(Model.)

C. C. PARKER.

INSTRUMENT FOR TREATING THE VAGINA AND UTERUS.

No. 275,405. Patented Apr. 10, 1883.

Fig. 1.

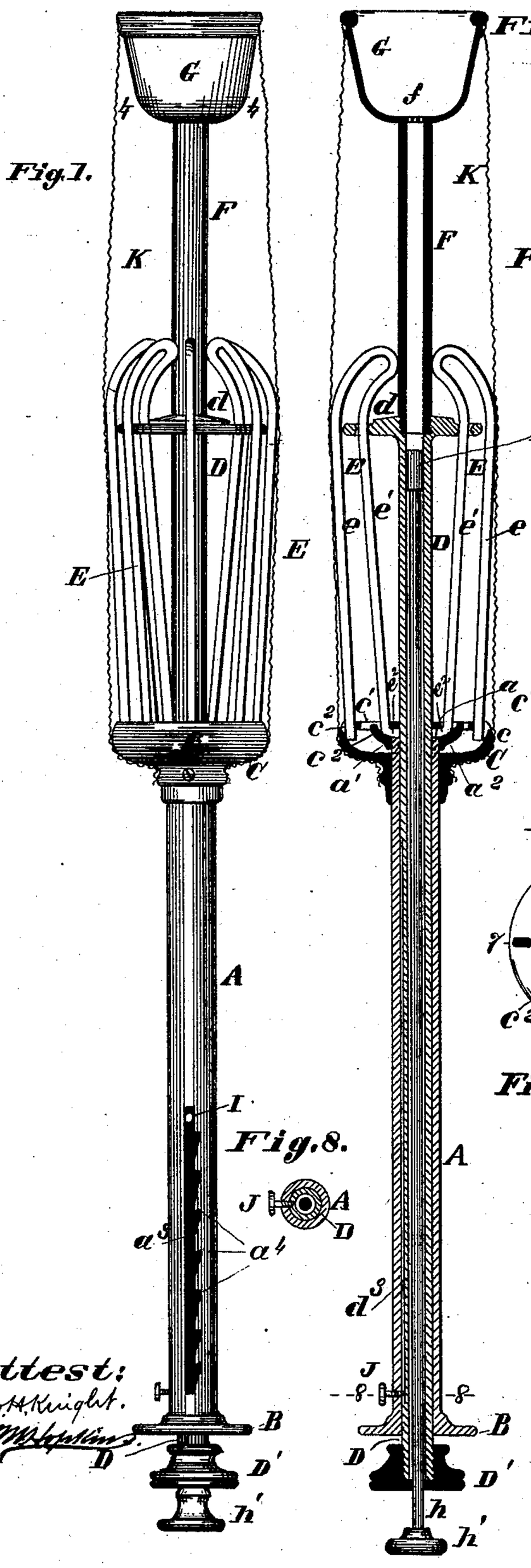

Fig. 2.

Fig. 3.

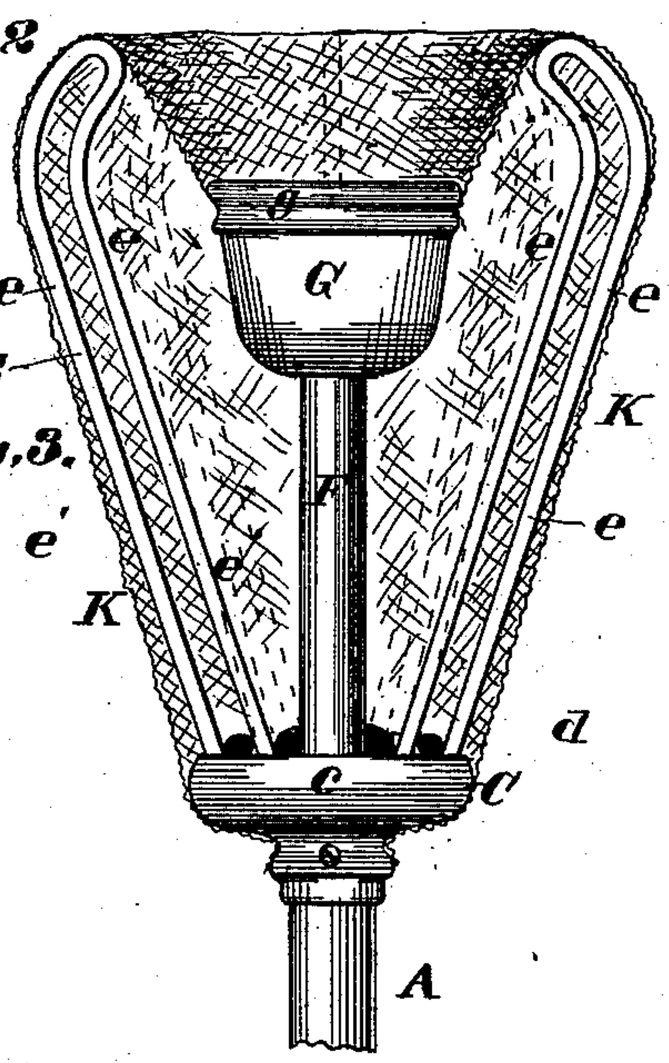

Fig. 4.

