H. C. DUNFEE.

NURSING BOTTLE.

APPLICATION FILED MAR. 6, 1909.

954,564.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

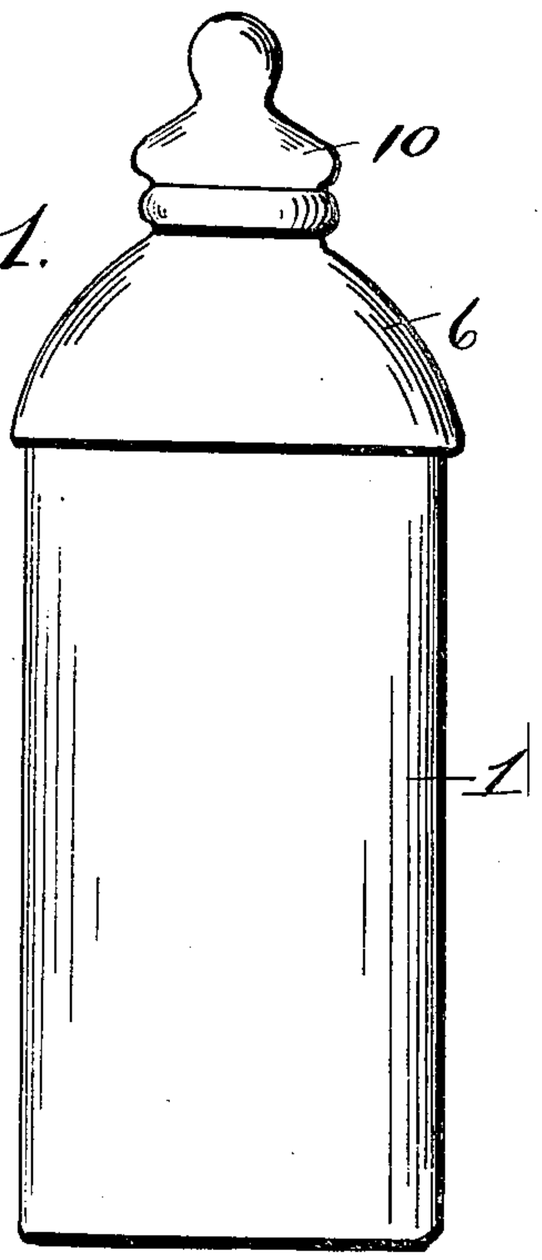


Fig. 2.

