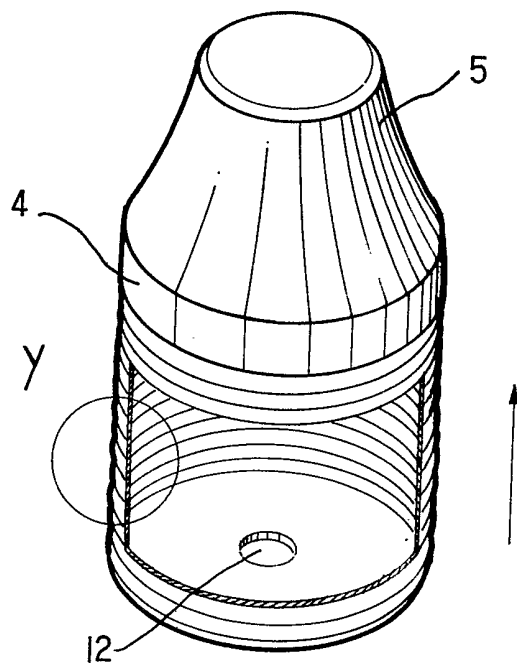




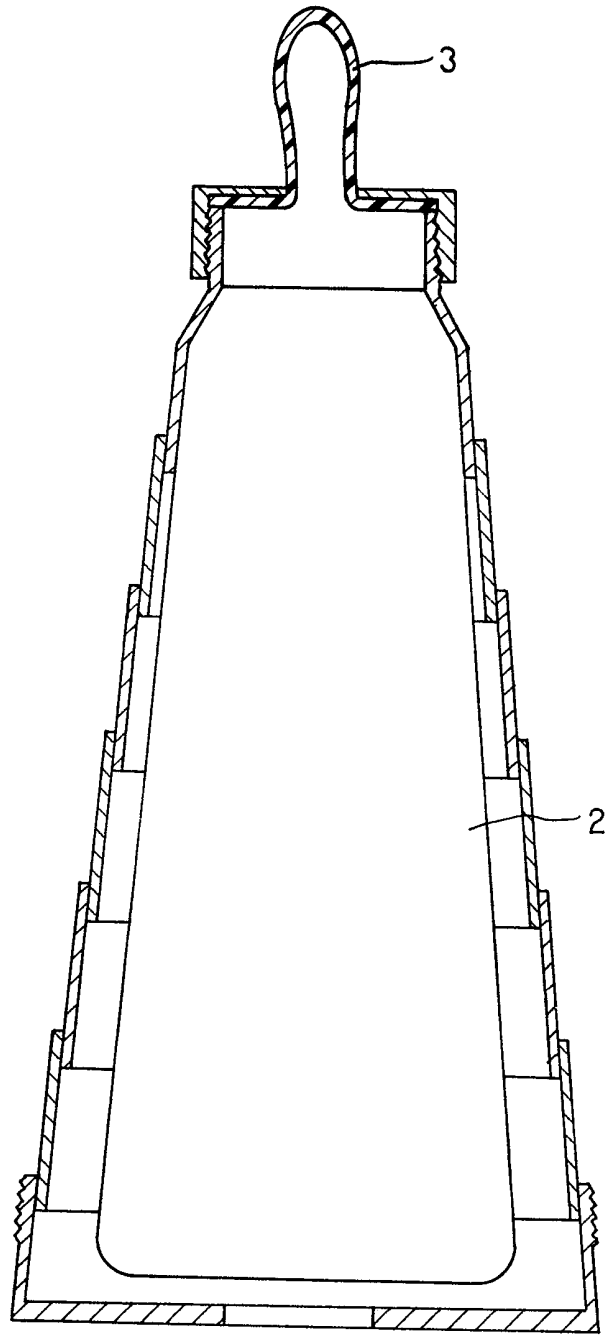
F I G. 1



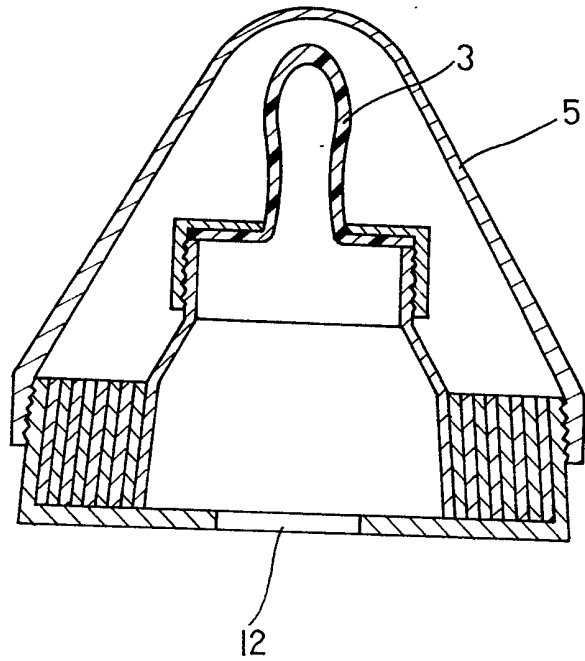
F I G. 3



F I G. 2



F I G . 4



F I G . 5

SPECIFICATION

Nursing bottle

5 This invention relates to an improved nursing bottle. Parents usually prepare a nursing bottle containing milk powder for their babies when going out for more than a few hours. For the sake of health a bottle must be washed with hot water after every use. This, however, may not be possible when travelling. Thus a plurality of spare bottles are necessary and this add to the bulkiness of a parent's baggage, which may be already crammed with other necessities for the journey.

