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INFANT FEEDING BOTTLE SUPPORT

Filed April 17, 1951

2 Sheets-Sheet 1

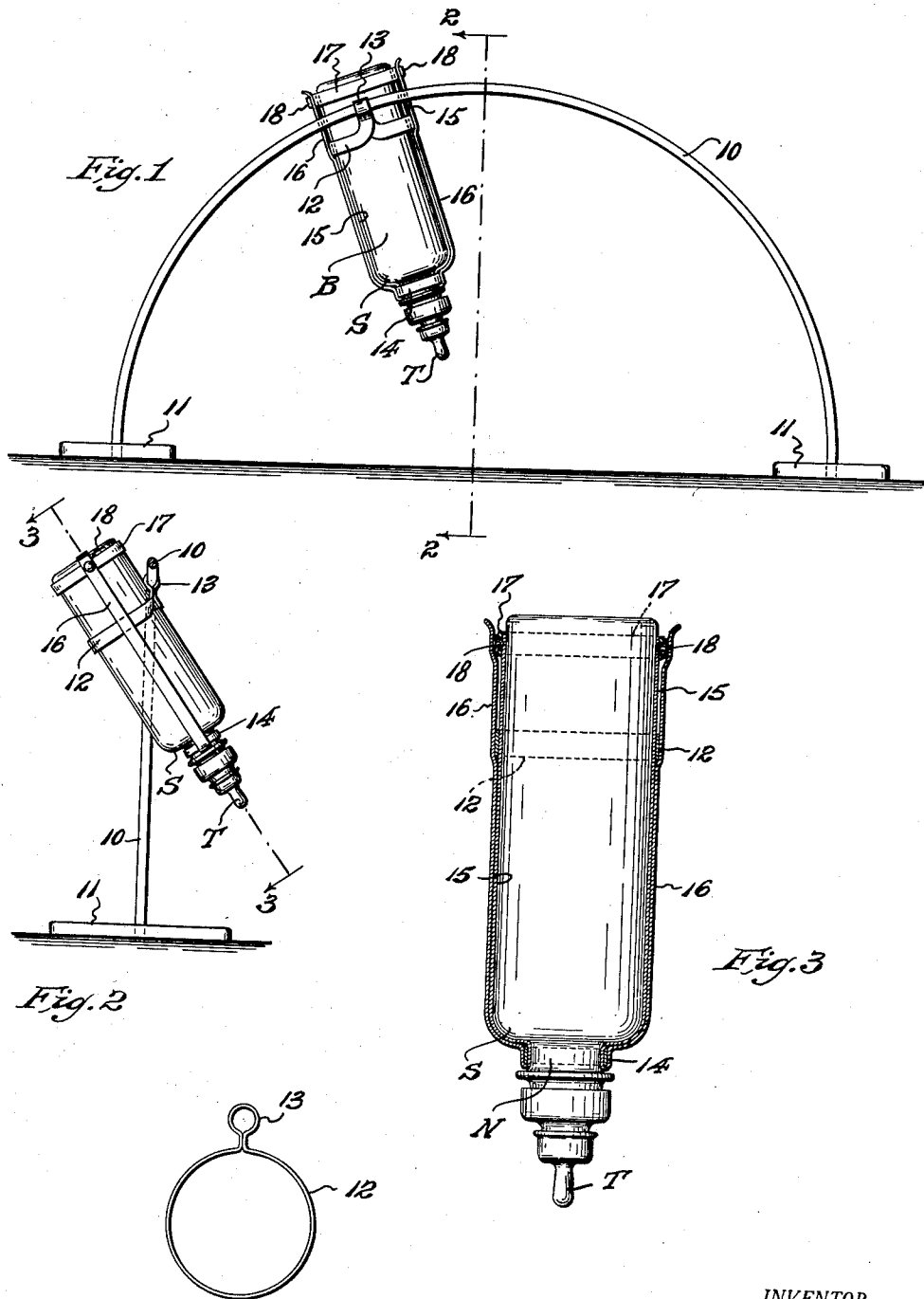


Fig. 4

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2 Sheets-Sheet 2

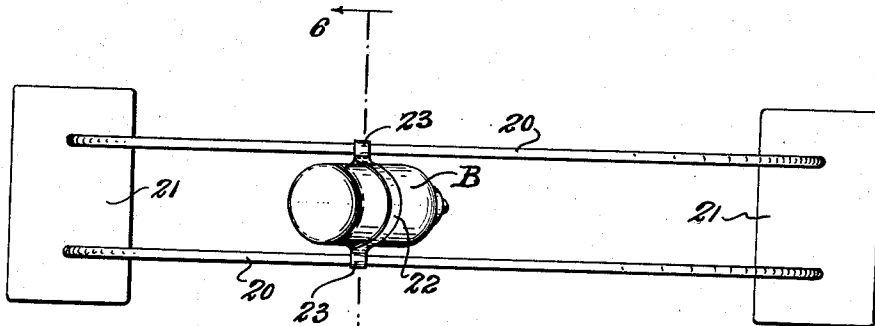


Fig. 5

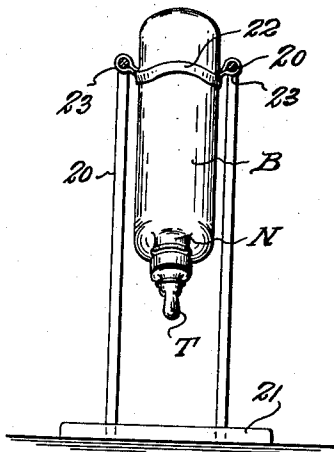


Fig. 6

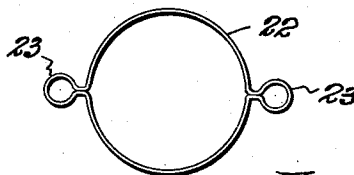


Fig. 7

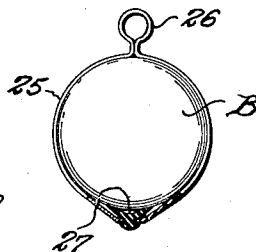


Fig. 8

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UNITED STATES PATENT OFFICE

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INFANT FEEDING BOTTLE SUPPORT

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6 Claims. (Cl. 248—106)

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This invention relates to improved means for supporting a feeding bottle while an infant or small child is being fed therefrom.

In infant feeding bottle supports comprising a stationary supporting means and a bottle holder to suspend the feeding bottle from the supporting means as heretofore known, the bottle suspending holder has usually been in the form of an articulated device made up from metallic parts, including metallic rod or wire formations having complicated joints, set-screws and other projecting parts. Such bottle holding devices are not only complicated in structure and difficult to manipulate and adjust, but are also costly, and by reason of their hard and rigid characteristics and their projecting and often sharp parts, the same offer considerable risk of injury to the infant or child if accidentally contacted by or brought in contact with the latter.

Having the disadvantages of the above mentioned heretofore known type of infant feeding bottle supports in view, it is an object of the present invention to provide an improved construction of bottle support for use in a crib, carriage or the like, said support comprising a stationary supporting means and a non-metallic holder for suspending the bottle from the supporting means for convenient disposition of the suspended bottle relative to the infant or child to be fed therefrom.

