

(No Model.)

T. S. EASTON.

TEMPERING BULB FOR SYRINGES, &c.

No. 338,045.

Patented Mar. 16, 1886.

Fig. 1.

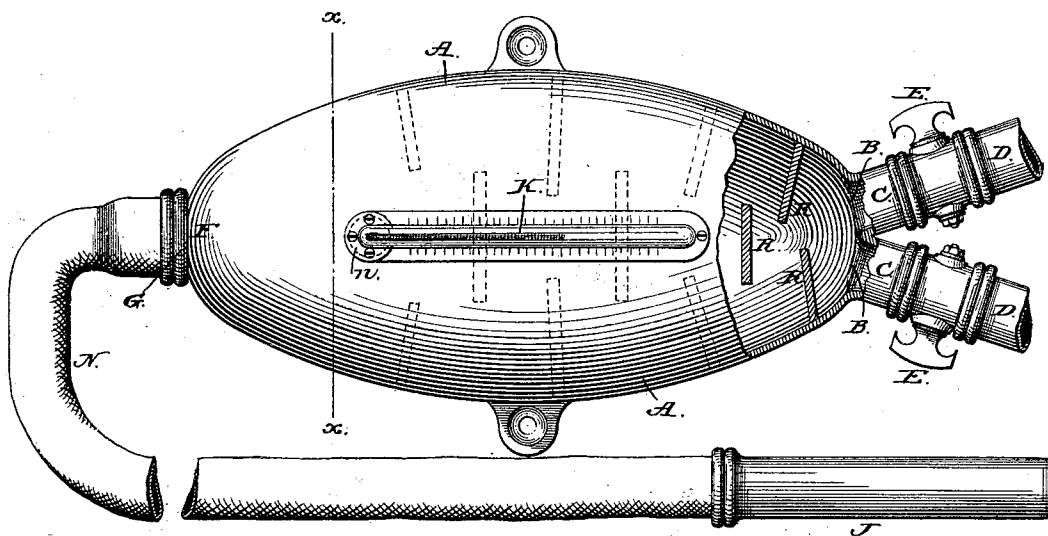


Fig. 2.

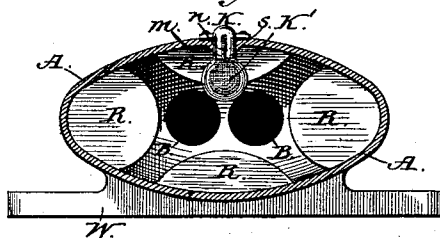
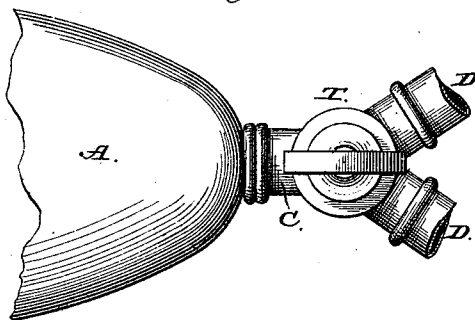


Fig. 3.



Attest:

John A. Ellis.  
A. B. Moore.

Inventor:

Thomas S. Easton  
By David A. Burr

Atty.

# UNITED STATES PATENT OFFICE.

THOMAS S. EASTON, OF NEW YORK, N. Y.

## TEMPERING-BULB FOR SYRINGES, &c.

SPECIFICATION forming part of Letters Patent No. 338,045, dated March 16, 1886.

Application filed December 7, 1885. Serial No. 124,929. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS S. EASTON, of the city, county, and State of New York, have invented a new and useful Improvement in a  
5 Tempering Chamber or Bulb for Vaginal Douches; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference  
10 marked thereon, making a part of this specification, in which—

Figure 1 is a side elevation, partly in section, of my improved tempering-bulb for vaginal and uterine douches; Fig. 2, a cross-section in line *x x* of Fig. 1, and Fig. 3 a detailed view illustrating the application of a  
15 three-way cock to the bulb.

It becomes important at times in medical practice to make use of douches which shall be varied in temperature during their application, and it is essential that exact degrees of temperature shall be observed and maintained in the douches.

To this end various forms of apparatus have  
25 been devised, in which streams of hot and cold water are made to mingle and are delivered in a single united stream of the desired temperature. These several forms of apparatus have, however, been connected in permanent form with water-closets, bath-tubs, or  
30 other water-supply fixtures of the house.

