No. 676,269. Patented June 11, 1901.

D. N. L. NEWBURY.

RETURN FLOW SYRINGE.

(No Model.) (Application filed Dec. 14, 1900.)

Fig. 1.

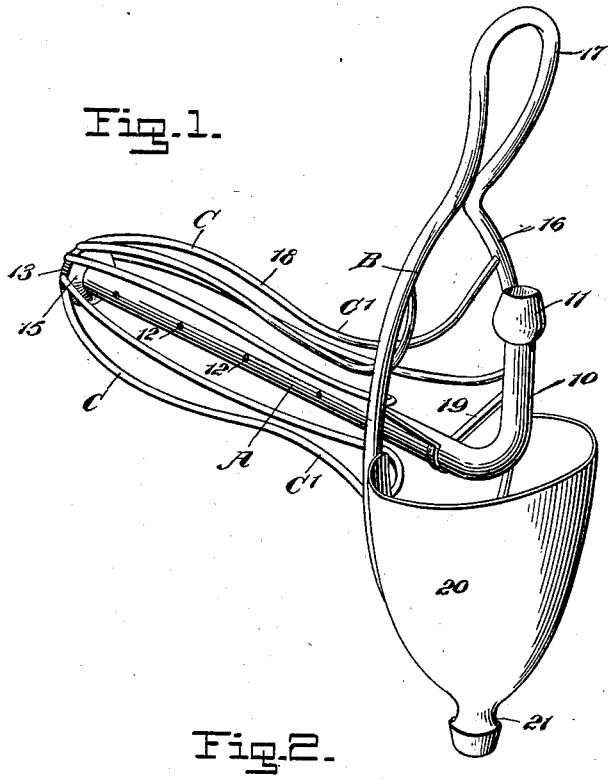
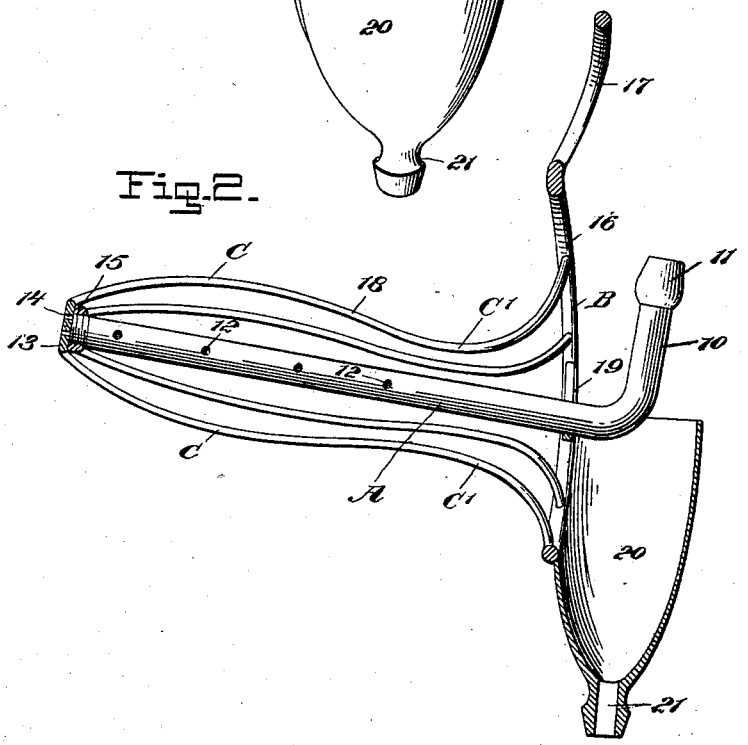


Fig. 2.



WITNESSES:

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RETURN-FLOW SYRINGE.

SPECIFICATION forming part of Letters Patent No. 676,269, dated June 11, 1901.

Application filed December 14, 1900. Serial No. 39,897. (No model.)

To all whom it may concern:

Be it known that I, DENWOOD N. L. NEWBURY, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Return-Flow Syringe, of which the following is a full, clear, and exact description.

The purpose of the invention is to construct an irrigating vaginal syringe in such manner that it may be as safely and satisfactorily used by a patient as by a physician, and also to so construct the device that it will not become foul and so that all portions of the vaginal canal may be reached, likewise the mouth of the womb.

The main objects sought to be attained by the use of the irrigating vaginal syringe are as follows: the treatment of all chronic womb and ovarian troubles by the prolonged use of plain hot or medicated water, the treatment of any local trouble in the vagina, and to provide for cleanliness of the genital parts.

To render the above possible, it is necessary to construct an instrument whose line of direction conforms to that of the vaginal canal and an instrument that conforms to the different diameters of the vaginal canal, so as to keep its walls on the stretch and render it possible to reach every part of its inner surface. The instrument should also be provided with a centrally-located irrigating-core, which which will not only throw streams against the entire vaginal canal, but also from its inner end against the mouth of the womb. In connection with the centrally-located core an open-wire shield should be provided which will permit not only the irrigation of the entire vaginal canal, but also the external genitals. The device should also be provided with a discharge-receptacle of a character which permits the entire process to be made clean and dry to all the external parts.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and 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 both figures.

Figure 1 is a perspective view of the device, and Fig. 2 is a longitudinal vertical section through the same.