The invention has for a further object to provide an improved infant feeding bottle support which comprises a stationary supporting means adapted to be stood in or otherwise suitably arranged in connection with a crib, carriage or the like in which the infant or child to be fed lies, and so as to extend over and above the latter, together with a bottle holder which is slidably adjustable along the stationary supporting means, said bottle holder being made of non-metallic material in a form adapted to embrace and frictionally grip an inverted bottle, whereby to hold the latter in suspension from the supporting means.

The invention has for another object to provide a feeding bottle holder as above characterized including a guard harness, also made of non-metallic material, which so cooperates with the bottle holder as to prevent accidental detachment of the bottle from the holder by the feeding infant or child; both said holder and said guard harness being free from rigid parts and projections, and consequently avoiding risk of accidental injury to the feeding infant or child if contacted by or with the latter.

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Other objects of the invention, not at this time more particularly enumerated, will be understood from the following detailed description of said invention.

Illustrative embodiments of the invention are shown in the accompanying drawings, in which:

Fig. 1 is an elevational view of one form of stationary supporting means having the bottle holder with its guard harness mounted thereon, and showing a bottle operatively held by the holder and engaged by the guard harness in inverted suspension from supporting means, ready for use by an infant or child to be fed therefrom; Fig. 2 is a vertical cross-sectional view, taken on line 2—2 in Fig. 1; Fig. 3 is a longitudinal sectional view, taken on line 3—3 in Fig. 2, but drawn on an enlarged scale; and Fig. 4 is a plan view of the bottle holder shown in Fig. 1 but detached from the stationary supporting means, this view being drawn on an enlarged scale.

Fig. 5 is a plan view of a modified form of stationary supporting means and bottle holder; Fig. 6 is a vertical cross-sectional view, taken on line 6—6 in Fig. 5; and Fig. 7 is a plan view of the bottle holder shown in Fig. 5 but detached from the supporting means, this view being drawn on an enlarged scale.

