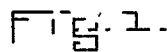


2 Sheets—Sheet 1.

### NURSING BOTTLE SUPPORTING APPARATUS.

Patented July 23, 1895.



Matthew M. Blunt  
J. Murphy.

William Hill  
by Jas. H. Churchill  
Atty.

(No Model.)

2 Sheets—Sheet 2.

W. GILL.

NURSING BOTTLE SUPPORTING APPARATUS.

No. 543,150.

Patented July 23, 1895.

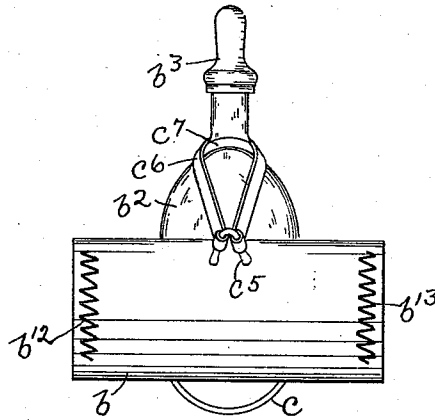


FIG. 2.

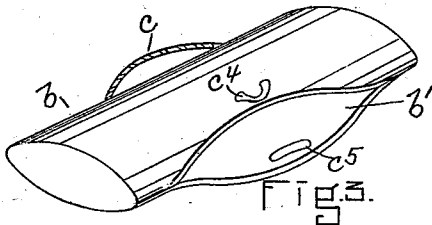


FIG. 3.

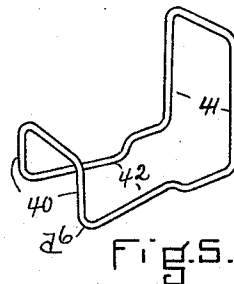


FIG. 5.

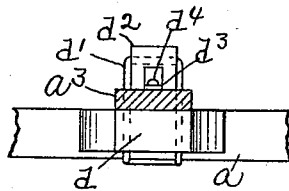


FIG. 4.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

WILLIAM GILL, OF BOSTON, MASSACHUSETTS.

## NURSING-BOTTLE-SUPPORTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 543,150, dated July 23, 1895.

Application filed June 29, 1894. Serial No. 516,078. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM GILL, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Nursing-Bottle-Supporting Apparatus, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

This invention relates to an apparatus for supporting nursing-bottles, and has for its object to provide a simple, cheap, and efficient apparatus for the purpose specified.

The apparatus referred to is especially adapted for use with cradles and is capable of being adjusted to present the nipple of the nursing-bottle to the infant in various positions in the cradle—that is, when the infant is lying on its back, or on either side, or when in a sitting position—and the said apparatus is also so constructed as to maintain the nipple and bottle in position within reach of the infant after the said nipple is ejected from the mouth of the infant.

The apparatus is preferably constructed so as to leave one side of the cradle unobstructed to permit the infant to be readily reached by the mother or attendant, and is further so constructed as to permit it to be turned out of the way when not in use.

The apparatus while particularly adapted to be used with cradles may be applied to chairs and other supports.

In accordance with this invention the apparatus comprises, essentially, a suspended bottle-holder adjustable, as will be described, and a preferably-adjustable frame from which the said bottle-holder is suspended.

These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 represents in elevation a bottle-supporting apparatus embodying this invention and shown as applied to a support represented as a cradle shown in transverse section partially broken out; Fig. 2, a top or plan view of the form of bottle-holder preferred by me looking down from the line 2 2, Fig. 1; Fig. 3, a detail of the bottle-holder shown in Fig. 2, showing the same in condition to receive a nursing-bottle; Fig. 4, a sectional de-

tail on the line 4 4, Fig. 1, to be referred to, and Fig. 5 a detail to be referred to.

Referring to Fig. 1, A represents a cradle, which may be of any usual or suitable construction and which is shown in the present instance as provided with longitudinal side bars  $a'$  and cross-bars  $a^2$ , forming what may be supposed to be the head of the cradle. The cradle A, in accordance with this invention, has secured to it, preferably in a manner as will be described, a supporting-frame for a suspended bottle-holding device.

The supporting-frame referred to may and preferably will be made as herein shown, it consisting of an upright member  $a^3$ , preferably a bar or rod, and a horizontally-disposed member  $a^4$ , preferably a bar or rod, which is adjustably secured to the upright member  $a^3$  by suitable means, herein shown as a cage A', which for the best results is made of a wire rod bent in substantially triangular shape and comprising the vertical bar 2, the horizontal bar 3, and the inclined bar 4, the horizontal bar 3 being bent to form loops 5 6, corresponding to the cross-section of the rod or member  $a^4$ , and through which the said member  $a^4$  of the frame is inserted.

