Feb. 19, 1924. 1,484,050

A. ZIMMERMAN.

NIPPLE ATTACHING DEVICE

Filed April 6, 1920

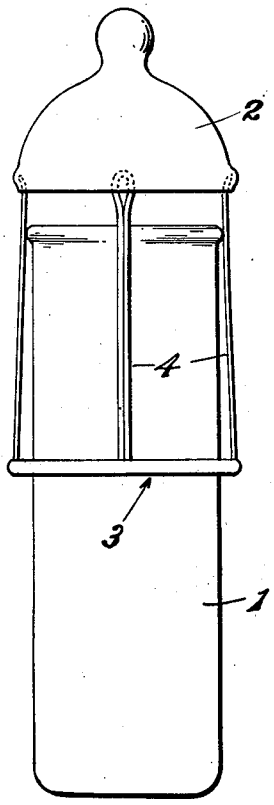


Fig. 2.

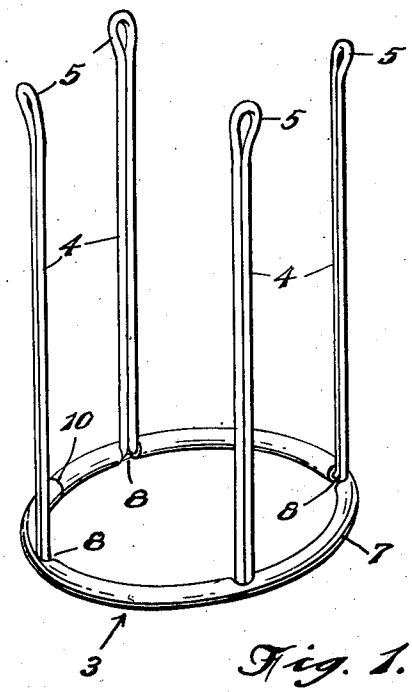


Fig. 1.

Fig. 3.

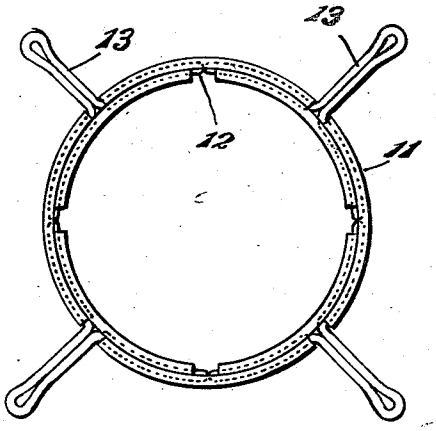
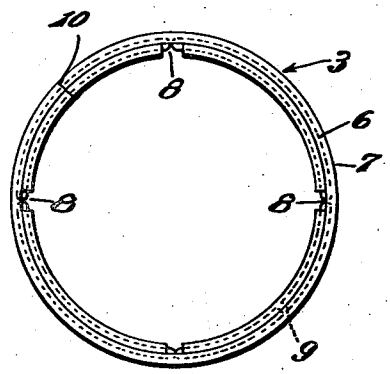


Fig. 4.



INVENTOR:
Arthur Zimmerman.
BY
Mason Fenwick & Lawrence,
ATTORNEYS.

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UNITED STATES PATENT OFFICE.

ARTHUR ZIMMERMAN, OF WATERBURY, CONNECTICUT.

NIPPLE-ATTACHING DEVICE.

Application filed April 6, 1920. Serial No. 371,688.

To all whom it may concern:

Be it known that I, ARTHUR ZIMMERMAN, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Nipple-Attaching Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The objects of this invention are to provide a means by which a nipple may be readily applied to a nursing bottle for babies; to thus eliminate the likelihood of spilling the contents of the bottle in applying the nipple; to avoid injury to the nipple; to provide a device which does not remain upon the bottle after the nipple is applied; to provide a device having few parts and parts adapted to be made without waste of material or labor; to provide a device which may remain upon the bottle and form a stand while the bottle is not in use; to secure simplicity of construction and operation; and to obtain other advantages and results as may be brought out in the following description.

Referring to the accompanying drawing in which like numerals of reference indicate similar parts throughout the several views,

Figure 1 is a perspective view of the nipple attaching device in its preferred construction;

Figure 2 is a side elevation of the same in use;

Figure 3 is a bottom plan of the device, and

Figure 4 is a bottom plan of a modified construction of device.