Fig. 8 is a plan view in part section of another modified form of bottle holder as operatively applied to a bottle, but detached from the supporting means.

Similar characters of reference are employed in the above described views, to indicate corresponding parts.

The infant feeding bottle support according to the present invention includes a stationary supporting means upon which a bottle suspending holder is mounted. This stationary supporting means may be optionally provided in various shapes and forms so long as it includes, essentially, at least one carrier bar with which hereinafter described bottle holder means can be engaged for adjustable movement therealong, and with some suitable means for arranging said carrier bar in operative association with a crib, carriage or the like in which the infant or child to be fed is laid.

Referring to Figs. 1 and 2, one illustrative form of stationary supporting means therein shown comprises an arcuate (preferably semi-circular) bar 10 which is provided at its respective ends with base members or foot plates 11, of substantial length and width, by which the same can be stood in a crib, carriage or the like in which the

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infant or child to be fed lies, and so that the same arches over the latter.

A form of bottle holder according to this invention adapted to be supported by the single carrier bar 10 of the above-described illustrative form of stationary supporting means comprises an annular holder band or belt 12 made of elastic material, such e. g. as an elastic fabric or webbing of suitable width. Provided in connection with the holder band or belt 12, to project externally and radially therefrom as a unitary part thereof, either in the plane thereof or in a plane at a right-angle or other angular relation thereto, is a hanger loop member 13 which is diametrically sized to snugly fit over and around the carrier bar 10 of the stationary supporting means. Preferably said hanger loop member 13 likewise comprises an elastic material so as to constrictively embrace the carrier bar 10, and, in such case, may comprise an integral part of the holder band or belt 12. The holder band or belt 12, in relaxed condition, is of diametric size somewhat less than the diametric size of a feeding bottle body B to be suspended from the carrier bar 10 thereby. To operatively engage the holder band or belt 12 with the bottle body B, the former is expanded and then telescoped over the inverted bottle body, and then so positioned thereon as to suspend the inverted bottle from the carrier bar 10 at a convenient angle with the suction nipple T of the bottle downwardly directed. When the bottle body B is so embraced by the holder band or belt 12, the latter, when released, due to its elasticity and tension will contract and thus constrictively engage and frictionally grip the bottle in firm holding and supporting engagement therewith. As engaged with and around the carrier bar 10 of the supporting means, the hanger loop member 13 can be slid in either direction along the carrier bar, whereby to best position the suspended bottle so as to locate the nipple T for convenient access and engagement by the mouth of an underlying infant or child to be fed.

The infant feeding bottle support as thus far described, may be used for the feeding of a small baby without likelihood that the latter could pull away or otherwise accidentally disengage the bottle B from the holder band or belt 12. When, however, the support is used in the feeding of an older, stronger or more active child, additional means is provided for preventing the pulling away of the bottle from the holder band or belt 12, or otherwise accidentally disengaging the bottle from the latter. Such means comprises a guard harness, an illustrative and preferred form of which is shown in Figs. 1 to 3 inclusive.

The guard harness is also made of non-metallic material of soft and flexible characteristics, and comprises an annular bottom collar member 14 preferably made of elastic material, such e. g. as an elastic fabric or webbing of suitable width. This collar member 14 is of a diametric size approximating the diametric size of the neck portion N of a bottle body B which is to be served by the guard harness in use. Connected with opposite sides of the bottom collar member 14, to extend longitudinally upward therefrom, are superposed inner and outer tie straps 15 and 16 of length somewhat less than the length of a bottle body B which is to be served by the guard harness in use. These tie straps 15 and 16 are made of non-elastic material so as to be non-stretching. The upper ends of the inner tie straps 15 are respectively suitably affixed and an-

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chored to opposite sides of an annular top band or collar member 17, which, in normal relaxed condition, is of diametric size somewhat less than the diametric size of a bottle body B which is to be served by the guard harness in use. Means are provided for releasably securing the upper ends of the outer tie straps 16 respectively to the anchored upper ends of corresponding inner tie straps 15. Such means, illustratively, comprise snap fastener devices 18, the cooperative elements of which are respectively affixed to the upper end portions of the corresponding inner and outer tie straps at the points of juncture of the inner tie straps with the top band or collar member 17.

