

(No Model.)

J. BARNES.
MEDICINE DISPENSER.

No. 404,950.

Patented June 11, 1889.

Fig: 1

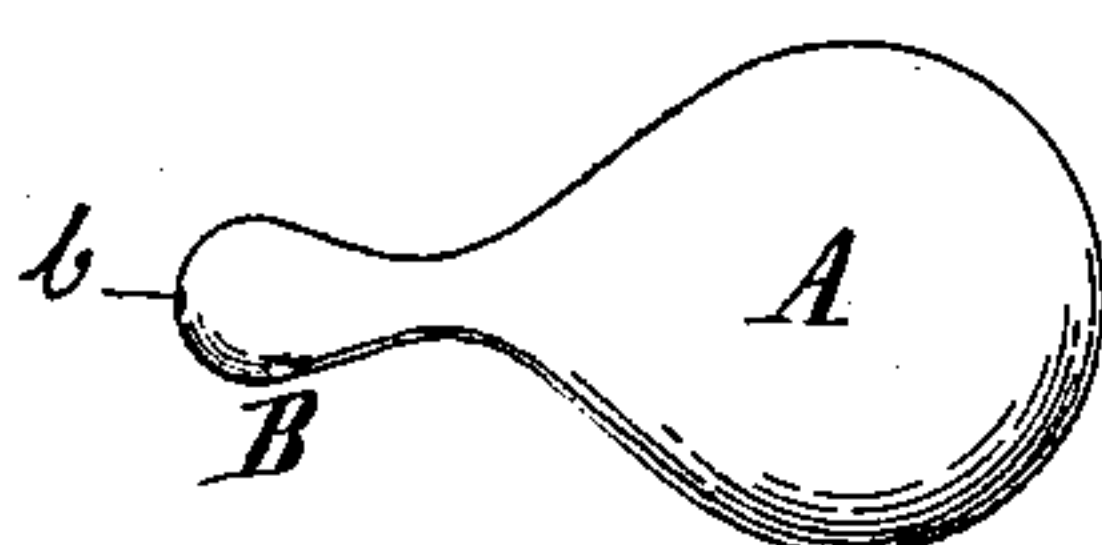


Fig: 2

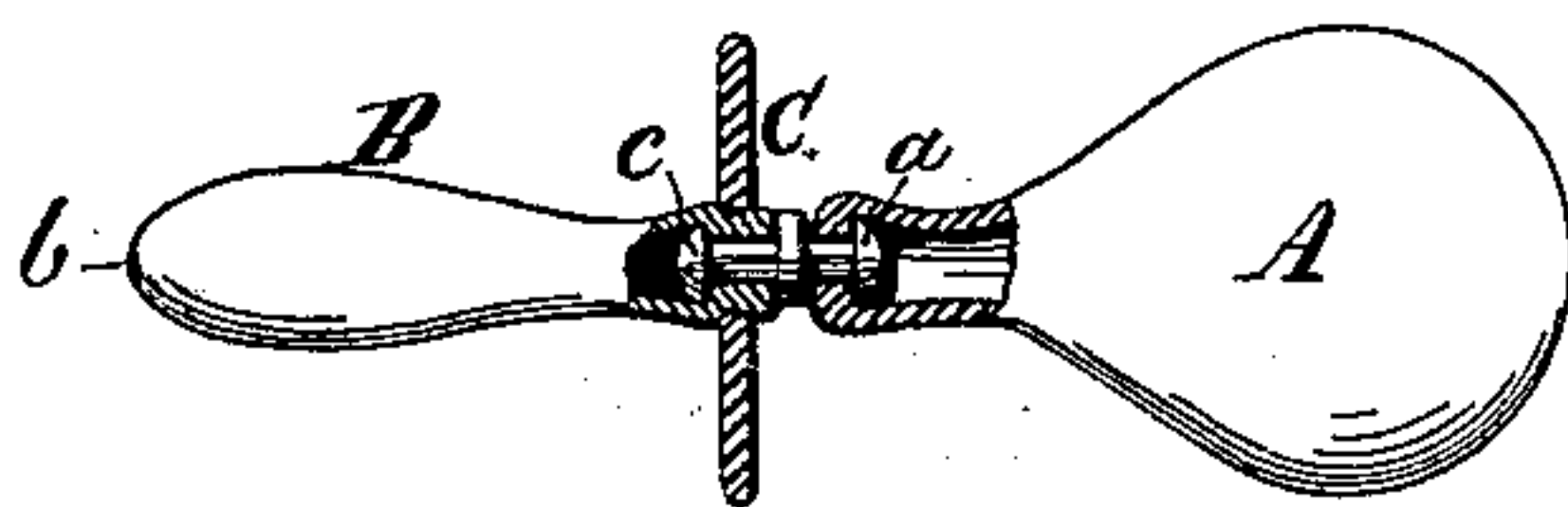


Fig: 3

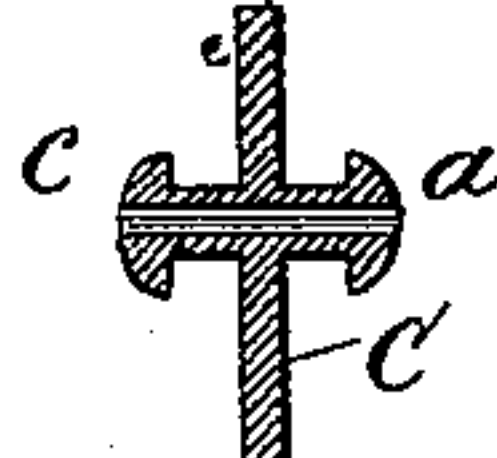
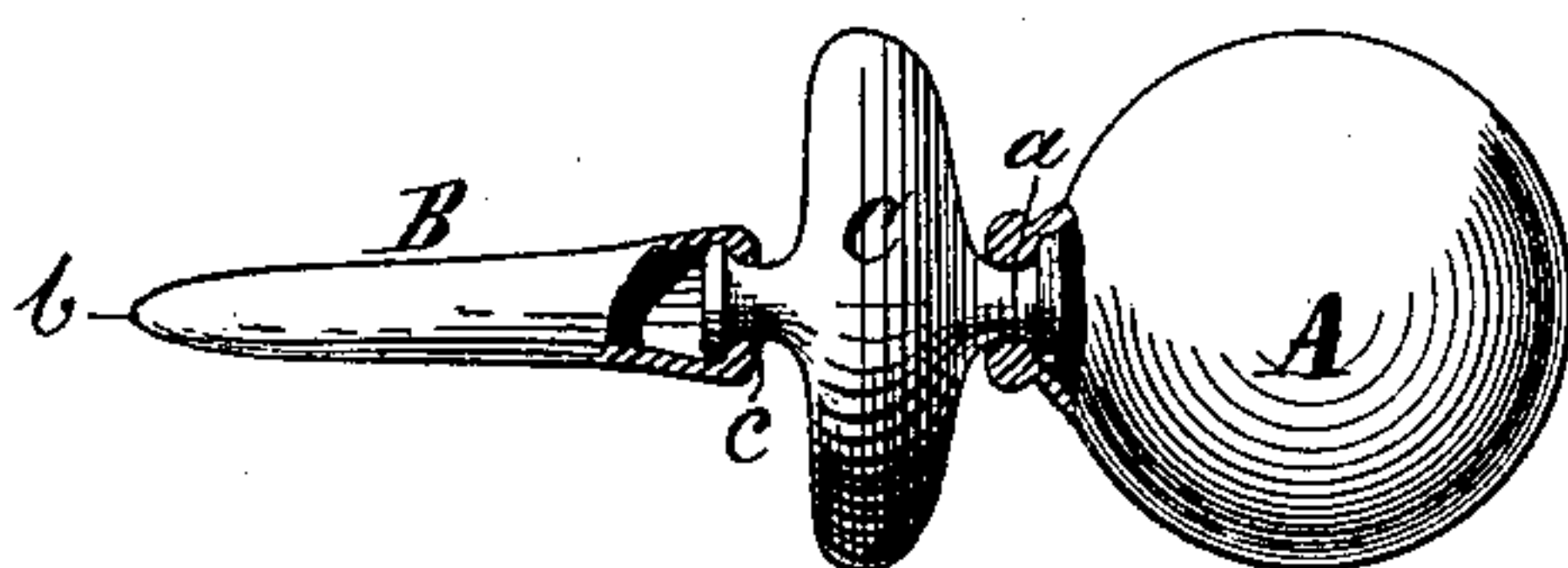


Fig: 4



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSHUA BARNES, OF BROOKLYN, NEW YORK.

MEDICINE-DISPENSER.

SPECIFICATION forming part of Letters Patent No. 404,950, dated June 11, 1889.

Application filed June 20, 1887. Serial No. 241,833. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA BARNES, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Medicine-Dispensers, of which the following is a specification.

The object of my invention is to provide a simple and efficient device for administering medicine to infants in prescribed proper doses without spilling and incurring the liability of its being ejected without being swallowed.

In giving medicine by a spoon a portion is almost invariably spilled, and the dose received is thereby smaller than that prescribed. The hard touch of the spoon is unnatural and disagreeable to the infant, compels it to keep its mouth open in the attempt of sucking, and thereby causes it to inhale an excess of air into the stomach, which often produces colic. My present invention obviates this difficulty and makes the administering of medicine easy and rapid, even when disagreeable to the taste.

In the accompanying drawings, Figure 1 is a side view of my improved medicine-dispenser in its simplest form. Figs. 2 and 4 are modifications thereof provided with a stop or shield between the bulb and the nipple and partly broken out; and Fig. 3 is a longitudinal section of the coupling used to connect the bulb and nipple in Fig. 2, with the shield formed in one piece with the said coupling.

