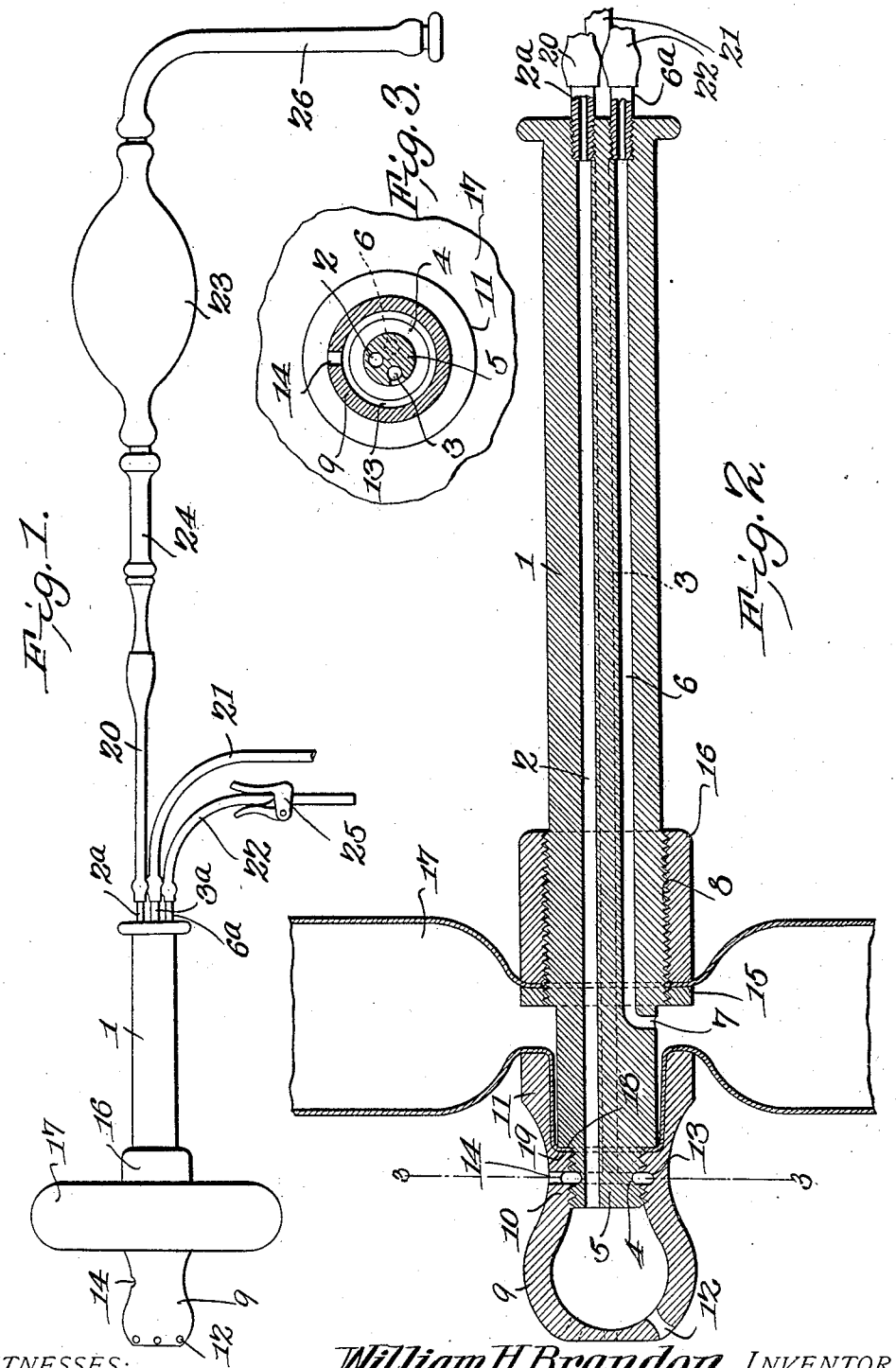
No. 835,496. PATENTED NOV. 13, 1906.

W. H. BRANDON.

VAGINAL SYRINGE.

APPLICATION FILED APR. 25, 1906.



WITNESSES:

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WILLIAM H. BRANDON, OF KOKOMO, INDIANA.

VAGINAL SYRINGE.

No. 835,496. Specification of Letters Patent. Patented Nov. 13, 1906.

Application filed April 25, 1906. Serial No. 313,689.

To all whom it may concern:

Be it known that I, WILLIAM H. BRANDON, a citizen of the United States, residing at Kokomo, in the county of Howard and State of Indiana, have invented a new and useful Vaginal Syringe, of which the following is a specification.

This invention relates to vaginal syringes, and has for its object to provide certain new and useful improvements in this class of devices whereby a more efficient drainage of the vaginal passages may be obtained.

A further object of the invention is to equip the device with improved means for closing the mouth of the vagina around the stem of the syringe, thereby to prevent the escape of liquids from the vagina except through the drain-passage of the syringe. In this connection it is proposed to have the closure inflatable and to provide for a convenient inflation thereof preparatory to introducing a liquid into the vagina through a syringe. It is also proposed to enable the convenient application and removal of the inflatable closure for the purpose of substituting a new closure when the original becomes punctured or damaged and also to permit of the convenient cleansing of the syringe in order that it may be maintained in a thoroughly sanitary condition.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of a vaginal syringe embodying the features of the present invention. Fig. 2 is a longitudinal sectional view of the syringe upon an enlarged scale. Fig. 3 is a cross-sectional view taken on the line 3 3 of Fig. 2.

Like characters of reference indicate corresponding parts in each of the several figures of the drawings.

