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ABSTRACT

A gravity influenced weeping device is provided for a doll having a head with eye sockets and an open mouth formed therein and is constructed to cause the doll to weep only when it is placed in a horizontal position. The device includes a liquid inlet conduit located adjacent the open mouth and a flexible reservoir in liquid communication with the inlet conduit; a selectively operable valve means is located in the inlet conduit to permit liquid to flow through the mouth to the reservoir when the valve is engaged with the nipple on the end of a liquid supply bottle. A second liquid conduit is formed between the reservoir and the eye sockets, and a gravity responsive valve member is located in the second conduit for opening that conduit for passage of liquid from the reservoir to the eye sockets when the doll is placed in a generally horizontal position while closing the second conduit when the doll is placed in a generally vertical position. Means are provided for compressing the flexible reservoir so that when the doll is in the horizontal position liquid is forced from the reservoir through the second conduit and valve means therein to the eye socket.

18 Claims, 8 Drawing Figures

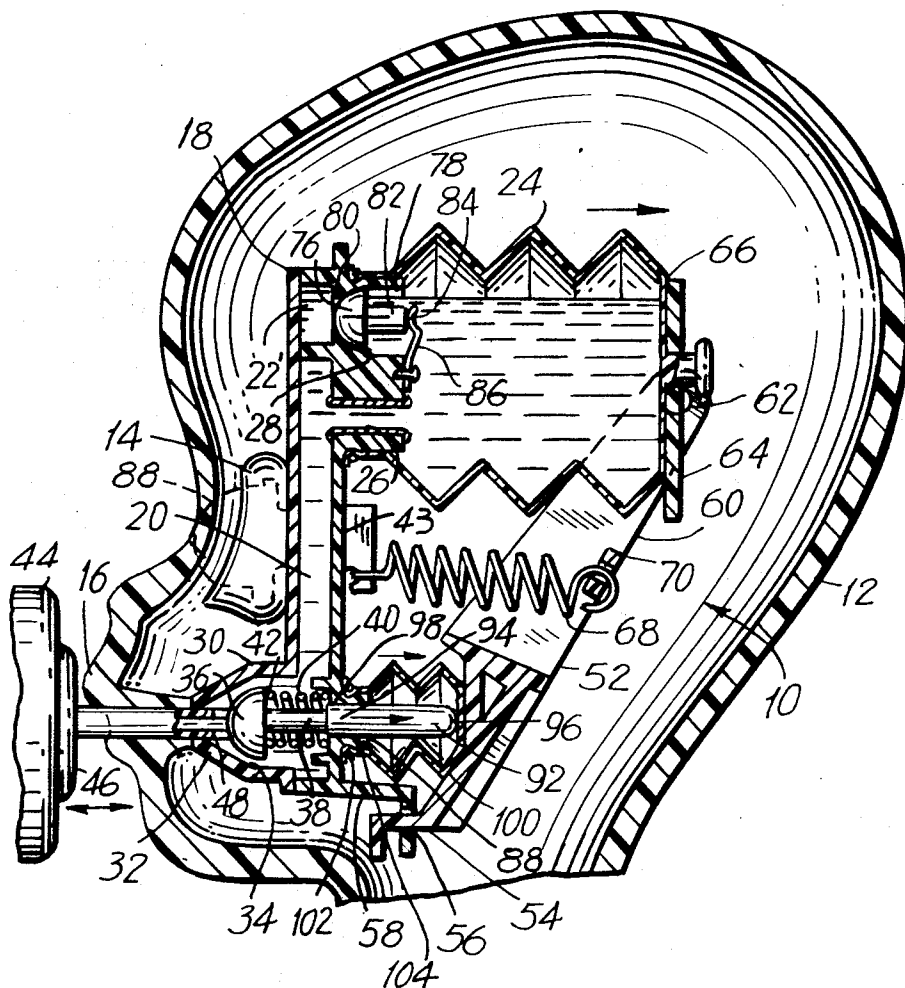


FIG. 1

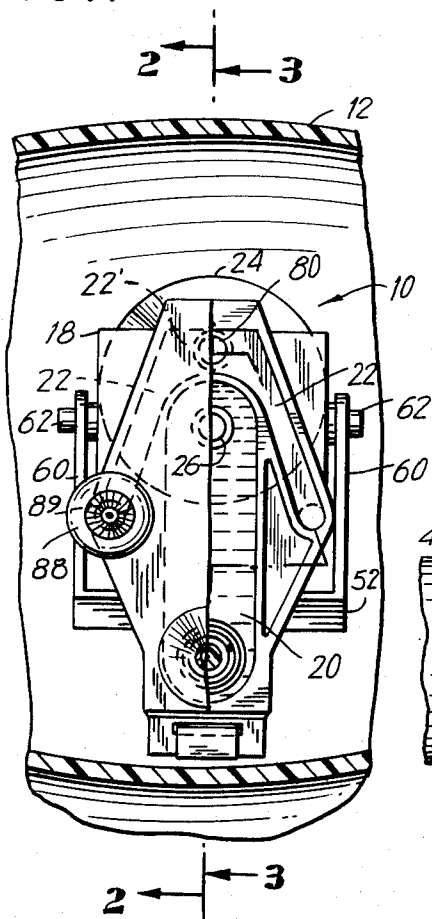


FIG. 2

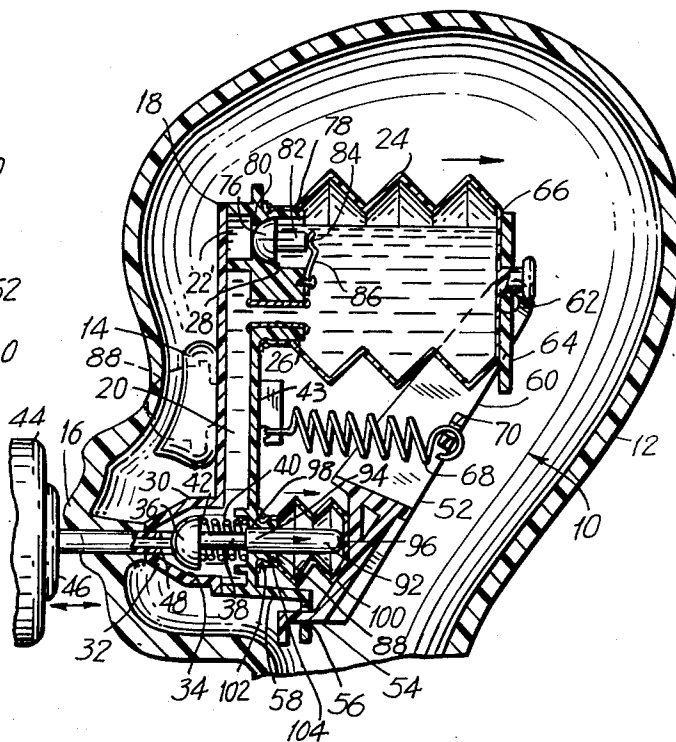


FIG. 3

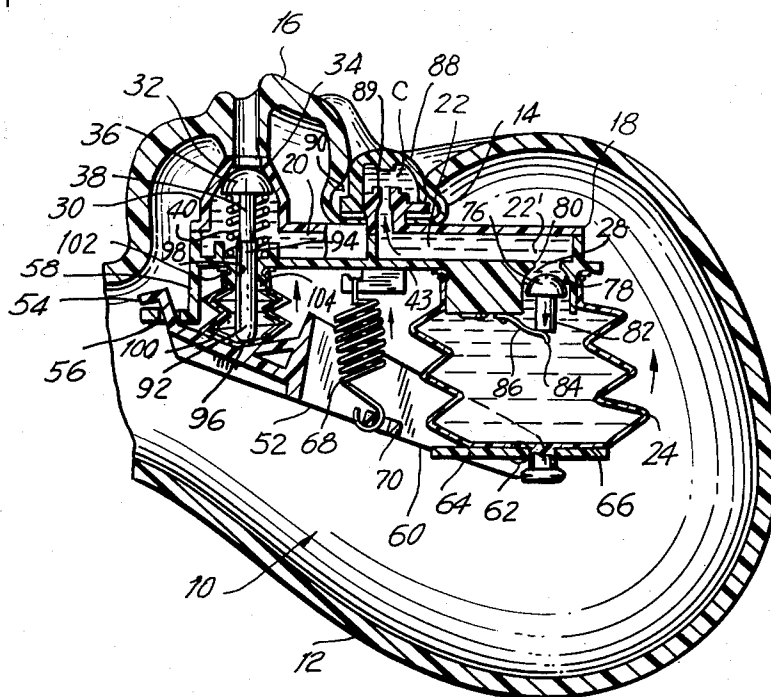


