No. 896,505. PATENTED AUG. 18, 1908.

J. E. AMENT.

APPARATUS FOR MASSAGING THE VAGINAL WALLS, &c.

APPLICATION FILED JUNE 14, 1907.

2 SHEETS—SHEET 1.

Fig. 1,

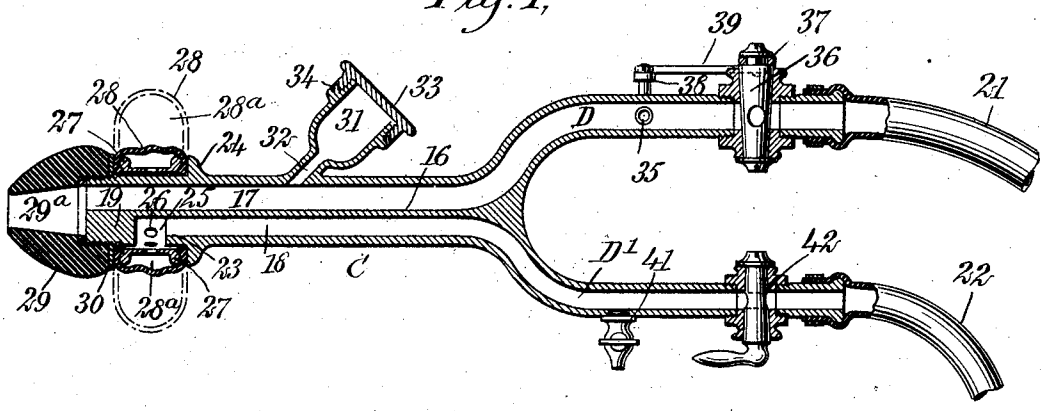
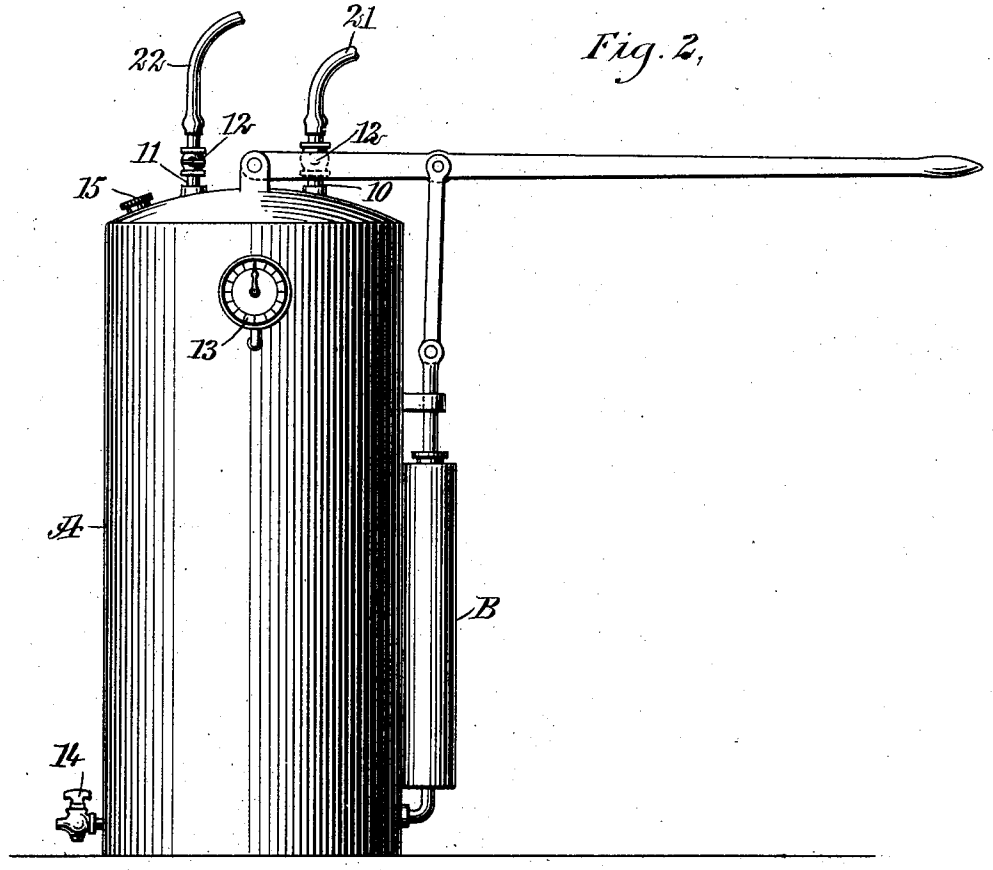


