April 14, 1959 H. MITCHELL 2,881,999

BABY BOTTLE HOLDER

Filed Dec. 15, 1955 3 Sheets-Sheet 1

Fig. 5

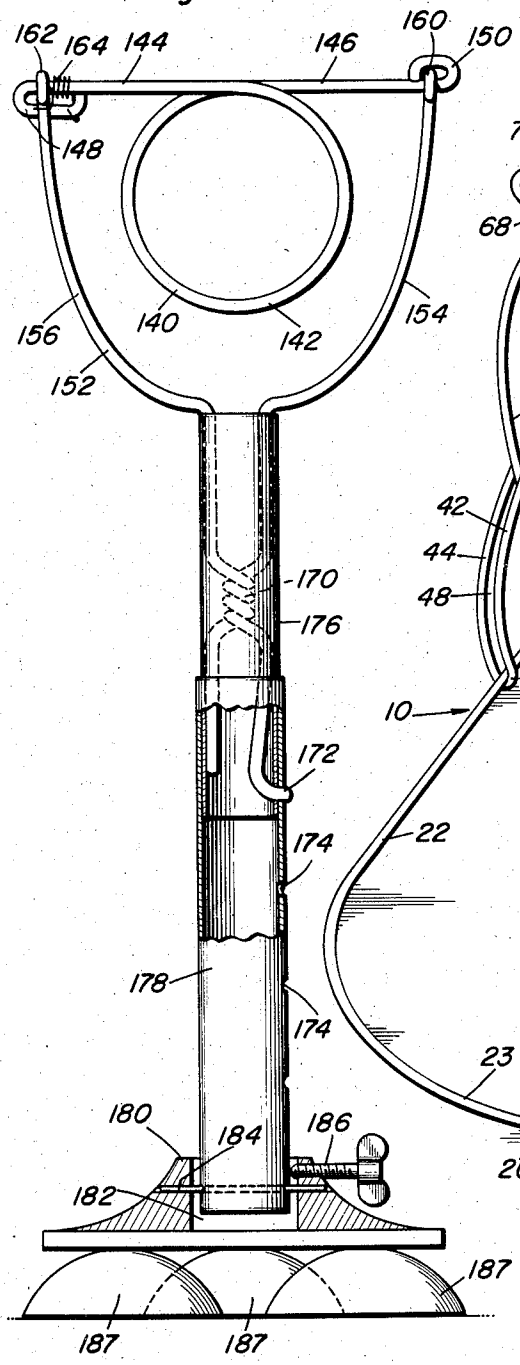
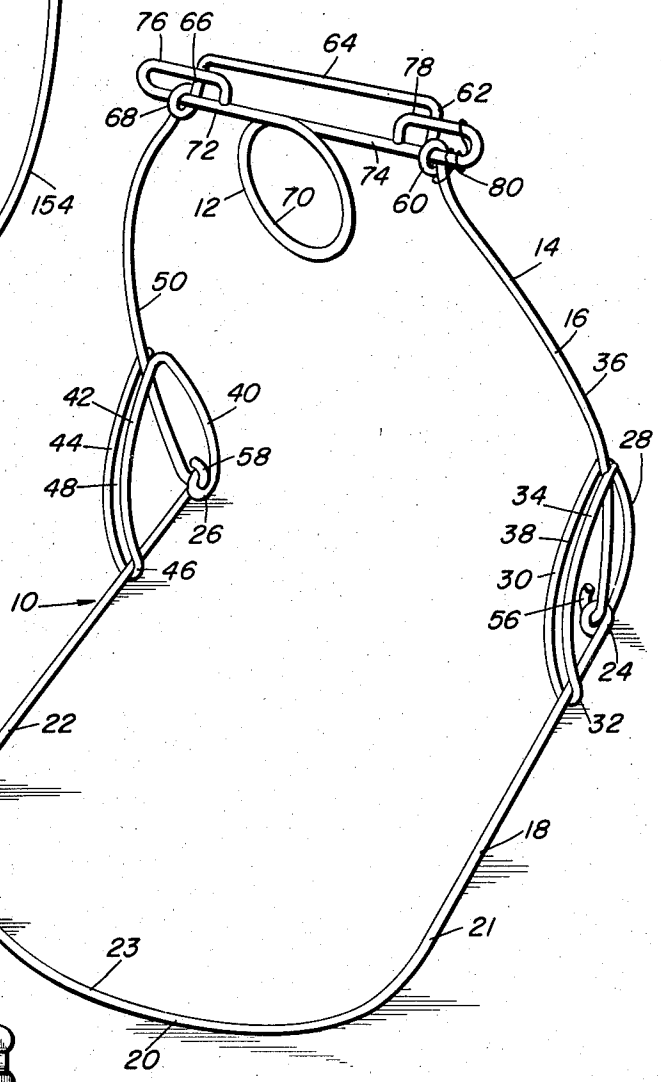