FIG. 4

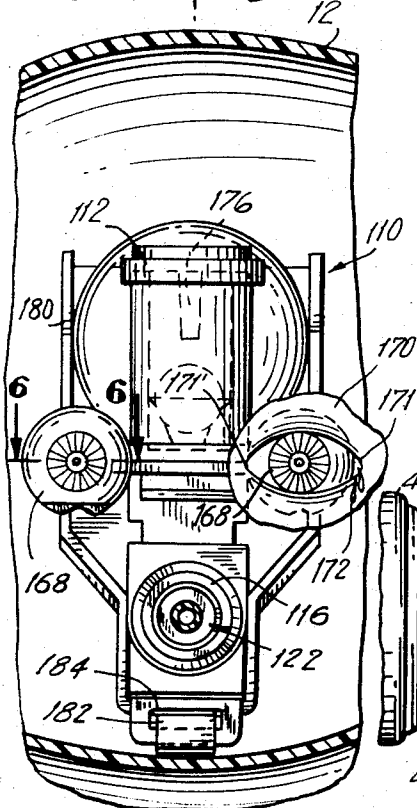


FIG. 5

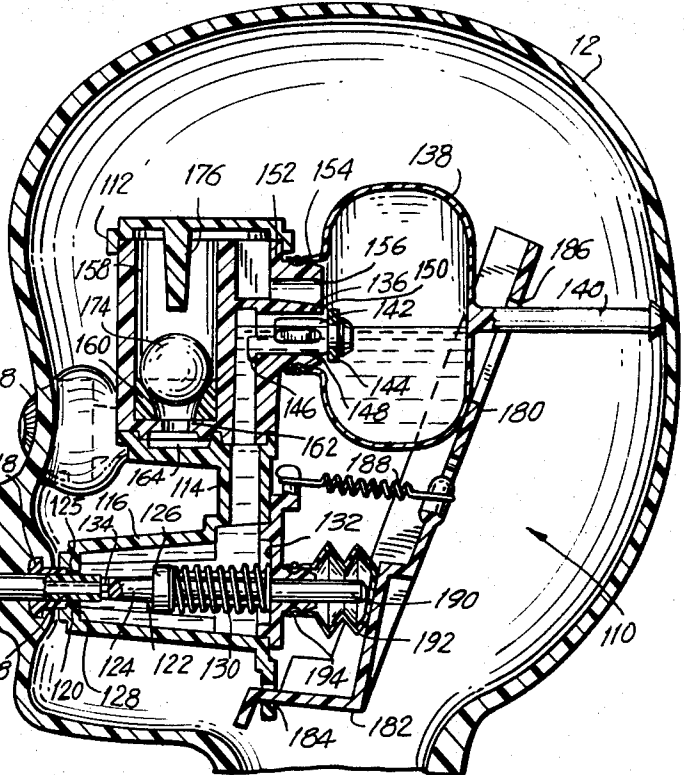


FIG. 7

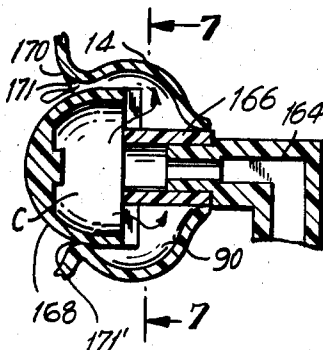
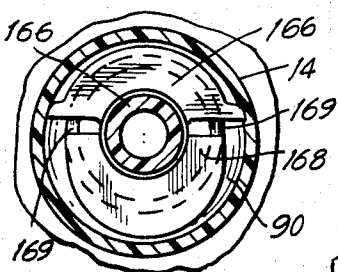
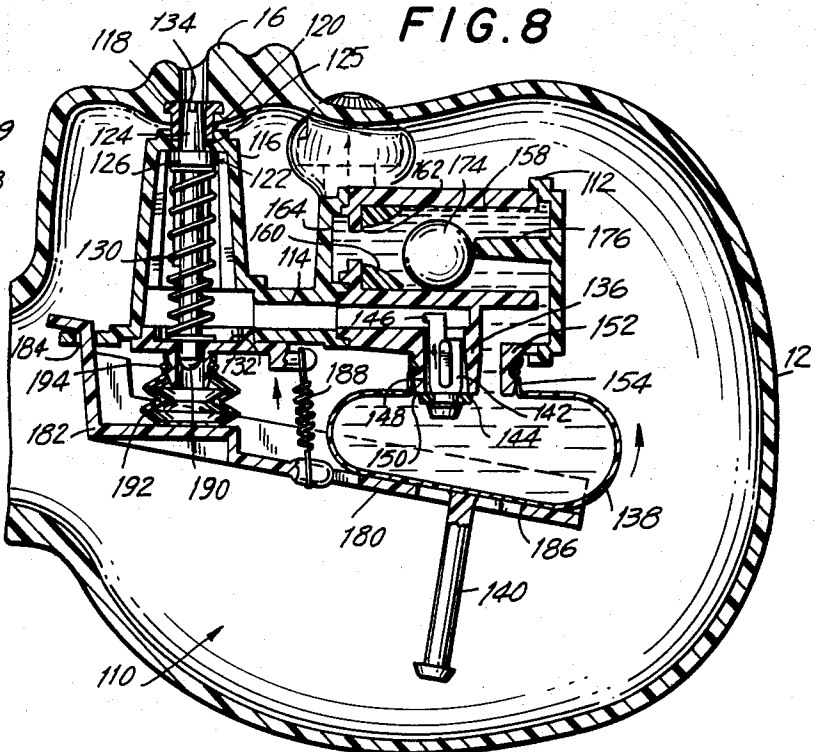


FIG. 6

FIG. 8



DOLL WHICH TEARS ONLY IN HORIZONTAL POSITION

The present invention relates to weeping dolls and in particular to weeping dolls which are adapted to automatically simulate tearing when the doll is placed in a horizontal position and to stop tearing when the doll is moved to a vertical position.

A number of "weeping" dolls have been previously proposed which will automatically simulate "weeping" or "tearing." Such dolls typically include a gravity influenced reservoir, located in the doll's head, which is filled through a miniature nursing bottle with the doll in a prone position. As the reservoir is filled, water flows to the reservoir through suitable tubing and, in some cases, from the reservoir to the lower back portion of the doll to simulate "wetting." This "wetting" continues until the doll is placed in an upright position whereupon additional tubing carries the water to the doll's eyes to simulate tearing. Dolls of this type are unable to simulate weeping or tearing when in a prone position and, when the wetting function is provided, have the disadvantage that wetting continues as long as the doll is in the prone position and water is in the reservoir. Further, with such tearing devices, there is no capability for repeated or consecutive release of small amounts of water without the necessity of repeated refilling of the reservoir.

Other types of weeping dolls utilize manually operated air pumps constructed with a compressible doll body. The pump includes a flexible reservoir to which liquid is supplied from a miniature nursing bottle through tubing extending from the mouth of the doll and additional tubing is provided leading from the reservoir to the eye sockets. Liquid is selectively supplied to the eye sockets to simulate weeping upon compressing the body or head of the doll, adjacent the area of the reservoir, in order to increase the pressure in the reservoir and raise the water to the eye sockets. This type of doll is not particularly satisfactory in use, because the child must often apply excessive pressure to the doll so that the amount of water expelled through the eyes is not controlled. Further, with this type of doll a removable stopper, typically supplied as a simulated "pacifier," is required to be placed in the mouth before the doll can be compressed to simulate tearing in order to permit the air pump to operate and to prevent expulsion of water from the mouth. While such dolls have the capability of simulating tearing in both horizontal and vertical positions, they do not tear or weep automatically, but rather will tear only upon the application of pressure to the doll by the child.

