

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
4 December 2008 (04.12.2008)

PCT

(10) International Publication Number
WO 2008/144871 A2(51) International Patent Classification:
A61M 3/02 (2006.01)

CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(21) International Application Number:
PCT/BR2008/000158

(22) International Filing Date: 26 May 2008 (26.05.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
MU 8702670-4 28 May 2007 (28.05.2007) BR

(71) Applicant and

(72) Inventor: RODRIGUES ALVES, Martene [BR/BR];
Rua Guiomar Santana, 65, Macedo, E-07112-060 Guarulhos (BR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

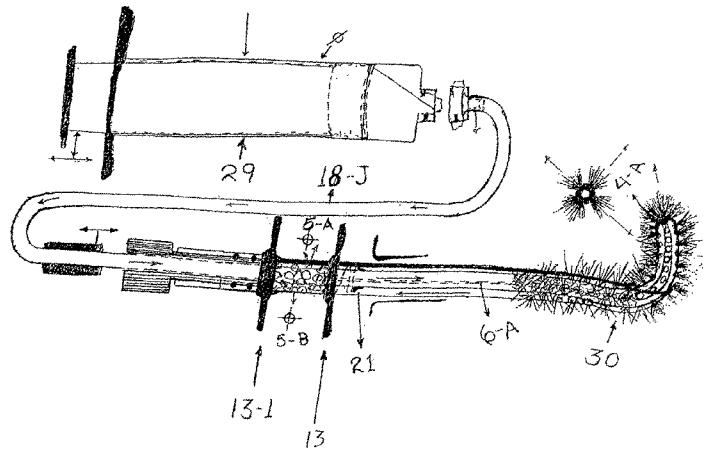
— of inventorship (Rule 4.17(iv))

Published:

— without international search report and to be republished upon receipt of that report

(54) Title: PREVENTIVE DEVICE FOR VAULTS OF THE UTERUS COL

FIG. 3



(57) **Abstract:** The gift of Model of Utility is understood by an anatomical, prolonged and horizontal pipe (1); folded in curves for inferior and superior, anatomical mouth (2) verticalizada, obtuse and leaked in the inferior side (3) for use of devices of applications in its section frontal (d), and closed mouth in the inferior side (3) for use of devices for collections; the stretch of the section of brings (b) of this pipe (1) is formed with two punctures (5 A and 5B) in its sides upper/lower that are made use on the part external of vulva for the drainings between diametrical protectors (13-1 and 13); in the present disposal this pipe (1) is constructed flattened (fig.1- 3-A), remaining itself located in the vaginal canal; carrying running tracks (6-A) to locate devices that will have to be free on the part intern of the adjuster (8-A) carrying metric thread (8-M) for better comfort in the displacement of the devices when in use it enters the differences of the depths of the vaults of the col; it comes to facilitate the cleanliness of the vaults and without it is necessary the dilates of the vaginal canal.

WO 2008/144871 A2

PREVENTIVE DEVICE FOR VAULTS OF THE UTERUS COL

The clear gift of Model of Utility mentions a pipe to it to surround with device in its interior as patrol in the vaults of the uterus col, and has as Model of Utility a fist to function adjusting devices for use in the pipe for vaults of the PI0602136-0, in its 5 interior atreves of metric thread and not for resources of the spring as in the construction of the pipe for vaults of the PI0602136-0 of 25/05/2007, it comes with objective to more good acquire reach of the spaces in the vaults of the col for eliminating the rudimentary remaining portions of the alkaline and of hormone base that they do not suffer the spontaneous eliminations, and that if they decompose forming primitive pathogenicities: 10 fluorine 's, acid gases, odor, incubations of the beings livings creature hosts; HPV 'S.

For the existing devices to carry through collections for preventive examination of Papanicolaou, therapeutical and cleanliness with banns of duchies in the vaults of the current col of the uterus not to be constructed with technical specific angles for the reach and the objectives of the vaults (deep of bag), as for examples, the devices of 15 related the current inventos of the family: the US5,394,863; gynecological spatula of MU7702087-1 U; e duchy for vaginal banns as of it I invent EP0363519 A 1.

