(No Model.)

# C. C. BALSTON & J. W. ROSE.

## NURSING BOTTLE.

No. 446,091. Patented Feb. 10, 1891.

Fig. 1.

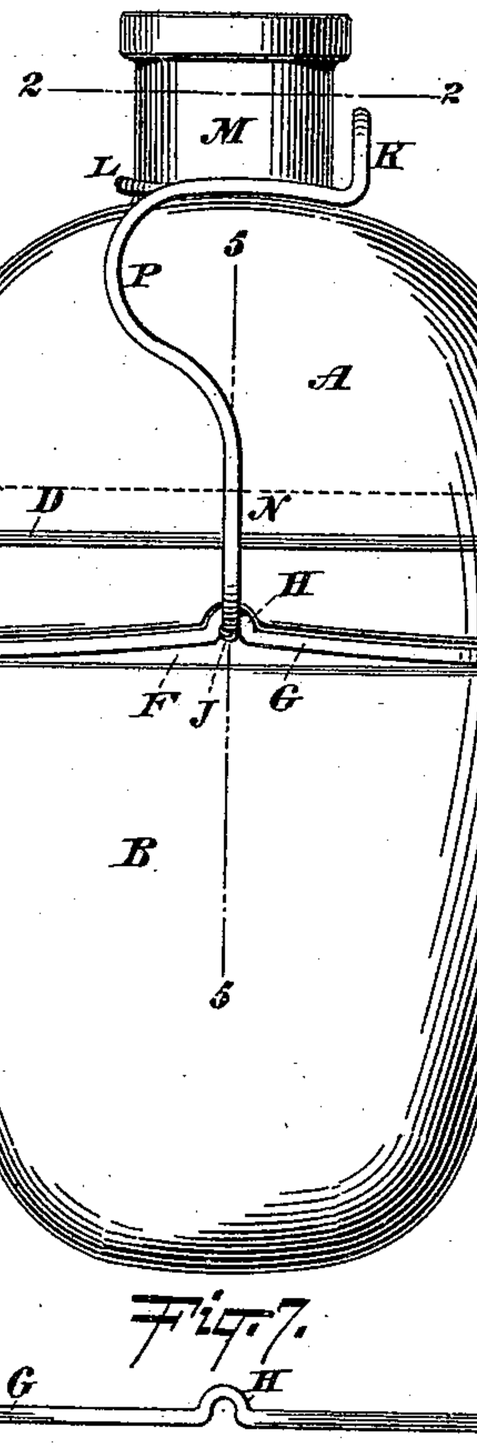



Fig. 4.

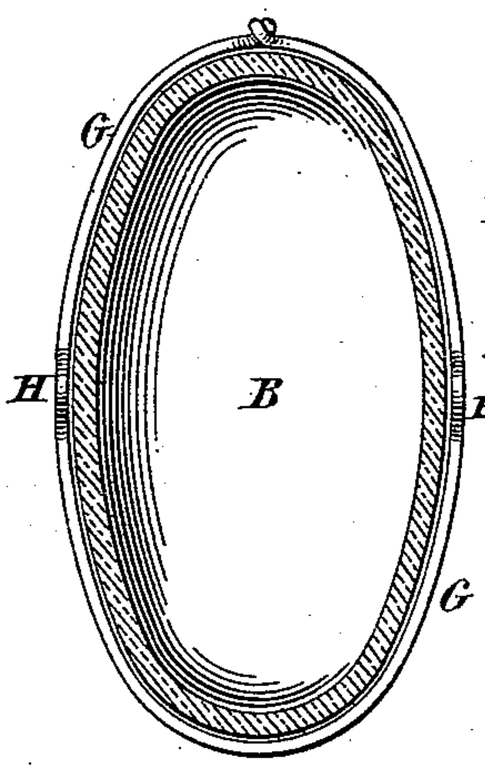



Fig. 5.

