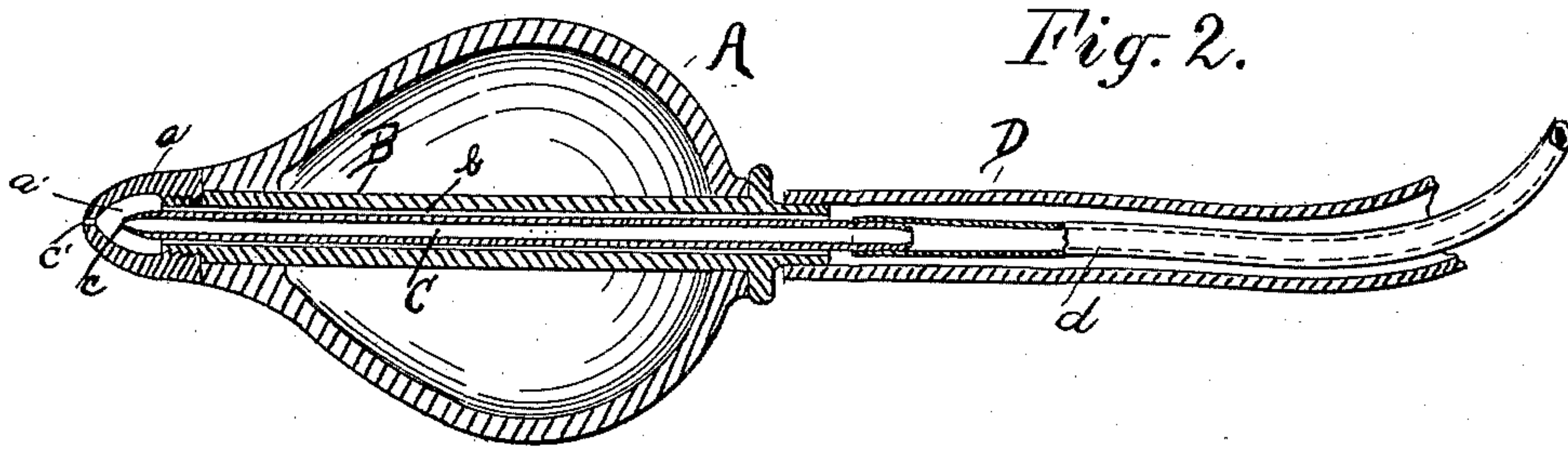
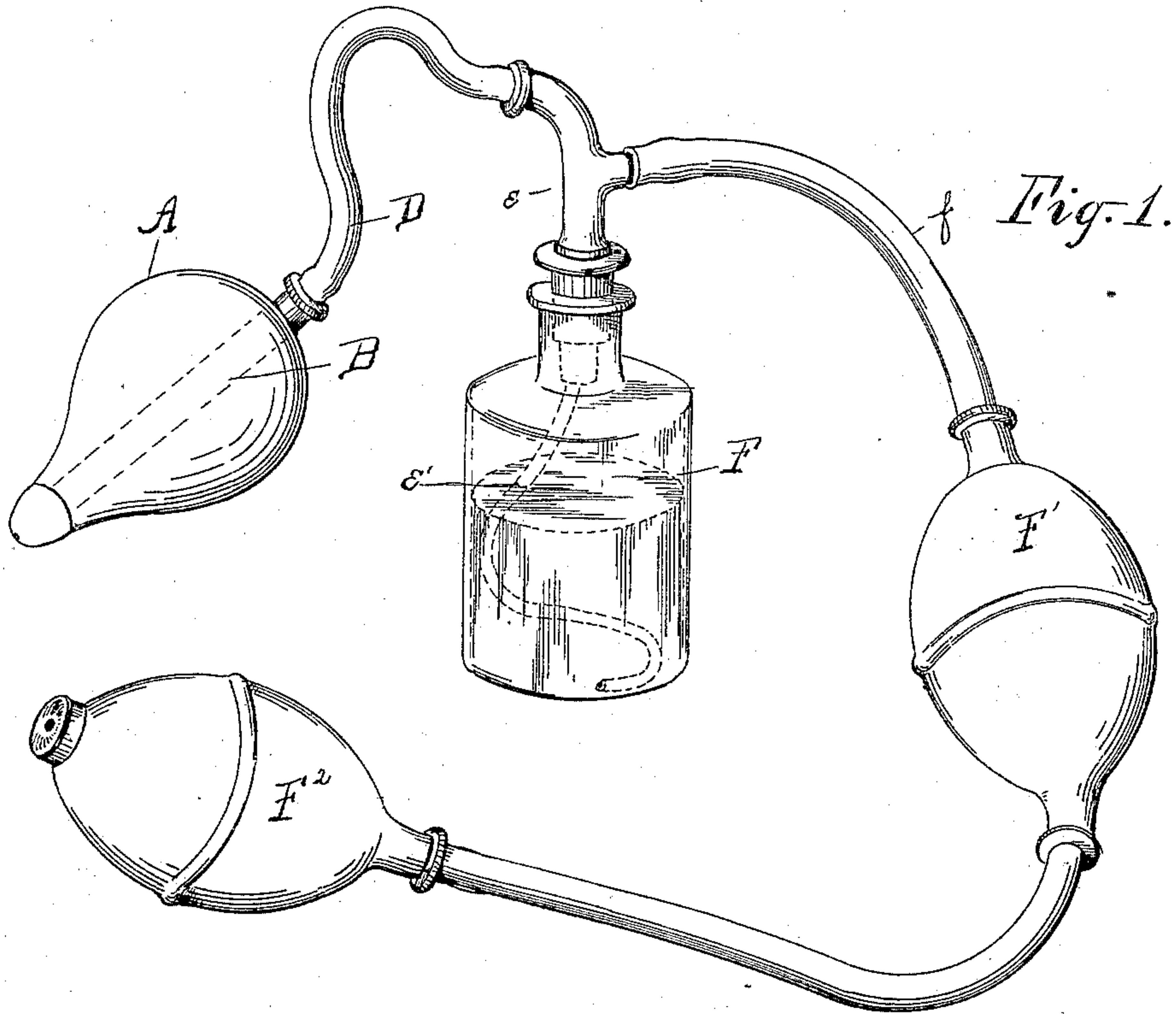


(No Model.)