A central tube A is employed in the construction of the device, and the outer end 10 of the said tube is upturned and provided with an enlargement 11, over which a rubber tube may be slipped and held. This main tube A of the device is provided with a series of apertures 12, ranging from a point near the upturned portion 10 to the inner end of the tube, and at the inner end of the tube a plate 13 is located, which closes the said inner end to some extent; but the said plate 13 is provided with apertures 14, which, with the apertures 12, permit the escape of liquid in certain quantities not only from the side portions of the main tube A, but from the inner end of the same. This apertured cap-plate 13 is usually secured to a collar 15, into which collar the inner end of the main tube A is screwed or otherwise secured.

In connection with the main tube A a shield B is employed. The front portion of the shield is in form of a loop 16, and the said shield is made from wire of suitable gage or from bar metal, and the loop-section 16 at the front of the shield receives the outer end of the main tube A, the said tube passing out usually through about the central portion of the loop, and the upwardly-extending portion 10 of the main tube is in front of the loop. The front portion of the shield B also comprises a handle 17, which is a continuation of the loop, and the said handle 17 has more or less of an outward inclination from the loop 16, as shown in Fig. 2. The inner face of the loop 16 and of the handle 17 is concaved and the outer face of said loop and said handle is convexed.

The body portion of the shield B consists of a series of bars or wires 18, which at their inner ends are attached to or made integral with the perforated cap-plate 13. The outer ends of the wires or bars 18 are given an outward inclination and are attached to the side portions of the loop 16.

The shield B and the main tube A are in a line of direction conforming to that of the vaginal canal, and the body portion of the shield B, or that portion which surrounds the fenestrated tube A, conforms to the different diameters of the vaginal canal. To this end the wires, rods, or bars 18, forming the skele-

ton body of the shield, are bowed outward near their inner ends, and the inner ends of the wires, rods, or bars of the body of the shield are made exceedingly smooth where they meet the cap-plate 13. The outwardly-bowed portion of the body of the shield is designated as C, and where the body of the shield approaches the front portion, section, or loop 16 the wires, rods, or bars are curved in direction of the main tube A, as shown at C'. The outer portion of the main tube A is supported, preferably, by a bracket 19, which is provided at its central portion with a drop-section receiving the main tube A, and the ends of this bracket are secured in any suitable or approved manner to the sides of the loop 16.

A receptacle 20 is secured in any suitable or approved manner to the front lower portion of the loop-section 16 of the shield B. This receptacle is located below the forwardly-extending portion of the main tube A to a greater or less extent, and the said receptacle 20 is preferably contracted at its lower portion and at its lower end is provided with an outlet-neck 21, having a suitable enlargement to receive and hold a rubber tube in place, which tube may be conducted to a convenient basin.

In the operation of this device when it is introduced into the vaginal canal the body portion of the shield and the main portion of the main tube A are within the canal, and the body portion of the shield conforms to the different diameters of the vaginal canal and stretches the wall thereof. The liquid which is supplied to the main tube A will find an exit through the side openings 12 and through the end openings 14, the streams or jets from the side openings 12 reaching the wall of the vaginal canal, while the streams or jets from the openings 14 reach the mouth of the womb. The front portion or loop 16 of the shield engages with the front of the body and does not interfere with the treatment of the outer genital parts, and the handle 17 may be held close to the abdomen and the instrument or device thus held in place. The vaginal canal constitutes a conductor for the fluid introduced therein, and such fluid is delivered into the receptacle 20, from whence it finds its way to the basin referred to or to any other receptacle placed to receive it.

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

1. The combination with a tube having apertures in its sides, of a shield within which the tube is contained, the said shield comprising a body-section consisting of a series of curved bars, and a front section in the form of a loop to which the outer ends of said bars are connected, the inner ends of the bars being connected with a perforated cap-plate, the outer end of the tube extending out through the loop-section and the inner end of said tube screwing into a collar connected with the apertured cap-plate, and a receptacle carried by the lower portion of the loop-section, substantially as set forth.

2. The combination with a tube having apertures in its sides and a perforated cap-plate secured to its inner end, the outer end of the said tube extending upward, and enlarged at its extremity, of a shield within which the tube is contained and comprising a body-section consisting of a series of curved bars connected at their inner ends with the perforated cap-plate at the inner end of the tube, and a front portion in the form of a loop with which the other ends of the said bars are connected, the said front portion or loop terminating at its upper end in a handle portion, the outer end of the tube extending forward through the loop portion, and the upwardly-extending end of said tube being located in front of the loop, a bracket connected with the sides of the loop portion for supporting the outer portion of the tube, and a receptacle secured to the front lower portion of the loop and located below the forwardly-extending portion of the said tube, substantially as shown and described.

3. In a syringe, the combination with a tube having apertures in its sides, the said tube having an upturned outer end, of a shield comprising an upwardly-extending front loop-section through which the outer end of the tube extends, and a body-section comprising a series of bars connected at one end with the inner end of the tube and at the other end with the loop-section of the shield, the bars having an outward inclination where they connect with the loop-section, the body of the shield being also convexed at the inner end portion of the tube and concaved and reduced in diameter at a point adjacent to the loop-section, a support for the outer portion of the tube carried by the loop-section, and a receptacle carried by the lower portion of the loop-section, the upturned end of the tube extending in front of the loop-section, substantially as described.

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

DENWOOD N. L. NEWBURY.

Witnesses:

J. FRED. ACKER,

JNO. M. RITTER.