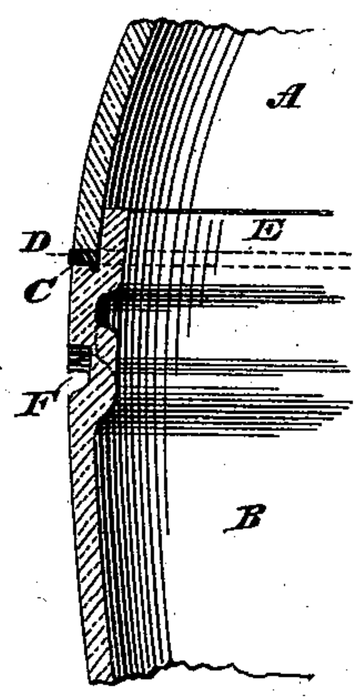



Fig. 6.

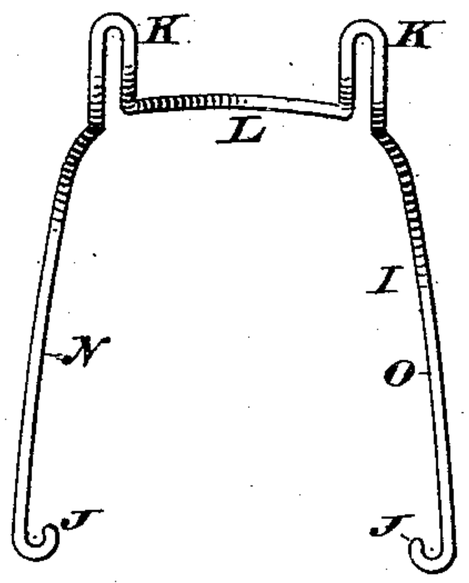



Fig. 7.




Fig. 2.

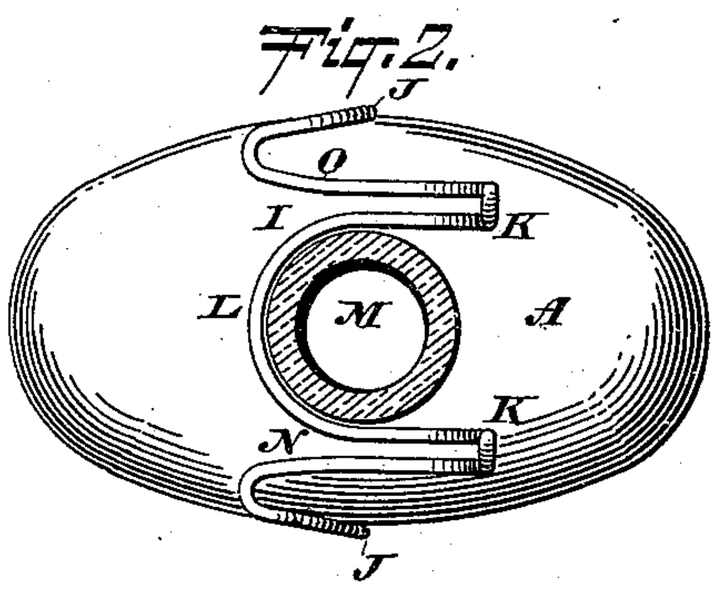
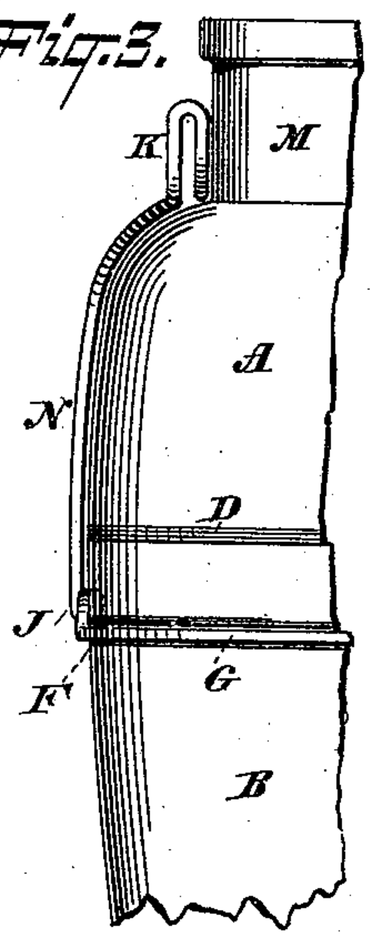



Fig. 3.

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# UNITED STATES PATENT OFFICE.