W. E. WELDON.
VAGINAL ATOMIZER.

No. 445,579.

Patented Feb. 3, 1891.



Witnesses.

G. Houtwerde.

W. A. Acker

Inventor

William E. Weldon

By Robert Acker

UNITED STATES PATENT OFFICE.

WILLIAM E. WELDON, OF SAN FRANCISCO, CALIFORNIA.

VAGINAL ATOMIZER.

SPECIFICATION forming part of Letters Patent No. 445,579, dated February 3, 1891.

Application filed May 2, 1890. Serial No. 350,272. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. WELDON, a citizen of the United States, residing at the city and county of San Francisco, and State of California, have invented certain new and useful Improvements in Vaginal Atomizers; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

The object of the present invention consists in providing an atomizer so constructed as to allow for the treatment of vaginal diseases by the application of atomized medicated fluid, and to cause by pressure of air the dilation of the vagina so as to permit of the perfect interior coating with the atomized fluid. Heretofore for the treatment of diseases of this nature different kinds of syringes have been employed, but experience in the practice of medicine has taught me that the result obtained thereby is inferior to such as can be obtained by atomization, for the reason that it is necessary, in order to properly treat the afflicted part, that the fluid gain access to every portion thereof. By the use of the syringe only a portion of the diseased surface can be reached at any one treatment, while by atomization the entire interior surface is coated with each application. I thus obtain the dilation of the vagina and complete coating of the entire surface with each operation of the atomizer, as hereinafter described.

Referring to the drawings, forming a part of this application, in which similar letters of reference are used to denote corresponding parts throughout the entire drawings and specification, Figure 1 is a view showing my entire device; and Fig. 2 a longitudinal sectional view of the vagina-bulb.

The letter A indicates my improved vagina atomizing-bulb, which is provided with the central air-tube B. The outer end of said tube is provided with screw-threads, by means of which the removable tip or end *a* is secured to the bulb. By preference I construct the bulb A of soft rubber, so as to allow of a free give to the pressure of insertion into the mouth of the vagina, thereby making a perfectly snug and tight fit. The central air-

tube passing through the bulb is constructed of hard rubber. Within this tube I insert the liquid-conveying tube C, of size sufficient to leave the annular space *b* therearound. The outer end of said tube is provided with the reduced opening *c*, in line with the perforation *c'*, formed in the tip or end *a*. The tube C is also formed of hard rubber, the same as tube B. The interior of the cap or tip *a* forms the commingling-chamber for the air and medicated liquid, as hereinafter described. Connection is made between the liquid-containing vessel F and atomizing-bulb through the medium of the air-pipe D, which connects to the air-tube B. Within said pipe runs the liquid-conveying pipe *d*, which is secured to the inner end of the tube C, as fully shown in the drawings. Both the inner and outer pipe I construct of soft rubber, so as to permit ready handling thereof. These pipes in turn connect with the tube and pipe *e e'*.

The letters F, *f*, F', and F² indicate the medicated-liquid-containing vessel, air-pipe, accumulator, and pressure-bulb, respectively, all of which being of ordinary construction and working in the usual manner call for no specific description herein. The air and medicated fluid passing through tubes B and C are discharged into the chamber *a'* of the end *a*, wherein they become thoroughly commingled before being discharged therefrom into the vagina.

It is obvious that as the bulb A is made of soft flexible rubber, which fits closely to the walls of the vagina when inserted, it is impossible for the discharged air to escape. Thus upon use of the atomizer the vagina and mouth of the uterus become dilated by the pressure of the air and thus allow of the interior surface becoming perfectly coated with the atomized liquid, consequently bringing the medicated fluid into contact with each and every portion, a result which cannot possibly be accomplished by the use of syringes adapted for vaginal treatment.

In the treatment of female diseases my improved atomizer will be found to be most advantageous, inasmuch, as above stated, I expose the entire inner surface to the effect of the medicated fluid. The advantages of such treatment will readily present themselves to

any one conversant with the subject and need not be entered into fully herein.

I am aware that minor changes may be made in the arrangement of parts and details of construction of the vaginal bulb without creating or necessitating a departure from the nature and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure protection in by Letters Patent of the United States, is—

In a vaginal atomizer, the combination of a vagina-bulb, an air-tube passing centrally therethrough, said tube having one end screw-threaded, a removable cone-shaped tip provided with threads registering with the threads of the air-pipe and also having an

orifice at its apex, a liquid-conveying tube within said air-tube with an intervening annular space, said liquid-conveying tube provided at its outer end with an orifice in line with the orifice of the cone-shaped tip, a liquid-containing vessel, a flexible tubing forming a connection between said air-pipe and liquid-conveying tube and the liquid-conveying vessel, and a reservoir-bulb having flexible connection with the liquid-containing vessel, substantially as set forth.

In testimony whereof I affix my signature in the presence of witnesses.

WILLIAM E. WELDON.

In presence of—

N. A. ACKER,

J. H. BLOOD.