Fig. 2,



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Fig. 3,

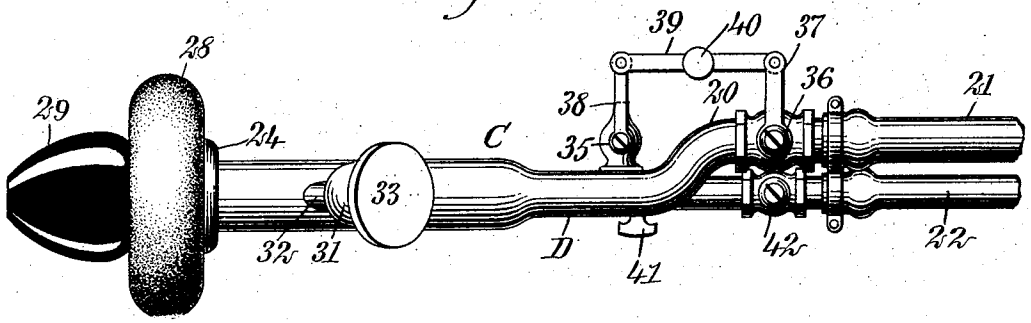


Fig. 4,

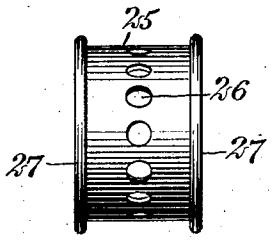
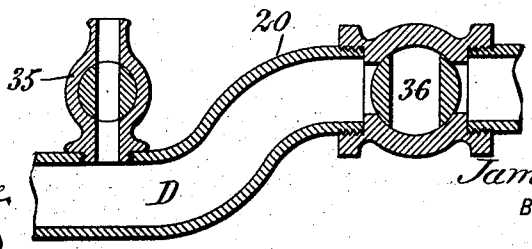


Fig. 5.



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APPARATUS FOR MASSAGING THE VAGINAL WALLS, &c.

No. 896,505. Specification of Letters Patent. Patented Aug. 18, 1908.

Application filed June 14, 1907. Serial No. 378,993.

To all whom it may concern:

Be it known that I, JAMES E. AMENT, a citizen of the United States, and a resident of Indiana, in the county of Indiana and State of Pennsylvania, have invented a new and Improved Apparatus for Massaging the Vaginal Walls, &c., of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a device especially adapted to replace a prolapsed uterus (a fallen womb) without touching the organ with either hands or instruments, to medicate the afflicted parts, to exercise the vaginal walls and broad ligaments, and to assist in breaking up adhesions.

Another purpose of the invention is to provide a device of the character described that will be simple and which can be operated either by an attendant or the patient.

The invention consists in certain features of construction and combinations of parts, all of which will be fully set forth hereinafter and particularly pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which

Figure 1 is a longitudinal section through the device; Fig. 2 is a side elevation of the air pump and tank employed in connection with the device; Fig. 3 is a side elevation of the device; Fig. 4 is a detail view of a sleeve adapted to carry an inflatable ring; and Fig. 5 is an enlarged longitudinal section through one of the air conducting tubes of the device.

A represents a tank adapted to contain compressed air supplied thereto by an attached hand pump B. The tank is provided with two outlet tubes 10 and 11, each having a valve 12. The tank is further provided with a gage 13, a pet cock 14, whereby to discharge the compressed air from the tank as desired, and a removable cap or plug 15, that admits of medicine being placed in the tank for the purpose of medicating the air that is to be admitted into the vagina through the improved device.