Fig. 1



Herman Mitchell
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

April 14, 1959 H. MITCHELL 2,881,999

BABY BOTTLE HOLDER

Filed Dec. 15, 1955 3 Sheets-Sheet 2

Fig. 2

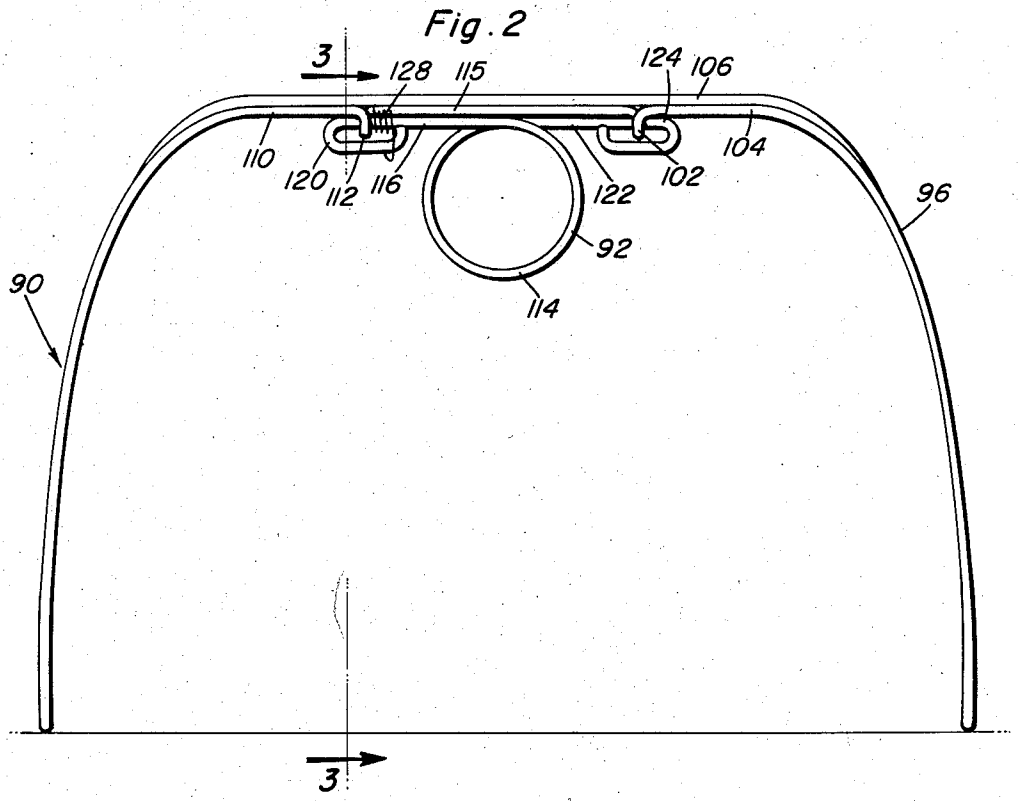


Fig. 3

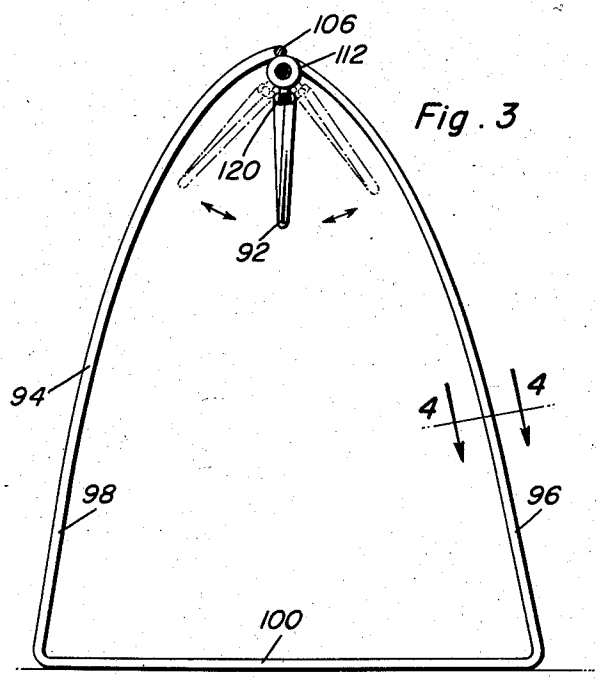
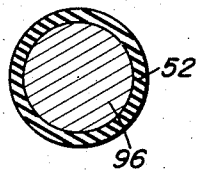


Fig. 4



Herman Mitchell
