

A. H. ALLEN.
BOTTLE HOLDER.
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956,749.

Patented May 3, 1910.

2 SHEETS—SHEET 1.

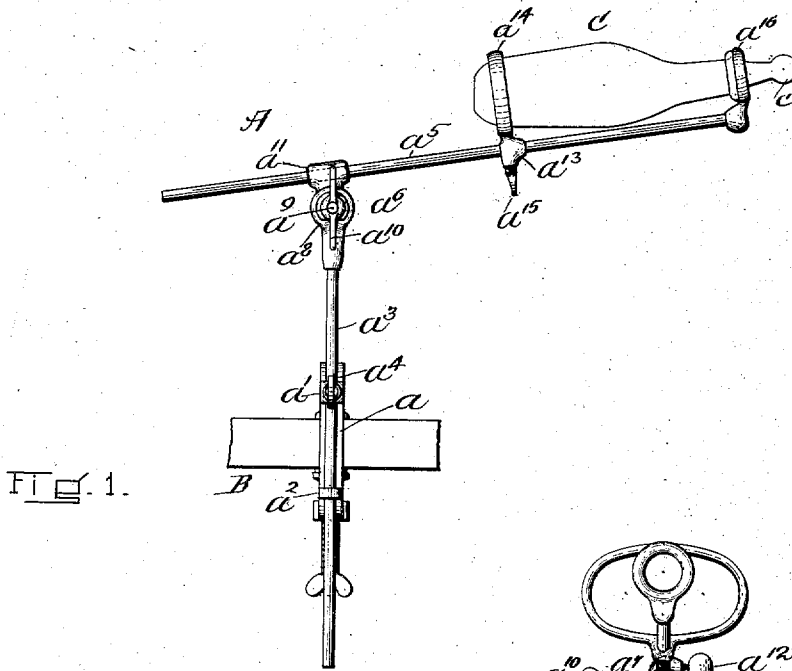


FIG. 1.

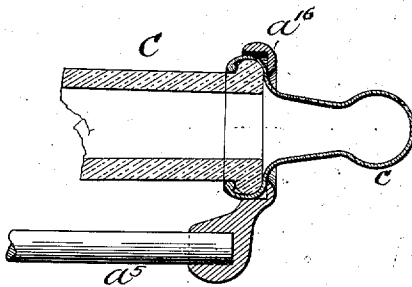


FIG. 2.

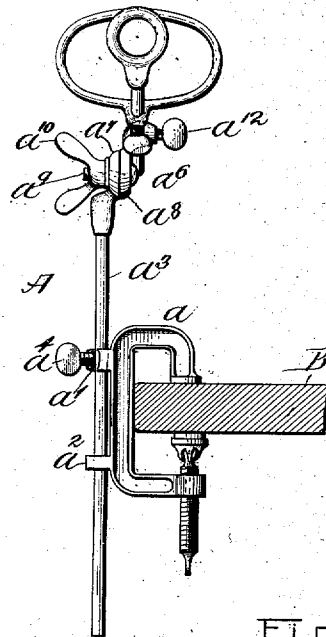


FIG. 3.

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2 SHEETS—SHEET 2.