It is preferable to provide a weeping mechanism which will operate automatically depending upon the position in which the doll is placed. In fact, if there is to be a truly accurate simulation, the weeping mechanism for the doll must be constructed to simulate the actual weeping or crying patterns of children. In this regard, typically, after an infant is fed it is put to sleep and placed in a prone position. Often the infant develops pains in his stomach due to gas or colic and will cry while in the prone position, but when lifted and held against the mother's shoulder, to be "burped," the infant ceases crying. Thus, to simulate this occurrence in dolls, it is necessary to provide a weeping mechanism in the doll which will automatically effect weeping when the doll is in a prone position and unattended, but

which will stop weeping when the doll is lifted and held in a vertical position during play or while the child using the doll simulates "burping" or pacifying of the doll.

Accordingly, it is an object of the present invention to provide a weeping device for dolls which will release liquid only when the doll is in a substantially horizontal position while automatically preventing release of liquid from the reservoir when the doll is in an upright position.

Yet another object of the present invention is to automatically simulate tearing in a doll without the use of a manual air pump.

Yet another object of the present invention is to automatically simulate weeping in a doll only when it is placed in a generally horizontal position, by a device which is relatively simple in construction and operation and inexpensive to produce.

In accordance with an aspect of the present invention a doll having a head with eye sockets and an open mouth formed therein is provided with a relatively rigid housing mounted entirely within the head. The housing has first and second fluid flow conduits therein, with a flexible reservoir in liquid communication with both of the conduits. The first conduit is located adjacent the mouth opening and has a selectively operable valve means therein which is adapted to permit liquid to flow through the mouth and first conduit to the reservoir. The second conduit has a valve chamber formed therein with a valve seat and a gravity responsive valve means in the chamber for opening the second conduit for passage of liquid from the reservoir to the eye sockets only when the doll is in a generally horizontal position and for automatically closing the second conduit when the doll is in a generally vertical position. A relatively rigid plate is pivotally mounted at one end to the housing with the reservoir being located between the housing and the other end of the plate. A spring member is operatively connected between the housing and the plate to urge the plate into compressive contact with the reservoir whereby liquid is automatically forced from the reservoir through the second conduit to the eye sockets only when the doll is in a generally horizontal position, i.e., when the valve member in the second conduit is open, thereby to simulate weeping or tearing of the doll.

The above, and other objects, features and advantages of this invention, will be apparent in the following detailed description of an illustrative embodiment thereof which is to be read in connection with the accompanying drawings, wherein:

FIG. 1 is a front view, with parts broken away, of a weeping device located within the head of a doll, according to an embodiment of the present invention;

FIG. 2 is a sectional view taken along line 2-2 of FIG. 1, illustrating the configuration of the components of the weeping device when the doll is in a vertical position and as it is being "fed;"

FIG. 3 is a sectional view similar to FIG. 2 taken along the line 3-3 of FIG. 1, but illustrating the configuration of the components of the weeping device after the doll is placed in a generally horizontal position;

FIG. 4 is a front view, similar to FIG. 1 of another embodiment of the present invention;

FIG. 5 is a sectional view taken along line 5-5 of FIG. 4, illustrating the configuration of the weeping

mechanism when the doll is in a generally vertical position during "feeding;"

FIG. 6 is a sectional view taken along line 6—6 of FIG. 4;

FIG. 7 is a sectional view taken along line 7—7 of FIG. 6; and

FIG. 8 is a sectional view, similar to FIG. 5, but illustrating the configuration of the components of the weeping device after the doll is placed in a generally horizontal position.

Referring now to the drawings, and initially to FIGS. 1 and 2 thereof, it is seen that a weeping mechanism 10, embodying the present invention, is mounted within the head 12 of a toy doll. Head 12 may be formed of a relatively flexible plastic material such as is conventional in the art, and is provided with eye sockets 14 and an open mouth 16 formed therein.

Weeping device 10 includes a relatively rigid housing 18, formed of a hard plastic material, which defines a liquid inlet conduit 20 and a pair of discharge conduits 22, more fully described hereinafter. A flexible reservoir tank 24 formed as a bellows, in this embodiment of the invention, is secured to housing 18 in watertight relation therewith and in communication with both inlet conduit 20 and outlet conduit 22, through port 26 and valve chamber 28 respectively.

Conduit 20 includes an inlet tube 30 having its open end 32 positioned adjacent the opening of mouth 16. Inlet tube 30 is generally conically shaped at its tip to form a valve seat 34 on its interior surface, which valve seat cooperates with a hemispherical valve member 36. The latter includes a stem 38 secured thereto and is biased towards the closed position, seen in FIG. 3, by a coil spring member 40 engaged between the inner surface 42 of valve 36 and the rear wall 43 of housing 18. By this arrangement the inlet tube 30 is normally closed so that water cannot escape through the opening in mouth 16 irrespective of the position in which the doll is placed.

In order to fill reservoir tank 24 a toy nursing bottle 44 is provided which has a simulated nipple 46 secured to the opened end thereof. The tip 48 of nipple 46 is placed through the opening in mouth 16 and engaged with the spherical surface of valve 36. The nipple is formed of relatively hard material and can be pushed against valve 36 to move the valve from valve seat 34, against the bias of spring 40, so that the inlet 30 is open. The tip 48 of the nipple can be serrated or castellated so that liquid passes through the tip and the serrations therein to the inlet tube 30. As an alternative embodiment, valve member 36 at its free end 50 may be provided with serrations or castellations, in lieu of those on nipple tip 48, in order to permit liquid flow from the bottle through the nipple into the inlet tube 30.

