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METER FLOW NURSING NIPPLE

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FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

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The present invention relates to a meter flow nursing nipple and it consists in the combinations, constructions and arrangements of parts herein described and claimed.

Generally there is provided a nursing nipple having a simply adjusted valve detachably removed upon the inside thereof and which is adapted to regulate the flow of fluid through a valve chamber formed in the head of the nipple and thence through a slit in the outer end of the nipple which will ordinarily remain closed but which will open when suction is applied to the nipple. The amount of flow is regulated by a handle which may be manipulated by the person preparing the bottle for the infant and which may not be reached by the infant in any way whatever.

It is accordingly an object of the invention to provide a device of the character set forth which is simple in construction, inexpensive to manufacture and effective and efficient in use.

A further object of the invention is to provide a nipple having means whereby the flow of fluid therethrough may be positively regulated.

Another object of the invention is to provide a device of the character set forth which may be quickly and easily assembled and disassembled for cleaning, etc.

A still further object of the invention is the provision of means, in a device of the character set forth, whereby the nipple may be set in a non-feeding condition when desired.

Still another object of the invention is the provision of a device of the character set forth which may be utilized in the normal manner without any interference with the normal usage thereof.

Other and further objects of the invention will become apparent from a reading of the following specification taken in conjunction with the drawing, in which:

Figure 1 is a side elevational view, partly in section, of an embodiment of the invention.

Figure 2 is an enlarged fragmentary plan view thereof.

Figure 3 is a plan view of one end of a valve device forming a part of the invention, and

Figure 4 is a plan view of the other end thereof.

Referring more particularly to the drawing, there is shown therein a nipple 10 for a conventional nursing bottle 11 which nipple is of conventional exterior shape and which is provided with a valve chamber 12 in the head portion 13 thereof which valve chamber communicates with the exterior of the nipple through a slit 14. In
teriorly of the head 13 there is provided a recess 14a having inwardly tapered outer edges and in the recess 14a which is eccentric with respect to the chamber 12 there is removably mounted a valve head 15 which is provided with tapering sides to fit the sides of the recess 14a so that the same may be forced into engagement therewith or may be removed when desired by pulling on a stem 16 which is formed integrally with the head 15.

The valve head 15 is provided adjacent its periphery with a plurality of graduated openings 17, 18, 19 and 20 and the lower end of a closed stem 16 has formed integrally therewith a substantially square handle 21 which is provided in each corner thereof with indentations 22, 23, 24 and 25 which correspond with the openings 17, 18, 19 and 20 so that the operator may quickly and easily position one of the openings as, for example, in Figure 1, the opening 20 in the head 15 in communication with the chamber 12 and, of course, with the slit 14.

It will be apparent that the device is capable of quick and easy setting to the desired rate of flow through the nipple by turning the handle 21 until the proper sized opening is placed in communication with the chamber 12 or, if desired, that portion between any of the openings 17 to 20, inclusive, may be positioned immediately below the chamber 12 to cut off any supply of liquid from the bottle through the nipple. Thus the desired rate of flow may be quickly and easily regulated by the person preparing the infants bottle and it will be further apparent that the infant may not, at any time, alter such arrangement through any action of his. It will also be apparent that the slit 14 will be tensed or biased to a closed position when the head 15 is in the recess 14a but that such tensing or biasing will not interfere with the normal use of the nipple when suction is applied thereto by the infant.

While but one form of the invention has been shown and described herein, it will be readily apparent to those skilled in the art that many minor modifications may be made without departing from the spirit of the invention or the scope of the appended claims.

What is claimed is:

1. A device of the character described comprising a nipple, a head for said nipple having a circular chamber therein and a slit extending outwardly from said chamber, said head having a recess formed in its inner side eccentric to said chamber and communicating therewith, a valve head removably mounted in said recess and hav-
ing a plurality of spaced openings of different diameters extending therethrough, and means for selectively positioning said openings to register with said chamber.

2. A device of the character described comprising a nipple, a head for said nipple having a circular chamber therein and a slit extending outwardly from said chamber, said head having a recess formed in its inner side eccentric to said chamber and communicating therewith, a valve head removably mounted in said recess and having a plurality of spaced openings of different diameters extending therefrom, and means for selectively positioning said openings to register with said chamber, said means including a stem for said valve, and a handle at the free end of said stem.

3. A device as characterized in claim 2 wherein the handle is provided with indicia each relating to and respectively positioned with respect to each of said openings.

4. A nursing nipple and graduated flow device in combination, comprising, a nipple having a head portion formed with an inwardly opening chamber and a slit connecting the chamber with the exterior of the head portion, said head portion having in its inner face a recess of greater transverse dimension than said chamber and being in communication therewith and eccentric thereto, a valve head movably mounted in said recess and having a series of spaced openings graduated for different amounts of flow therethrough, and means connected with said valve head for moving the valve head in the recess, and a handle on said stem, said handle bearing indicia arranged to indicate which of said openings is in communication with the chamber, and to place any desired opening in such communication.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

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<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>721,722</td>
<td>Morton</td>
<td>Mar. 3, 1903</td>
</tr>
<tr>
<td>1,569,693</td>
<td>Young</td>
<td>Jan. 12, 1926</td>
</tr>
</tbody>
</table>