

No. 703,107.

Patented June 24, 1902.

C. S. WOOD.
SYRINGE NOZZLE.

(Application filed Jan. 10, 1902.)

(No Model.)

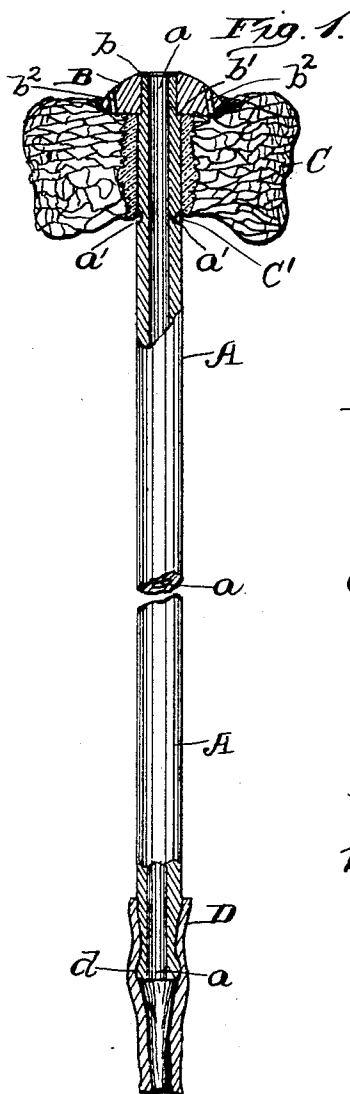


Fig. 2.

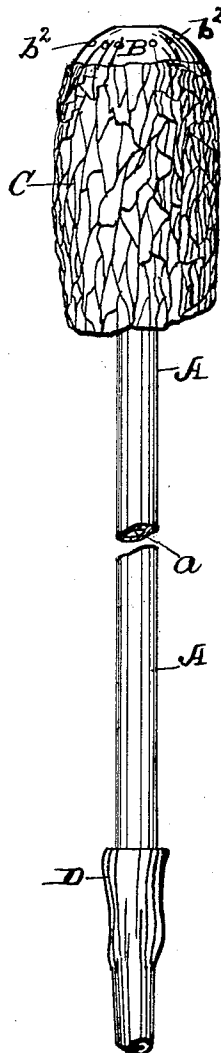


Fig. 3.

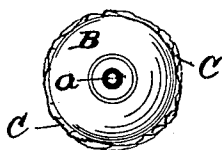
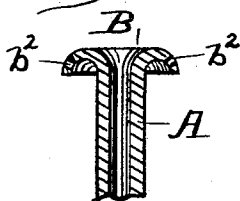


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

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SYRINGE-NOZZLE.

SPECIFICATION forming part of Letters Patent No. 703,107, dated June 24, 1902.

Application filed January 10, 1902. Serial No. 89,122. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. WOOD, physician, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Syringe-
Nozzles, of which the following is a specification.

This invention relates to vaginal syringes; and the object sought by me is to obtain a new and useful vaginal-syringe nozzle to be used for cleansing the vagina and also to be used in the application of medicinal preparations in liquid form to the vagina.

A further object of this invention is to obtain an instrument of the kind named by means of which water or a medicated liquid mixture may be deposited in the vagina adjacent to the womb when desired and there retained under a determined pressure for a sufficient time to secure the results desired, while at the same time the manner of retention of such water or medicated liquid prevents injury to the person using or upon whom the instrument is used.

In the drawings referred to as accompanying and forming a part of this specification, Figure 1 is a side elevation of an instrument embodying my invention, the ends of such instrument illustrated in vertical section and the sponge, which forms an element of the instrument, expanded. Fig. 2 is a side elevation of such instrument with the sponge referred to as forming an element thereof compressed. Fig. 3 is an end view of such instrument, and Fig. 4 is a vertical sectional view of the upper end of a modification of the tube forming an element in the instrument embodying this invention.

A reference-letter applied to designate a given part is used to indicate such part throughout the several figures of the drawings wherever the same appears.

A is a tube, preferably of metal or hard rubber, and *a* is the passage-way there-through.

a' is an annular groove around tube A.

