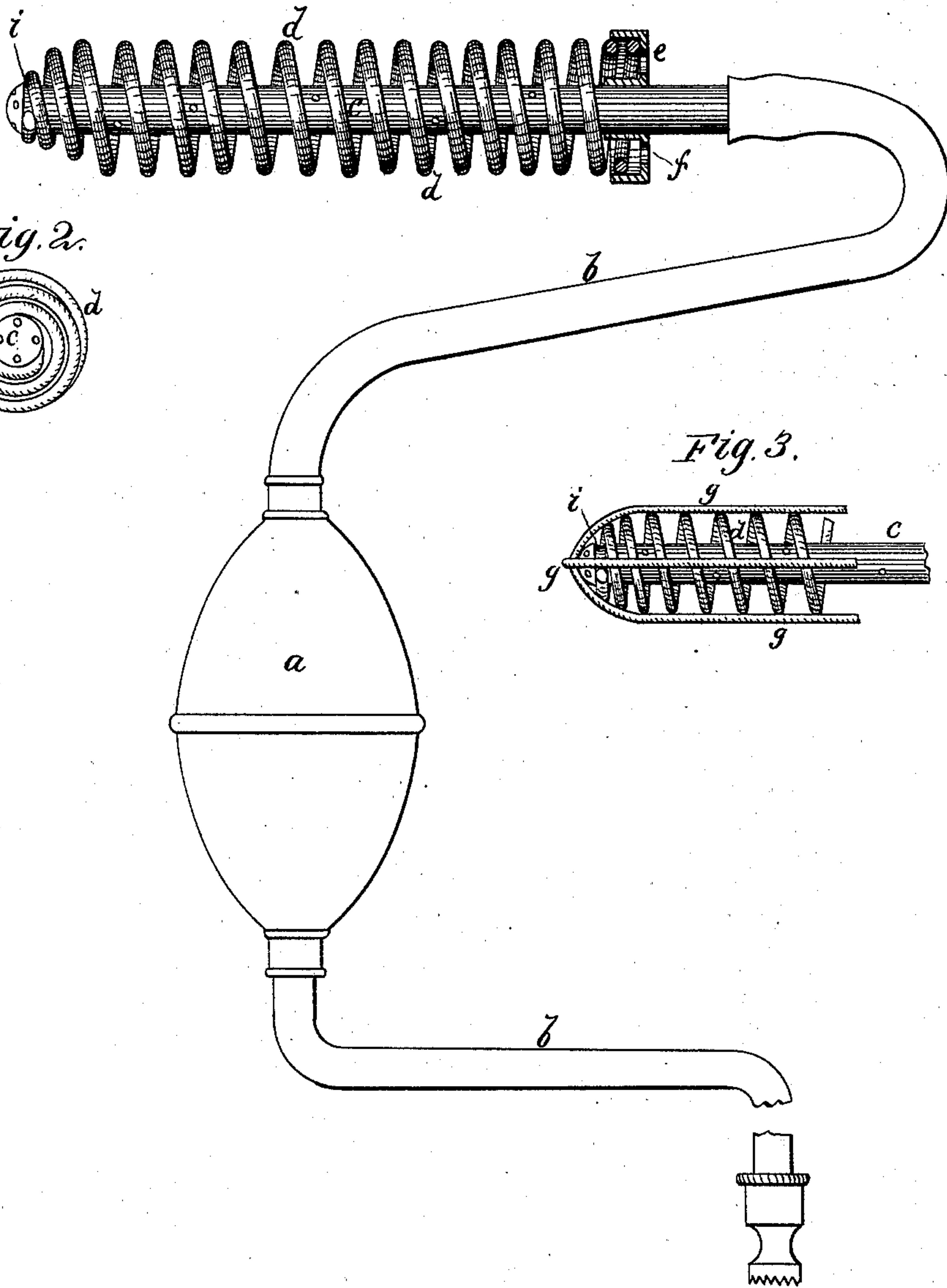


J. H. GUEST.  
Syringe.

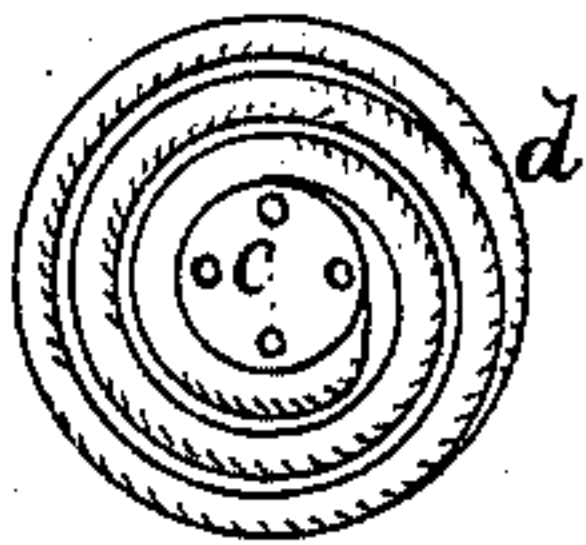
No. 216,396.

Patented June 10, 1879.

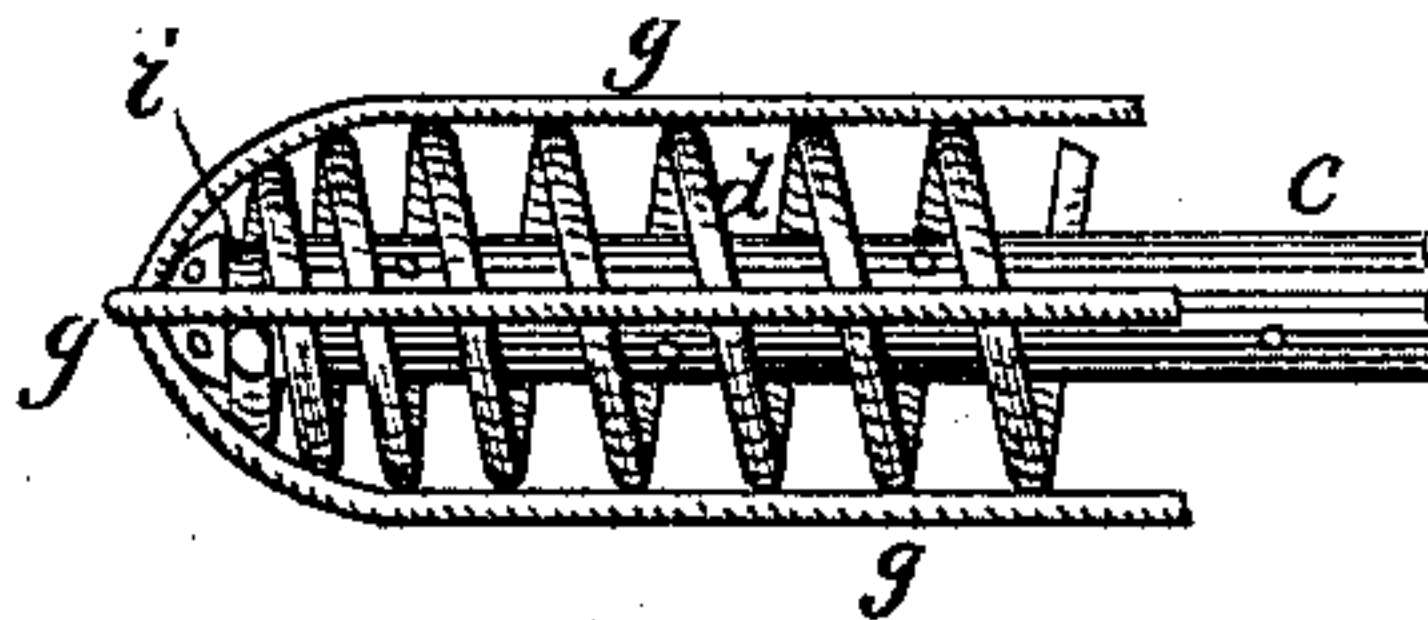
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Henry N. Miller*  
*C. Sedgwick*

INVENTOR:

*J. H. Guest*  
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# UNITED STATES PATENT OFFICE.

