

(No Model.)

H. G. LEISENRING.
SYRINGE.

No. 445,813.

Patented Feb. 3, 1891.

Fig. 1.

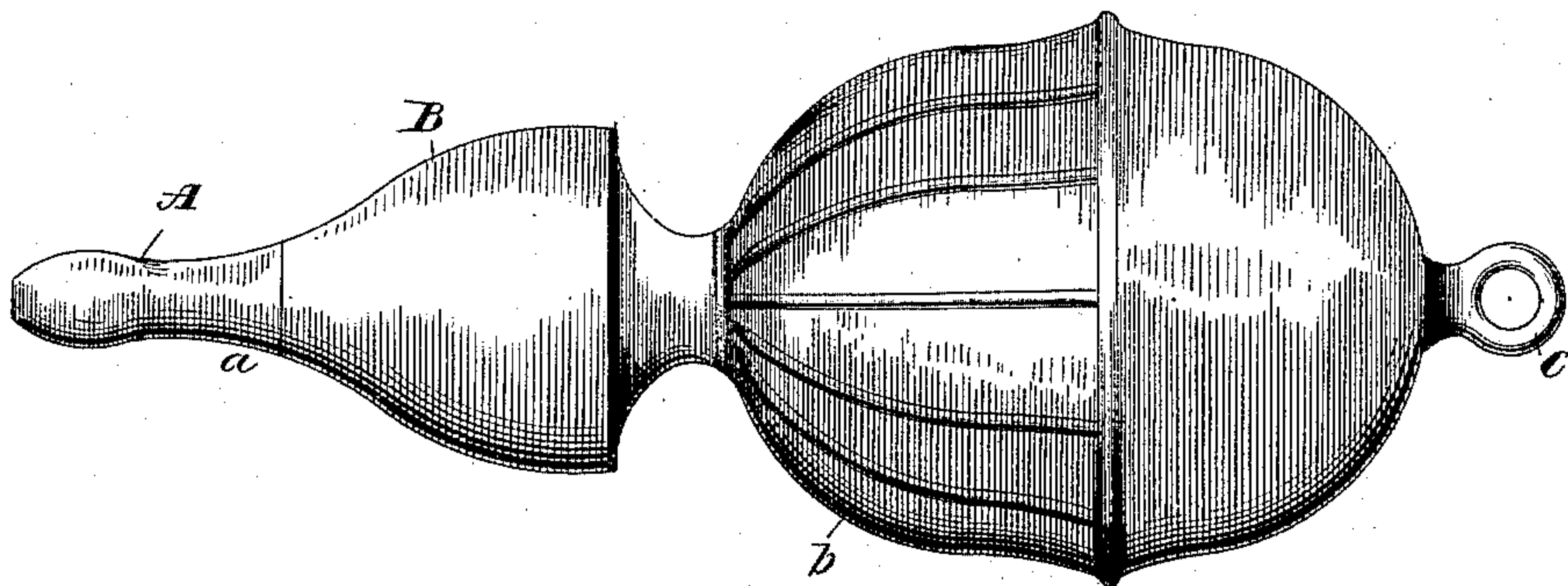
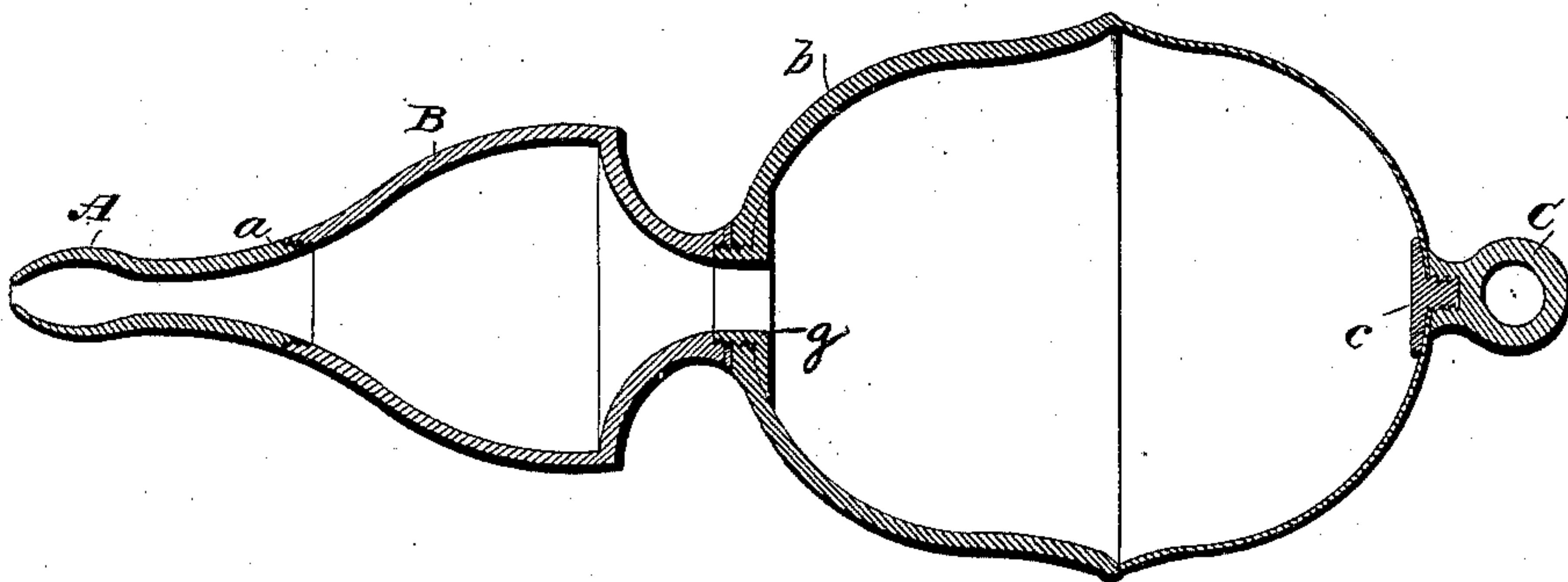