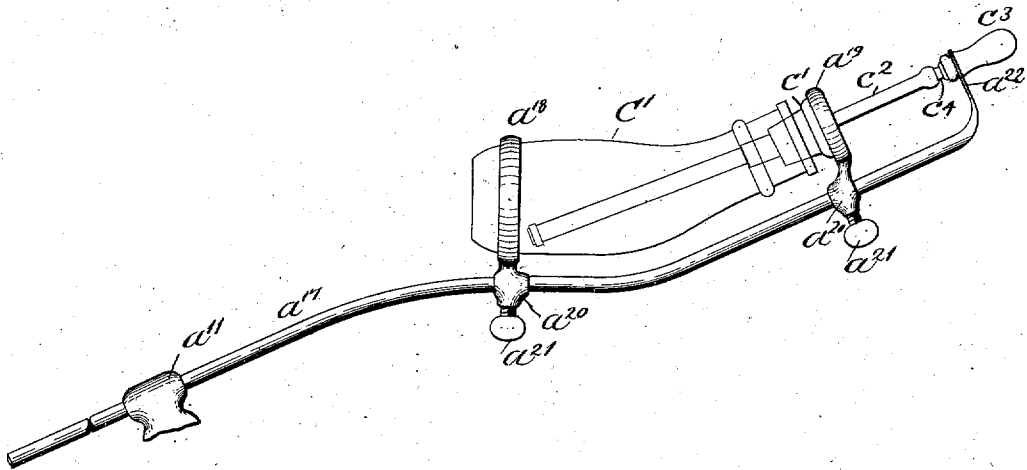


Fig. 4.

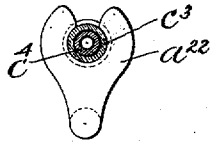


Fig. 6.

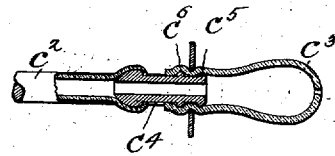


Fig. 7.

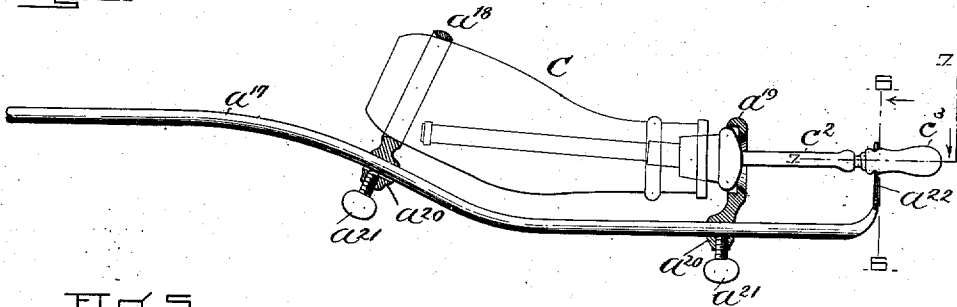


Fig. 5.

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UNITED STATES PATENT OFFICE.

ALBERT H. ALLEN, OF WAKEFIELD, MASSACHUSETTS.

BOTTLE-HOLDER.

956,749.

Specification of Letters Patent.

Patented May 3, 1910.

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To all whom it may concern:

Be it known that I, ALBERT H. ALLEN, of Wakefield, in the county of Middlesex and State of Massachusetts, a subject of Edward VII, King of Great Britain, have invented a new and useful Improvement in Bottle-Holders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

My invention relates to a bottle holder and especially to one adapted for holding a nursing bottle.

The object of my invention is to provide a bottle holder which can conveniently be secured to any suitable fixture or support and fitted with such adjustments that the bottle held by the holder may be turned to and maintained in any angular position; a bottle holder adapted whereby the bottle can quickly be fixed in or removed from the holder, and one also which is adapted in part to hold the nipple on the end of the bottle and prevent it from being pulled off.

It is the further object of my invention to make the holder simple in its construction and of comparatively few parts so that it can be manufactured and sold at a comparatively low cost.

My invention can best be seen and understood by reference to the drawings, in which—

Figure 1 shows the holder and bottle fixed in it in side elevation. Fig. 2 shows mainly in vertical section that portion of the holder acting to assist in holding the bottle and the nipple onto the end thereof, as will hereinafter be more fully explained. Fig. 3 shows the holder in front elevation. Fig. 4 shows in side elevation a slightly modified form of a portion of the holder or part thereof directly bearing the bottle, the part being adapted to support and shown supporting a bottle different from the form of bottle shown in Fig. 1. Fig. 5 shows the same as Fig. 4 excepting that the parts are shown mainly in vertical section. Fig. 6 is a cross section on the line 6—6 of Fig. 5, and Fig. 7 is a cross section on the line 7—7 of Fig. 5.

