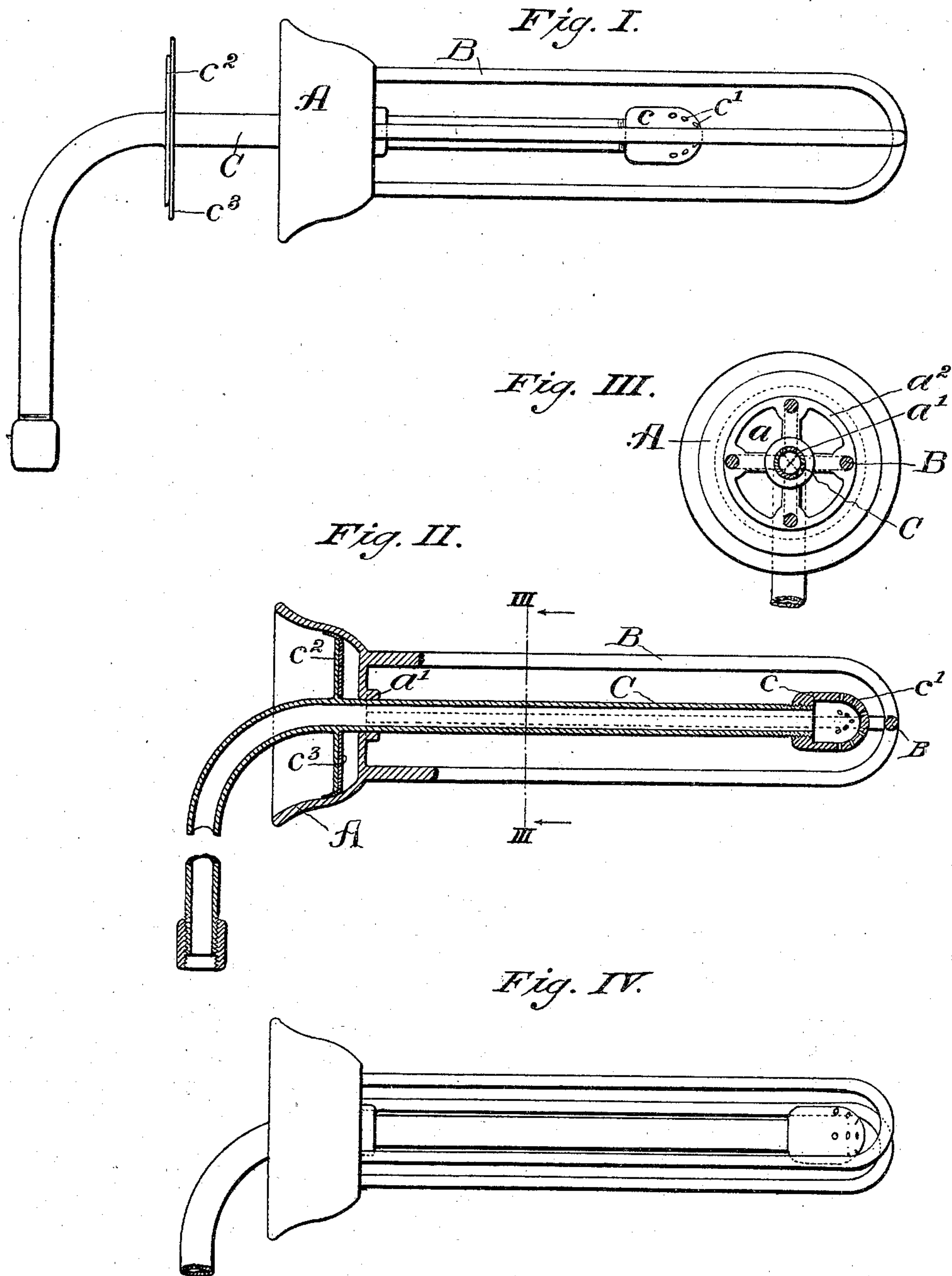


No. 725,270.

PATENTED APR. 14, 1903

O. P. MOON.
VAGINAL SYRINGE.
APPLICATION FILED JUNE 27, 1902.

NO MODEL.



WITNESSES:
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UNITED STATES PATENT OFFICE.

ORVILLE P. MOON, OF LORAIN, OHIO.

VAGINAL SYRINGE.

SPECIFICATION forming part of Letters Patent No. 725,270, dated April 14, 1903.

Application filed June 27, 1902. Serial No. 113,409. (No model.)

To all whom it may concern:

Be it known that I, ORVILLE P. MOON, a citizen of the United States, and a resident of Lorain, county of Lorain, and State of Ohio, have invented a new and useful Improvement in Vaginal Syringes, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates to devices commonly called "vaginal syringes" and used for irrigating the vaginal passage with antiseptic or other fluid.

The object of said invention is to provide an instrument of the above-named character having characteristics such as to combine in as great a degree as possible facility and effectiveness of operation.

The invention consists of means hereinafter fully described, and particularly pointed out in the claims.

The annexed drawings and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings, Figure I represents a front elevational view of a device embodying my invention. Fig. II represents a central longitudinal cross-section of such device. Fig. III represents a transverse cross-section taken upon the plane indicated by line 3 3, Fig. II. Fig. IV represents an elevational view of a modified form of the said device.