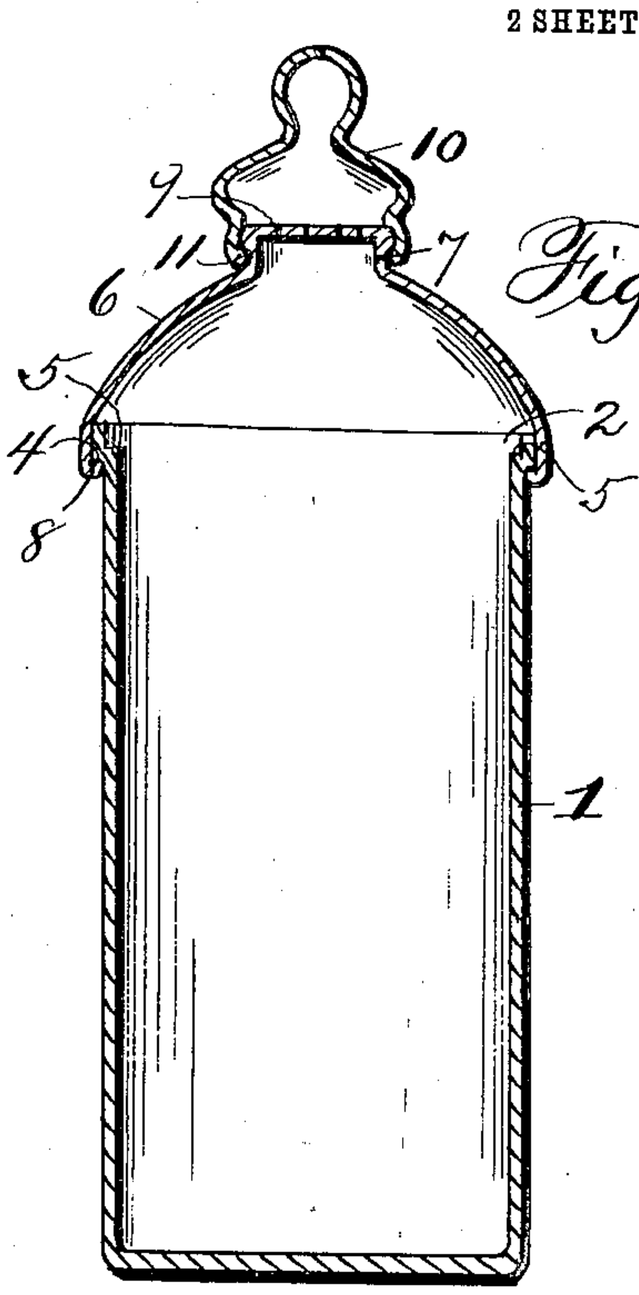


Fig. 3.

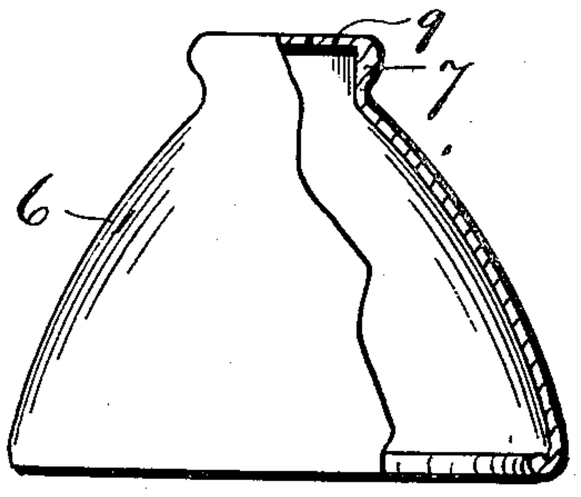
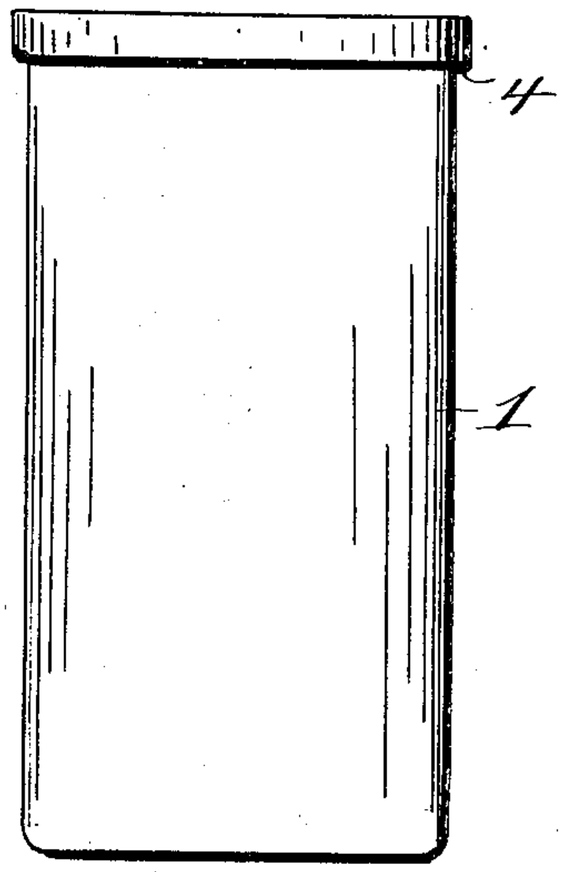


Fig. 4.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 5.

