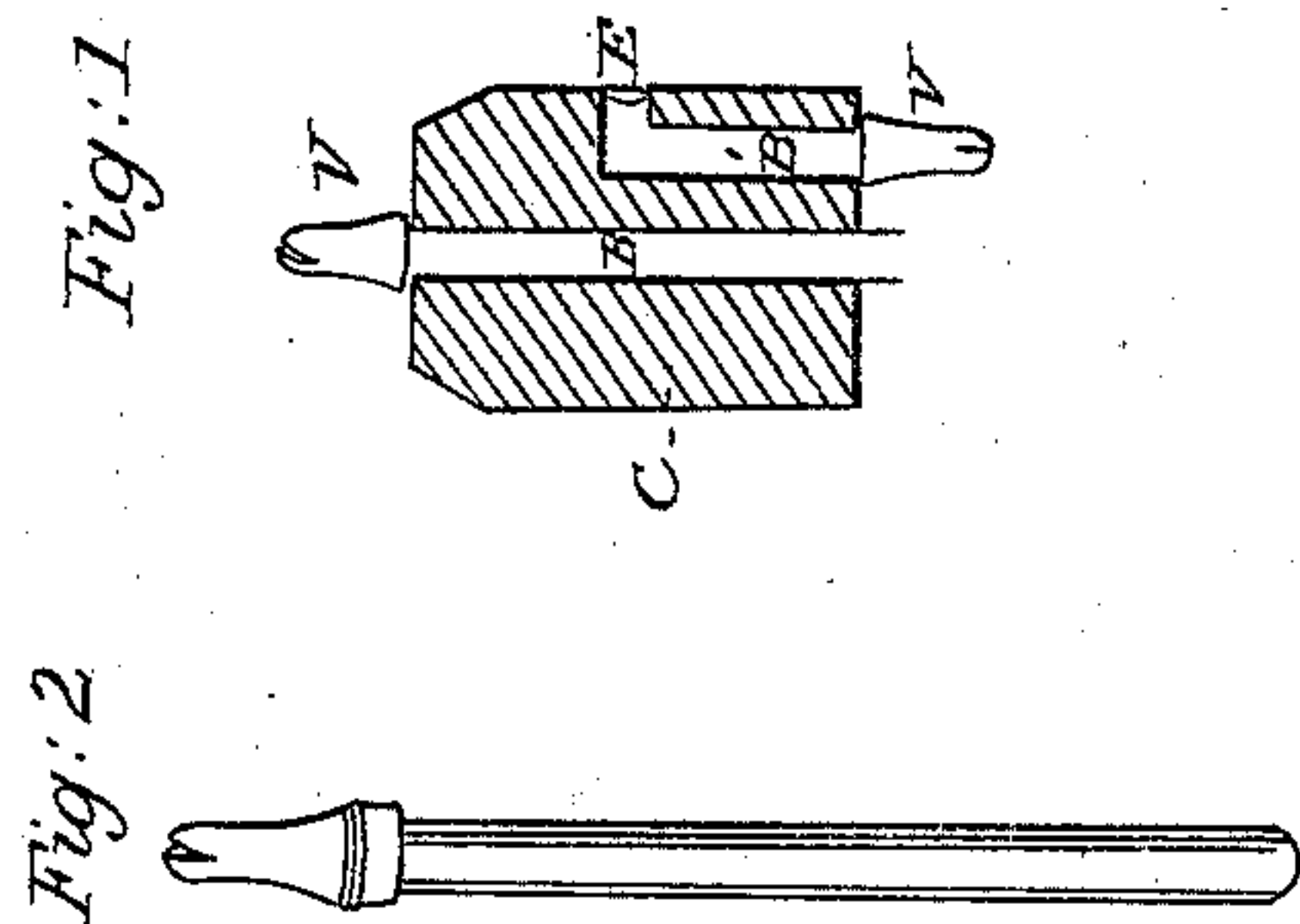
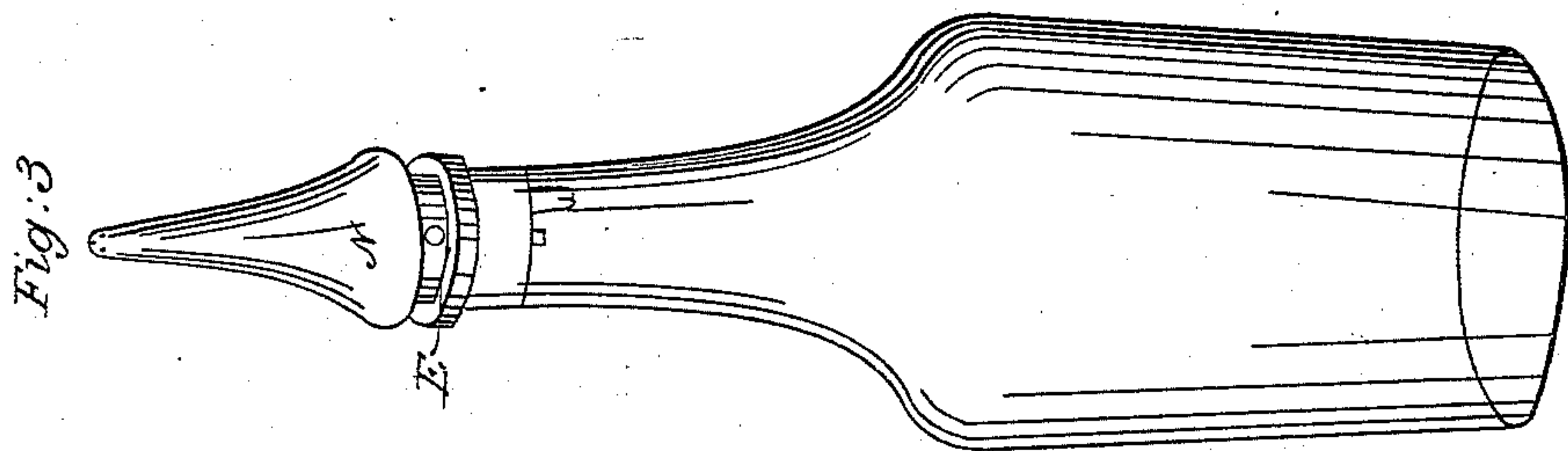