CLYDE C. BALSTON AND JOSEPH W. ROSE, OF BROOKLYN, NEW YORK, ASSIGNORS TO THE HEALTH NURSING BOTTLE COMPANY, OF SAME PLACE.

## NURSING-BOTTLE.

SPECIFICATION forming part of Letters Patent No. 446,091, dated February 10, 1891.

Application filed June 20, 1890. Serial No. 356,111. (No model.)

*To all whom it may concern:*

Be it known that we, CLYDE C. BALSTON and JOSEPH W. ROSE, citizens of the United States, and residents of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Bottles, of which the following is a specification.

The invention relates to improvements in nursing-bottles; and it consists of a bottle divided transversely into separable parts, combined with the fastening device for retaining the parts of the bottle in position or permitting their separation when desired, all as hereinafter more particularly described and claimed.

The object of the invention is to produce a bottle which may be kept scrupulously clean and so constructed that it will not readily become broken or destroyed and no difficulty be experienced in operating the clamping device.

Referring to the accompanying drawings, Figure 1 is a side elevation of a bottle constructed in accordance with the invention. Fig. 2 is a transverse section of same on the dotted line 2 2 of Fig. 1; Fig. 3, an edge view of a detached portion of the bottle; Fig. 4, a transverse section of same on the dotted line 4 4 of Fig. 1; Fig. 5, a detached vertical section through one side of the bottle on the dotted line 5 5 of Fig. 1; Fig. 6, a detached elevation of a wire clamping device for retaining the separable sections of the bottle together or permitting their separation when desired, and Fig. 7 a side elevation of a wire band passing around the body of the bottle and serving as bearings for the lower ends of the clamping device illustrated in Fig. 6.

In the accompanying drawings, A B respectively designate the upper and lower separable sections of the bottle, the section B being provided with the shoulder C, passing entirely around it to receive the ring of packing material D and the lower edge of the upper section A of the bottle, as shown more clearly in Fig. 5. The upper edge of the lower section B constitutes a continuous flange E, which fits snugly within the lower edges of the upper section A, and with the packing D forms a suitable joint between the parts of the bottle. The lower section B of the bottle also contains the continuous groove F, passing transversely around it and enlarged at its two opposite sides, as shown in Fig. 1, to permit a definite spring action in the band or rod of wire G, which is secured within said groove, as hereinafter specified. The ends of the wire G are twisted, as shown in Fig. 4, in order that the band may closely hug the walls of the groove F and not form an unsightly projection on the bottle or lose its position.

At opposite sides of the bottle the wire G has formed in it the loops H, which constitute eyes or bearings to receive the lower ends of the wire clamp I and permit said clamp to have a hinged or swinging or pivotal motion during the operation of pressing it around the neck of the bottle or removing it therefrom. The lower ends of the wire clamp I are given the form of hooks J, which engage the loops H, as illustrated in Figs. 1 and 3, and thereby retain the clamp in place upon the bottle. From the loops H the wire of which the clamp I is composed extends upward a suitable distance toward the neck of the bottle and then bends to one side of the vertical center of said bottle, as illustrated in Fig. 1, after which the wire then extends to the opposite side of the center of said bottle, being finally turned upward to form the thumb-pieces K, which on opposite sides of the bottle are connected by the loop L, which extends around one side of the neck M, as illustrated more clearly in Fig. 2. The clamp I is thus composed of the arms N O, extending upward on each side of the bottle from the loops H, as illustrated in Fig. 1, said arms terminating in the thumb-pieces K, which are connected by the loop L.

The distance between the loop L of the clamping device I and the lower end of the side arms N O is such that upon the clamp being turned upward to clasp the upper section A of the bottle the central portions of the wire G will be drawn upward in the enlarged portion of the transverse groove F, as

illustrated in Fig. 1, this creating a spring-tension downward on the said clamp I, which serves to compress the upper section A against the packing D, and thus insure the formation of a liquid-tight joint between the sections of the bottle. The form of the groove F is such that upon the upward movement of the middle portions of the wire G the loops H will be snugly housed, so as not to project outward from the sides of the bottle, the upper portion of the groove being recessed to receive said loops. The form of the clamp I is also of advantage, since a double thickness of the wire is formed at each side of the neck of the bottle, as illustrated in Fig. 2, and this forms broad bearing-surfaces upon the upper section of the bottle, besides insuring the proper strength to the device. The thumb-pieces K will enable a person to readily force the clamp I from the upper section of the bottle, so that it may swing outward upon the loops H and permit the upper section A to be readily removed. The thumb-pieces K also afford convenient means for enabling a person to press the clamp I upon the upper section A, so as to close it upon the lower section B when desired.