Because of the tight fit between the nipple and the opening in mouth 16, little, if any, water can flow out of the mouth during "feeding." When the doll is fed some pressure must be applied to the water in the bottle 44, as by squeezing it, in order to force the water through conduit 20 and port 26 to reservoir 24. However, since the doll normally will be fed while cradled in the arms of the child, so that it is at an inclined position, the bottle will be at a higher elevation than any point of the device 10 and the water will flow freely from the mouth to reservoir 24. Upon completion of the filling or rather "feeding," bottle 44 is removed from the mouth 16 and valve member 36 automatically

closes the inlet tube as it is moved against valve seat 34 by spring 40.

Having completed "feeding" the doll, the child, in simulating the actions of an adult with an infant, will put the doll to "sleep" by lying it in its crib, playpen, or the like. With infants, the infant typically cries if not "burped" because of gas pains occurring in his stomach as a result of bottle feeding. In order to accomplish this simulated reaction in the doll, the device 10 is provided with a generally U-shaped arm member 52 having a tab 54 extending through a slot 56 in an extension 58 formed on the housing. In this manner the arm 52 is pivotally mounted on the housing. The free ends of the arms 60 of U-shaped member 52 are pivotally connected at 62 to a plate 64 which is engaged with the rear surface 66 of bellows reservoir 24 and cooperates with a spring 68 to apply pressure to the bellows. Spring 68 is connected at its opposed ends to the rear wall 43 of housing 18 and a cross piece 70 formed between the legs 60. In this manner a constant compressive force is applied to the reservoir 24 which tends to force water in the reservoir out through port 26 and valve chamber 28. However, as mentioned, after the filling operation, conduit 20 and inlet tube 30 are closed by valve 36 so that while conduit 20 will fill with water under the influence of the compression of reservoir 24 by spring 68, the water cannot be discharged therefrom and the only possible path of release for the water is through valve chamber 28 into the outlet conduits 22.

A gravity influenced hemispherical valve member 76 is located in valve chamber 28 to selectively permit or prevent liquid passage through the valve chamber to outlet ports 22. This valve member is adapted to engage the valve seat 78 which defines a generally horizontally extending port 80 between valve chamber 28 and discharge conduits 22. The latter are joined at a cross conduit section 22' adjacent port 80 so that they are simultaneously fed with water when water passes through the valve chamber. Valve member 76 includes a stem 82 which is engaged with the tip 84 of a leaf-spring 86 secured to housing 18. When the doll is in a generally vertical position, spring 86 biases valve member 76, in the direction of the arrow seen in FIG. 2, to cause valve member 76 to engage valve seat 78 so that the port 80 in the valve chamber is closed to prevent liquid passage therethrough. As a result, when the doll is in a generally vertical position, and is not being "fed," liquid contained within reservoir 24 remains therein as it has no possible open path of discharge. However, when the doll is placed in a prone position, on its back, as seen in FIG. 3, valve 76 moves downwardly under the influence of gravity against the bias of spring 86 in order to open port 80. As a result, plate 64 is moved toward housing 18, under the influence of spring 68, to compress the reservoir 24 and force liquid through valve chamber 28 and port 80 into the outlet conduits.

Conduits 22 are connected to hollow eye members 88 through tubes 89 so that liquid is supplied to the chambers C, formed in the eyes, when valve 76 is open. Eye members 88 are mounted in hollow sockets 14 each of which defines a chamber 90 surrounding its associated eye member. Chambers C, as more fully described hereinafter with respect to FIGS. 6 and 7, communicate with chambers 90 through apertures formed between the eye members and tubes 89 so that liquid supplied to the chambers C passes into chambers 90.

The exterior portions of sockets 14 are oval shaped to simulate human eyelids and at least one of the corners of each of the ovals is slightly spaced from its associated eye member 88, so that liquid may pass from chambers 90 between eye members 88 and sockets 14 to the exterior of the doll's face or cheek. The liquid passing through these small spaces tends to well up in the corners of the eyes until sufficient liquid is accumulated to form a drop of liquid that falls from the eye. As a result, the illusion of actual weeping is substantially enhanced since the tears trickle out of the eyes themselves rather than out of the openings at the sides of the eyes, as has heretofore been provided in most weeping dolls.

During play, the child would observe the doll "crying," and would pick the doll up to comfort it, as by raising the doll to a vertical position with the head against its shoulder to "burp" the doll and relieve its discomfort. As a result of raising the doll to a substantially vertical position, the influence of gravity of valve 76, that tended to open port 80, is removed so that the valve is again urged by spring 86 against seat 78 to close port 80. Accordingly, weeping of the doll ceases.

It is noted that, if the doll were placed in a horizontal position, but on its stomach, weeping also would cease since valve member 76 would then be moved against valve seat 78 both by the influence of gravity and by spring member 86 so that water could not be discharged through the port 80. Of course, this is another manner of comforting an infant having gas pains as a result of feeding.