15 Accordingly, it is the main object of this invention to provide an improved nursing bottle to obviate and mitigate the aforesaid drawbacks.

According to the present invention, a nursing bottle comprises a collapsible bottle; a dismountable milk tube with an opening; a teat; means to secure said teat; said collapsible bottle being axially stretchable and contractible to elongate or shorten its size lengthwise; said milk tube being provided with means to secure it inside said bottle with its opening coinciding with the opening of said bottle.

In further describing the invention hereof, reference will be made to a drawing, illustrating schematically a preferred embodiment of the invention, in the drawing:

30 *Figure 1* is a fragmentary view of a first embodiment of the invention;

Figure 2 is a perspective view of the first embodiment in collapsed state, partially dismantled;

35 *Figure 3* is a perspective view of the first embodiment;

Figure 4 is a longitudinal sectional view of a second embodiment of the invention; and

Figure 5 is the collapsed state of the embodiment shown in *Figure 4*.

40 Referring to *Figure 1*, this invention comprises a flexible bottle 1, a milk tube 2, a teat 3, a seat ring 4, and a lid 5. The bottle 1 is formed by flexible, liquid-impervious material, preferably a plastics material and comprises a bellows-shaped cylinder, the bottom end of which is provided with a vent aperture 12 to release the air sealed therein. Preferably each segment of the bellows 11 is formed by two slopes 111 and 112, wherein the former slope is comparatively gentle, while the latter is comparatively steep. (See X in *Figure 1*). Thus when bottle 1 is compressed axially, the steeper and shorter slope 112 will be folded in and hidden behind slope 111. (See Y in *Figure 2*) thereby considerably reducing its size. The top end 13 of the bottle includes an opening which is externally threaded. In use, inner bottle 1 is stretched to its full length, then a milk tube 2 which is filled with milk is nested into the bottle. Preferably, the opening of the milk tube 2 is provided with a rigid flange 21 which is slightly outside to the opening of the bottle 1. The remaining part of the milk tube 2 is preferably formed by a thin, flexible plastics bag. A teat 3 is then secured by means of the internally threaded seat ring 4 which engages with the thread of bottle 1 thereby finishing the assemblage, which is now available for the hungry baby. The bottle 1

and the milk tube 2 are flexible and can be bent to an optimal angle to facilitate the mother to feed her baby, (see *Fig. 3*). Having fed the baby, the seat ring and teat are dismantled. The milk tube, now empty, is taken out from and bottle and discarded, to dispense with the trouble of washing the bottle.

70 The bellows-type bottle 1 can be modified into another type of structure comprising a plurality of hollow frusta of like height and slope. This is illustrated in *Figure 4*, in which like reference numerals designate parts corresponding to those of *Figures 1* to 3. Note that the size of the bottom of a unit frustum is slightly larger than the size of the top of the unit frustum just below it, thereby preventing the detachment of this unit when they are stretched. Both the uppermost and bottommost frusta are externally provided with thread means. The use of this modification is similar to its bellow-type prototype. When not in use, the used milk tube may be removed and the teat 3 mounted in place by means of the seat ring 4. The structure may be collapsed as seen in *Figure 5* and then covered by a lid.

85 It will be apparent to those skilled in the art that various modifications of the present invention are possible and accordingly the scope of the present invention should be interpreted solely from the following claims.

CLAIMS

- 95
1. A nursing bottle comprising a collapsible bottle; a dismountable milk tube with an opening; a teat; means to secure said teat; said collapsible bottle being axially stretchable and contractible to elongate or shorten its size lengthwise; said milk tube being provided with means to secure it inside said bottle with its opening coinciding with the opening of said bottle.
 2. The nursing bottle according to claim 1, wherein said bottle is an elongate bellow structure.
 3. The nursing bottle according to claim 1 or 2, wherein said bellow is formed by a plurality of like, interconnecting segments formed by two slopes of different length.
 4. The nursing bottle according to claim 1, which is further provided with an aperture at its bottom.
 5. The bottle according to claim 1, wherein said bottle is formed by a plurality of hollow frusta interconnected in alignment in a head-to-tail manner, characterised in that the size of the bottom frusta is smaller than that of the bottom yet larger than that of the top of the frusta just located below it, in a manner such that when the structure is stretched, the frusta are not detached.
 6. A bottle substantially as hereinbefore described with reference to and as illustrated in *Figures 1* to 3 of the accompanying drawings.
 7. A bottle substantially as hereinbefore described with reference to and as illustrated in *Figure 4* of the accompanying drawings.