

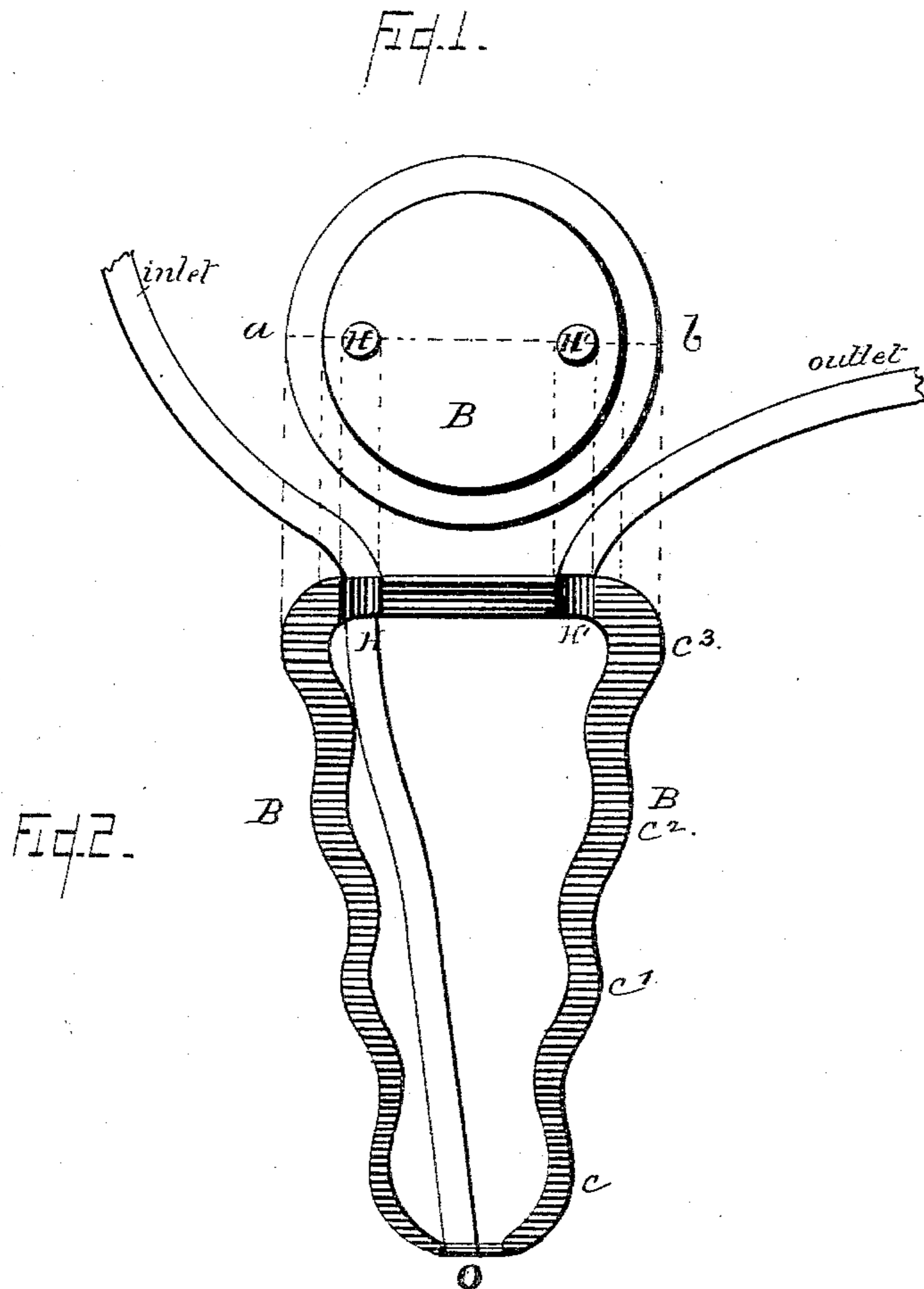
(No Model.)

T. M. HEALEY.

SYRINGE.

No. 381,622.

Patented Apr. 24, 1888.



Witnesses  
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# UNITED STATES PATENT OFFICE.

THOMAS M. HEALEY, OF CUMBERLAND, MARYLAND.

## SYRINGE.

SPECIFICATION forming part of Letters Patent No. 381,622, dated April 24, 1888.

Application filed January 30, 1888. Serial No. 262,456. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS M. HEALEY, a citizen of the United States, residing at Cumberland, in the county of Alleghany and State of Maryland, have invented certain new and useful Improvements in Vaginal Irrigators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in that class of surgical instruments known as "vaginal irrigators" or "douches."

In the drawings, Figure 1 represents a plan, and Fig. 2 a section through a given center line, *a b*, of one form of irrigator.

The same letters represent like parts in the plan and section.

The object of my invention is to provide a means whereby fluids can be introduced into, retained in, and withdrawn from the vagina without the same coming in contact with and wetting the person externally.

The nature of my invention consists in making or shaping the exterior of a hollow cylinder, or preferably a truncated hollow cone, B, by providing it with ridges or corrugations *c c' c'' c'''*, which will, when thrust within the opening of the vagina, be grasped by the sphincter muscle of that canal, thus making a water-tight joint without causing any undue or painful distention of this sensitive organ. The vagina is larger or more easily distended just within the sphincter muscle and gives place to the elevation *c* of the cone. When it is forced through the sphincter muscle, the muscle immediately closes down into the depression and offers nearly as much resistance to the escape of the instrument as it does to its entrance, and this renders the instrument nearly, if not quite, self-retaining.

The truncated hollow cone B is the preferable shape of this instrument, as the several corrugations on its increasing diameter from the smaller end enables one instrument to fit a number of different-sized vaginas and to make a much tighter joint when it is desirable to apply pressure to distend this canal. Now, by providing this hollow cone B with a diaphragm (the drawings show the diaphragm as

the top of the cone) pierced with two holes, H H, in which are inserted two tubes, one for an inlet-tube, which should extend to the edge of the opening O, and the other an outlet-tube, which may just enter the hollow of the cone, and there connecting the inlet-tube with a reservoir above the level of the body, a syringe, or other means of supply, fluids can be made to fill and distend the vagina (especially if the party lies on her side) and then escape through the outlet-tube into any suitable receptacle at a lower level than the body, or at a lower level or under less pressure than that of the inlet-tube. By differentiating the levels of these two tubes any desired pressure can be put on and maintained in the vagina for any desired length of time.

The irrigator can be made of glass, wood, metal, hard and soft rubber, celluloid, or any suitable material, and the diaphragm can be made separate or in one piece with the cone, as shown in the drawings.

As the opening O is much larger than the inlet-tube, the current entering the vagina will pierce the slower outgoing current through the larger aperture and eddy around the sides of the canal and thoroughly wash, cleanse, and apply to its walls any fluid used. Where the impact of a jet is needed or desired the diaphragm can be dispensed with and a nozzle of proper shape carrying fluid under pressure can be used and the fluid allowed to escape through the tube at once into any receptacle placed for the purpose.

I am aware that cylinders and cones open and diaphragmed have been used for vaginal irrigation provided with the same means of irrigation as herein described, and I do not claim this as my invention; but

What I do claim is—

A hollow truncated cone, B, of hard rubber or similar material, provided on its conical outer surface with a series of corrugations, and further provided with outlet and inlet tubes, arranged as shown and described, to convey fluids to and from said cone, as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS M. HEALEY.

Witnesses:

R. W. McMICHAEL,

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