Accordingly, the child can play with the doll as it wishes, making it "cry" or weep, or cease weeping, depending upon the position to which it is placed so long as water remains in reservoir 24. Upon depletion of water in reservoir 24, or at any time desired by the child, "feeding" may taken place as described above by the insertion of the nipple 48 in mouth 16. In order to facilitate the "feeding" of the doll and the filling of reservoir 24, a plunger 92 is slidably mounted in rear wall 44 of housing 18, with one end 94 thereof in engagement with the free end of stem 38 and the other end 96 thereof engaged with the extension 54 of U-shaped member 52. In this manner, when the nipple tip 48 is inserted in mouth 16 to depress valve member 36, the stem 38 of the valve member urges plunger 92 in the direction of the arrow in FIG. 2, to pivot U-shaped member 52, and thus plate 64, away from housing 18 and against the bias of spring 68, in order to expand bellows 24. As a result, the available volume of the bellows is increased so that a relatively large amount of liquid can be supplied to the reservoir. When nipple tip 48 is removed from engagement with valve member 36, plunger 92 moves to the left, in FIG. 2, and upwardly in FIG. 3, as the U-shaped member 52 is pivoted towards housing 18 by spring 68. It is noted that plunger 92 slides closely within an aperture 98 formed in rear wall 43 so that little or no liquid can pass through the aperture from inlet conduit 20. However, as an additional feature, a bellows-shaped bag 100 is provided about plunger 92 and sealed in a watertight manner at its open end 102 to the extension 104 in which bore 98 is formed. As a result, any liquid that may pass through bore 98 is captured within bag 100 and does not pass to the interior of the doll's head or into the torso.

Referring now to the embodiment of the invention illustrated in FIGS. 4-8 of the drawing, a gravity influ-

enced weeping device 110 is provided which operates in substantially the same manner as the previously described embodiment but which has a somewhat different structure. In this embodiment, a housing 112, formed of relatively rigid material, is mounted within head 12. Housing 112 provides an inlet conduit 114 which has an inlet tube 116 positioned adjacent the opening in mouth 16. Inlet tube 116 is connected to mouth 116 through a mouth plug 118 secured in the head and slidably received within the open end 120 of tube 116. A spring biased valve member 122 is located within tube 116 and has an extension 124 which is adapted to pass through the port 125 in tube 116 and through plug 118. Valve member 122 also is provided with an annular valve surface 126 which is adapted to engage and seal against the valve seat 128 formed adjacent port 125. A spring 130 surrounds valve member 122 and is engaged between valve portion 126 and the rear wall 132 of housing 112 to bias the valve to a closed position, seen in FIG. 8.

When it is desired to fill weeping device 100, nipple 46 of bottle 44 is inserted within mouth 16 with the end 48 thereof engaged against the tip 134 of valve extension 124. This tip is castellated or serrated so as to permit free flow of liquid from the interior of the bottle into inlet tube 116 and conduit 114. The latter is in liquid communication through a port 136 with a flexible reservoir 138, which, in this embodiment, is formed as a bulbous member having an extension 140.

A valve member 142 is loosely mounted within port 136 and has an annular sealer member 144 on the side thereof located within reservoir 138. The opposite end of valve member 142 is provided with a laterally extending tip 146 which prevents inadvertent removal of the valve member from the port. When the doll is in a vertical position, shown in FIG. 5, the valve member 142 rests upon the inclined lower surface 148 of port 136 and, under the influence of gravity, slides inwardly of reservoir 138 so that valve sealing member 144 moves away from its seat 150, surrounding port 136, with tip 146 preventing the valve member from slipping out of the port into the reservoir. As a result, liquid supplied from bottle 44 can pass to reservoir 138. As mentioned with respect to the previous embodiment, some pressure must be applied to bottle 44, by squeezing, in order to discharge liquid from the bottle, to reservoir 138. However, as normally occurs, the doll is fed while cradled in the child's arms so that the bottle is above the level of weeping device 110 and water flows freely under the influence of gravity into reservoir 138 and thus only a slight pressure is required on bottle 44.

Port 136 is formed in an extension 152 of housing 112, to which the opened end 154 of reservoir 138 is connected in watertight relation. Extension 152 includes an outlet port 156 which leads to a valve chamber 158 formed in the housing 112. Valve chamber 158 includes a valve seat 160 therein which provides a liquid discharge port 162 that extends in a generally vertical direction when the doll 12 is held in a vertical position. Port 162 provides communication between valve chamber 158 and a horizontally extending conduit 164, also formed within housing 112. Conduit 164 (FIG. 6) communicates at each end thereof through eye bushings or tubes 166 with eye members 168 mounted within sockets 14 of head 12 in substantially the same manner as described with respect to the previous embodiment. Eye members 168 are each provided with a

central chamber C which communicates with the chamber 90, formed by socket 14 about the eye member, through the openings 169 formed between the rear wall of the eye members and tubes 168, as seen in FIG. 7. As a result, liquid supplied to chambers C in the eye members, passes through apertures 169 to chambers 90 in sockets 14.

The front surface 170 (FIG. 4) of sockets 14 are generally oval-shaped to simulate the actual configuration of a human eye, with at least one of the corners 171, 171' thereof slightly spaced from the eye members. Preferably, only the outer corners 171 are spaced from the eye members, although it is contemplated that both outer corners 171 and inner corners 171' can be spaced. In either case, the remaining portions of the socket, between corners 171, 171' are in fluid tight engagement with the eye members. As a result, liquid in chambers 90 will pass from the chambers to the exterior of the corners 171 where it will well up until sufficient liquid is accumulated to form a drop of liquid 172 that will fall from the eye. The spaces between the socket and the eye members at the corners 171 are very small so that liquid is slowly seeped therethrough to permit welling and tearing to occur, thereby enhancing the illusion of weeping.