The object of my invention is to provide a neat device by means of which the temperature of the douche may be controlled and regulated with exactitude during its application  
35 and be positively determined by the constant indications of a thermometer, and which shall be portable, so as to admit of detachment for use in connection with any convenient source  
40 of water-supply.

My improved device is constructed in the form of a bulb having double induction-ports for a supply thereto of both hot and cold water, and a single discharge-port for the delivery of  
45 a single stream of tempered water to the douche, the induction-ports being governed by valves to control the supply from each, and which is fitted internally with a series of wings or deflecting-plates properly arranged  
50 to break up the flow of water, and, by causing eddies and currents in the bulb, promote and insure a rapid and thorough commingling

and blending of the two supply-streams, and which is provided with a thermometer adapted to indicate the mean temperature of the  
55 mingled streams to be delivered therefrom.

In the drawings, A represents a chamber or bulb constructed in any suitable manner of metal, hard-rubber, or other suitable material, preferably in the form of a hollow prolate  
60 spheroid. One end of this spheroidal bulb is provided with two induction-ports, B B, and with projecting nozzles C C, by which the bulb is connected with tubes D D, for a supply of hot and cold water thereto, and these  
65 tubes are each governed by a valve or a cock, E, by means of which the supply from either tube is readily controlled. The opposite end of the bulb is provided with an eduction-port, F, preferably made of a diameter not to exceed that of either of the induction-ports B B,  
70 and is fitted with a nozzle, G, connected with said port to facilitate the attachment to the bulb of a flexible discharge-tube, N, terminating in the douche-tube J, of any approved  
75 form.

K represents the tube of a thermometer which is fitted neatly within a longitudinal recess formed exteriorly on one side of the chamber A, and which terminates at the end  
80 nearest the discharge-nozzle G in an aperture, *m*, in the side of the chamber, large enough to permit of the introduction of the bulb K' of the thermometer through it, so that said thermometer-bulb may project within  
85 the chamber. This opening *m* is covered and closed with a tight joint by means of a cap-plate, *n*, and an interposed gasket, *s*, of rubber or other yielding material, the cap being  
90 secured in place by screws or other fittings.

The commingling of the two separate streams introduced within the bulb from the tubes D D is promoted by means of wings R R, formed and fitted to project inwardly from the inner wall of the chamber A, said wings  
95 being so disposed as to break joint with each other and leave passages between them. As an equivalent for these separate wings, or as an auxiliary device in connection therewith, one or more transverse perforated diaphragms may be introduced within the chamber A, between the bulb K' of the thermometer and the induction-ports B B.

The two induction-tubes may be governed

by a single three-way cock, T, (see Fig. 3,) instead of by independent cocks E E, the cock being adapted, in the customary manner, to permit of an inflow from either tube alone or

5 from both.

The bulb A is preferably provided with a base-plate, W, by means of which it may be made fast to the wall by the side of a bath-tub, or may be laid upon the side plate of the tub

10 or other convenient support.

In the use of my tempering-bulb the supply of hot and cold water to the chamber A is regulated by means of the valves controlling the tubes D D until the thermometer indicates the mean temperature in the stream

15 flowing from the douche-tube J which has been prescribed. The change of temperature in the stream required during the continued application of the douche is then readily produced by a manipulation of the valves in the

20 induction-tubes, whereby the prescribed indications upon the thermometer may be obtained, which will denote the temperature of the effective stream, and any required temperature constantly maintained so long as may

25 be desired.  
I am aware that an apparatus for giving injections at regulated temperatures, in which a

receiver is connected with hot and cold water supply pipes on the one hand, and with a 30 flexible tube leading therefrom to the injection-nozzle on the other, the several pipes being controlled each by a suitable cock, is not new; hence I do not claim, broadly, such a device.

35 My invention relates to the special internal construction and portable form of my device as described; and

I claim as my invention—

The combination, with a tempering-chamber 40 for a vaginal or rectal douche constructed with double induction and a single eduction port, a valve controlling each port, and a flexible delivery-tube fitted to the eduction-port, of deflecting wings or diaphragms fitted 45 within the chamber to produce a commingling of the inflowing streams, substantially in the manner and for the purpose herein set forth.

In testimony whereof I have signed my name 50 to this specification in the presence of two subscribing witnesses.

THOS. S. EASTON.

Witnesses:

P. ELBERT NOSTRAND,  
A. B. MOORE.