The body C of the device is by preference made circular in cross section and is divided by a central, longitudinal partition 16 into two parallel chambers 17 and 18. The chamber 17 is open at both of its ends, but the chamber 18, while open at its inlet end, is closed at its outlet end by a solid section 19 of the body, as is shown in Fig. 1. In the further construction of the body, two branch tubes D and D′ are employed, being continuations of the body and the chambers 17 and 18 therein. The branch tubes D and D′ are outwardly and laterally curved in opposite directions where they connect with the body, as is shown best in Fig. 1, and the branch tube D is also upwardly curved, as is shown at 20 in Figs. 3 and 5, so that the outlet end of the tube D is at a greater elevation than the corresponding end of the tube D′. Flexible tubes 21 and 22 connect the outlet ends of the branch tubes D and D′ respectively with the supply pipes 10 and 11 of the compressed air tank A.

An opening 23 is made in one side of the body chamber 18 at the closed end portion 19 thereof, and adjacent to the rear wall of said opening an angular shoulder 24 is exteriorly formed upon the body C, as is also best shown in Fig. 1.

A sleeve 25 is exteriorly fitted upon the body C at the shoulder 24 and said sleeve extends over the opening 23 in the body chamber 18. This sleeve 25 is provided with openings 26 circumferentially arranged between its edges, and said edges are provided with outwardly extending annular flanges 27, as is shown in Fig. 4.

A ring 28, of elastic or inflatable material is passed over the flanges 27 of the sleeve 25, and when the sleeve is in position on the body C, one edge of the ring is held between the shoulder 24 and the adjacent flange 27 of the sleeve. The opposite edge of the ring 28 is passed over the opposing sleeve flange 27, and the ring is held fast to the sleeve and the sleeve fast upon the body C, by a nozzle 29 that is screwed upon the outlet end of the body C, to a bearing upon a washer 30, located between the outer edge portion of the ring 28 and the nozzle. It will thus be observed that an inflatable chamber 28^a is formed between the sleeve and the ring, as is shown in Fig. 1, said inflatable chamber being in communication with the body chamber 18. The nozzle is provided with a central opening 29^a, in communication with the body chamber 17, and this chamber 17 is also in communication with a cup 31 adapted to contain a medicated powder, for example. This cup 31 is connected with the chamber 17 by means of a channel 32 and is provided with a washer 34, and an air-tight cap 33. Thus, when the compressed air passes through the chamber 17, it creates sufficient

suction to draw the powder from the cap and conduct it to the vaginal canal and uterus.

A vent valve 35 is located in the branch pipe D, and likewise a second valve 36, that is operated to admit compressed air to said tube D or cut off the supply of air thereto. These two valves 35 and 36 are connected in such manner that when one is open, the other is closed. This is usually accomplished as is illustrated in Figs. 1 and 3, by connecting an arm 37 to the plug of the valve 36, and a similar arm 38 is provided for the plug of the valve 35, and the two arms are pivotally connected by a switch 39 having an attached handle 40.

A vent valve 41 is provided for the branch tube D′, and also a valve 42, for admitting and for cutting off the air supply relatively to the branch tube D′. These two valves 41 and 42 are, however, independent in action.

The ring 28 is shown collapsed in Fig. 1, and so remains until the instrument is inserted into the vagina, whereupon by opening the valve 42, compressed air passes through the body chamber 18 into the chamber 28^a back of the ring, whereupon the latter is inflated, as is illustrated in Fig. 3, and serves to prevent the compressed air that is admitted into the vagina through the chamber 17, from escaping. The compressed air is thus compelled to exert its force in lifting the uterus and stretching up to their normal position the prolapsed vaginal walls. In order to remove the instrument, the valve 41 is opened, the valve 42 being closed, whereupon the air passes out from the chamber 28^a leaving the ring 28 collapsed.

When the nozzle of the instrument is properly inserted into the vagina and the ring 28 is inflated, the operator, whether physician or patient, is ready to admit the air pressure which will force the prolapsed uterus up to its normal position.