In the drawings:—A represents a bottle holder and B a fixture which is shown for the purpose of illustrating the manner in which the holder may be secured to it. This

fixture may form a portion of a table, chair or other object forming a suitable base or support.

C is a bottle comprising a common form of nursing bottle having a straight body and with a nipple *c* affixed to the end thereof.

Referring to the holder A, *a* represents a screw clamp by which the holder may be secured to the fixture B. Projecting from the side of this clamp are lugs *a'*, *a''*. Extending through these lugs is a standard or rod *a'''*. This standard fits loosely within the lugs so that it may turn therein or be moved longitudinally, the standard simply sliding through the lugs. The standard is fixed at any point of adjusted position to which it is moved by means of a thumb screw *a'''* extending through one of the lugs or the lug *a'* and binding against the side of the standard or rod.

Connecting with the standard *a'''* is a bottle-supporting arm *a''*, on which rests the bottle C. The arm *a''* is secured to the end of the standard by what may be termed a swinging clamp joint *a'''*, this joint comprising a jaw-forming portion *a''''* fixed to the end of the standard *a'''* and a complementary jaw-forming portion *a'''''* with which the arm *a''* connects. Through these jaws there extends a screw *a'''''*, the head of the screw bearing against the jaw *a''''*. On the end of the screw bearing against the jaw *a''''* is a winged clamping nut *a''''''*. When this nut is loosened the jaw *a''* may be swung or turned with respect to the jaw *a''''* to any adjusted position, which position is maintained upon again tightening the nut on the end of the screw. Moreover the disposition of the jaws is such with respect to the standard *a'''* that the jaw *a''* will swing or turn in a plane parallel or substantially parallel to the plane of the standard *a'''*. It is accordingly apparent that with the swinging clamp or jaw thus operating, the arm *a''* and bottle carried by it may be turned upon an arc up or down when the holder is mounted in a proper upright position. The arm *a''* may be affixed to the clamping jaw *a''''* in any suitable manner. I prefer, however, that the arm should extend through a boss *a'''''* which connects with the jaw, the arm being slidably mounted therein when the arm may be lengthened or shortened as occasion may require, the arm being fixed to the boss in

any adjusted position by a screw a^{12} passing through the boss and binding against the side of the arm.

The bottle C is secured to the arm a^5 in the following manner: Loosely mounted upon the arm is a boss a^{18} carrying a flange a^{14} , the boss forming the means by which the flange slidably connects with the arm and which may be secured thereto at any point of adjusted position by means of a thumb screw a^{15} passing through the boss and binding against the side of the arm. The flange a^{14} is preferably made elliptical in form or oval to conform to the shape of the bottom end of the bottle which fits into the flange as the flange bears against the bottle. Affixed to the end of the arm a^5 is another flange a^{16} which is made annular in form or with a hole or opening in it which permits the nipple on the end of the bottle to pass through the flange and the flange is just of a size to bear as a collar against the head or top end of the bottle to which the nipple is affixed, the flange acting to hold the nipple onto the bottle in the manner of a clamp and preventing it from being pulled off when the head or the end of the bottle is held against the flange. The head or top end of the bottle with the nipple in it is held against the flange a^{16} by drawing the adjustable flange a^{14} along the arm a^5 and against the bottom end of the bottle when the bottle will be held fixed between the two flanges and the head or top end thereof will bear against the flange a^{16} in such a manner that the nipple cannot be drawn off the bottle.