JOHN H. GUEST, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN SYRINGES.

Specification forming part of Letters Patent No. **216,396**, dated June 10, 1879; application filed December 12, 1878.

*To all whom it may concern:*

Be it known that I, JOHN H. GUEST, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Vaginal Syringe, of which the following is a specification.

Vaginal syringes have heretofore been made in which the discharge-tube is inclosed in a frame of wire bars and plates, with the design to prevent the walls of the vagina from closing on the tube, thereby giving a better opportunity for washing the parts and removal of accumulated matters in cases of ulceration and other affections.

In the form as heretofore made such syringes are expensive to manufacture, and even when carefully finished the plates present edges that irritate, especially where there is inflammation. Besides these objections, the openings between the wire do not prevent the folds of the vagina from passing through, which not only defeats the intended object, but renders withdrawal of the syringe painful.

My invention consists in certain novel details in the construction of the wire guard or shield, whereby it is more cheaply constructed and freed from the objectionable features named.

In the accompanying drawings, Figure 1 is an elevation of my improved syringe. Fig. 2 is an end view of the nozzle and shield. Fig. 3 shows a modification.

Similar letters of reference indicate corresponding parts.

The bulb *a*, rubber tubing *b*, and metal discharge nozzle or pipe *c* are of usual character. Around the nozzle *c* is a spiral, *d*, of wire, which, when the instrument is inserted, dilates the vagina, exposing every part of the vaginal folds to the immediate action of the injected fluid, and permitting the fluid to run out. The spiral *d* is made of soft or spring wire, wound in the spiral form shown, having the outer end drawn down into a conical form, and the rear end of the spiral attached to a circular base-plate, *e*, through which the pipe *c* passes. This plate *e* has its edges turned up to embrace and cover the end of the spiral. The plate *e* is perforated, as seen at *f*, to permit escape of fluid. The end of pipe *c* extends slightly through the conical forward end

of spiral *d*, and is formed with an annular groove, *i*, that receives the flattened end of the wire, so as to retain it in place and avoid any projecting points.

By this construction there are no rough edges or angles to irritate and inflame the parts which are in contact with the spiral. The spiral is to be wound close enough to accomplish dilation, and at the same time permit the water or other fluid to pass into contact, and the water may run out by the openings *f*.

If desired, the spiral may be made more rigid by longitudinal bars or wires *g g*, that pass from plate *e* and around the conical end of the spiral, as seen in Fig. 3. These bars may be inside or outside, and are attached to the wire *d* at intervals to retain them in position.

I prefer the form shown in Fig. 1 in cases where there are tumors, as the spiral is limber and will give way in passing the tumor and adjust itself to the vaginal walls.

It will be seen that the openings between the wires of the spiral *d* will, when the instrument is inserted, be at nearly right angles to the direction of the folds of the vagina, thereby securing distention and preventing the folds from entering into the openings to any great extent. This construction also admits of the case being inserted or withdrawn by simply rotating it, when it will enter or withdraw by the action of the spiral in the manner of a screw, so that in cases of severe inflammation the parts will not be irritated.

I am aware that it is not broadly new in vaginal syringes to use longitudinal wires arranged upon notched disks placed about the discharge-tube; but

What I claim is—

In vaginal syringes, the elastic wire *d*, arranged spirally about the discharge-pipe *c*, and extending forward to the end of said pipe, where it is brought to a point behind the sprinkler, and the rear end attached to a disk movable on the discharge-pipe, as shown and described.

J. H. GUEST.

Witnesses:

GEO. D. WALKER,  
C. SEDGWICK.