When it is desired to use the guard harness in conjunction with the bottle holder, said guard harness is first applied to the bottle. To accomplish this, the top band or collar member 17 of the guard harness is expanded and telescoped over the inverted bottle body B so that the same is positioned adjacent to the bottom end of the bottle, with the tie straps 15 and 16 dependent from said top band or collar member 17, in downward extension along opposite sides of the bottle body B, to the lower collar member 14 which, in the meantime, has been telescoped over the neck portion N of the bottle so as to be stopped against the shoulder S intermediate said neck portion and the bottle body B. The guard harness having been thus operatively assembled with the bottle, the free end portions of the outer tie straps 16 are released from normal secured relation to the top band or collar member 17 and inner tie straps 15. This having been done, the holder band or belt 12 is expanded and telescoped over the inverted bottle body B and so as to pass over the top band or collar member 17 and inner tie straps 15 of the guard harness, and then positioned to embrace the inverted bottle for suspension thereof at a convenient angle from the supporting means. After the holder band or belt 12 is thus operatively engaged with the bottle body B, the outer tie straps 16 are closed over the holder band or belt 12, and then secured by the fastening means, such as the snap fasteners 18, to the top band or collar member 17 and inner tie straps 15, so that said holder band or belt 12 is enclosed between the inner tie straps 15 and the outer tie straps 16. When the guard harness is thus operatively related to the holder band or belt 12, if any down pulling force is applied to the bottle sufficient to shift or slip the latter downwardly through the holder band or belt 12, such downward shift or slip of the bottle will be arrested by engagement of said holder band or belt 12 with the joined upper ends of the tie straps 15 and 16 and top band or collar member 17. Any yielding of the guard harness relative to the bottle, under such circumstances, will be prevented by the tie strap anchoring bottom collar member 14 which is stopped by the shoulder S of the bottle body. From the above description and inspection of the accompanying drawings, it will be apparent that the bottle holder and guard harness devices closely hug the supported feeding bottle, and being made of soft non-metallic material, free from hard and rigid parts and projections, the same involve no risk of injury to the feeding infant or child if, accidentally or otherwise, contacted by or with the latter.

Referring to Figs. 5 to 7 inclusive, there is shown thereby a modified form of supporting means and bottle holder cooperative therewith.

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In this modified form of supporting means, the same comprises a pair of arcuate, preferably semi-circular, carrier bars 20, laterally spaced apart in parallel relation, with their ends affixed to base members or foot plates 21 of substantial width and length, whereby the supporting means can be stood in a crib, carriage or the like in which the infant or child to be fed lies, and so as to arch over the latter. The bottle holder is modified to engage and be supported by and between the parallel carrier bars 20, and, to this end, comprises an annular holder band or belt 22 made of elastic material, such e. g. as an elastic fabric or webbing of suitable width. The holder band or belt 22 is provided with diametrically aligned, oppositely and radially extending hanger loop members 23 to respectively fit over and around the respective carrier bars 20 so as to support the holder band or belt therebetween, and subject to slidable adjustment along the same. It will be obvious, that the holder band or belt 22 can be telescopically engaged over an inverted bottle body B so as to embrace and frictionally hold the same in angular suspension from the carrier bars 20. It will also be understood that the coupling hanger loop member 23 may be slid in either direction along the carrier bars, whereby to best position the suspended bottle so as to locate the nipple T thereof for convenient access and engagement by the mouth of the underlying infant or child to be fed.

Although in Figs. 5 and 6 the guard harness above described has been omitted from the showing, it will nevertheless be understood that said guard harness may be used in conjunction with the holder band or belt 22 in the same manner and with the same advantage as hereinabove previously described.

Referring now to Fig. 8, another modified bottle holder means is thereby shown. This modified form of holder comprises a bottle body embracing holder band or belt 25, which may or may not be made of elastic material, and which is provided with one or more hanger loop members 26 for coupling engagement with a carrier bar or bars of the bottle supporting means. The holder band or belt 25 is provided with at least one suction cup element 27, the operative face of which is projected from the internal face of the holder band or belt 25. When the bottle body B is inserted within the holder band or belt 25, the operative face of the suction cup element 27 is opposed to the bottle body surface and is then operatively applied in gripping relation thereto. In most cases, when the suction cup provided holder band or belt 25 is used, use of the above described guard harness may be omitted, although said guard harness may be used therewith, if desired, as an added precaution against accidental displacement of the bottle from the holder.

