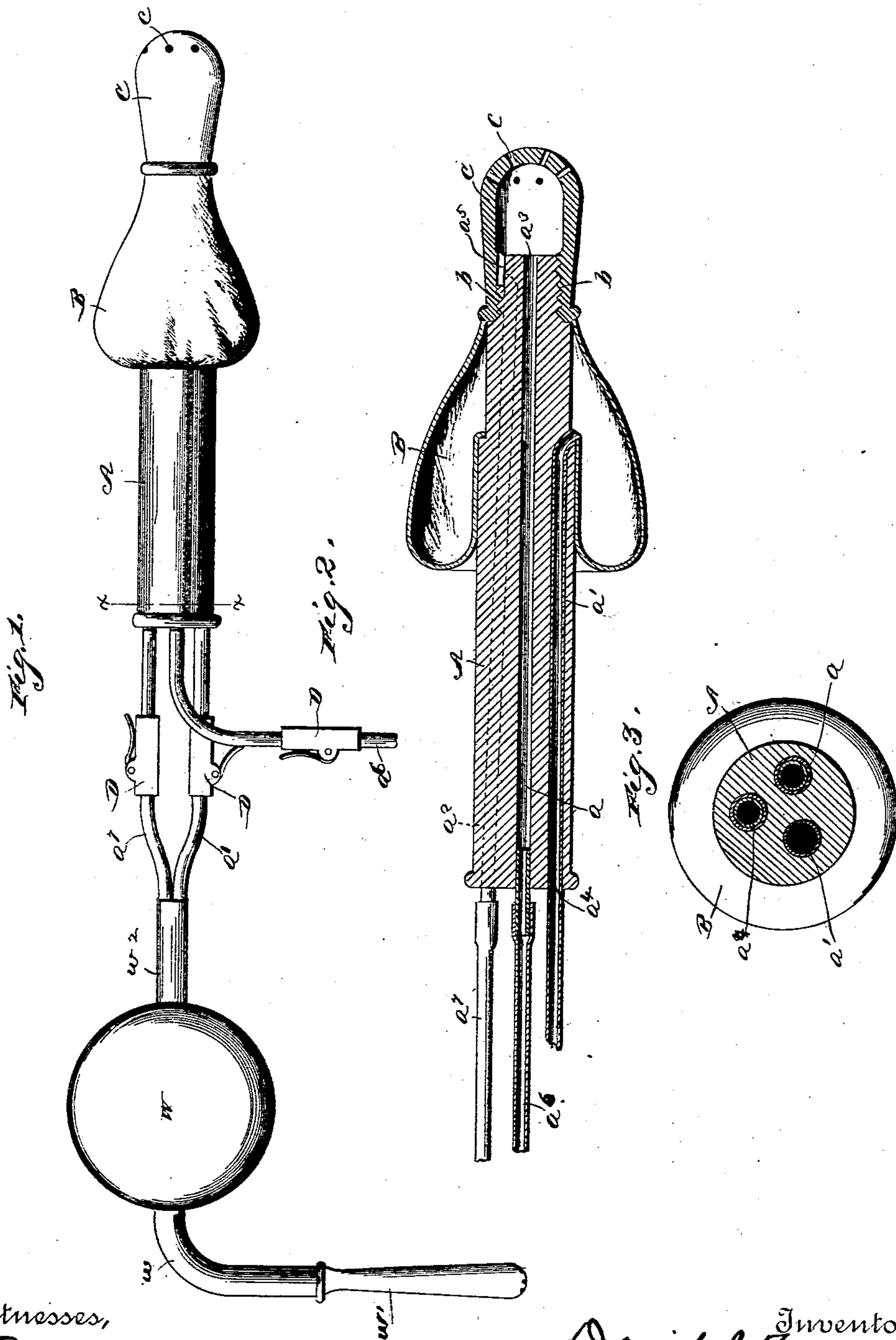


(No Model.)

D. J. TERRELL.
VAGINAL SYRINGE.

No. 388,510.

Patented Aug. 28, 1888.



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UNITED STATES PATENT OFFICE.

DAVID J. TERRELL, OF KOKOMO, INDIANA.

VAGINAL SYRINGE.

SPECIFICATION forming part of Letters Patent No. 388,510, dated August 28, 1888.

Application filed April 25, 1887. Serial No. 236,081. (No model.)

To all whom it may concern:

Be it known that I, DAVID J. TERRELL, a citizen of the United States, residing at Kokomo, in the county of Howard and State of Indiana, have invented a new and useful Improvement in Vaginal Syringes, of which the following is a specification.