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY G. LEISENRING, OF WAYNE, NEBRASKA.

SYRINGE.

SPECIFICATION forming part of Letters Patent No. 445,813, dated February 3, 1891.

Application filed December 9, 1890. Serial No. 374,042. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. LEISENRING, a citizen of the United States, residing at Wayne, in the county of Wayne and State of Nebraska, have invented certain new and useful Improvements in Rectal and Vaginal Syringes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in rectal and vaginal syringes of that class wherein the liquid is caused to flow through the rectum or vagina and out again through the syringe without withdrawing the rectal or vaginal tip and without wetting or soiling the clothing or necessitating the employment of a receptacle.

The object of the present invention is to provide an improved syringe of this character which shall not bend while using and obstruct the flow of the liquid.

It has for a further object to provide for the more complete injection in a direct line with the opening in the tip, which opening should be large enough to allow all the discharge to pass freely.

I provide a hard-rubber neck to the tip, which prevents bending. I make the tip detachable, so that it can be readily interchanged for one of another character when desired. I provide the bulb with a ring-handle, which aids materially in the suction by drawing out the bulb. This handle also serves as a means of suspending the syringe when not in use, so that it will drain and prevent the bulb from rotting. I provide a bulb by which all of the fluid may be injected and removed by a pumping motion not possible with many other syringes.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, in which—

Figure 1 is a side view of my improved syringe. Fig. 2 is a central longitudinal section through the same.

Referring now to the details of the drawings by letter, A designates the rectal tip, which is formed of hard rubber and at its inner end formed with a screw-threaded tapered portion *a*, which is connected detachably with the hard-rubber vaginal tip or neck-piece B, by being screwed into the interior screw-threaded end thereof, as shown in Fig. 2, the screw-threaded portion of the vaginal tip or neck being also on an incline or taper, so that when the two parts are screwed home there will be a smooth continuous surface both upon the outside and upon the inside, as shown in Fig. 2. This avoids all impediments to the flow of the liquid, as will be readily understood. This vaginal tip or neck is dilated to distend the opening of the vagina to prevent the fluid used in the injection from flowing out. This tip or neck screws into the soft-rubber bulb in a single piece, one half being firm and thick and the other half thin and flexible, to push into the firm portion when used in injecting, and designed to be withdrawn by the hard-rubber handle C, which is connected thereto by a screw-threaded plate *c*, which is placed upon the inside of the bulb at the outer end thereof and screwed into the screw-threaded socket of the handle, as shown clearly in Fig. 2.

The bulb is formed in a single piece of soft rubber, with one half firm and thick and the other half thin and flexible, so as to avoid the danger so common in this class of devices of leakage and rot at the joints.

This hard-rubber ring-handle forms an important element of the device. It serves to aid suction by drawing the thin part of the bulb out; also to hang the bulb up by, so that it will readily drain off all its contents. Without the handle, when the thin part of the bulb is pressed in, it is very difficult to withdraw it, owing to the inward suction of the parts. The parts being thus detachably connected provides for ready separation for the purpose of cleaning or repairs, and also provides for the replacing of any one part which should become broken or injured without the necessity of purchasing an entirely new syringe, thus greatly benefiting the user.

The hard-rubber vaginal tip or neck performs an important function not attained by a flexible rubber neck or tip. It prevents the distorting of the passage through which the liquid flows, and thus I attain a much better and more uniform flow of liquid and consequently a better result.

What I claim as new is—

As an improved article of manufacture, the syringe herein described, consisting of the hard-rubber rectal tip having screw-threaded tapered portion, the hard-rubber vaginal tip having screw-threaded tapered portion en-

gaging the threaded tapered portion of the rectal tip, and having reduced end, the bulb secured to the vaginal tip and comprising in a single piece a firm thick half and a thin flexible half, and a hard-rubber handle C, secured centrally to the flexible half of the bulb, all substantially as shown and described.

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

HENRY G. LEISENRING.

Witnesses:

J. D. KING,

W. A. IVORY.