

No. 805,826.

PATENTED NOV. 28, 1905.

M. VIDAVER.
VAGINAL IRRIGATOR.
APPLICATION FILED OCT. 4, 1904.

2 SHEETS—SHEET 1.

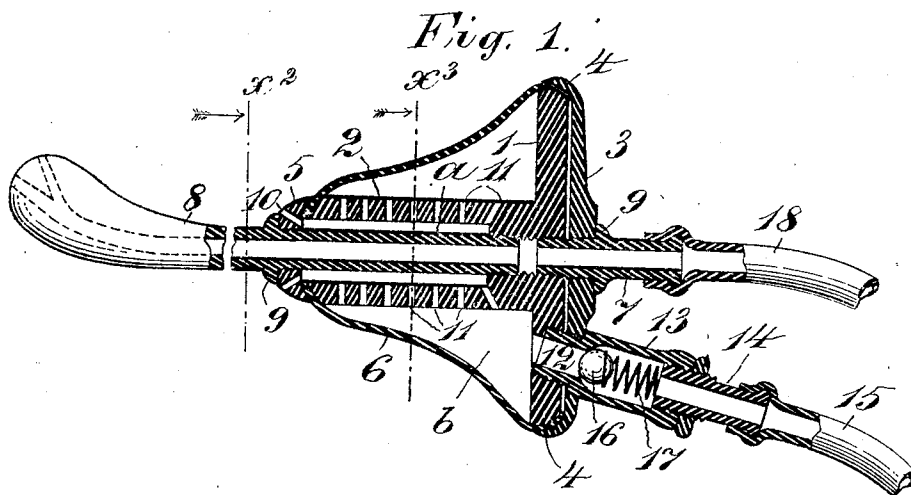


Fig. 2.

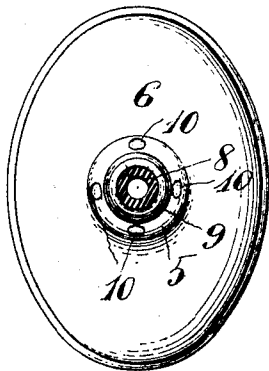


Fig. 3.

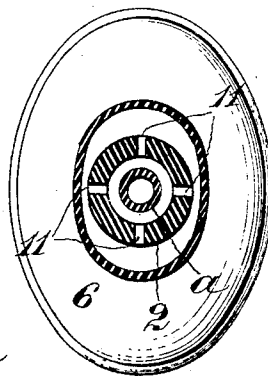
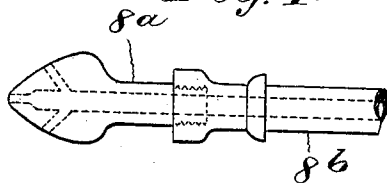


Fig. 1^a



Witnesses
S. H. Kline
William J. Firth

Maxwell Vidaver
Inventor
By his Attorney, Henry Canfield

No. 805,826.

PATENTED NOV. 28, 1905.