The present syringe includes a cylindrical stem 1 of suitable material—for instance, hard or vulcanized rubber—which is pierced by a longitudinal induction-passage 2, extending throughout the entire length of the stem and provided at its rear end with a projecting nipple 2^a for connection with a rubber tube. There is also a longitudinally-disposed drain-passage 3, which pierces the rear end of the stem and terminates short of the front end thereof in communication with an external annular groove or channel 4 in the reduced externally-threaded forward extremity 5 of the stem of the syringe. A third longitudinal passage 6 pierces the rear end of the syringe and terminates short of the forward reduced portion thereof in a transverse branch passage 7, which intersects the exterior of the stem between the forward extremity thereof and the slightly-enlarged externally-threaded portion 8. The rear extremity of the drain-passage 3 is provided with a nipple 3^a, and the rear extremity of the inflation-passage 6 is provided with a nipple 6^a.

A substantially spherical hollow nozzle 9 is provided with an internally-threaded neck portion 10, which is removably fitted to the threaded forward extremity of the stem of the syringe and is provided with an integral collar portion 11, loosely embracing the smooth portion of the stem between the threaded portions 5 and 8. The forward end of the nozzle is provided with a plurality of perforations 12, through which the liquid is designed to be discharged. An internal annular groove or channel 13 is formed in the threaded neck portion of the nozzle and is designed to register with the annular channel 4 of the stem. A substantially radial passage 14 pierces the neck of the nozzle and intersects the channel 13.

Between the threaded portion 8 of the stem and the branch passage 7 there is an external annular flange or shoulder 15, with which coöperates an internally-threaded sleeve 16, fitted to the threaded portion 8 of the stem.

Prior to assembling the nozzle with the stem an inflatable bag 17, of air-tight elastic material, is drawn over the forward end of the stem with one side clamped between the flange 15 and the sleeve 16, the other side of the bag being clamped between the annular shoulder 18 at the base of the threaded portion 5 and the internal annular shoulder 19 upon the nozzle, whereby the bag is clamped upon the stem in an air-tight manner.

In using the device rubber tubes 20, 21, and 22 are fitted to the respective nipples 2^a, 3^a, and 6^a. An inflation-bulb 23, having an outlet-stem 24, is then engaged with the rubber tube 22 and manipulated to force air

through the passages 6 and 7 into the bag 17, whereby the latter is inflated and snugly fits the mouth of the vagina around the stem of the syringe, so as to operate as a plug or closure therefor. When the bag has been sufficiently inflated, a clamp 25 is clutched upon the tube 22, so as to close the same and prevent the escape of air from the bag. The stem of the inflation-bulb 23 is then applied to the rubber tube 20 of the injection-passage 22, the inlet-tube 26 of the bulb being placed in communication with any desired liquid which is drawn through the tube 26 and then forced through the syringe and injected through the passages 12 of the nozzle into the vagina. Drainage of the vagina is effected through the passage 14 in one side of the nozzle, the registered channels 4 and 13, the passage 3, and the rubber tube 21, whereby soiling of the garment of the patient, bedclothing, and the like is effectually prevented.

Having thus described the invention, what is claimed is—

1. A device of the character described comprising a stem having an induction-passage, an inflation-passage and a drain-passage extending longitudinally therein, one end of said stem being reduced in diameter and screw-threaded, said end having an annular groove communicating with the drain-passage, an annular flange upon the stem and adjacent one end of the inflation-passage, an elastic inflation-bag surrounding the reduced portion of the stem and surrounding said stem adjacent the flange, a substantially spherical nozzle removably mounted upon the reduced portion of the stem and having an annular groove therein adapted to register with the groove in said stem, there being an aperture extending from the nozzle to the groove, said nozzle being adapted to clamp one wall of the bag against the stem, and means adjustably mounted on the stem for clamping the other wall of the bag against the flange.

2. A device of the character described comprising a stem having an induction-passage, an inflation-passage and a drain-passage extending longitudinally therein, one end of said stem being reduced in diameter and screw-threaded, said end having an annular groove communicating with the drain-passage, an annular flange upon the stem and adjacent one end of the inflation-passage, an elastic inflation-bag surrounding the reduced portion of the stem and surrounding said stem adjacent the flange, a substantially cylindrical nozzle having an annular reduced portion, said nozzle being adapted to screw upon the reduced portion of the stem and to clamp one wall of the bag against the stem, there being an annular groove within the nozzle registering with the groove in the stem and having an inlet-passage, that portion of the nozzle exterior of the groove being reduced annularly, a sleeve integral with the nozzle and overhanging the stem and a portion of one wall of the bag, and means adjustably mounted on the stem for clamping the other wall of the bag against the flange.

3. A vaginal syringe comprising a stem having a reduced externally-threaded forward portion providing an annular shoulder, the threaded portion having an external annular channel, the stem being provided with an injection-passage, a drainage-passage and an inflation-passage, the drainage-passage communicating with the channel, the inflation-passage having a lateral branch piercing one side of the stem, an external annular flange upon the stem in rear of the outlet end of the inflation-passage, an inflatable bag embracing the forward portion of the stem and the flange, an adjustable sleeve embracing the stem and clamping one side of the bag against the flange, and a removable nozzle having an internal threaded portion engaging the threaded reduced end of the stem and having a collar portion clamping the other side of the bag against the shoulder at the base of the threaded portion of the stem, said nozzle having an internal annular channel registered with the channel of the stem and also provided with an inlet-passage piercing one side of the nozzle and communicating with its channel.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in the presence of two witnesses.

WILLIAM H. BRANDON.

Witnesses:
ORVILLE JEFFERSON.
C. N. POLLARD.