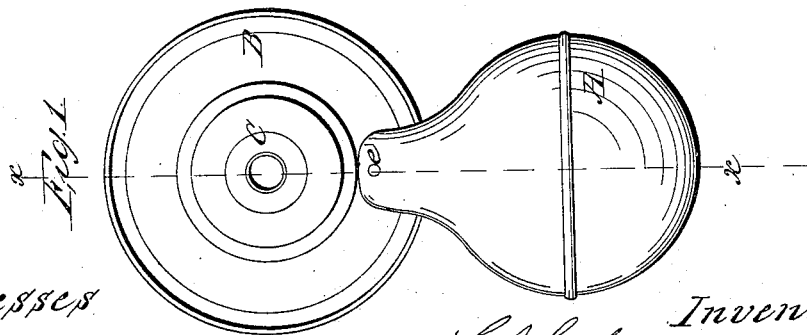
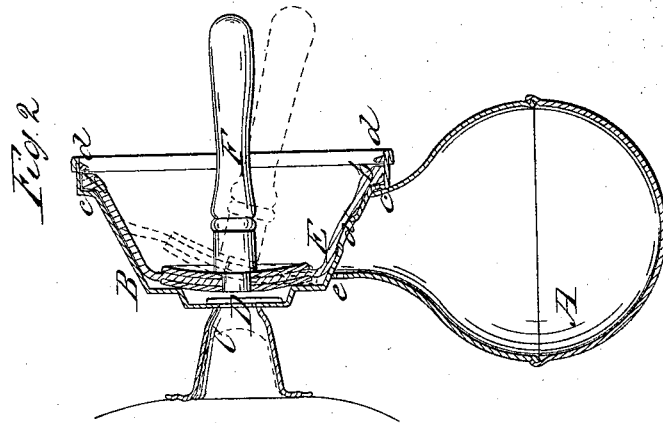


L.O. Colrin,

Breast Pump.

N^o 50,457.

Patented Oct. 17, 1865.



Witnesses
Henry Morris
James P. Hall

Inventor
L.O. Colrin
per Munn & Co
Attorneys

UNITED STATES PATENT OFFICE.

L. O. COLVIN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BREAST-PUMPS.

Specification forming part of Letters Patent No. 50,457, dated October 17, 1865.

To all whom it may concern:

Be it known that I, L. O. COLVIN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Breast-Pump; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a face or front view of my invention; Fig. 2, a vertical section of the same, taken in the line *x x*, Fig. 1.

Similar letters of reference indicate like parts.

This invention relates to a new and improved breast-pump; and it consists in the employment or use of a bulb or milk-receptacle, valve-cup and valve, and nipple-tube, all arranged and combined in such a manner as to form an extremely portable and convenient breast-pump, one which may be operated with the greatest ease by the person requiring its use, and with equal facility when applied to either breast.

This invention is an improvement on a breast-pump for which Letters Patent were granted to me, bearing date February 17, 1863, the present improvement possessing all the advantages of the patented one, besides those of portability, simplicity, and great facility in the operation or use of the device previously alluded to.

A represents a milk-receptacle, which may be of spherical form, and which has a cup, B, attached to its upper end. This cup and milk-receptacle may be of metal, and both be cast in one piece, and the cup has a nipple-tube, C, attached to one side of it, and the tube may be cast with the cup.

D is a valve at the inner end of the nipple-tube, opening into the cup B. (See Fig. 2.) The cup B communicates with the milk-receptacle A by means of an opening, *a*, also shown in Fig. 2.

E is a valve, constructed of india-rubber or other elastic material, provided with a rim, *b*, of hard rubber, which is fitted in a recess, *c*, around the edge of the cup B, and within cleats *d*. This valve E is made in cup form to correspond to the shape of the cup B, and it has a handle, F, attached centrally to it, which projects out beyond the cup, as shown in Fig. 2. The valve E covers the opening *a* when it is in its proper or normal position within the cup B.

The operation is as follows: The tube C is applied to the nipple and the valve E operated by pressing the handle F downward, as shown in red in Fig. 2. This movement opens the valve D, producing a suction within the cup B, the milk consequently flowing into said cup B. When the valve E commences to return to its former position under the upward movement of the handle the valve D closes, and the milk is forced from the cup B through the opening *a* into the receptacle A. A small opening, *e*, is made in the upper part of the receptacle A to admit of the escape of air from the latter.

Thus by this arrangement an extremely simple breast-pump is obtained, one that may be operated by the user with equal facility when applied to either breast, and capable of being constructed at a moderate cost.

The valve E may be removed from the cup B and fitted into it without any difficulty whatever, and hence the pump may be kept in a perfectly clean state.

I claim as new and desire to secure by Letters Patent—

The milk-receptacle A, cup B, and nipple-tube C, in combination with the valves D E, all constructed, arranged, and combined to operate in the manner substantially as and for the purpose herein set forth.

L. O. COLVIN.

Witnesses:

ANDW. J. BOSWELL,
LOUIS BOSWELL.