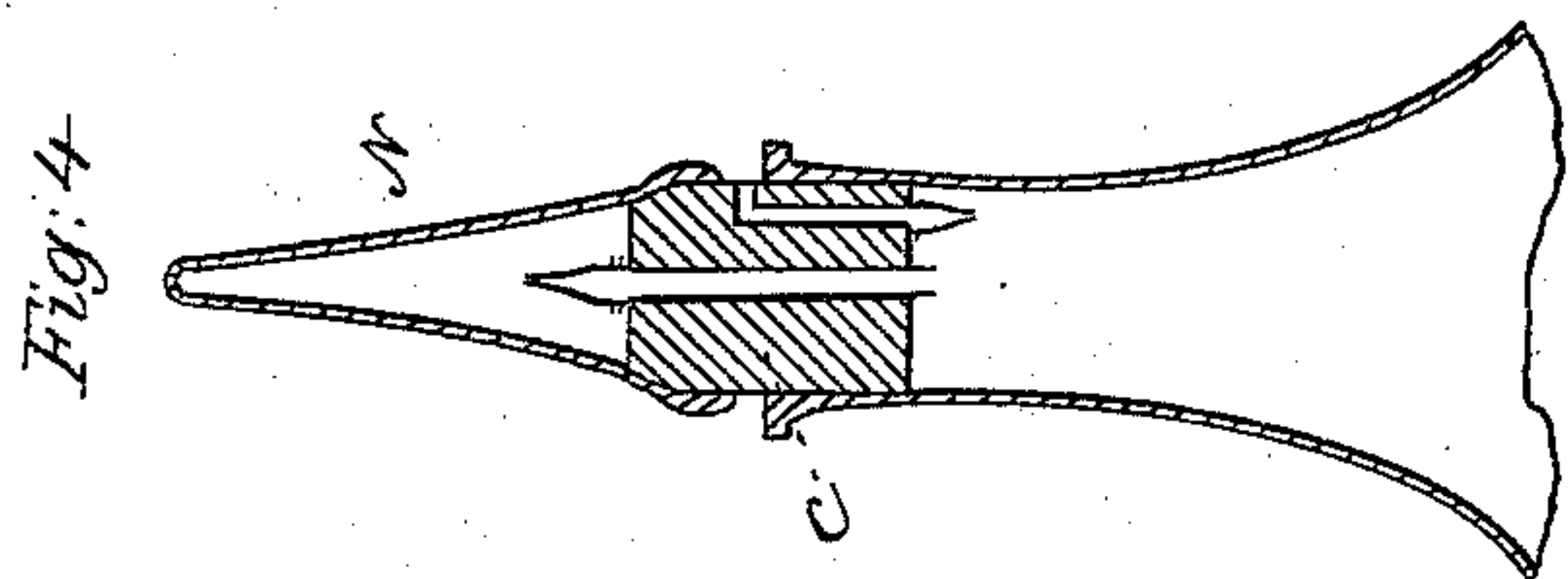


