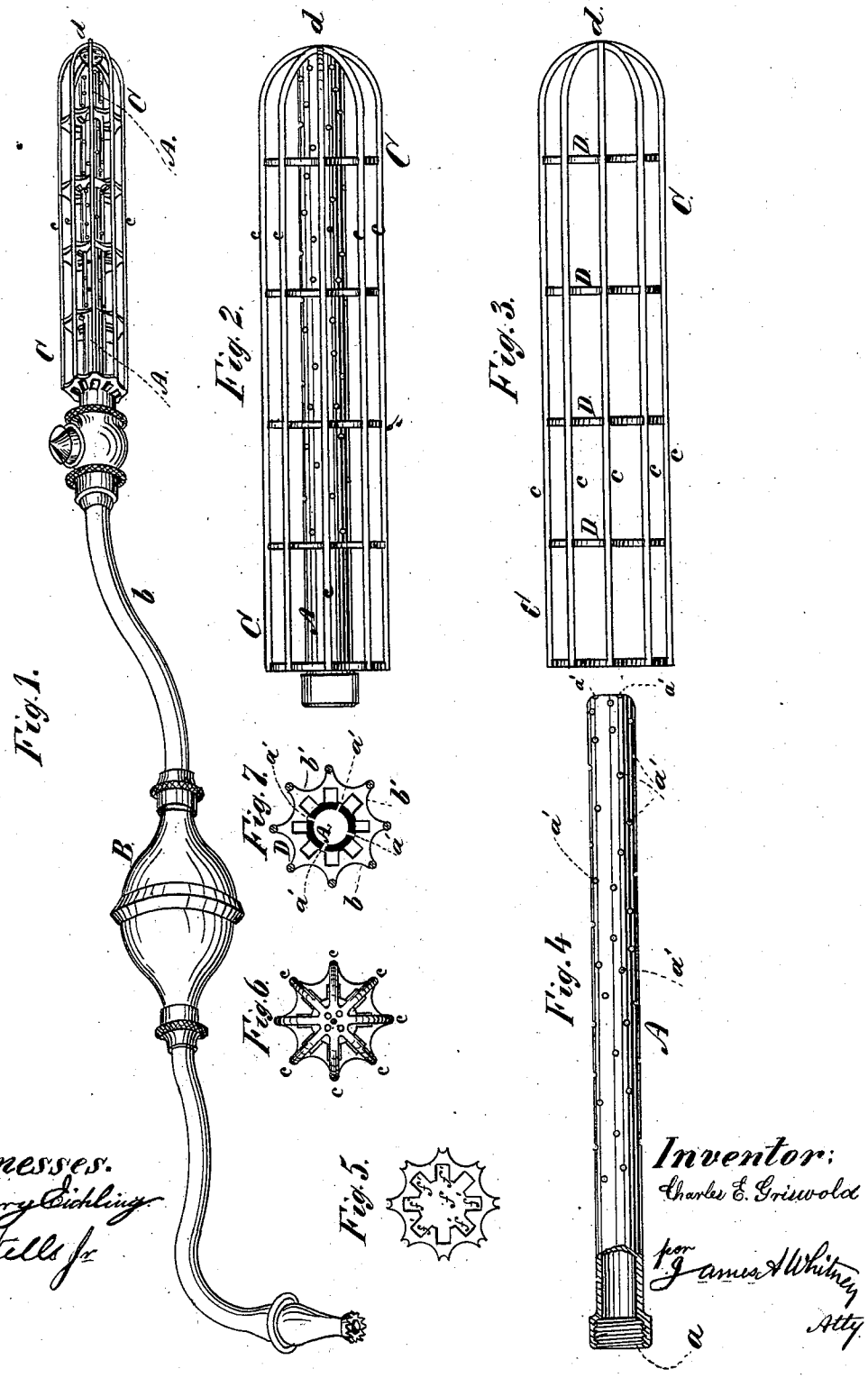
C. E. GRISWOLD.

SYRINGE.

No. 193,368. Patented July 24, 1877.



Witnesses.
Henry Eichling
H. Wells Jr.

Inventor:
Charles E. Griswold
per James A. Whitney
Atty

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C

UNITED STATES PATENT OFFICE.

CHARLES E. GRISWOLD, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN SYRINGES.

Specification forming part of Letters Patent No. **193,368**, dated July 24, 1877; application filed August 29, 1876.

To all whom it may concern:

Be it known that I, CHARLES E. GRISWOLD, of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Vaginal Syringes, of which the following is a specification:

The object of this invention is to provide an improved means whereby the outflow from a vaginal syringe may be brought into more immediate contact with all parts of the walls of the vagina, and a much more effective treatment of the parts by means of medicated solution is provided for.