M. VIDAVER.
VAGINAL IRRIGATOR.
APPLICATION FILED OCT. 4, 1904.

2 SHEETS—SHEET 2.

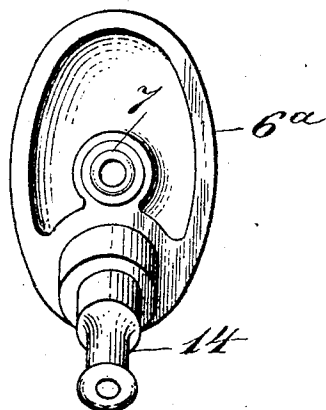
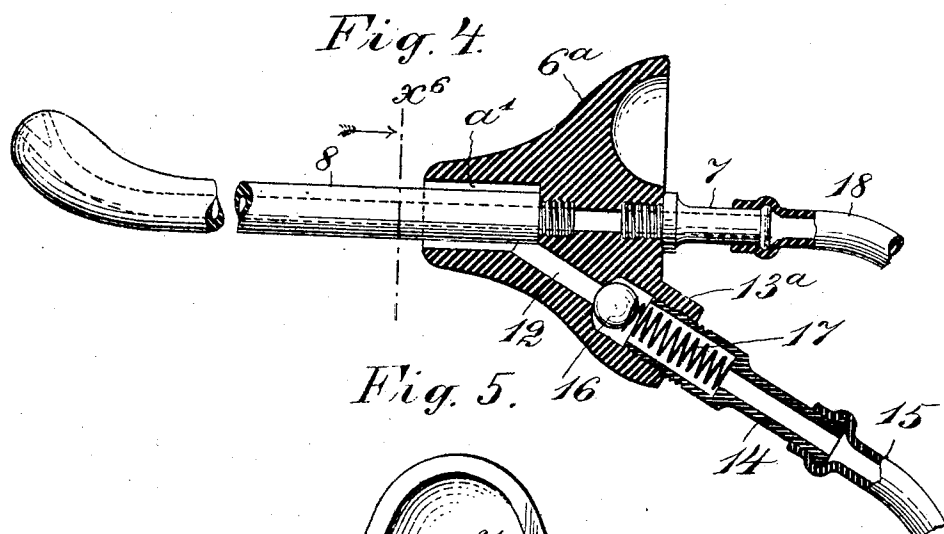
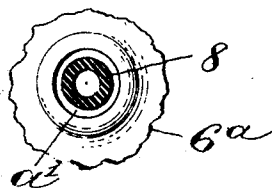


Fig. 6.



Witnesses
E. H. Almon
William J. Firth

Maxwell Vidaver
Inventor
By his Attorney *Henry Connors*

UNITED STATES PATENT OFFICE.

MAXWELL VIDAVER, OF NEW YORK, N. Y.

VAGINAL IRRIGATOR.

No. 805,826.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed October 4, 1904. Serial No. 227,138.

To all whom it may concern:

Be it known that I, MAXWELL VIDAVER, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Vaginal Irrigators, of which the following is a specification.

This invention relates to the class of irrigators or douches for vaginal and other cavities, which have a closing shield and an outlet for the liquid; and the principal objects of the invention are to provide the instrument with means for retarding the outflow of the injected irrigating fluid in order to cause distention or "ballooning" of the cavity, and to provide a shield which adapts itself to the opening to be closed and effects a complete sealing thereof. Other details of the invention will be hereinafter described.

In the accompanying drawings two forms of the invention are illustrated.

Figure 1 is an axial section of the instrument provided with partly flexible shield or closure, and Fig. 1^a illustrates a different form of nozzle therefor. Fig. 2 is a front view of the device with the nozzle in section at x^2 in Fig. 1, and Fig. 3 is a transverse section taken at x^3 in Fig. 1. Fig. 4 is a section similar to Fig. 1, showing a form of the invention where the shield or closure is solid or non-yielding throughout. Fig. 5 is an end view taken from the right in Fig. 4, and Fig. 6 is a cross-section at x^6 in Fig. 4.

Referring primarily to Figs. 1 to 3, the construction will be explained. The shield or closure is made up of four parts, one of which has an oval disk 1 and a tubular part 2, perpendicular to the face of said disk. Another part is in the nature of an outer disk 3, also oval, with a curved rim 4, which takes over the margin of the disk 1. A third part is a clamping-disk 5, which takes over the end of the tubular part 2, and the fourth part is a hollow relatively thin bell-shaped part 6. This last part is held in position by having the margin at its outer end clamped between the edge of the disk 1 and the rim 4 on the disk 3 and having the margin at its smaller end clamped between the disk 5 and the end of the tubular part 2. The clamping together of the disks 1 and 3 is effected by the inlet-tube or nipple 7, which passes through the outer disk 3 and screws into the inner disk 1, and the clamping together of the tubular part 2 and disk 5 is effected by the discharge tube or nozzle 8, which passes through

said disk and screws into the part 2 at its outer end, where it is joined to the disk 1. The nipple 7 and nozzle 8 have each a collar or shoulder 9 to bear on the respective disks in clamping. The tubular part 2 has a bore which is considerably larger than the nozzle extending through it, thus leaving a chamber *a* about the nozzle, and this annular chamber is connected with the outside by a port or ports 10 in the disk 5 and with the chamber *b* in the bell-shaped part 6 by ports 11 in the tubular part 2. In the parts or disks 1 and 3 is the outlet 12, in which is screwed a valve-casing 13, provided with a nipple 14, to which may be secured a rubber tube 15. In the valve-casing is a valve 16, controlling the outlet, this valve being backed by a spring 17.