The vertical bar 2 of the triangular cage A' may be attached to the upright member  $a^3$  of the supporting-frame by staples 7 8, so that the cage A' may turn on the staples 7 8 as pivots in an arc of about one hundred and eighty degrees. The triangular cage A' is attached to the upright member  $a^3$  near its upper end, so that the horizontally-disposed member  $a^4$ , when inserted through the loops 5 6 of the cage, may rest upon and be supported by the upper end of the upright  $a^3$ .

The horizontally-disposed member  $a^4$  has suspended from it a hollow bottle-holding device  $b$ , which for the best results is made of a substantially cylindrical piece of tubing, preferably composed in whole or in part of rubber or other flexible material, which tubing is preferably provided on one side with a longitudinal slit  $b'$ , (see Fig. 3,) adapted to be distended or opened to permit of the insertion of the rear portion of nursing-bottle  $b^2$ , which latter may be of any suitable or usual construction and having the nipple  $b^3$ .

The flexible or elastic holder  $b$  may and

preferably will be suspended by means of a cord  $b^4$ , provided at one end with a clasp  $b^5$ , and having its other end passed through an eye  $b^6$ , secured to the horizontal member  $a^4$ , and thence passed about a spool  $b^7$ , which I prefer to designate as the tension device, thence through the eye  $b^8$  attached to the arm or member  $a^4$ , and thence loosely through the eye of a clasp  $b^9$ , and the said cord may then be carried up to and secured to the arm or member  $a^4$  in any suitable or desired manner, it being preferably slipped between a finger  $b^{10}$  and the arm or member  $a^4$ , the finger  $b^{10}$  being secured to the said member in any suitable manner.

The clasps  $b^5 b^9$  are adapted to engage suitable devices  $b^{12} b^{13}$ , secured to the holder  $b$  near its opposite ends. The devices  $b^{12} b^{13}$  may be made in the form of coiled springs, having their opposite ends inserted through the material of the holder  $b$  or otherwise caught or fastened thereto, or they may be made of spirally-shaped wire or of independent projections attached to the holder  $b$ . These devices permit the clasps  $b^5 b^9$  to be engaged with any desired one of their turns or coils in order to obtain the proper horizontal position of the bottle when inserted into the holder.

By means of the cord  $b^4$  the bottle  $b$  may be raised and lowered to readily adjust the bottle-holder and its bottle the suitable or desired distance above the cradle, and after the bottle-holder has been adjusted the desired height above the cradle, which height may be termed its "normal" position, the operator may tip or incline the bottle-holder  $b$  and its contained bottle toward the right or left (viewing Fig. 1) by the adjustment of the two legs 20 30 of the cord, and when so adjusted angularly with relation to its normal position the bottle-holder is retained in its adjusted position by means of the tension device  $b^7$ . This feature is of special advantage, inasmuch as the bottle-holder  $b$  may be adjusted so as to carry the bottle and its nipple into correct position to permit the child to nurse while inclining on either side, whereas when the child is lying on its back the bottle-holder may and preferably will be adjusted into its normal horizontal position, it being lowered sufficiently to place the nipple within easy reach of the mouth of the child.

The bottle-holder  $b$ , on its side opposite to the slit  $b'$ , may be provided with a loop or handle  $c$ , by which the said holder may be suspended from a hook  $c'$ , carried by the arm  $a^4$ , when the bottle-holder is not in use. In some instances it may be desired to provide the bottle-holder with means for assisting the natural flexibility of the material of which the bottle-holder is composed to grasp or hold the bottle and thereby prevent dislodgement of the bottle from its holder by restless children, as by a knock or sudden movement. In the present instance I have represented the holder  $b$  as provided on opposite sides of

the slit  $b'$  with substantially small loops  $c^4 c^5$ , through which may pass rubber bands  $c^6 c^7$  adapted to be passed about the neck of the bottle  $b^3$ , as represented in Fig. 2.

In order to render the supporting-frame easy of attachment to the cradle, I prefer to employ the fastening devices shown in Figs. 1 and 4.