By moving the switch 39, the operator closes the vent valve 35 and opens the valve 36. The air now rushes through the passage 17 into the vaginal cavity, lifting the uterus and medicating, if desired, all the internal cavity of the vagina. Now, if the switch 39 is reversed, the valve 36 is closed and the valve 35 is opened. The air now rushes back through the chamber 17 and escapes at the valve 35. The vagina is thus emptied of compressed air, and just so far as the natural pressure of air will permit, the vaginal walls relax and let the uterus down. The operator may now pull the switch 39 back, closing the valve 35 and opening the valve 36, whereupon the uterus is instantly pushed up again. By thus opening and closing the switch as rapidly and as frequently as desired, the operator is enabled to raise and lower the uterus as often as is needed to give exercise to the weakened walls of the vagina, in order that they may be strengthened and toned up to the point where they will be able to do their part in sustaining the weight of the floating uterus in its normal position. The said movement also gives exercise to the broad ligaments, that imparts tone and strength. If the uterus is bound by adhesions, this exercise, gently administered, will gradually overcome them.

It will thus be seen that the express purpose of the improved instrument is to replace a prolapsed uterus or fallen womb, without touching the organ with either hands or instrument; to medicate the afflicted parts; to exercise the vaginal walls and broad ligaments and to assist in breaking up adhesions.

It will be understood that ordinarily an obturator would be used to close the mouth of the uterus, when the device was in use, to prevent the entrance of air into the uterus.

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

1. In an instrument for treating the uterus, a body section, provided with a chamber for conducting compressed air, independent connections between the inlet ends of the chamber and a source of air supply, a nozzle at the outlet end of the body section in communication with one of said chambers, an exterior inflatable ring in communication with the outlet end of the other chamber, a vent valve and a valve for controlling the air supply, located in each of said chambers between their inlet and outlet ends the vent valve and the air inlet valve of the air chamber being connected together to operate in unison.

2. In an instrument for treating the uterus, a body section, provided with a chamber for conducting compressed air, independent connections between the inlet ends of the chamber and a source of air supply, a nozzle at the outlet end of the body section in communication with one of said chambers, an exterior inflatable ring in communication with the outlet end of the other chamber, a vent valve and a valve for controlling the air supply located in each of said chambers between their inlet and outlet ends, and a switch connection between the plugs of the two valves in the chamber connected with the nozzle, said connection including means for simultaneously closing one valve when the other is opened.

3. In an instrument for treating the uterus, a body section, provided with a chamber for conducting compressed air, independent connections between the inlet ends of the chamber and a source of air supply, a nozzle at the outlet end of the body section in communication with one of said cham-

bers, an exterior inflatable ring in communication with the outlet end of the other chamber, a vent valve and a valve for controlling the air supply, located in each of said chambers between their inlet and outlet ends, and a receptacle for medication connected with the chamber in communication with the nozzle.

4. In an instrument for treating the uterus, the combination with a body section, provided with independent chambers for the conduct of compressed air and adapted to be connected with a source of compressed air supply, said chambers being provided with independent connections between the said source of air supply and the inlet portions of said chambers, one of said chambers being closed at its outlet end, and provided with a side opening adjacent to said end and a shoulder upon the exterior of the body section adjacent to said side opening, of a perforated, flanged sleeve mounted on the body section, covering said side opening and engaging said shoulder, an expansible ring covering the flanged and apertured portions of the sleeve, a nozzle in connection with the chamber, having an open outlet, means for holding said sleeve to said shoulder, and a vent valve and a controlling valve for the air supply located in each chamber between their inlet and outlet ends.

5. In an instrument for treating the uterus, the combination with a body section, provided with independent chambers for the conduct of compressed air and adapted to be connected with a source of compressed air supply, said chambers being provided with independent connections between the said source of air supply and the inlet portions of said chambers, one of said chambers being closed at its outlet end, and provided with a side opening adjacent to said end and a shoulder upon the exterior of the body section adjacent to said side opening, of a perforated, flanged sleeve mounted on the body section, covering said side opening and engaging said shoulder, an expansible ring covering the flanged and apertured portions of the sleeve, a nozzle in connection with the chamber, having an open outlet, means for holding said sleeve to said shoulder, and a vent valve and a controlling valve for the air supply located in each chamber between their inlet and outlet ends, and a connection between the valve in the chamber connected with the nozzle, whereby when one is closed the other is automatically opened.

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

JAMES E. AMENT.

Witnesses:
ANNIE E. VOGEL,
S. M. JACK.