In the practical use of the holder the manner of affixing the bottle to the bottle-holding arm a^5 would be to first pass the nipple on the end of the bottle through the flange a^{16} with the head or top end of the bottle bearing against this flange and then moving the flange a^{14} along the arm a^5 until the flange engages the bottom end of the bottle and there fixing the flange by the binding screw a^{15} . The bottle and nipple on the end thereof will then be held securely in place as before described. When thus secured the bottle may be moved to and maintained in any desired position of adjustment for by loosening the swinging clamp joint a^6 the bottle may be turned up and down on an arc and its angular position determined. By loosening the screw a^{12} the bottle may be moved toward or drawn away from the end of the main supporting rod or standard a^8 and by turning this standard or moving it up or down upon loosening the binding screw a^4 the bottle may either be turned laterally or raised or lowered.

In Figs. 4 and 5 I have shown a slight modification of my invention in that it is adapted for holding another common form of bottle C', or in other words, a curved bot-

tle having a stopper c^1 with a tube c^2 extending from the stopper and a nipple c^3 connecting with the end of the tube by a plug connection c^4 .

The modification consists only in the form of the bottle-holding arm and parts connecting therewith. This arm is represented as a^{17} and is shown bent to conform to the shape of the bottle. In other respects it is practically the same as the arm a^5 in the construction before described and is mounted in precisely the same way. Adjustable upon the arm are the two flanges a^{18} , a^{19} , each of these flanges connecting with the arm by a sliding boss a^{20} and may be fixed in any adjusted position by thumb screws a^{21} extending through the respective bosses and binding against the side of the rod. The flange a^{18} is made to bear against the bottom end of the bottle and the flange a^{19} against the stopper and when in properly adjusted position to clamp the bottle between them and to hold the stopper in the end of the bottle. To prevent the bottle from slipping out, the flange a^{18} , like the flange a^{14} before described, is made to conform to the shape of the bottom end of the bottle which fits therein as the flange bears against the bottle. The flange a^{19} also is made to fit over the stopper and is provided with a hole or opening in it by which the tube bearing the nipple may pass through the flange. On the end of the arm a^{17} there is shown what may be termed a nipple holder a^{22} . This comprises a plate having in it a slot made to receive the plug c^4 into which the nipple fits and which connects it with the end of the tube. This plug in the part over which the nipple fits is corrugated by separate annular ribs c^5 , c^6 , and the plug fits into the slot in the plate in that part covered by the nipple which lies between the annular ribs. The effect is that the nipple is held securely in place by the plate in such manner that the nipple cannot be pulled off the end of the tube.

It is apparent that one of the flanges a^{18} , a^{19} might be a fixed flange and the bottle still be properly secured. I prefer, however, to make both adjustable so that when the nipple has been properly affixed to the nipple holder a^{22} the bottle may be adjustably fixed in such position that there will be little or no slack left in the tube c^2 .

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States:—

1. A bottle holder having a bottle-supporting arm, flanges mounted thereon relatively adjustable with respect to one another and adapted and arranged to the end that they may clamp a bottle with a nipple thereon between them, one of which flanges is adapted when the bottle is clamped to bear with pressure against its head or top

end and the nipple affixed thereto and passing through said flange whereby the flange will act by its pressure against the bottle to prevent the nipple from being withdrawn therefrom.

5 2. In a bottle holder, the combination with a clamp, of a main supporting rod extensionally and rotarily adjustable in said clamp, means for securing said rod to said
10 clamp whereby such adjustment may be obtained, a separate bottle-holding arm, an adjustable clamp for securing said arm to said rod by which said arm may be turned to occupy and maintain a position in
15 parallel alinement with said rod or be turned on an arc to extend outwardly from said rod

and occupy and maintain an angular position with respect thereto and in the same or substantially the same plane therewith, means for securing said arm to said ad- 20 justable clamp whereby the arm may be extensionally adjustable with respect to said clamp, and means arranged on said arm for retaining a bottle, said means comprising separate members relatively adjustable with 25 respect to one another and adapted when in an engaging position to hold the bottle clamped between them.

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Witnesses:

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JOHN E. R. HAYES.