For had the lack of specific devices for the difficult accesses it stops of the vaults being necessary to dilator the vaginal canal with the device I speculate, to pull with a device clamp the surface of the portion in the ectocérvicix of a side for others to 20 make visible the vaults. With this, the area, in the surface of the portion where it is pressed with the acute extremities of the clamp is the place of the ectropionizin where the meeting of the two epitheliums occurs and where if it forms cancer IN SITU.

For had the rudimentary remaining portions of the alkaline and harmonies bases, sanguines, salpingites, creams, and semen's not to be always eliminated with the 25 spontaneous scalings off and to be grasped in the vaults. E more, for gland to beat these rudimentary remaining portions for the vaults; to form the pastoso intumesciment, that does not commit suicide in conservation state; if it decomposes and to give the time for the primitive pathogenic formations, of the provokers of I put; incubations as barns of the hostesses, HPV 'S, fluorine 's, acid gases, odor, metástases for pipes glandular, 30 sanguineous chain and contagions for the partner.

In addition, for the necessity of the dilatações with use of the device I speculate, in the current use, to affect the psychosomatic one of the feminine classroom consisting of the fact of widening the vaginal canal with the distrust of being it rejected for the partner, beyond the applications of anesthetics and discomforts; e this reduces

the accomplishments of the activities necessary to hinder the pathogenic formations and them HPV'S in the vaults.

E for which had the lack of specific devices to surround as patrol in the vaults of the uterus col, the numbers of incidences as of hysterectomy (removed of uterus) in 5 2005, had been of 112.200; the taxes of the index (source: INCA) of Brazilians infected for HPVS to pass of 30% in 2005; e for the index of incidents of the cancer of the col of uterus and prostate to be enters first the highest ones, as well as the expenses.

Therefore, it was developed I periodically invent it of a pipe for the vaults, surrounding as patrol in the vaults with specific devices to prevent the pathogenic 10 formations and to guarantee physically in way that denounces any beginning of cancer in the uterus col.

The Device pipe for vaults of the PI0602136-0, came to assist the ways of defenses it vaginal canal: the acid lactic of pH= the 4,5 and scalings off of the spontaneous cleanlinesses.

15 For the solution of the rudimentary remaining portions that are not eliminated with the spontaneous scalings off and that they are grasped in the vaults and if they decompose was developed the disposal invent of the PI0602136-0, in:

1. A pipe for vaults, to surround with devices in its interior, object of the clear gift of the PI0602136-0, which mentioned an anatomical horizontal pipe to it, formed of a 20 polypropylene article, flattened in its inferior side, folded in curves for inferior and superior, mouth verticalizada for top, obtuse and leaked in the inferior side in its section frontal, with external rises of rounded off, prolonged and diametrical corner, and that they are extended horizontally for section of brings; said section of it brings, projected with a puncture equalizer for compression and suction of air, in its superior side, and 25 another puncture in the inferior side for the drainings for exterior, proceeding from carnalities formed between external rises of pipe of a device duchy and internal spaces between the pipe of the device for vaults; said pipe, carrying a spring spiral and fist for movements of the devices: fig.2; fig.3; fig.4; fig.5; fig.6; fig.7; fig.8; fig.9; said pipe, it was formed to introduce in the vaginal canal leading said devices in its interior, to 30 surround ace vaults and to allow that such devices if dislocate from its interior for its exterior and carry through collection of cytological material, banns with duchy of the rudimentary remaining portions in the vaults, and are pulled for bring, inside of the said pipe for vaults, eliminating the necessity of the dilations of the canals, of the uses of

clamps in the portion, in the place of the ectropionização, the area of CANCER IN-SITU; eliminating anesthesias, beyond hurter, discomforts and expenses.

This form of construction of the pipe for the vaults (fig.1) of the PI0602136-0, came to prevent and to solve in the cleannesses of the vaults, a time that the pipe with 5 the described construction lode will make possible the simpler and practical periodic use extremely becoming that the usual method, that does not wait for the spontaneous scalings off; it eliminates the rudimentary remaining portions of the vaults before the pathogenicitiess if they form and for not needing the dilations of the vaginal canal.