Referring to Figs. 1 and 4, the upright member  $a^3$  has fastened to it a block  $d$  of wood or other suitable material having two holes through which extend two legs of a wire hook or loop  $d'$ , having its front end bent downward substantially at right angles to engage the longitudinal side bar  $a$  of the cradle, and the two legs of the hook  $d'$  are inserted through holes in the upright  $a^3$  and are preferably bent into substantially rectangular form on the rear side of the upright  $a^3$  to receive a wedge-shaped block  $d^2$  attached to the upright member  $a^3$  but having a vertical movement thereon. This attachment may be effected by means of a bent piece of wire  $d^3$ , secured to the wedge  $d^2$  and forming a slot, through which extends a screw  $d^4$ . The lower longitudinal side bar  $a'$  of the cradle is also engaged by a hooking device  $d^6$ , preferably made as shown in Fig. 5, it consisting of a loop of wire bent to form two vertical members 40 41 and a connected horizontal member 42, the two parts of the horizontal member being separated sufficiently to permit the upright  $a^3$  to be passed through or between them, and the upright member 40 being made of sufficient height to engage the inner side of the longitudinal side bar  $a'$ , as represented in Fig. 1. The vertical member 41 is preferably secured by a spiral spring  $d^{10}$  to a hook or projection  $d^{12}$  attached to the upright bar  $a^3$ . The spring  $d^{10}$  serves to keep the hook  $d^6$  in engagement with the lower side bar of the cradle, and at the same time it permits the said hook to be readily disengaged from the said side bars by lowering the hook sufficiently to clear the vertical member 40 from the side bar  $a'$ .

In operation the arm  $a^4$  is movable through the cage  $a'$ , and when the said arm has been extended the desired or required distance across the cradle the bottle-holder  $b$  is adjusted into its normal position, and when so adjusted the cord  $d^4$  is made fast in any suitable manner, as by passing it between the bar  $b^{10}$  and the member  $a^4$ . The bottle-holder may then be adjusted by movement of the legs 20 30 of the cord, if it is so desired. Furthermore, by reason of the cage  $A'$  being pivoted, as described, to the upright  $a^3$ , the arm  $a^4$  may be moved so as to extend obliquely across the cradle, and when the apparatus is not in use the member  $a^4$  of the supporting-frame may be turned so as to extend in the direction of the length of the cradle, or into a position substantially at right angles to that shown in Fig. 1, thereby removing the bottle-holder from over the cradle and leaving the latter unobstructed, so that the mother may readily remove the child from the cradle.

By means of the wedge  $d^2$  the hook  $d'$  may be adjusted to cradles having side bars of varying thickness. The apparatus is herein shown as applied to a cradle; but it may also be attached to a chair, table, or other support—as, for instance, by tying or lashing the upright member  $a^3$  to said support.

By reason of the bottle-holder being suspended the bottle will return to its proper or adjusted position in case the nipple is ejected from the mouth of the infant, so that if the child should lose its hold on the nipple it could regain it again after the bottle-holder has come to a position of rest.

In some instances it may be desired to secure the apparatus to a support such, for instance, as a door, the side of a wall, or other practically-stationary support, and this may be accomplished by securing the upright  $a^3$  to the door or other support and reversing the position of the arm  $a^4$ —that is, inserting it into the cage  $A'$  from the opposite side to that shown in Fig. 1, or the upright  $a^3$  may be dispensed with and the arm  $a^4$  pivotally secured to the door or other support. Furthermore, I do not desire to limit my invention to any particular construction of arm  $a^4$  and upright  $a^3$ , nor to any particular manner of pivotally securing the arm  $a^4$ .

I claim—

1. In a support for nursing bottles, the combination with a horizontally disposed arm, of a flexible suspension consisting of a cord or like flexible body secured to said arm to form depending legs 20—30 and capable of adjustment to vary the length of the said legs with relation to the said arm and to each other, a

hollow bottle holder adapted to receive the nursing bottle and provided with devices at or near its ends for attachment to the flexible suspension, and means carried by the legs 20—30, to detachably engage the said devices and permit of horizontal adjustment of the bottle holder, substantially as described.

2. The combination with a cradle, of a bottle supporting apparatus comprising an upright member secured to the cradle, a horizontally disposed arm or member secured to the upright member and adjustable longitudinally thereon, a flexible suspension  $b^4$  secured to the said horizontal arm to form legs 20—30 and capable of adjustment to vary the length of the said legs with relation to the said arm and to each other, a hollow bottle holder to receive the nursing bottle and provided with devices at or near its ends for attachment to said flexible suspension, and clasps carried by the legs 20—30, to detachably engage the said devices and permit of horizontal adjustment of the bottle holder, substantially as described.

3. In a support for nursing bottles, a horizontally disposed arm provided with eyes  $b^6$   $b^8$  and with a tension device, a bottle holder, and a flexible support connected to the said holder and engaging the said eyes and tension device, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM GILL.

Witnesses:

JAS. H. CHURCHILL,  
J. MURPHY.