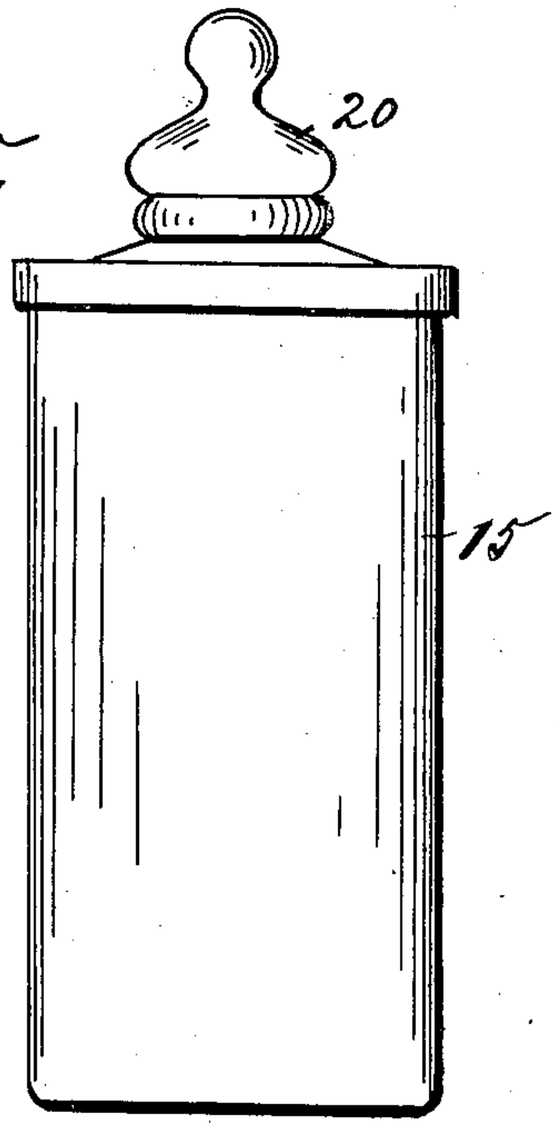


Fig. 6.

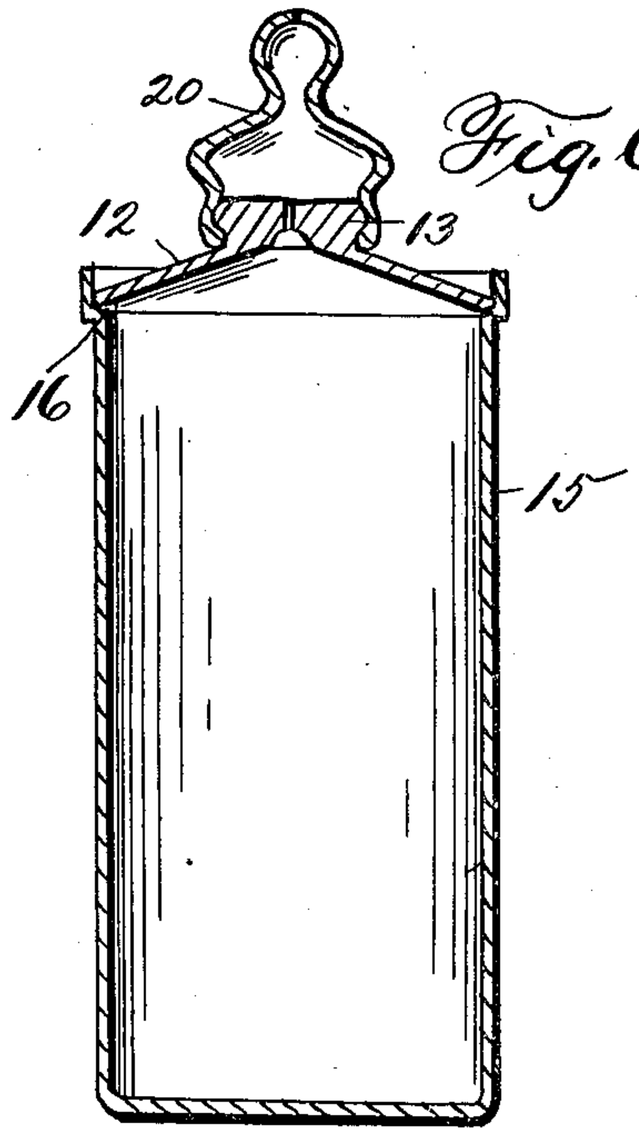


Fig. 7.

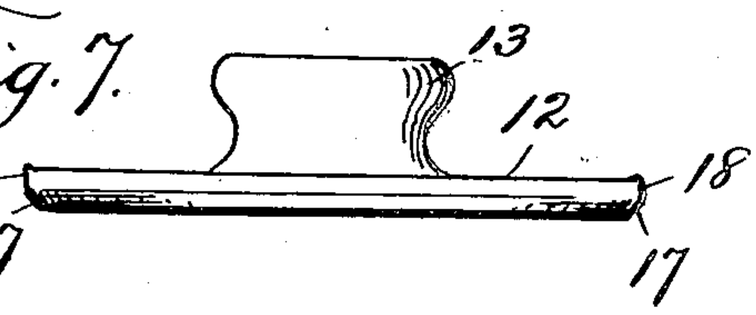
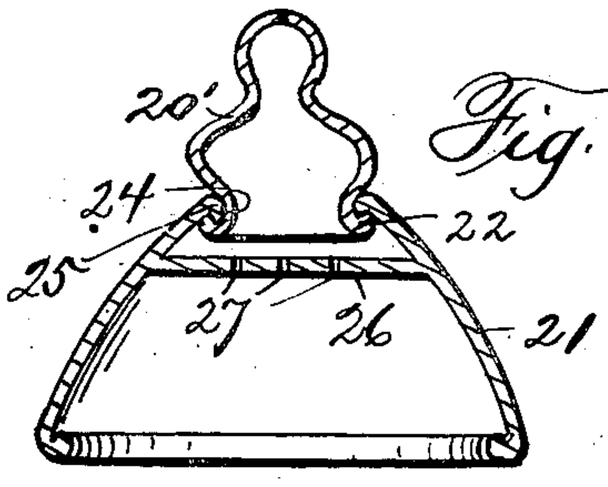