E. Pratt,
Nursing Bottle.
N^o 4,138. Patented Aug. 9, 1845.



UNITED STATES PATENT OFFICE.

ELIJAH PRATT, OF NEW YORK, N. Y.

IMPROVEMENT IN NURSING-BOTTLES.

Specification forming part of Letters Patent No. 4,138, dated August 9, 1845; antedated June 16, 1845.

To all whom it may concern:

Be it known that I, ELIJAH PRATT, of New York, N. Y., have invented a new and useful Improvement in Nursing-Bottles for Administering Liquid Food to Infants or Infirm Adults; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, which make a part of this specification.

I use any kind of bottles of suitable material and dimensions, with corks fitted to them in the ordinary way. I introduce two quills or small tubes, of glass, silver, wood, or ivory, through the cork of each bottle, their lower ends opening into the interior and their upper ones communicating without. Through one the child or patient imbibes the liquid contents, while at the same time air enters through the other and replaces the liquid drawn out. So far there is little or nothing novel, as nursing-bottles substantially thus constructed have been and are in use; but in my improvement I adapt a contractile valve to the exterior orifice of the sucking-tube and another to the interior orifice of the air-tube, by which means the contents are prevented from escaping or leaking when the bottle is inclined or inverted. I also place an artificial nipple or sheath of india-rubber over the sucking-tube. This sheath, from its figure and yielding qualities, constitutes a better substitute for the natural nipple than any reed or tube of solid material.

Figure 1 represents a section of the cork C and also of the tubes. B is the sucking and B' the air tube. The upper end of the latter terminates in a perforation at right angles to it on one side at E, care being taken that such perforation be not pushed so far into the neck of the bottle as to prevent the air at any time

from entering. Both valves V V are alike. They are made of thin india-rubber in the form of short collapsed tubes, one end being slit so as to form two lips and the other slipped over the end of the tube and tied by a thread or otherwise secured, as shown more at large at Fig. 2, where the lips are represented open, as they will be when the bottle is in use. When the child or patient ceases to suck, the lips close. The sheath or artificial nipple is shown at N, Figs. 3 and 4. It has two or three minute perforations at the pointed end, and is made sufficiently small at the wide end as to make an air-tight joint when stretched over the upper part of the cork. The lower edge of the sheath ought not to extend over the perforation E in the side of the cork, as otherwise it might prevent the admission of air through the air-tube B', and consequently the withdrawal of the liquid through the sucking-tube B.

Fig. 4 is a section of the sheath or nipple, cork, tubes, and neck of the bottle.

Fig. 3 represents the bottle when prepared for use. It is to be inclined or inverted according to the position of the child or patient and according to the quantity of liquid within it. As the liquid is withdrawn through B by the action of the lungs, air enters through B', and hence the atmospheric pressure will constantly remain the same within as without.

What I claim, and desire to secure by Letters Patent, is—

The contractile valves to sucking and air tubes of nursing-bottles, and also the application of artificial nipples to the same, as herein set forth.

ELIJAH PRATT.

Witnesses:

EDWARD JONES,
BENSON S. COOPER.