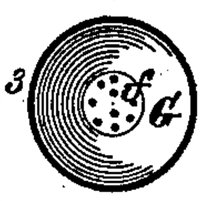

Fig. 5.

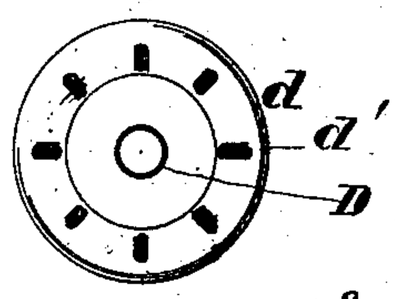

Fig. 6.

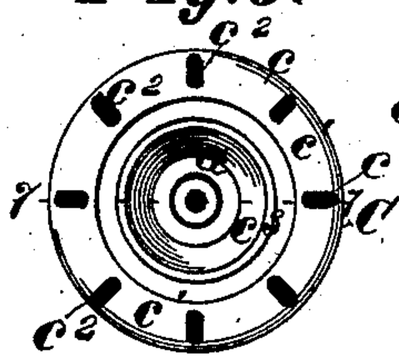

Fig. 7.

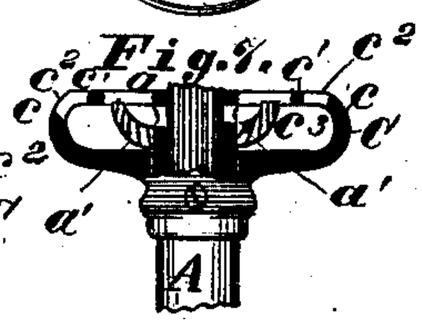

Fig. 8.

Fig. 9.

Fig. 10.

Attest:

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UNITED STATES PATENT OFFICE.

CHRISTOPHER C. PARKER, OF FARLINGTON, KANSAS.

INSTRUMENT FOR TREATING THE VAGINA AND UTERUS.

SPECIFICATION forming part of Letters Patent No. 275,405, dated April 10, 1883.

Application filed May 4, 1882. (Model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER C. PARKER, of Farlington, in the county of Crawford and State of Kansas, have invented a certain new and useful Improvement in Syringes, of which the following is a specification, reference being had to the accompanying drawings, forming part of the same.

My improved syringe is constructed with the following parts: An outer and inner tube (or a rod in place of the latter) telescoped together, so as to slip upon each other, the outer tube having a head to which a number of fingers are hinged. The fingers consist of two parallel bars, the inner bars passing freely through holes in a disk-formed collar at the end of the inner tube. The movement of the bars in the collar serves to move their free ends inward and outward. The inner tube carries a removable spray nozzle or nipple having at the end a cup suited to receive the mouth of the uterus. From the cup to the head of the outer tube is stretched a rubber veil that envelops the fingers. A piston works within the inner tube to cause any liquid contained in the tube to be ejected from the same through the spray-holes.

My invention consists in the device hereinafter described and claimed.

In the drawings, Figure 1 is a side view of the metallic parts of the instrument, the rubber veil or envelope being shown in section. Fig. 2 is an axial section. Fig. 3 is a detail, showing the fingers and veil expanded. Fig. 4 is a top view of the cup. Fig. 5 is a top view of the finger-actuating disk upon the inner tube, the spray tube or nozzle being removed. Fig. 6 is a top view of the head upon the outer tube, to which the fingers are hinged; and Fig. 7 is a section of the same at 7 7, Fig. 6. Fig. 8 is a transverse section at 8 8, Fig. 2. Fig. 9 is a side view of a modified form of finger. Fig. 10 is a transverse section at 10 10, Fig. 9.

A is the outer tube, having a collar or knob, B, by which it is held and moved.

C is a circular head or collar attached to the tube A at the opposite end to the knob B. The head C has a cup, *c*, whose top or margin is turned inward in a flange, *c'*, having radially-elongated sockets c^2, receiving the lower ends of the outer bars or fenders, *e*, of the fingers E. The sockets c^2 are so formed as to allow the bars *e* free endwise and oscillatory movement as the fingers are moved inward and outward, while at the same time holding said ends snugly in position.