Fig. 8.



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UNITED STATES PATENT OFFICE.

HOD C. DUNFEE, OF CLARKSBURG, WEST VIRGINIA.

NURSING-BOTTLE.

954,564. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed March 6, 1909. Serial No. 481,598.

To all whom it may concern:

Be it known that I, HOD C. DUNFEE, citizen of the United States, residing at Clarksburg, in the county of Harrison and State of West Virginia, have invented certain new and useful Improvements in Nursing-Bottles, of which the following is a specification.

My invention relates to nursing bottles.

One of the objects of my invention is to provide a nursing bottle wherein means are provided for regulating the flow of the milk and preventing the too free flowing of the milk even though the usual perforated tip of the nursing nipple may be damaged by the teeth of the child, causing enlargement of the perforation in the nipple.

A further object of my invention is to provide a nursing bottle which will be extremely simple in its construction and inexpensive to manufacture.

A further object of my invention is to provide a nursing bottle wherein a receptacle or bottle proper having a mouth of large diameter may be used, adapted for coöperation with the usual inexpensive small-sized nipple, so that if the latter becomes damaged it may be discarded and a new one substituted, thus making my device an inexpensive one to use.

A further object of my invention is to provide a nursing bottle the receptacle or bottle proper of which is adapted for use with either an internally or an externally-arranged flow regulating member.

A further object of my invention is to provide a nursing bottle wherein if the flow regulating member should collapse it will not interfere with the flow of the milk nor prevent the nipple being seized by the child.

With the above and other objects in view my invention consists in the normal construction, arrangement and combination of parts as hereinafter fully described, illustrated in the drawings and pointed out in the appended claims.

In the drawings:—Figure 1 is a side elevation of a nursing bottle constructed in accordance with my invention. Fig. 2 is a vertical sectional view of Fig. 1. Fig. 3 is an enlarged side view partly in section of the device for regulating the flow of the milk. Fig. 4 is a side elevation of the receptacle or bottle proper, Fig. 5 is a side view of another form of my nursing bottle, the flow regulating disk being shown bowed upwardly, Fig. 6 is a vertical sectional view thereof, Fig. 7 is an enlarged detail view of the regulating member shown in Fig. 6. Fig. 8 is a vertical sectional view showing a slight modification of the construction shown in Figs. 1 to 4.

A complete nursing bottle constructed in accordance with my invention comprises essentially a receptacle or bottle proper for containing the milk, a member for regulating the flow of milk from the receptacle and detachably connected with the latter, and a nipple adapted to be detachably connected with the regulating member.

Referring particularly to Figs. 1 to 4 inclusive of the drawings which illustrate one form of the invention, 1 indicates a receptacle or bottle proper for containing the milk and being preferably of the shape shown and having a mouth 2 of large diameter. While I preferably use the shape of bottle proper as shown and having a large mouth, I do not wish to be restricted to said shape as other shapes of bottles might be used and having mouths varying in size. The upper edge of the receptacle is provided with the external lip or shoulder 4 and the internal seat 5 for purposes presently described. The receptacle is preferably constructed of glass though it may be constructed of any other suitable or desired materials.

With nursing bottles as heretofore usually constructed no means have been provided for controlling or regulating the flow of the milk from the receptacle so that in the event of the nipple being damaged by the child thus enlarging the perforation in the nipple, the milk would flow out too freely. In order to obviate this contingency and regulate the flow of the milk even though the nipple should be damaged or even should become detached entirely, I provide a regulating member 6, which as shown in Figs. 1 to 4 is made in a cup-shaped or somewhat tapering form resembling closely the shape of the human breast. This member 6 is preferably constructed of thin and

very flexible rubber and it terminates at its smaller end in an integral head or extension 7 and at its larger open end in an internally-projecting bead or flange 8. At its smaller end the member 6 is provided with one or more fine perforations 9 through which the milk can flow in the desired quantity. The bead 8 is adapted to be sprung over the mouth of the receptacle and detachably though firmly engage with the shoulder 4 so as to be retained snugly in position.