To this end the invention comprises an attachment for vaginal syringes constructed with longitudinal ribs converged at their forward ends to a common center to provide a rounded extremity to the attachment, and fixed upon recessed annular braces which hold the ribs in position, and at the same time permit the reflux of the liquid along the length of the syringe; this attachment when applied to use being placed upon and concentric with a vaginal syringe, and distending the walls of the vagina, leaving a space between the same and the surface of the syringe itself, through which the jets from the syringe may be impelled into direct and immediate contact with all parts of the surface of the walls of the vagina; the device having, moreover, the further advantage that when turned axially it causes all crevices in the walls to be opened or distended to permit the immediate contact therewith of the medicated liquid.

Figure 1 is a perspective view, representing my invention as attached to the bulb of a Davidson syringe, my said invention, however, being capable of use in connection with any suitable device for producing a flow of liquid through the syringe. Fig. 2 is a side view, on a larger scale, representing the attachment as placed upon the perforated body of a vaginal syringe. Fig. 3 is a side view of the attachment detached from the perforated body of the syringe. Fig. 4 is a side view and partial section of such perforated body itself. Fig. 5 is an end view of the attachment. Fig. 6 is a similar view of the opposite extremity or front end thereof, and Fig. 7 is a transverse sectional view of the attachment and of the perforated body of the syringe.

The perforated body A may be of any suitable size and configuration, and capable, by means of an internal screw-thread, *a*, or otherwise, of being attached to the tube *b* of a compressible bulb, B, or to any other suitable or known means of effectually producing a flow of liquid into the perforated body A and out through the perforations *a'* therein. C is the attachment, the essential features of which comprise longitudinal ribs *c*, arranged more or less concentric to a common axis, and at one end converged to a common center—for example, as represented at *d*—thereby providing a rounded contour to such end of the said attachment. These ribs *c* are made of cylindric wire of suitable diameter, and are attached to the outer extremities of radial spurs *b'*, provided upon annular braces D. These braces have circular openings *f* in their central parts, through which the body A of the syringe may be thrust to bring said body within the attachment C, with the ribs *c* of said attachment concentric with said body. These openings may be formed with radial notches *f'*, the purpose of which will presently hereinafter appear.

The attachment C being placed upon the body A, and the latter arranged in due connection with a suitable liquid forcing device or appliance, as hereinbefore explained, the apparatus comprising said body and attachment is thrust into the vagina, the rounded end *d* of the attachment permitting its easy inward passage and distending the walls of the vagina. The space between the body A and rib *c* of the attachment being, of course, left clear, and with simply the ribs *c* in contact with the surface of the vagina, the liquid being then forced into the body A, and thence out through the openings *a'* thereof, is impelled directly against the unobstructed surface of the vagina with the most potent effect. During this operation, by giving a slow axial or turning movement to the attachment C, the crevices or folds in the walls of the vagina are opened and exposed to the jets issuing through the openings *a'*, as just mentioned, all parts of the surface of the vagina being thus subject to the action of the medicated liquid.

It is, of course, to be understood that the body A should not only be perforated along its length, in order that the liquid thrown out

axially therefrom shall be brought in contact with the walls of the vagina, but that the end of the apparatus should be perforated, as represented more clearly in Fig. 6, in order that the liquid may be thrown upward and inward through and against the mouth of the womb.

After the liquid has been brought in contact with the walls of the vagina and falls back therefrom it flows along the body A of the apparatus through the openings f', and thence out from the vagina at the base or outer end of the instrument.

It is obvious that the attachment C may be slipped upon a body, A, of any suitable construction, the attachment C being capable of separate manufacture for employment upon vaginal syringes previously in use.

The ribs *c*, as well as the other portions of the apparatus, should, of course, be plated with some non-corrosive metal, or made of some non-corrosive material for the same reason that other instruments for like purposes are thus made with a non-corrosive material.

I do not claim, broadly, the combination of a cage-like structure for distending the vagina and a tube for the delivery of the injected fluid into the vaginal cavity, such having been hitherto proposed; but such devices as heretofore made have had the forward end or extremity made flat or squared off at a right angle to the length of the syringe, a construction which has rendered such devices incapable of proper insertion, liable to produce inflammation by the contact of the sharp edges with the delicate membrane or lining of the vagina, and hence utterly useless so far as any advantageous result is concerned; but

What I claim as my invention is—

For vaginal syringes the device C, constructed with the ribs *c*, converged at one extremity to provide a rounded end and fixed upon the annular braces D, recessed to permit the outflow of liquid along the syringe, all substantially as and for the purpose set forth.

CHARLES E. GRISWOLD.

Witnesses:
JOHN RANKIN,
H. WELLS, JR.