My invention relates to vaginal syringes; and it consists in the construction and combination of the parts of the same, which will be more fully hereinafter described, and pointed out in the claim.

One object of my invention is to provide a vaginal syringe which is adapted to be inserted in the vaginal opening for the conveyance therein of air, water, or medicaments for the purpose of cleansing and treating diseases of the vaginal canal and uterus.

A further object of my invention is to provide a vaginal syringe which is simple and effective in its construction and operation, strong and durable, easily handled, readily understood and operated, convenient and accessible at all points, positive in its desired ultimate result, and comparatively inexpensive in its manufacture. I attain these objects by the construction of syringe illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a top plan view of my improved vaginal syringe and the operating attachments therefor. Fig. 2 is a longitudinal section of the same with the pipes or ducts shown in full. Fig. 3 is a transverse vertical section on the line *x x* of Fig. 1.

A represents the handle or duct support or cylinder of the syringe, which is preferably constructed of vulcanized rubber; but other suitable material may be used, if desired. Around the upper end of this cylindrical support A, and surrounding the same, is an annular rubber conical bag, B, and the extreme upper end of the said cylinder is formed with a screw-threaded surface, *b*, for the reception of an oblate spheroidal terminus or nipple, C, of similar material, which is provided with a series of openings, *c*, formed therein in various positions to permit the air or fluid to exude therefrom for purposes which will be more fully hereinafter mentioned. The cylinder A is formed with three ducts or passages, *a*, *a'*,

and *a''*. The drainage-duct *a* passes entirely through the cylinder in a direct line and communicates by means of an opening, *a''*, in the central portion of the upper end thereof with the terminus or nipple C. The air-duct *a'* is in the form of a conduit and is situated to one side of the duct *a*, and a flexible-rubber tube or pipe, *a'*, passes entirely therethrough and connects with the annular bag B at one end, and projects outward from the other end of cylinder A for attachment to a suitable hand pressure-bulb, W. The duct *a''* also runs almost entirely through the cylinder A and registers with an opening, *a''*, in the side of the upper end thereof, which also opens into the terminus or nipple C. The lower ends of the ducts *a* and *a''* are provided with extensions in the form of hard or vulcanized rubber tubes, which project slightly below the lower end of the cylinder A, and are engaged by flexible-rubber pipes *a''* and *a'*. The pipe *a''*, with the pipe *a'*, is adapted to be connected to a single pipe or forked tube, *w''*, which has formed therewith or attached thereto a common hand pressure-bulb, W, as shown, which is provided with an ingress-pipe, *w*, and inflow-nipple, *w'*, on its end, which may be inserted in a vessel of water or medicated fluid, or be left in such a position as to receive atmospheric air or gas, while the discharge-pipe *a'* may project away to any distance and to a depositing-receptacle.

On the several flexible-rubber pipes, as above described, suitable clamps, D D, may be mounted for the purpose of causing a continuation or cessation of flow of the fluid or air through any one of the said pipes, as may become necessary; or, if desired, the hand may be used for the same purpose by exerting a slight pressure on the said pipes or tubes, which, being of flexible material, will readily yield to said pressure and the flow therethrough cease.

The operation of the syringe is as follows: The nipple end C of the cylinder A is inserted into the vaginal canal by separating the inner and outer lips of the same until the annular bag B is entirely within said canal, beyond the lips of same or beyond the pelvis-bone. The dilatable annular bag B is then distended by inflation through the medium of the hand-bulb W until the said bag expands the vaginal opening a sufficient distance and is fixed

therein and acting as a soft-cushion plug for the said vaginal-canal opening. The clamp D on the air-pipe is then closed and the clamp on the water-pipe opened, when water or medicated fluid may be injected into the vagina above the point of expansion and the same bathed or medically treated. If it is desired to retain the water or medicated fluid within the vagina, the clamp D on the lower end of the pipe a is closed and the egress of any of the fluid therefrom is prevented, the clamps having been previously closed on the other tubes. When, however, it is desired to relieve the vagina of the injected material, the pressure of the clamps D of the pipe a^6 is relieved and the fluid is allowed an uninterrupted egress through said pipe a^6 to a suitable place of deposit. By means of this discharge-pipe a^6 all the air or gas which may be prevalent in the vagina at the time of the operation may be readily allowed to escape, thus providing for treatment of every portion thereof without the harmful interruption and detriment of foreign matter in the vagina at the time of treatment.