Port 162 is normally closed by a ball valve member 174 contained within chamber 158, which ball is engaged against valve seat 160 when the doll is held in a generally vertical or upright position. When the doll is moved towards a horizontal position, the ball valve 174 moves away from its seat 160, under the influence of gravity, so that port 162 is open to permit passage of liquid from reservoir 138 to conduit 164 and eye chambers 90. Movement of ball 174 is restricted by an extension 176 formed within housing 112 so that the ball is maintained close to valve seat 160 even while port 162 is open. As a result, port 162 will be closed quickly when the doll is raised. In addition, the limited range of movement of ball 174 reduces vibrations and the sound of the ball rolling in the valve chamber as the doll is moved from the horizontal to the vertical position or vice-versa.

In order to supply the water from reservoir 138 to conduits 164, a plate-like member 180 having an extension 182 is provided, wherein the extension 182 is received within the slot 184 formed in housing 112, so that the plate is pivotally mounted on the housing. Plate 180 includes an elongated slot 186 which accommodates the extension 140 of reservoir 138 and is guided thereby during movement. The plate is spring biased towards reservoir 138 by a spring 188, operatively connected between housing 112 and the plate, which spring corresponds to the spring 68 of the previously described embodiment. In this manner, reservoir 138 is constantly under pressure of spring 188 in order to force liquid in the reservoir through port 156 to valve chamber 158. Since port 162 is opened only when the doll is in a horizontal position, liquid can only pass from valve chamber 158 to conduit 164, eye chambers 90 and apertures 172 when the doll is lying down.

In this embodiment, the doll can weep whether lying on its back or on its stomach, since in either case ball 174 will move away from valve seat 160 under the influence of gravity. In addition, in either horizontal position of the doll, valve sealing member 144 on valve 142 will be engaged against its seat 150 to prevent discharge of liquid from reservoir 138 into conduit 114.

This occurs because, when the doll is in a prone position, the pressure of the liquid within reservoir 138 urges valve member 144 against its seat and holds it there to close port 136. Moreover, when the doll is on its stomach, sealing member 144 will be under the influence of both gravity and liquid pressure in reservoir 138 in order to maintain port 136 closed. This arrangement is provided since during the course of play and movement of the doll successively from vertical to horizontal position, without feeding therebetween, liquid contained within inlet 116 and conduit 114 which, as seen in the drawings, is substantially larger than the corresponding elements of the embodiment of FIG. 2, will pass through port 136 into reservoir 138. These conduits act, in this embodiment, as auxiliary reservoir chambers for the main reservoir 138, and thus it is undesirable to have liquid which has passed from these chambers into the main chambers returned to the auxiliary reservoir chamber when the doll is in the horizontal or weeping position.

In this embodiment, valve member 122 is provided with an integral plunger 190, corresponding to the plunger 92 of the prior embodiment, so that the plunger moves with the valve member 122 under the influence of nipple 46 and spring 130. The plunger operates in substantially the same manner as plunger 92 in that it engages against the extension 182 of plate 180 in order to move the plate away from the reservoir 138 during the filling operation. This permits the liquid as it enters reservoir 138 to expand the reservoir in order to increase its capacity. Similarly, plunger 190 may be provided with a cover 192 mounted on housing 112 in watertight relationship at 194 to prevent leakage of liquid along the plunger from the housing into the head or torso of the doll.

Accordingly, it is seen that relatively simple weeping devices are provided which will automatically simulate weeping or tearing when the doll is placed in a prone or horizontal position after feeding. This simulates what actually occurs with infant children after feeding, as for example, when they cry to demand relief from gas accumulated in their stomachs as a result of bottle feeding. In simulating what actually happens with infant children, the child picks up the weeping doll from its horizontal position, and raises it to an upright position to "burp" the doll and while doing so, the weeping devices of the present invention, which are gravity influenced, prevent liquid from passing to the eyes so that it appears that the doll has stopped weeping. The arrangements of the present invention are relatively simple and inexpensive in construction and are durable in use, so that they will have a long operative life.

Although illustrative embodiments of the present invention have been described herein with reference to the accompanying drawings, it is to be understood that the invention is not limited to those precise embodiments, and that various changes and modifications may be effected therein by one skilled in the art without departing from the scope or spirit of this invention.

What is claimed is:

1. In a weeping doll having a head with eye sockets and an open mouth formed therein, a gravity influenced weeping device for causing said doll to weep only when in a generally horizontal position comprising, a liquid inlet conduit located adjacent said open mouth, a flexible reservoir in liquid communication with said inlet conduit, selectively operable valve

means in said inlet conduit to permit or close off the flow of liquid between said open mouth and said reservoir, means defining a second liquid conduit between said reservoir and said eye sockets, gravity responsive valve means in said second conduit for opening said conduit for passage of liquid from said reservoir to said eye sockets when said doll is in a generally horizontal position and for closing said second conduit when said doll is in a generally vertical position, and means in said doll for compressing said reservoir, whereby when said doll is in a horizontal position, said compressing means may operate to force liquid from said reservoir through said second conduit to said eye sockets.

2. The device as defined in claim 1 including a hollow eye member mounted in each of said eye sockets in liquid communication with said second conduit, said eye sockets having openings generally oval in shape to simulate the corners of a human eye, and providing a hollow chamber surrounding their associated eye member, said chambers being in liquid communication with the interior of their associated hollow eye member, with at least one corner of each of said eye socket openings being slightly spaced from its associated eye member whereby liquid in said chambers passes between said eye members and said one corner of said sockets to simulate weeping.