10 indicates the ordinary rubber nipple at present generally used. This nipple has the bead 11 adapted to be sprung over the extension 7 of the member 6 and engage firmly though detachably with said extension 7. In the event that the nipple should be injured as by the child biting off the end of the same or otherwise which would heretofore permit the milk to flow too freely, the member 6 will act to regulate the flow since only a quantity predetermined by the size or number of perforations 9 could flow therethrough. This is a great advantage in this class of devices, as will be readily recognized, and aside from the fact that it maintains a uniform flow of milk under all conditions, it also is economical in that if a nipple 10 becomes damaged it can be readily replaced by a new one at an insignificant cost.

In Figs. 5 to 7 I show another form of regulating member as 12, the same being somewhat of disk-shape and having a bead-like extension or flange 13 having one or more fine perforations 14 for the passage of the milk. The diameter of the member 12 is slightly larger than the mouth of the receptacle 15 so that it is adapted to be forced down within the mouth and snugly fit within the said open mouth of the receptacle and seat upon the internal seat 16 thereof. I preferably construct the edge of the disk with inclined face 17 and vertical face 18 so that when the disk is drawn somewhat upwardly, as in the act of nursing, said edge will engage firmly against the inner wall of the bottle, as seen in Figs. 5 and 6.

The nipple 20 similar to that seen in Figs. 1 to 4 is adapted to be sprung over the extension 13 and detachably engage with the same and the flow of milk will be regulated in the same manner as with the member 6 seen in Figs. 1 to 4.

It will be understood that when the exteriorly-fitting member 6 is used the internal seat could be dispensed with, and when the internally-fitting member 12 is used the external flange could be dispensed with. I, however, preferably construct the receptacle with both the external shoulder and the internal seat so that the buyer could use either form of regulating member, as desired.

In Fig. 8 I show a modified construction of the form of device represented in Figs. 1 to 4. The small nipple 20′ instead of being attached exteriorly to an extension on the breast-shaped regulating member 21 has its beaded edge 22 inserted within the said member and engaging the edge 24 thereof, which edge may be provided with a bead 25 beneath which the beaded edge 22 engages. The member 21 has molded integral therewith the disk-like portion 26 which is perforated at 27, said portion 26 serving to regulate the flow of the milk.

If desired, the well-known glass tube as heretofore used in nursing bottles, may be detachably secured to either form of regulating member hereinbefore described.

While I have shown and described various ways of engaging and securing in position the regulating disk, other ways will readily suggest themselves and I do not wish to be restricted to any particular way of arranging or securing the regulating disk in position. Furthermore, various other shapes of nipples than those shown may be used, if desired, and I do not wish to be restricted to any particular shape of nipple so long as the same will be adapted to engage with the breast-shaped or the disk-like regulating member.

What I claim is:—

1. As a new article of manufacture, a regulating member for regulating or controlling the flow of milk from a nursing bottle comprising a flexible body portion adapted to detachably engage with the bottle and provided with an integral perforated head or extension adapted to be engaged by a nipple.

2. As a new article of manufacture, a regulating member for regulating or controlling the flow of milk from a nursing bottle comprising a flexible breast-shaped member having at its larger open end an inwardly-projecting bead and at its smaller end an integral perforated head or extension adapted to be detachably engaged by a nipple.

3. The combination with a receptacle, of a flexible regulating member detachably engaged therewith and having an integral perforated head or extension, and a nipple directly but detachably engaging with said extension.

4. In a nursing bottle the combination with a receptacle having an external shoulder adjacent its upper end, a breast-shaped regulating member having at its larger end a bead engaging the said shoulder and at its smaller end an integral perforated extension and a nipple detachably engaging with the said extension.

5. In a nursing bottle, the combination with a receptacle, of a flexible regulating member detachably engaged therewith, and having an integral perforated portion constructed to regulate the flow of the milk, and a nipple directly but detachably engaging said regulating member.

In testimony whereof I affix my signature in presence of two witnesses.

HOD C. DUNFEE.

Witnesses:
CHAS. E. RIORDAN,
WM. E. BOULTER.