By the use of my improved syringe the aqueous or medicated fluid may be retained in the vagina as long as is necessary and desirable and discharged and renewed without the necessity of collapsing the distended bag B, and by which construction the treatment is expedited and the desirable effect of the medicaments promulgated.

In filling the bag B with air or gas more or less is thrown into the vagina above the said bag, making it impossible to fill the vacuum above the point of expansion with water or medicated fluids. By the use of my construction of syringe and its mode of injection uterine colic is prevented, which would necessarily result from the pressure of the injected material against the vital parts were there no means for relieving said pressure. After the gas or other foreign matter has escaped through discharge-pipe a^6 the vagina can be filled to its fullest capacity without danger of injury to the parts thereof, and if it is desirable to merely wash or cleanse the os uteri and vagina, and provide for a continuous ingress and egress of the fluid used for that purpose, the pipe a^6 may be left entirely open by removing the pressure of its clamp.

By reason of the conical shape of the bag, with the small end of the cone facing the nipple C, the said bag, when inflated and inserted into the vagina, forms a plug or wedge to dilate the walls of the vagina and at the same time plug or stop up the channel to prevent the fluid from escaping therefrom. The peculiar conical shape of the bag allows it to be wedged into the vaginal channel, and thus hold itself in place without the use of a hand to retain it in position. By this means the hands are left free, and the operator is not obliged to be constantly worried for fear that the syringe may drop out. Furthermore, the

arrangement of the bag at the front end of the cylinder leaves the balance of the cylinder exposed when the bag is inserted into the vagina, which exposed portion projecting from the vagina forms a convenient hand-hold, by means of which the syringe may be readily withdrawn without soiling the hands. Again, the air-tube a^4 and the fluid-supply tube a^7 are both detachably fitted to the tube w^2 of the bulb W, and thus the latter may be separated from the said tubes a^4 a^7 . By this means when the patient desires to retain fluids of any description, and does not wish to be bothered with the bulb, the latter can be removed from the tubes a^4 a^7 after the vagina is filled and the clamps D shut down. This will leave nothing to give the patient wearing it any inconvenience if she wishes to turn over in bed or desires to walk around while the syringe is still inserted.

The syringe may be removed from the vagina when desired by allowing the air in the bag B to escape, when the apparatus entire may be removed from the vaginal opening.

It is obvious that many minor changes in the construction and arrangement of the several parts might be made and substituted for those shown and described without in the least departing from the nature and principle of my invention.

I am aware that it is old to construct a vaginal syringe with three ducts, one leading to an annulus, a second to a nipple, and the third to an exit-orifice at the side of the nipple, said first two being operated by separate bulbs; but I lay no claim to that construction, as in my invention I conduct the ingress and egress ducts to the interior of the nipple and supply the annulus and ingress ducts by a single bulb.

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

In a vaginal syringe, the cylinder A, having three ducts, a a' a^2 , the soft-rubber bag B, surrounding and secured to the cylinder at the upper or front end thereof, said bag being constructed conical in form with the smaller end of the cone facing the front end of the cylinder, whereby the said bag when inflated and inserted beyond the labia forms a tapering wedge or stop-plug to dilate the walls of the vagina and also close or stop up the channel and prevent the fluids from escaping from the vagina, and thus the bag may be held in position without the use of the hand, the duct a communicating with the vagina, the tube a^6 connecting with the duct a and running to a suitable place of deposit, the nipple C on the front or upper end of the cylinder beyond the bag B, the latter being located at one end only of the cylinder, so as to have the other end thereof projecting from the vagina, which projecting portion forms a convenient hand-hold to withdraw the syringe, the tubes a^4 a^7 , connecting with the ducts a' a^2 , suitable clamps, D, provided on the pipes a^4 a^6 a^7 , the bulb W,

having the tube w^2 and the pipe w , the ends
of the tubes a^4 a^7 being detachably connected
to the tube w^2 of the syringe, whereby the
bulb W may be detached from the pipes a^4 a^7
5 for the purpose set forth, or when in use the
clamp D of air-tube a^4 may be closed, so that
the vagina may be supplied with fluid from
the bulb W through the tube a^7 , or when the
clamp of fluid-tube a^7 is closed the bag B may

be supplied with air or gas from the bulb W
through the air-tube a^4 , as set forth.

Intestimony that I claim the foregoing as my
own I have hereto affixed my signature in
presence of two witnesses.

DAVID J. TERRELL.

Witnesses:

WILLIAM BECKTEL,
ALFRED L. SHARP.