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

April 14, 1959 H. MITCHELL 2,881,999

BABY BOTTLE HOLDER

Filed Dec. 15, 1955 3 Sheets-Sheet 3

Fig. 6

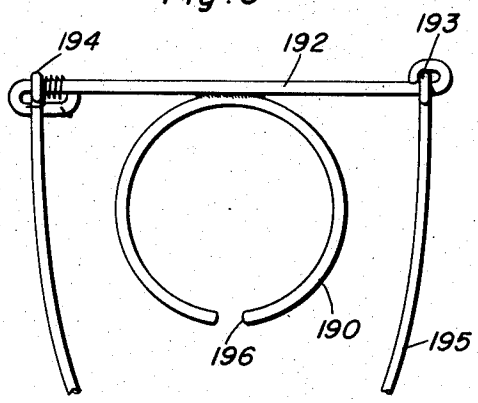


Fig. 7

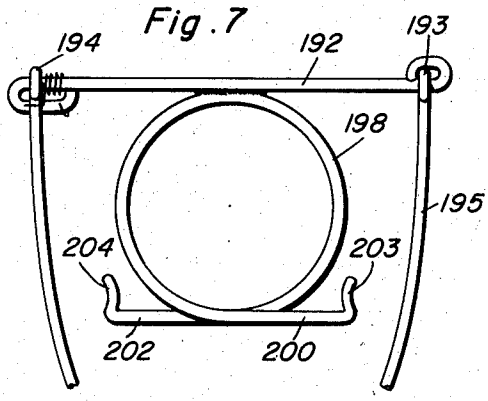


Fig. 8

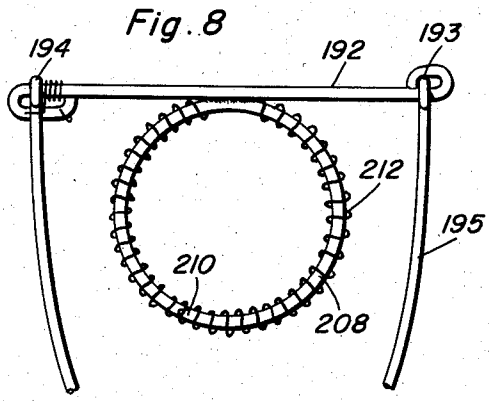


Fig. 9

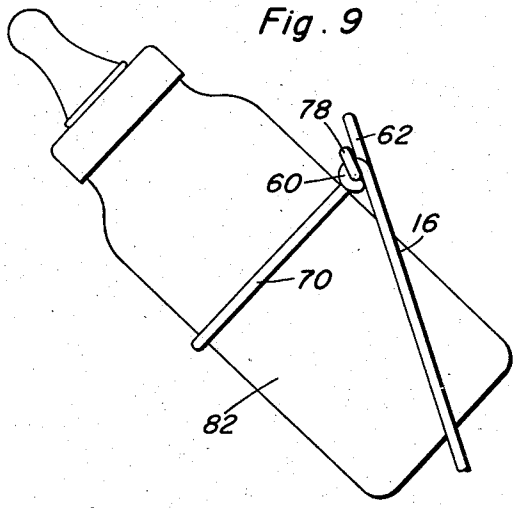
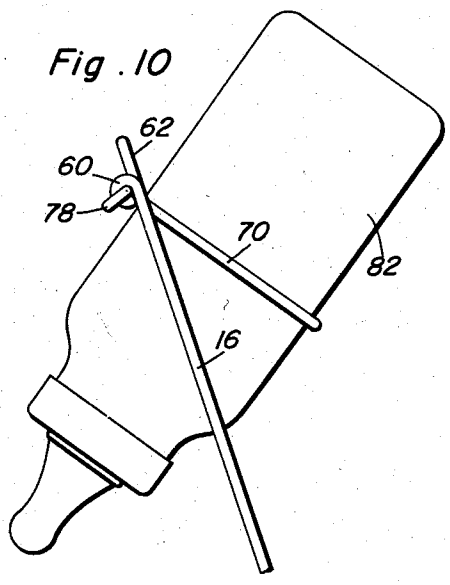