A frusto-conical bell A, open at the top and bottom base portions, the upper opening *a* formed with a spider for supporting a bearing *a'* for a hereinafter-described purpose, and an inwardly-extending flange *a*², surrounding such upper opening, is provided with a distender B, formed of wires joined at the top and having their lower ends securely fastened to said flange, as shown in Fig. I. The wires forming the elements of this distender are placed equidistantly from the line of axis of the bell substantially parallel with each other and a sufficient distance apart to dis-

in and cause the folds of tissue forming the internal walls of such passage to extend and open out, so as to permit the injected liquid to readily reach and irrigate the entire surface of such tissue.

A second form of distender is illustrated in Fig. IV. In this form instead of bending two wires into a U shape, crossing them at the top, and brazing at such crossing the two U-shaped wires are placed parallel with each other, as shown. The lower base portion is made of the greater diameter and is caused to flare outwardly, the mean diameter of the bell being such as to cause the latter when inserted in the mouth of the vagina to form a substantially water-tight joint therewith. A sliding injecting-nozzle C passes through the middle of the bell and through the aforementioned bearing *a'*, which acts as a guide therefor. This bearing is made to fit the nozzle as snugly as is consistent with a non-interference with an easy sliding movement there-through on the part of said nozzle. The top of the nozzle is provided with a knob *c*, having a series of suitable openings *c'* for permitting the liquid to be properly ejected therefrom. Said knob is made of a diameter such as to prohibit the withdrawal of the nozzle through the bearing *a'*. Upon the lower part of the nozzle is transversely and rigidly secured a valve consisting of a circular disk *c*², provided upon its upper surface with a rubber washer *c*³, the disk and washer having a diameter such as to permit them to close the opening *a* from below and prevent the escape of fluid therethrough—that is, somewhat greater than the internal diameter of the flange *a*².

In applying the above-described device the nozzle is attached by means of a suitable tube to a bulb or fountain and the distender projected in the vaginal passage until the bell enters the mouth thereof and is stopped by the flared base portion thereof. The nozzle is now pushed inwardly until the disk *c*² tightly closes the opening *a'*. Fluid now being forced into the nozzle is sprayed upon the distended walls of the vagina and directly into the open folds thereof. The injected fluid is allowed to collect in the lower part of the vagina and may then be permitted to pass out through the bell by slightly withdrawing

the nozzle and releasing the disk and freeing the opening, thereby permitting the released fluid to carry along with it and out of the passage any impurities or secretions which it may have dissolved or suspended in it. While the liquid is collecting as above described, it is seen that, the vagina being held distended by the distender, the spray is continually playing in an air-space in the upper part of the passage, and is hence allowed to do its work at that point very effectively.

Instead of permitting the fluid to collect as above described and then discharge the opening a' may be kept continually open and the nozzle moved in and out, thereby applying the fluid directly to all parts of the vaginal walls within its scope and thoroughly flushing the passage. During such operation the fluid carrying the impurities and secretions is continually discharged through the bell.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any one of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention—

1. In a vaginal syringe, the combination with a bell adapted to form a water-tight joint with the vagina, provided with a distender secured thereto, and having a valve-opening therein for permitting the passage of liquid therethrough, of an injecting-nozzle slidably mounted in so as to be reciprocable through said bell and having a valve mounted thereon for controlling said valve-opening.

2. In a vaginal syringe, the combination of a bell of frusto-conical form having an opening for permitting the passage of liquid therethrough, a distender secured to the base portion of smaller diameter of such bell, and an injecting-nozzle reciprocable through the latter and provided with a closure adapted to close said opening and prevent the escape of liquid therefrom.

3. In a vaginal syringe, the combination

with a bell adapted to form a water-tight joint with the vagina and having a central opening for permitting the passage of liquid therethrough, of an injecting-nozzle passing through and slidable in such bell and provided with a transversely-located fixed disk adapted to close such opening and form a water-tight joint therewith so as to prevent the escape of liquid therefrom.

4. In a vaginal syringe, the combination with a bell adapted to be inserted in and form a water-tight joint with the vagina and having a central opening for permitting the passage of liquid therethrough, of an injecting-nozzle passing through and slidable in such bell and provided with a transversely-located fixed disk adapted to close such opening and form a water-tight joint therewith so as to prevent the escape of liquid through such bell.

5. In a vaginal syringe, the combination with a bell adapted to form a water-tight joint with the vagina, provided with a distender secured thereto and having a central opening for permitting the passage of liquid therethrough, of an injecting-nozzle passing through and slidable in such bell and provided with a transversely-located fixed disk adapted to close such opening and form a water-tight joint therewith so as to prevent the escape of liquid therefrom.

6. In a vaginal syringe, the combination with a bell adapted to be inserted in and form a water-tight joint with the vagina, provided with a distender secured thereto and having a central opening for permitting the passage of liquid therethrough, of an injecting-nozzle passing through and slidable in such bell and provided with a transversely-located fixed disk adapted to close such opening and form a water-tight joint therewith so as to prevent the escape of liquid through such bell.

Signed by me this 20th day of June, 1902.

ORVILLE P. MOON.

Attest:

A. W. SAGEMAN,
JNO. JONES,