

(No Model.)

A. PALMER.
VAGINAL IRRIGATOR.

No. 295,276.

Patented Mar. 18, 1884.

Fig. 1.

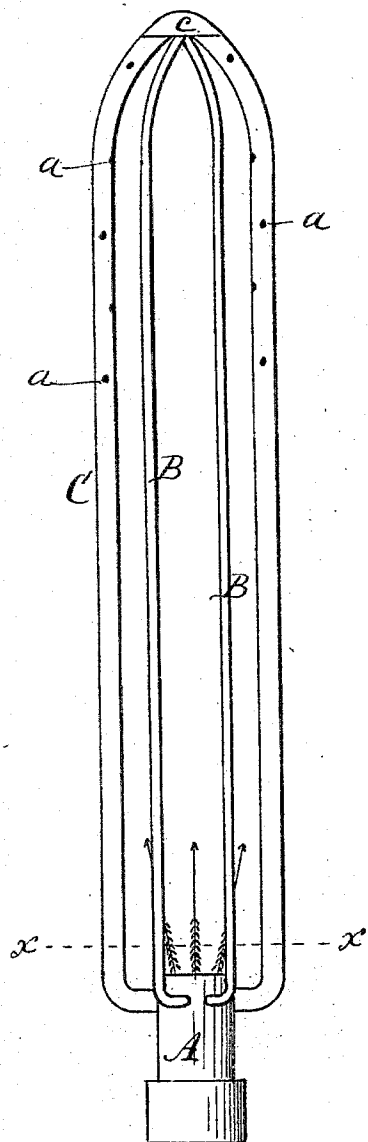


Fig. 2.

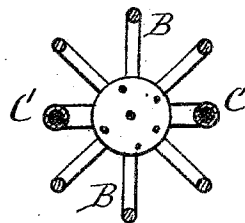


Fig. 3.

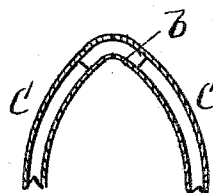


Fig. 4.

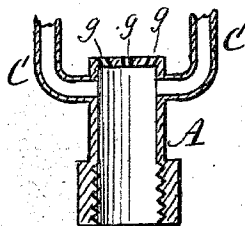
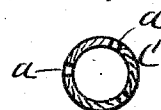


Fig. 5.



Attest.

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AARON PALMER, OF ROCHESTER, NEW YORK.

VAGINAL IRRIGATOR.

SPECIFICATION forming part of Letters Patent No. 295,276, dated March 18, 1884.

Application filed January 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, AARON PALMER, of Rochester, Monroe county, New York, have invented a certain new and useful Improvement in Vaginal Irrigators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of the instrument.

Fig. 2 is a cross-section of the same in line x x of Fig. 1. Fig. 3 is a section at the upper end of the instrument through the distributing-tubes. Fig. 4 is a section at the lower end of the instrument through the same tubes.

Fig. 5 is a cross-section of one of the tubes enlarged, showing the perforations therein.

My improvement relates to vaginal irrigators; and it consists, essentially, in the combination of two or more small distributing-tubes and a series of small wires attached to the nozzle, the tubes serving to carry the liquid and discharge the same in fine jets, the wires serving to distend the vagina and forming non-conductors, so that where hot liquids are used, as is frequently necessary, but a small heating-surface is presented in that portion of the instrument inserted in the vagina. Furthermore, the wires are offset or projected out farther than the tubes, so that the latter have less contact with the walls of the cavity than would be the case if they were in the same line with the wires; and, furthermore, the end of the nozzle to which the tubes and wires are attached is provided with small perforations, which discharge the liquid up vertically through the body of the skeleton instrument, all as hereinafter described.

In the drawings, A shows the hollow nozzle, which screws upon the syringe in the usual way. B B are a series of small wires, and C C are two or more small distributing-tubes interposed at intervals between the wires, the wires and tubes being attached at their lower ends to the upper end of the nozzle A, and their upper ends being bent in and united to give a conical or rounded shape to the top of the instrument, as shown. The small tubes C C open into and connect with the nozzle A, so that the liquid from the latter can pass clear up to the top of the small tubes, and the tubes are provided with small perforations $a a a$, opening in different directions, so that the

liquid will be discharged in small jets throughout the whole cavity of the vagina, and by passing across the space will acquire such projection and force as to thoroughly wash the parts and remove the adhering secretions. A piece of bent wire, b , forming a stiffener, is inserted one-half in the upper end of each tube C, as shown in Fig. 3, being soldered or otherwise fastened in place, thereby connecting the tops of the tubes, stiffening them, stopping the communication between the two, and forming a foundation or body at the top of the instrument for the attachment of the wires. The wires are bent over in the proper conical form, their ends fitted to the connected ends of the tubes, and the whole are attached by solder c , which securely fastens them together and presents a smooth and unbroken surface. If desired, a sheet-metal cap may be placed over the top of the united ends of the tubes and wires and be soldered in place. The wires B B are offset or projected out beyond the line of the tubes C C, as shown in the cross-section, Fig. 2, so that when the instrument is inserted in the vagina the wires will hold the contact with the walls, while the tubes will be comparatively free, the object of which is, first, to prevent obstruction to the perforations in the tube, and therefore insure free discharge of the jets; and, second, to prevent, as far as possible, the burning of the patient from the contact of the hot metal, where hot liquids are used, as is frequently necessary in the treatment of leucorrhoea.

By the use of the wires and the small discharge-tubes, as described, the nozzle A is prevented from being carried up through the instrument, or from being inserted into the vagina, as is usually done, and hence, in the use of hot liquids, there is a smaller surface of metal to radiate heat, and greater comfort to the patient is insured.

By the use of a series of wires and interposed small distributing-tubes, as set forth, the minimum of heating-surface is exposed, as the tubes can be made very small and but few in number, and still have sufficient capacity for the discharge of the liquid, while the wires which form the main portion of the distending-frame are non-conductors of heat and hold the main contact with the walls of the vagina. This arrangement of the wires and

tubes is much more effective than where a main tube runs up through the center of the instrument and discharges the liquid, or where simply a skeleton frame composed entirely of tubes without wires is employed.

By offsetting the wires, as described, the distributing tubes impart less heat to the organs, as the wires thus hold the main contact while the tubes stand back and are comparatively free of contact.

The top of the nozzle A is closed, but is provided with several small perforations, *g g*, which open upward at different angles and discharge jets of the liquid vertically through the body of the skeleton frame, thus thoroughly washing the parts and producing such a volume of the liquid that the morbid secretions will be effectually removed. These jets, by passing up vertically, act upon parts that the radial jets cannot reach, and they serve to keep the center of the instrument clear and unimpeded by washing out the same.

I do not claim, simply and broadly, a vaginal irrigator with perforated tubes for discharging the liquid.

I claim—

A vaginal syringe consisting of the hollow nozzle A, the tubes C C, and non-heat-conducting wires B B, the wires offsetting the tubes, as described, the top of the nozzle entering the bottom of the cage, and provided with perforations *g g*, which allow the liquid to be injected up vertically the whole length of the cage, the whole arranged to operate in the manner and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

AARON PALMER.

Witnesses:

R. F. OSGOOD,
W. MARTIN JONES.