Fig. 10



Herman Mitchell
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jackson
Attorneys

United States Patent Office 2,881,999 Patented Apr. 14, 1959

2,881,999

BABY BOTTLE HOLDER

Herman Mitchell, Pacoima, Calif., assignor of one-tenth to Gadget-Of-The-Month Club, Inc., Los Angeles, Calif., a corporation of California

Application December 15, 1955, Serial No. 553,230

7 Claims. (Cl. 248—106)

This invention relates to holders for baby bottles and particularly to holders for supporting the baby's feeding bottles above the baby rather than on the side of him.

In the past there have been baby bottle holders which support baby bottles above the baby when he is in a prone position. One of the difficulties encountered in using such a holder has been leakage or dripping from the bottle when it is not being used by the baby. Accordingly an object of the present invention is to provide a baby bottle holder which automatically tilts to a position with the nipple up that is, above the liquid level in the bottle so that it cannot drip or leak on the baby, the bed clothing or other surface on which the baby is resting during feeding.

A more specific object of the invention is to provide a support for a baby bottle, this support being pivotable through a limited arc as defined by stops in the travel of the support, there being means in the support to hold the baby bottle and additional means operatively connected with this support for yieldingly opposing the pivotal motion of the support in one direction and in turn, automatically returning the support to the initial position when the bottle is released by the baby.

A further object of the invention is to provide a nursing bottle holder which includes a support mounted on a frame or other support, the frame being of such construction that the baby may be fed whether he is in a prone position, a sitting position or even a standing position. In other words, the position of the child being fed is adjusted for by the structural arrangement of the baby bottle holders.

A further object of the invention is to provide a baby bottle holder which is of simplified construction in order to keep production costs low and yet, a bottle holder for a baby, which is of reasonably rugged construction.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be restorted to, falling within the scope of the invention as claimed.

Figure 1 is a perspective view of one form of the invention;

Figure 2 is a front view of a second form of the invention;

Figure 3 is a transverse sectional view taken on the plane of line 3—3 of Figure 2;

Figure 4 is an enlarged sectional view taken on the plane of line 4—4 in Figure 3;

Figure 5 is an elevational view, parts being shown in section, of a further modification of the invention;

Figure 6 is a fragmentary elevational view of a modified clamp to hold the baby bottle in the bottle support part of the baby bottle holder;

Figure 7 is a further modification of the clamp;

Figure 8 is a further modification of the clamp;

Figure 9 is a fragmentary side view of a typical embodiment of the invention showing the baby bottle held in a position where there will be no leakage therefrom; and

Figure 10 is a fragmentary side view of the same structure in Figure 9 but in the baby feeding position.