3. The device as defined in claim 1 wherein said means defining said second conduit comprises a relatively rigid housing having said second conduit formed therein.

4. The device as defined in claim 3 wherein said means for compressing said reservoir comprises a relatively rigid plate pivotally mounted at one end to said housing, with said reservoir being positioned between said plate and said housing, and spring means operatively engaged with said plate for urging said plate into compressive contact with said reservoir.

5. The device as defined in claim 4 wherein said selectively operable valve means comprises a valve seat formed in said inlet conduit and a spring biased valve closure member normally engaged with said valve seat to prevent liquid discharge from said reservoir through said mouth, said valve closure member being adapted to move away from said valve seat when engaged with a nipple on a liquid supply bottle to allow filling of said reservoir.

6. The device as defined in claim 5 including means operatively connected between said valve closure member and said plate for pivoting said plate away from said reservoir against the bias of said spring means when said closure member is engaged by said nipple to permit said reservoir to expand as water is supplied thereto.

7. The device as defined in claim 6 wherein said means operatively connected between said valve closure member and said plate comprises a rigid plunger rod secured to said closure member.

8. The device as defined in claim 6 wherein said gravity responsive valve means comprises a valve chamber located in said second conduit and having a valve seat whose port extends in a generally vertical direction when said doll is in a vertical position and a ball valve located in said chamber whereby when said doll is in a vertical position said ball is positioned against said seat under the influence of gravity to prevent passage of liquid from said reservoir to said eye members and when said doll is in a substantially horizontal position said

ball moves away from said seat to permit passage of liquid through said port to said eye members.

9. The device as defined in claim 6 wherein said gravity responsive valve means comprises a valve chamber located in said second conduit and having a valve seat whose port extends in a generally horizontal direction when said doll is in a vertical position, a valve closure element located in said valve chamber and spring means for biasing said valve closure element against said valve seat when said doll is in a generally vertical position, said valve closure element being relatively heavy and moving away from its associated valve seat under the influence of gravity and against the bias of its associated spring means when said doll is in a generally horizontal position to permit passage of liquid through said second conduit to said eye members.

10. A weeping doll including, in combination, a head having eye sockets and an open mouth formed therein, a relatively rigid housing mounted in said head and having first and second fluid flow conduits therein, a flexible reservoir in liquid communication with said first and second conduits, said first conduit being located adjacent said mouth opening and having selectively operable valve means therein to permit or close off the flow of liquid between said mouth opening and said reservoir, said second conduit having a valve chamber formed therein with a valve seat and gravity responsive valve means in the chamber for opening said second conduit for passage of liquid from said reservoir to said eye sockets only when said doll is in a generally horizontal position and for closing said second conduit when said doll is in a generally vertical position, a relatively rigid plate pivotally mounted at one end to said housing with said reservoir being located between said housing and the other end of said plate and spring means operatively engaged with said plate for urging said plate into compressive contact with said reservoir whereby liquid may be forced from said reservoir through said second conduit to said eye sockets only when said doll is in a generally horizontal position, thereby to simulate weeping.

11. The doll as defined in claim 10 wherein said spring means is a tension spring connected between said housing and said plate.

12. The doll as defined in claim 10 including a hollow eye member mounted in each of said eye sockets in liquid communication with said second conduit, said eye sockets being generally oval in shape to simulate the corners of a human eye, and providing a hollow chamber surrounding their associated eye member, said chambers being in liquid communication with the interior of their associated hollow eye member, with at least one corner of each of said eye sockets being slightly spaced from its associated eye member whereby liquid in said chambers passes between said eye members and said one corner of said sockets to simulate weeping.

13. The doll as defined in claim 11 wherein said selectively operable valve means comprises a valve seat formed in said first conduit adjacent said open mouth and a spring biased valve closure member normally engaged with its associated valve seat to prevent liquid discharge from said reservoir through said mouth, said valve closure member being adapted to move away from said valve seat when engaged with a nipple on a liquid supply bottle to allow filling of said reservoir.

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14. The doll as defined in claim 13 including means operatively connected between said valve closure member and said plate for pivoting said plate away from said reservoir against the bias of said spring means when said closure member is engaged by said nipple to permit said reservoir to expand as water is supplied thereto.

15. The doll as defined in claim 14 wherein said means operatively connected between said valve closure member and said plate comprises a rigid plunger rod secured to said closure member.

16. The doll as defined in claim 11 wherein said valve seat in said valve chamber defines a valve port which extends in a generally vertical direction when said doll is in a vertical position and said gravity responsive valve means comprises a ball valve closure element located in said chamber whereby when said doll is in a vertical position said element is positioned against said seat under the influence of gravity to prevent passage of liquid from said reservoir to said eye members, and when said doll is in a substantially horizontal position, said element moves away from said seat to permit passage

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of liquid through said port and said second conduit to said eye members.

17. The doll as defined in claim 16 including means in said valve chamber for limiting the distance which said valve element moves away from its associated valve seat when the doll is in a horizontal position.

18. The doll as defined in claim 11 wherein said valve seat in said valve chamber defines a valve port which extends in a generally horizontal direction when said doll is in a vertical position, and said gravity responsive valve means comprises a valve closure element located in said valve chamber and spring means for biasing said closure element against said valve seat when said doll is in a generally vertical position, said valve closure element being relatively heavy and moving away from its associated valve seat, under the influence of gravity and against the bias of its associated spring means when said doll is in a generally horizontal position, thereby to permit passage of liquid through said second conduit to said eye members as said reservoir is compressed when said doll is in a generally horizontal position.

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