Having now described my invention, I claim:

1. An infant feeding bottle support comprising a stationary supporting means including at least one carrier rod and a bottle holder supported thereby, said bottle holder comprising an annular holder band adapted to grippingly encircle an inverted bottle, said holder band having, as a unitary part thereof, at least one external radially projecting hanger loop member adapted to embrace a carrier rod whereby to attach the holder band thereto, said hanger loop member being adapted to be slidably moved along said carrier rod for adjusting the position of the holder band and supported bottle thereon, a guard harness cooperative with the holder band

and the inverted bottle embraced thereby, said guard harness comprising a bottom collar member to encircle the neck of the inverted bottle, pairs of non-stretchable tie straps each comprising an inner tie strap and a superposed outer tie strap, said pairs of tie straps being respectively affixed to opposite sides of said bottom collar member to extend longitudinally upward therefrom along opposite sides of the inverted bottle, a top collar member to encircle the inverted bottle body above the holder band applied thereto, the inner tie straps extending across the holder band internally thereof, the upper ends of said inner tie straps being respectively affixed to opposite sides of the top collar member, the outer tie straps extending across the holder band externally thereof, and said inner and outer tie straps having cooperative means for releaseably securing their upper end portions together.

2. An infant feeding bottle support comprising a stationary supporting means including at least one carrier rod and a bottle holder supported thereby, said bottle holder comprising an annular holder band adapted to grippingly encircle an inverted bottle, said holder band having, as a unitary part thereof, at least one external radially projecting hanger loop member adapted to embrace a carrier rod whereby to attach the holder band thereto, said hanger loop member being adapted to be slidably moved along said carrier rod for adjusting the position of the holder band and supported bottle thereon, and said holder band having a suction cup element mounted thereon to project from its internal surface and adapted to grip the bottle embraced by said holder band.

3. An infant feeding bottle support comprising at least one arched carrier rod provided at its opposite ends with foot plates to hold the same in erect upstanding position, and a bottle holder, said bottle holder comprising an annular holder band adapted to grippingly encircle an inverted bottle, said holder band having, as a unitary part thereof at least one external radially projecting hanger loop member adapted to embrace a carrier rod whereby to attach the holder band thereto, said hanger loop member being adapted to be slidably moved along said carrier rod for adjusting the position of the holder band and supported bottle thereon, a guard harness cooperative with the holder band and the inverted bottle embraced thereby, said guard harness comprising a bottom collar member to encircle the neck of the inverted bottle, pairs of non-stretchable tie straps each comprising an inner tie strap and a superposed outer tie strap, said pairs of tie straps being respectively affixed to opposite sides of said bottom collar member to extend longitudinally upward therefrom along opposite sides of the inverted bottle, a top collar member to encircle the inverted bottle body above the holder band applied thereto, the inner tie straps extending across the holder band internally thereof, the upper ends of said inner tie straps being respectively affixed to opposite sides of the top collar member, the outer tie straps extending across the holder band externally thereof, and said inner and outer tie straps having cooperative means for releaseably securing their upper end portions together.

4. An infant feeding bottle support comprising a stationary supporting means including at least one carrier rod and a bottle holder supported thereby, said bottle holder comprising an an-

nular holder band adapted to grippingly encircle the body of an inverted bottle, said holder band having, as a unitary part thereof, at least one external radially projecting hanger loop member adapted to embrace a carrier rod whereby to attach the holder band thereto, and a guard harness cooperative with the holder band and the inverted bottle embraced thereby, said guard harness comprising a bottom collar member to encircle the neck of the inverted bottle, a top collar member to encircle the inverted bottle body above the holder band applied thereto, and non-stretchable tie means attached to and extending longitudinally between said bottom and top collar members and across the holder band.

5. An infant feeding bottle support comprising a pair of laterally and parallelly spaced apart arcuate carrier rods, flat foot plates to which respective ends of said carrier rods are affixed whereby to support the said carrier rods in arched extension therebetween, a bottle holder comprising an annular holder band adapted to grippingly encircle the body of an inverted bottle, and said holder band having externally projecting hanger loop members extending respectively from diametrically opposite sides of the same and adapted to respectively embrace the respective carrier rods whereby to support said holder band in bridging extension between the latter, said hanger loop members being adapted to be slidably moved along said carrier rods for adjusting the position of the holder band thereon

and thereby the suspended position of the supported bottle.

6. An infant feeding bottle support according to claim 5 including a guard harness cooperative with the holder band and the inverted bottle embraced thereby, said guard harness comprising a bottom collar member to encircle the neck of the inverted bottle, pairs of non-stretchable tie straps each comprising an inner tie strap and a superposed outer tie strap, said pairs of tie straps being respectively affixed to opposite sides of said bottom collar member to extend longitudinally upward therefrom along opposite sides of the inverted bottle, a top collar member to encircle the inverted bottle body above the holder band applied thereto, the inner tie straps extending across the holder band internally thereof, the upper ends of said inner tie straps being respectively affixed to opposite sides of the top collar member, the outer tie straps extending across the holder band externally thereof, and said inner and outer tie straps having cooperative means for releasably securing their upper end portions together.

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