In the accompanying drawings there are several embodiments of the invention. In Figure 1 the bottle holder **10** consists of a bottle support **12** and a supporting frame **14** for the bottle support **12**. Frame **14** is made of two parts **16** and **18**, the latter functioning as a base. It consists of a loop **20** having sides **21** and **22** together with a connecting portion **23** at the outer ends of the sides **21** and **22**. An eye **24** is formed at the inner end of side **18** and an eye **26** is formed at the inner end of side **22**. The wire which forms side **18** continues beyond eye **24** upwardly as at **28** and then curves forwardly and downwardly as at **30**. It has a U-shaped end **32** formed in it and then proceeds upwardly at **34** in parallel relationship to the portion **30**. The portion **34** curves behind the frame part **16**, one side **36** of part **16** passing through the slot **38** formed by portions **30** and **34**. After forming eye **26**, the wire from which side **22** is made proceeds upwardly as at **40** and then curves rather sharply downwardly in order to form a curved portion **42**. A similarly curved, parallel portion **44** is adjacent to it, portions **42** and **44** being connected by U-shaped portion **46**. The slot **48** defined by the portions **42** and **44** accommodates side **50** of part **16**, side **50** being substantially identical to side **36**. Sides **36** and **50** fit snugly in slots **38** and **48** so that the parts **16** and **18** may be pivotally adjusted with respect to each other and the pivotal adjustment retained. Moreover, it is preferred that frame **14** be made of wire and the wire coated with a rubber or plastic sheet as at **52** (Figure 4). This friction enhancing material aids in retaining an adjustment between the parts **16** and **18** of the frame **14**.

Sides **36** and **50** are provided with eyes **56** and **58** respectively, the eye **56** being engaged with the eye **24** while eye **58** is engaged with eye **26**. This mounts the frame part **14** for pivotal movement with respect to the part **18** thereof. As previously mentioned the sides **36** and **50** pass through the slots **38** and **48** whereby the part **14** of the frame is guided in its pivotal travel. Starting with eye **56** the specific configuration of parts **14** is formed by the wire moving upwardly through slot **38** where there is an eye **60**. After curving in a circular fashion to form eye **60** a short part **62** of the wire rises therefrom. A transverse portion **64** extends at right angles to portion **62** to a portion **66** which is at right angles to transverse portion **64** and parallel to portion **62**. Eye **68** is formed in the wire at an end of the short portion **66** from which extends the side **50** at the lower end of which there is eye **58**. The parallel portions **62** and **66** constitutes stops for the bottle support.

Bottle support **12** is made of a single piece of wire. Intermediate the ends thereof there is a loop **70** in which the baby feeding bottle is to be inserted. From one end of the loop there extends a straight spindle **72**. A straight spindle **74** aligned with the spindle **72** extends from loop **70** and in the opposite direction. The spindles pass through eyes **60** and **68**. The outer ends of the spindles **72** and **74** are returned in order to form loops **76** and **78**, one side of which abuts the stops **62** and **66** in order to limit the extent of pivotal travel of the bottle support **12**.

Means yieldingly opposing the pivotal movement of the bottle support in one direction are operatively connected with it. The preferred means consist of a coil spring **80** mounted on a portion of one of the spindles and having ends which clamp on a part of the frame and a part of

one of the loops. Accordingly spring **80** constantly retains the bottle support in one position. This position is shown in Figure 9. When the bottle is in the position shown in Figure 10, it has to be held there. When released, the bottle will gently swing upwardly so that the nipple is above the liquid level as shown in Figure 9.

In use and operation of the holder of Figure 1, the frame is placed around the bady's head with the baby bottle **82** in such position that it will be accessible to the baby while he is on his back. In connection with this the upper part **14** of the frame may be adjusted to suit the child. In order to insert the bottle **82**, the loops **76** and **78** are moved together manually thereby opening loop **70** slightly. The inherent resiliency in the wire which forms the bottle support returns the loops **76** and **78** such that loop **70** firmly clamps on the surface of the bottle in order to hold it. Inasmuch as it is preferred to have the wire which forms the baby bottle holder coated with a plastic or other friction enhancing material, the bottle **82** is very firmly held in place.

Bottle **82** is tilted to the position shown in Figure 10 and offered to the baby. When the baby stops feeding and releases the nipple of the bottle spring **80** automatically returns it to the upright position so that milk will not drip therefrom.

Attention is now invited to Figures 2–4. The baby bottle holder **90** disclosed therein comprises a symmetrical wire frame on which there is mounted a bottle support **92**. The wire frame **94** consists of a front arch **96** and a rear arch **98**. The legs on one side of the arches are joined by a cross member **100** while the legs on the other side of the arches are joined by a similar cross member. These cross members are adapted to rest on a supporting surface and the entire frame is arranged to be placed over the child. This frame, as the previously described frame, is preferably made of wire having a coating of plastic or rubber or other similar material **52** thereon.