B is a flaring end to tube A, preferably obtained by fitting a button over the upper end of tube A and attaching it firmly in place—say by forcing the end of the tube outward,

as at *b*, Fig. 1, thus forcing the button against shoulder *b'* on the tube. Flaring end B may be obtained by spinning or pressing the end of tube A out when such tube is made of ductile metal or integral therewith when made of hard rubber, as is illustrated in Fig. 4.

C is a sponge secured on tube A, as by thread or wire *C'*, which is wound around the sponge C and in the annular groove *a'* or by thread through holes *b² b²* in button B into the sponge, or by both means.

D is a flexible rubber hose or pipe which may be attached to tube A by forcing such pipe over the end of the tube, as is illustrated in Figs. 1 and 2, and attached at the other end thereof to the source of water-supply or other liquid-supply, as medicated liquid.

As hereinbefore stated, the button B may be made integral with tube A, if preferred, as by making the tube of ductile metal, vulcanized rubber, or other material, as is shown in Fig. 4. When the tube A is made of ductile metal, the button may be formed out from such tube, as by spinning or pressing, and such button so formed out is shown at B, Fig. 4.

I prefer to fasten sponge C to tube A at each end of such sponge and in the manner set forth—that is, by means of thread or wire in holes *b² b²* of button B and around the tube A in groove *a'*; but the sponge is not necessarily attached to the tube at more than one end thereof.

The purpose of the button is primarily to prevent the end of the tube A from entering the mouth of the womb and from injuring such womb, although the instrument may be used by a physician or surgeon without inserting tube A in the womb and without injury thereto if such button be omitted, and hence such button is not absolutely essential; but I consider it should be used.

When the apparatus is to be used, the sponge C is compressed into substantially the shape shown in Figs. 2 and 3 and is then inserted in the vagina, (or such sponge may be inserted in an ordinary speculum and the speculum inserted in the vagina.) Water or medicated liquid is then permitted to flow through the pipe D and tube A into the vagina. The water or other liquid delivered

from the passage-way *a* in tube A into the vagina is there retained by the compressed sponge C, such sponge acting as a dam to retain the water or other liquid until the pressure thereof is sufficient to force the same through the sponge. In practice it will be found that the physician using the same can regulate the size of the sponge relative to the vagina in which it is to be used to obtain any desired pressure to the water or other liquid used without fear of injury to any of the parts with which it comes in contact. Where the instrument is used with a speculum, the sponge C may be inserted in such speculum and the speculum then inserted in the vagina in which the instrument is to be used, or the speculum may first be inserted in such vagina and the instrument then inserted in the vagina by forcing the sponge C through such speculum. However the instrument and speculum are inserted in the vagina, after such instrument and speculum are inserted the speculum is withdrawn from the vagina, leaving the instrument in place in the same position and condition as if such speculum were not used.

The instrument may be gradually withdrawn while the water or other liquid is flowing through the tube A while the same is in the vagina, leaving the walls of the vagina distended and filled with water or medicated liquid, or the flow of such water or medicated liquid may be shut off before withdrawing

the instrument from the vagina, as preferred by the physician using the same.

Having thus described my invention and the manner in which the same is operated, what I claim as new, and desire to secure by Letters Patent, is—

1. In a syringe-nozzle, the combination of a tube a button on the delivery end of the tube and a sponge on the tube, such tube extending entirely through the sponge and such sponge secured at the delivery end of the tube in contact with the button; substantially as described.

2. In a syringe-nozzle the combination of a tube, such tube provided with a shoulder at one end thereof, a button on the tube in contact with the shoulder, means to force the button into close contact with the shoulder on the tube, and a sponge on the delivery end of the tube secured to the tube in contact with the button; substantially as described.

3. In a syringe-nozzle, the combination of a sponge, a tube extending entirely through such sponge, such tube provided with a flaring end and means for securing the sponge to the tube at the delivery end of such tube in contact with the flaring end thereof; substantially as described.

CHARLES S. WOOD.

In presence of—

CORA A. ADAMS,

CHARLES TURNER BROWN.