In the specific embodiment of the invention illustrated in said drawing, the reference numeral 1 indicates the bottle to which the nipple 2 is to be applied. Said bottle is of the type usually known as the "Hygeia," which is a cylindrical bottle having a wide open end substantially as large as the bottle itself, and accordingly requires a nipple having a correspondingly large apron or attaching portion. Such nipples, as a result of their size, are difficult to attach, and in endeavoring to apply them, it often happens that the bottle is upset and the contents spilled. Quite obviously this is caused by the lateral pressure exerted on the bottle and lateral pull upon the nipple to stretch it over the mouth of the bottle, and the nipple slipping, the forces react to upset the bottle. It therefore becomes desirable to eliminate this lateral push and pull and apply the nipple by a force which will be directly counteracted by a fixed support for the bottle, such as a table.

Referring, therefore, to the means by which this is accomplished, and in which the present invention inheres more particularly, the reference numeral 3 indicates a ring or base member of sufficient diameter so as to permit the bottle to pass therethrough. From this base 3 project a plurality of prongs or fingers 4 which in use extend in the same general direction as the bottle. Preferably, however, the fingers are not as long as the bottle, so in use the bottle may rest upon a table and the device slid downwardly thereon with the upper ends of the fingers well below the top of the bottle.

The upper ends 5 of said fingers are outturned slightly, and are adapted to be introduced in the nipple by squeezing the fingers together and then letting them spread again so as to engage the rim of the nipple just inside. The spring action of the fingers and the slightly outturned ends cooperate to hold the nipple. The device may then be slid downwardly over a bottle standing upright on a table or the like, and the nipple will be dilated by the fingers 4 and drawn into position on top of the bottle. After the nipple is in position, the continued downward pull upon the device will withdraw the fingers from between the nipple and bottle, but without any likelihood of upsetting the bottle because the force exerted is directly toward the supporting surface or table. The bottle may then be removed entirely from the device and used as usual.

Obviously the details of structure and of manufacture may be varied as seen fit, but for purposes of full disclosure and to distinctly set forth the preferred construction, it may be stated that the device is preferably formed of a piece of wire which forms the circular base and projecting fingers. The fingers, in forming a continuation of the wire comprising the ring or base 6, are each substantially loops branching off at their lower ends to form sections of the ring. The end of the wire is preferably in one section of the ring between two loops.

For holding the portions of wire at the lower ends of the loops together, and also for holding the ring 6 from separating where the wire ends, the ring preferably includes as a part thereof a sheet metal casing 7. This casing 7 is made from a blank with cut outs 8 struck therefrom where the casing is to take over the lower ends of the fingers, and said casing is bent into channel form and curled into ring shape. The wire base is then inserted in the channeled and curled casing and the edges of the channel are crimped over the wire. This therefore completes the device. It may be noted, that the ends 9 of the wire and the ends 10 of the curled casing are positioned diametrically opposite each other so they will not be readily separated and the wire and casing will cooperate to prevent spreading.

As an added feature to my device, the ring may be formed with radiating feet for maintaining the device in an upright position if so desired, as for instance, to form a rack in which the bottle may be stood when not in use. For illustrative purposes, I have shown such structure in Fig. 4 wherein a ring 11 and fingers 12 are employed as before, but between the fingers, the wire comprising the ring is bent outwardly into another loop 13 to form a foot. As here shown such foot is in the plane of the ring, but obviously this is not prerequisite.

In conclusion, it may be stated, that detail changes and modifications may be made in the construction and use of my improved nipple attacher without departing from the spirit or scope of the invention, and I do not wish to be understood as restricting myself except as required by the following claims when construed in the light of the prior art.

Having thus described the invention, I claim—

1. A nipple attaching device comprising a wire base, fingers bent upwardly from the portions of the wire forming said base, and a clip for holding the portions of wire comprising said fingers together.

2. A nipple attaching device comprising a base and fingers bent from a single piece of wire, the ends of the wire being positioned in the base between a pair of fingers,—and a sheet metal clip encircling the wire of the base, said clip having its ends at a part thereof opposite from the ends of the wire.

3. A nipple attaching device comprising a base, fingers projecting from said base by which a nipple may be attached to a bottle, and a plurality of feet projecting from said base whereby a bottle supported between said fingers may be held upright.

4. A nipple attaching device comprising a base, fingers projecting from said base by which a nipple may be attached to a bottle, and a plurality of feet projecting from said base whereby a bottle supported between said fingers may be held upright, said fingers and feet being bent from a single piece of wire.

5. A nipple attaching device comprising a plurality of wire fingers extending in the same general direction and adapted to resiliently engage a bottle, and a base for holding said fingers including means other than said wire so as to permit utilization of wire for the fingers having proper resiliency and provision of a base having greater strength than said fingers.

In testimony whereof I affix my signature.

ARTHUR ZIMMERMAN.