The upper parts of the arch not only curve inwardly but converge. The entire frame is made of a single piece of wire. Starting with an eye **102** in the upper cross member **104** of arch **96**, the wire curves downwardly and forwardly in order to form one side of arch **96**, it extends at right angles in order to form the cross member **100**, and then upwardly to the upper cross member **106** of the rear arch **98**. Continuing further the opposite sides of arch **98** is formed together with the other lower cross member from which the other arch side is formed. Extending therefrom is a portion **110** of the upper arch cross member, the latter terminating in an eye **112** which is in alignment with eye **102**. The members **110** and **104** are in alignment as well as eyes **102** and **112**. A connecting piece **115** extends from eye **112** to eye **102** thereby forming a continuous closed loop of the wire which forms the frame.

Bottle support **92** comprises a loop **114**, the latter being formed of wire with one end **116** protruding therefrom in one direction and terminating in a loop **120**. Loop **120** is identical to loop **76**. From loop **120** there extends another portion **122** which is in alignment with the portion **116**. Loop **124** is formed on the end of portion **122** and is similar to loop **120**. Parts of loops **120** and **124** are mounted for pivotal movement in the eyes **102** and **112** thereby mounting the entire bottle support **92** for pivotal movement in the arches of the frame. In view of the inherent resiliency of the wire which forms the bottle support **92**, the loops **120** and **124** may be squeezed toward each other in order to open the bottle supporting loop **114** so that the baby nursing bottle may be easily inserted therein. Upon release of the loops **120** and **124**, the loop **114** will spring tightly back so that it clamps firmly on the baby bottle.

A spring **128** is mounted on part of one of the loops and has one end fastened to that loop and the other end fastened to a part of the frame, for example the connecting portion **115** which extends between loops **120** and **124**. This spring constantly biases the bottle support in such direction to normally maintain bottle **82** in the position shown in Figure 9. Therefore when the infant being fed releases the bottle, it will automatically return, by the bias of spring **128**, to the upright position. In this way seepage and leakage from the bottle is prevented.

In Figure 5 there is a modified holder for a baby bottle, this holder including a support **140** for the bottle. Loop **142** forms the portion of the support which embraces the bottle **82**, this loop having longitudinally aligned spindles **144** and **146** protruding therefrom in opposite directions. The spindle **144** has a loop **148** at one end thereof, while the spindle **146** has loop **150** at its end. These loops are longitudinally spaced and positioned with the planes in which each of said loops lies displaced approximately 90° with respect to each other so that sides **152** and **154** of frame **156** function as stops for the baby bottle holder limiting the pivotal travel thereof. The sides of the frame have eyes **160** and **162** at the ends thereof. These eyes accommodate portions of the loops **150** and **148** respectively, mounting the baby bottle support for pivotal movement. A spring **164** is mounted on a part of one of the loops and has an end clamped thereover. The opposite end of the spring is clamped over a portion of one of the sides of frame **156** whereby the spring constantly presses the support in one direction. The same operational events shown in Figures 9 and 10 pertain to the operation of the baby bottle holder disclosed in Figure 5.

Frame **152** is preferably made of wire, the ends of which are twisted together as at **170**, with an extreme end portion **172** passing through aligned openings **174** in telescopingly arranged tubes **176** and **178**, respectively. The upper end of tube **176** has the sides **152** and **154** of frame **156** protruding therefrom. The lower end of the lower tube **178** is mounted on a base **180**. Explicitly, the base has a pocket **182** in which tube **178** is accommodated, this pocket being sufficiently large to allow the tube **182** to be swung on its pivot **184**, the latter holding it fastened to base **180**. An optional set screw **186** is carried by the base **180** and comes to bear against a surface of tube **178** upon adjustment of the set screw. In this way the angularity of the tubes which hold the upper part of the frame adjacent to the baby may be adjusted. As an additional feature of the base **180**, the suction cups **187** may be used to prevent slipping.