Within the cup *c* is another cup, c^3, set upon the projecting end (or nipple) *a* of the tube A. The nipple or end *a* has radial sockets *a'* to receive the hooked ends e^2 of the inner finger-bars, *e'*. These hooked ends fit freely but snugly in the sockets *a'*, thus forming the proper articulation of the fingers, the bearings $e c^2$ serving to brace the hinge. The outer sides of the hooks e^2 bear against the cup c^3, which thus serves to hold the hooks in the sockets. The two parallel bars *e e'* of the finger are in one piece, as shown. The finger E is curved at the free end. The inner tube, D, works endwise in the outer tube, A. It has at one end a disk-formed head, *d*, with radially-elongated orifices *d'*, through which the inner bars, *e'*, of the fingers pass. These bars are inclined, as shown, so that as the disk *d* moves toward the head C the fingers are pushed outward, and vice versa. The bore of the tube D extends through the disk or head *d*, and is screw-threaded to receive the screw-threaded end of the nozzle or jet-pipe F. The upper end of the nozzle has a spray-plate, *f*, through which medicinal or cleansing liquids may be ejected from the tube D and drawn back into the tube, if desired. G is a cup, fast or removable, attached to the end of the nozzle to receive the mouth of the uterus. This cup has a bead, *g*, at its rim. The bead extends inward to hold the mouth of the uterus out of contact with the inside of the cup, and thus allow the ejected liquid or spray to reach all parts of the mouth.

H is a piston working in the tube D, acting by pressure to eject liquid through the spray-plate *f*, and acting by suction, when drawn backward, to draw the liquid contents of the cup into the tube D.

h is the piston-rod, extending through a cap or knob, D', that screws onto the end of the tube D.

h' is a screw-knob by which the piston is worked.

I is a pin fast in the inner tube, D, working in a longitudinal slot, a^3, in the outer tube.

The slot has a number of ratchet-formed notches, a^4, upon one side, into any one of which the pin I may be placed to prevent the disk *d* moving outward from the head C.

It will be observed that any pressure upon the outside of the fingers will, owing to the inclination of the bars *e'*, tend to carry the disk *d* a greater distance from the head C. Consequently there will never be a tendency, when in use, to cause the disk *d* and head C to approach each other by any pressure upon the outer sides of the fingers.

In Figs. 2 and 8 a modification of the holding device is shown. In this J is a set-screw that acts also as a guide. This screw engages in the outer tube, and its point works in a longitudinal groove, d^3, in the inner tube. Thus the screw acts constantly as a guide, and may be made to act as a set-screw to hold the parts *d* C in their relative position by turning it so as to bear hard against the inner tube, D.

K is a veil or envelope consisting of a tubular piece of rubber that may have a bulbous form, and whose ends are secured respectively to the cup G and to the head C, said cup and head being made with circumferential grooves to receive the edges of the veil. The object of the veil or envelope is to protect that part through which the instrument is passed from coming in contact with the body of the instrument.

When the instrument is used as a speculum the veil is detached and the nozzle F is generally removed. In this case the part D may be made in form of a solid rod instead of tubular.

The various uses and manner of using the instrument will be apparent to medical practitioners.

By loosening the screws by which the head C is attached to the tube A and unscrewing the knobs or caps D' *h'* the instrument can be taken to pieces.

In Figs. 9 and 10 a modified form of finger is shown, the outer bar or fender, *e*, carrying a concavo-convex shield.

It will be seen by examination of Fig. 3 that when the fingers are fully distended their ends are somewhat in advance of the rim of the cup G, forming a basin having the said cup at its center, so that as the advanced part of the fingers and veil occupy the *cul de sac* the mouth of the uterus is brought into the cup. In this form of the instrument the folds of the vagina are opened and secretions readily removed.

I claim as my invention—

1. The combination of tube A, the rod D, having perforated disk at top and working in tube A, and the fingers E, hinged to the top of the tube A, and having their inner arms working through the perforated disk, as set forth.

2. The combination of head C, having parts *a* and *c'*, provided with sockets *a'* and c^2, and the fingers E, constructed substantially as set forth.

3. The combination of the two tubes A and D with fingers hinged to a head or cap on tube A and passing through a head or cap upon the tube D, and the jet-nozzle F, with spray-plate *f* and cup G, and the piston H, working in the tube D.

4. The tubes A and D, piston H, nozzle F, cup G, fingers E, and veil K, all combined to operate substantially as set forth.

CHRISTOPHER C. PARKER.

Witnesses:

SAML. KNIGHT,

GEO. H. KNIGHT.