The operation will be readily understood. When the shield has been inserted in a manner to close the outlet of the cavity, the irrigating liquid is introduced by the nipple 7, usually supplied from a rubber tube 18, which is connected with any suitable liquid-forcing means. The valve 16 resists the outflow of the liquid and causes the latter to accumulate in and be retained in the cavity. The liquid forced in is forced back in part through the ports 10 to the chamber *a* and thence to the chamber *b* through ports 11. The pressure in the chamber *b* tends to expand the flexible part 6 and cause it to fit snugly and tightly in the opening, thus producing a perfect closure. The tension of the spring 17 may be varied by screwing in or out the nipple 14.

Fig. 1^a shows a straight nozzle 8^a, and it also shows this nozzle or tip screwed onto the portion 8^b, which is connected with the shield. Obviously the discharge-nozzle may be of any desired form. The present invention is not limited in this respect. Preferably the flexible bell-shaped part 6 will be of soft rubber and the other parts of hard rubber; but the invention is not limited to any specific materials.

In the construction shown in Figs. 4 to 6 the shield 6^a is solid and in one piece, the nipple 7 screws into its outer face, and the nozzle 8 into its inner face. There is an annular chamber *a'* about the nozzle corresponding to the chamber *a* of Fig. 1. The valve-casing 13^a is integral with the shield or may be so. In other respects the construction is the same as that before described.

The feature or part of the instrument which closes the entrance of the cavity has

been called herein the "shield" or "closure," as both terms have been applied to such parts.

Having thus described my invention, I
5 claim—

1. An instrument for the purpose specified, having a closure or shield, a nozzle, an outlet for the liquid forced through the nozzle, and automatic means at the outlet offering
10 a yielding resistance to the outflow of the liquid and retaining it under pressure.
2. An instrument for the purpose specified, having a closure or shield, a nozzle mounted therein, an inlet and outlet for the
15 fluid, and regulable automatic means at the outlet offering a yielding resistance to the outflow of the liquid.
3. An instrument for the purpose specified, having a closure or shield, a nozzle
20 mounted therein, an inlet and an outlet for the fluid, a valve-casing at the outlet for the fluid, a valve therein, and a spring therein behind the valve which presses the latter up
25 yieldingly to the liquid-outlet to close the same.
4. An instrument for the purpose specified, having a closure or shield, a nozzle mounted therein, an inlet and outlet for the
30 fluid, a valve-casing at the outlet, a valve therein, a spring behind the valve and pressing it yieldingly up to the liquid-outlet to close the same, and means for varying the tension of the said spring.
5. An instrument for the purpose specified, having a closure with a hollow, flexible,
35 bell-like part 6, a nozzle and inlet-nipple, a part admitting liquid which has passed through the nozzle to the chamber in said

part 6, an outlet for the liquid, and regulable means offering a yielding resistance to the
40 outflow of the liquid thereat.

6. An instrument for the purpose specified, having a disk 1 and tubular part 2, a nozzle 8 screwed into the latter and having a
45 shoulder 9, a nipple 7, screwed into the disk 1 and having a shoulder 9, a disk 3 with a clamping-rim 4, a disk 5, and a bell-shaped hollow part 6, of flexible material clamped at its
50 larger end between the rim 4 and disk 1, and at its lesser end between the disk 5 and the inner end of the tubular part 2.

7. In an instrument for the purpose specified, the combination of the following coacting instrumentalities, namely, the disk 1 and
55 tubular part 2, the latter projecting perpendicularly from the former and provided with ports 11, the disk 3, having a rim 4 which takes over the disk 1, the inlet-nipple 7, provided with a shoulder 9, said nipple extending through the disk 3 and screwing into the
60 disk 1, the shouldered discharge-nozzle 8, extending into the larger bore of the tubular part 2 and leaving an annular chamber *a* in the latter, the clamping-disk 5, on the nozzle and having in it a port 10, the hollow bell-like
65 part or closure 6, of flexible material secured at its ends as described, and a valve-controlled outlet for the injected liquid.

In witness whereof I have hereunto signed my name, this 28th day of September, 1904,
70 in the presence of two subscribing witnesses.

MAXWELL VIDAVER.

Witnesses:

HENRY CONNETT,
BENJAMIN H. HOLT.