A is the bulb, and B the sucking-nipple with the ordinary small end aperture *b*.

C is a shield, which acts as a stop against the infant's mouth (as in ordinary nursing-bottles) to prevent it from drawing in the nipple too far. The shield is provided, as shown in Figs. 3 and 4, with the coupling-teats *a c*, for attaching it to the bulb and nipple, respectively.

The simplest form of my medicine-dispenser is that shown in Fig. 1, in which the bulb and sucking-nipple are made together in one piece of rubber or other flexible elastic material, the bulb serving in a measure as a shield, or an ordinary bone shield of the nursing-bottle may be put upon the nipple B.

The device is to be used as follows: The

proper dose of medicine having been put in a suitable vessel, the bulb A is compressed to expel the air, and the nipple B is inserted with its aperture *b* in the liquid. The pressure on the bulb is then removed, and the vacuum formed is, of course, replaced by the liquid forced up by the atmospheric pressure. The nipple is then inserted in the mouth and the infant allowed to suck on it until it has consumed the medicine.

If the medicine is of such disagreeable taste that the infant would be liable at once to eject it without swallowing, it is only necessary to insert the nipple sufficiently deep, so as not to be tasted with the tongue, and compress the bulb to squirt the liquid directly into the throat, or, by gentler pressure, cause it to flow slowly therein. It is evident that in this latter manner the device may be used just as effectually for grown persons, as also for dispensing medicine to dogs and other animals.

In Figs. 2 and 4 the bulb and nipple are shown as connected by a coupling. This may be the ordinary coupling, as in Fig. 2, and a shield C may be put upon the nipple in the old way; but I prefer to make the shield and coupling in one piece, the partition between the teats of the coupling itself being enlarged in diameter to form the shield, as in Fig. 3, and the shield more preferably being hollow and made of glass or other transparent substance, as in Fig. 4. The object of this is to utilize the shield for two purposes—one as the shield proper and the other as a reservoir to receive the liquid medicine—so that in drawing it up it need not enter the bulb A itself, but merely this glass reservoir C, Fig. 4, through which its volume can be noticed and the proper action of the dispenser observed. In either case, Figs. 3 and 4, it will be noticed that the teats *a* and *c*, by which the shield C is coupled to the bulb and nipple A B, respectively, are made in one piece with the shield and form a conduit between the bulb and nipple A B, as usual. The sucking-nipple may, of course, be either hard or flexible.

I am aware of United States Patent No. 280,202 for a powder-injector, in which an elastic bulb is used in connection with a non-

transparent powder-receptacle and a non-elastic discharge-nozzle, and I do not claim the construction therein covered and shown.

I am also aware of certain improvements
5 in vacuum-producing breast-pumps, in which there is a device called a "nipple," a receiver, and an elastic bulb. The so-called "nipple" is a short flexible tube having a wide open mouth adapted to receive the nipple of the
10 breast and close around it, so as to exclude the air and cause suction on the breast through the action of the flexible bulb, the operation of which is by induction through the nipple, eduction of the air directly from
15 the bulb and without effect on the contents of the receiver, and discharge of the contents of the receiver by pouring out the same independently of the action of the flexible bulb. My improved instrument differs from these
20 in having a sucking-nipple, which is a device that can be inserted in the mouth of an infant and retains the contents till withdrawn by suction, and the arrangement is at the same time so that the contents can be ejected
25 through the nipple by the bulb when occasion requires, and the arrangement is also such that the instrument is alike useful as a medicine-dropper.

Having thus described my invention, what I
30 claim as new, and desire to secure by Letters Patent, is—

1. The combination of a flexible elastic bulb with a flexible elastic sucking-nipple communicating with the said bulb, and a

coupling and shield interposed between said 35 bulb and nipple, for the purpose set forth.

2. The combination of a flexible elastic bulb with a flexible elastic sucking-nipple communicating with the said bulb, and a
40 hollow shield coupled to and forming a conduit between said bulb and nipple in the described arrangement for induction and eduction through the nipple by the bulb, for the purpose set forth.

3. The combination of a flexible elastic 45 bulb with a sucking-nipple communicating with the said bulb, and a transparent hollow shield coupled to and forming a conduit between said bulb and nipple in the described arrangement for induction and eduction 50 through the nipple by the bulb, for the purpose set forth.

4. The combination of a flexible elastic bulb with a sucking-nipple communicating with the said bulb, and a transparent reser- 55 voir coupled to and forming a conduit between said bulb and nipple in the described arrangement for induction and eduction through the nipple by the bulb, for the purpose set forth. 60

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 17th day of June, 1887.

JOSHUA BARNES.

Witnesses:

A. W. ALMQVIST,
HELMER WESTEEN.