Any of the previously described baby bottle holders may be fitted with the supports described in connection therewith. In addition various other loops may be substituted in the supports. For example in Figure 6 a very simplified loop is shown. This loop **190** is on a typical spindle **192**, the latter being mounted for restricted pivotal movement in the eyes **193** and **194** at the upper end of frame **195**. This same frame and spindle construction is shown in Figures 7 and 8, the purposes of which are to illustrate modified baby bottle embracing loops. Loop **190** comprises a single piece of wire which is curved in a circle and which is split at **196**. The intermediate part of the circle is soldered, welded or otherwise fastened to the spindle **192** intermediate the ends thereof. The sides of the loop **190** are manually spread or simply forced apart by pressing the bottle thereinto. An improvement over the loop **190** is seen in Figure 7 wherein the loop **198** has end portions **202** protruding therefrom and in alignment. Finger grips **203** and **204** are bent on the ends of portions **200** and **202** so that the diameter of loop **198** may be altered by squeezing the finger grip portions **203** and **204** together. After squeezing them in this fashion the baby bottle in inserted in the loop **198**. Upon release of the finger grip portions **203** and **204** the baby bottle **82** is held firmly in place due to the inherent resiliency of the material from which the loop **198** is made.

Substituted on the spindle **192** in Figure 8 there is a loop **208** made of a single piece of wire and curved in a circle. The ends of the loop **208** overlap as at **210**, and an intermediate part of the loop forming wire is soldered

or otherwise rigidly secured to the spindle **192**. In order to enhance the frictional contact with the bottle a spring **212** is concentrically arranged on the loop **208**. Upon insertion of the baby bottle **82** the spring **212** yields as does the sides of the loop. Each of the modified loops may be used in connection with any of the previously described embodiments of the baby bottle holder. In all cases the feature of having the baby bottle **82** returned to the upright position so that no liquid will inadvertently flow therefrom, is retained.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A baby bottle holder for use in feeding a baby, said baby bottle holder consisting of a wire frame having wire sides, a bottle support, said wire frame having aligned eyes therein, said bottle support including a wire spindle having loops at the ends thereof, said loops being mounted for pivotal movement in said eyes, a spring connected with said frame and one of said eyes constantly urging said support in one direction of pivotal movement so that the bottle maintained therein is constantly urged to such position that the nipple is above the bottom of the bottle, said support including a loop carried by said spindle, said loop adapted to embrace the bottle, means operatively connected with said loop for opening said loop in order to insert and remove the bottle, said means for opening said loop comprising said loops at the ends of said spindle.

2. A baby bottle holder of the character defined in claim 1 including means connected with said wire sides for supporting said sides in position for the baby to feed from the bottle in the loop.

3. A baby bottle holder of the character defined in claim 1 including a stop on said frame and located in the path of pivotal movement of a portion of one of said loops in order to limit the travel of said bottle support, and means mounting said sides for pivotal movement.

4. A baby bottle holder of the character defined in claim 1 including a base having eyes, said sides having eyes which are pivotally connected to the eyes of said base, and means for constraining the movement of said sides with respect to said base.

5. A baby bottle holder of the character defined in claim 1 including a base having eyes, said sides having eyes which are pivotally connected to the eyes of said base, and means for constraining the movement of said sides with respect to said base including a pair of parallel wire portions between which a slot is formed, and a portion of one of said sides passing through said slot and frictionally contacting the sides thereof in order to hold said sides in adjusted position.

6. A baby bottle holder of the character defined in claim 1 including an extensible support to which said wire sides are connected, said extensible support including a pair of telescopingly arranged tubes having apertures therein, a part of one of said wire sides passing through aligned apertures in order to hold said tubes in the adjusted position.

7. A baby bottle holder of the character defined in claim 1 including an extensible support to which said wire sides are connected, said extensible support including a pair of telescopingly arranged tubes having apertures therein, a part of one of said wire sides passing through aligned apertures in order to hold said tubes in the adjusted position, a base to which one of said tubes is connected, and means on said base for anchoring said base to a supporting surface.

References Cited in the file of this patent

UNITED STATES PATENTS

210,235	Borch	Nov. 26, 1878
932,344	Starbard	Aug. 24, 1909
1,434,000	Gibbs	Oct. 31, 1922
1,606,065	Eveleth	Nov. 9, 1926
2,084,162	Packard	June 15, 1937
2,412,426	Rayko	Dec. 10, 1946
2,557,570	Seiger	June 19, 1951
2,684,109	Youmans	July 20, 1954