The bend lettered P in the arms N O affords a spring-tension to the clamp I and facilitates its proper use upon the bottle. It will be noted that the bend P in the arms N O of the clamp extends to one side of the vertical center of the bottle, while the thumb-pieces K are on the opposite side of said center.

The bottle is elliptical in cross-section, as shown in Figs. 2 and 4, and the arms N O of the clamp I are on the opposite sides of the bottle, in which position their upper portion with the loop L may have a more extended bearing on the upper section of the bottle at the base of its neck than could be secured if said arms were hinged at the opposite edges of the lower section B. The arms N O being at the sides of the bottle, the clamp I is less likely to be accidentally moved from the section A when in use than it would were the said arms along the edges of the bottle, and said position of the arms N O at the opposite sides of the bottle brings the strain of the clamp I as nearly as possible in line with the vertical center of the sections A B and the opposite sides of the clamp as close together as possible, thus affording the maximum degree of strength with the minimum thickness of wire and insuring the formation of a liquid-tight joint between the sections A B.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The bottle consisting of the separable sections A B, united on a transverse line, the section A having the neck M, combined with the wire band passing around one of the sections and forming loops H, the clamp I, hinged at its lower end to said loops and having at its upper portion the loop L, passing around the neck M of the bottle and having a bearing upon the upper section thereof at the base of said neck, substantially as set forth.

2. The bottle consisting of the separable sections A B, the former being provided with the neck M, combined with the wire clamping device consisting of the two arms hinged at their lower end to the section B, and connected at their upper portion by the loop L, passing around the neck of the bottle and bearing upon the upper surface thereof at the base of said neck, substantially as and for the purposes set forth.

3. The bottle consisting of the separable sections united on a transverse line, the lower section being provided with the continuous groove F, combined with the band of wire G, fitting within said groove, and the wire clamp I, hinged to said band G at opposite sides of the bottle and thence extending upward first to one side of the vertical center of the bottle and then to the opposite side of said center, where the thumb-pieces K are provided, said thumb-pieces being connected by the loop L, passing around the neck of the bottle, substantially as set forth.

4. The bottle consisting of the separable sections A B, united on a transverse line, the section B being provided with the continuous groove F, which is wider at opposite sides of the bottle, combined with the band of wire G, secured within said groove and adapted to be allowed a movement within the wider parts thereof at opposite sides of the bottle, and the clamping device I, hinged to said band of wire G at opposite sides of the bottle and consisting of the arms N O, thumb-pieces K, and connecting-loop L, substantially as set forth.

5. The bottle consisting of the separable sections A B, united on a transverse line, the section B having the continuous groove F, combined with the band of wire G, secured within said groove and provided with the bearings H, and the clamping device I, consisting of the arms N O, having hooks J at their lower ends to engage said bearings and being provided at their upper portion with the connecting-loop L, passing around the neck of the bottle, substantially as set forth.

6. The bottle consisting of the separable sections A B, united on a transverse line and provided with the packing D at their point of union, combined with the clamping device I, hinged to the lower section and consisting of the arms N O, the thumb-pieces K, and connecting-loop L, the said clamping device being adapted to be moved upon and close around the neck of the upper section of the bottle, substantially as set forth.

7. The bottle consisting of the separable sections united on a transverse line and provided with the packing at their point of union, said bottle being elliptical in cross-section, combined with the clamping device I, hinged

at opposite sides of the lower section and consisting of the upwardly-extending arms N O and connecting-loop L, the upper portion of the arms N O, with the loop L, having a bearing upon the upper section A of the bottle at the base of its neck M, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 18th day of June, A. D. 1890.

CLYDE C. BALSTON.
JOSEPH W. ROSE.

Witnesses:
CHARLES C. GILL,
E. D. MILLER.