2. E in accordance with the first device of the PI0602136-0, and in accordance with as a 10 device of the invention of the PI0602136-0, was created a device model duchy for internal use of the pipe for vaults of the PI0602136-0, that it ejects and it sucks for exterior, object of the clear, formed of a silica article, flexible, constructed gift folded for superior and obtuse in its section frontal; linked in the section of it brings to a parted pipe that is connected to a system electronic Injection with bombs that turbo collecting 15 for vase sucks bide and hardwired to a bomb that ejects products of cleannesses, of separate reservoirs, for use of adjusted product to kill hostesses and HPV 'S in the vaults of the col of the uterus.

3. In accordance with the first device of the PI0602136-0, and in accordance with one third device of the invention of the PI0602136-0, was created a device model duchy for 20 internal use of the pipe for vaults of the PI0602136-0 that ejects e it flows off for exterior, object of the clear gift, a device model duchy for internal use of the pipe for the vaults, a device model duchy of a prolonged and flexible, linked pipe to a syringe model, and that it ejects for system of manual physical resource; e flows off for exterior.

4. In accordance with the first device of the PI0602136-0, and in accordance with one 25 room device of the invention of the PI0602136-0, was created a device model applicator for vaults, for internal use of the pipe for vaults of the PI0602136-0, a formed of a silica article, flexible, constructed pipe folded for superior and obtuse in its section frontal; to apply creams in the vaults by means of manual, physical ejector.

5. In accordance with the first device of the invention of the PI0602136-0, in agreement 30 to a fifth device of the invention of the PI0602136-0, was created a device model gynecological swab for collection of the cytological material of the vaults for the preventive examination of Papanicolaou, for internal use of the pipe for vaults of the PI0602136-0, object of the gift pioneer patent, a formed of a silica article, flexible,

constructed pipe folded for superior and obtuse in its section frontal and coated of a cellulose article; for collection for resource of physical displacement.

6. In accordance with first device PI0602136-0 and in accordance with one sixth device of the invention of the PI0602136-0, was created a device gynecological teething 5 ring for collection of the cytological material of the vaults for the preventive examination of Papanicolaou, for internal use of the pipe for vaults of the PI0602136-0, object of the gift pioneer patent, a formed pipe of a silica article, flexible.

7. O superficial of the device gynecological teething ring; e the section of the pipe that ejects spare air hardwired to a bomb that it ejects; it came to collect for resource of 10 suction and physical displacement.

7. In accordance with the first one of the PI0602136-0, and the sixth device of the invention of the PI0602136-0, and in agreement to one seventh device of the invention of the PI0602136-0, was created a gynecological *surged device for collection of the cytological material of the cervical canal for the preventive examination of 15 Papanicolaou, for internal use of one *model of pipe for vaults of the PI0602136-0, a formed of a silica article, flexible, constructed pipe folded for superior and obtuse in its section frontal; linked in the section of it brings to a pipe parted that is connected to a fixed system Injection electronic, with bombs that collecting turbo for surface of the device sucks gynecological teething ring; e the section of the pipe that ejects spare air 20 for section intercalated, connected to a bomb that it ejects for static pressure (P.E.); e that came to collect by means of suction and physical displacement.

8. In accordance with first and the seventh device of the invention of the PI0602136-0, and in accordance with one eighth device of the invention of the PI0602136-0, was created a gynecological *surged device for collection of the cytological material of the 25 uterine canal for the preventive examination of Papanicolaou, for internal use of one model of pipe for vaults of the PI0602136-0, constructed understanding the seventh device of seventh invents, with its section prolonged frontal and adjusted for deep of the uterus, carrying as a pipe with two punctures in its section of it brings; formed of a silica article, folded in curve for superior, obtuse in its section frontal; projected to cross 30 the uterine isthmus, for the displacement of the device teething ring, cytological collector and to be collected for its interior; e collected for the interior of the model of pipe for vaults of the first one I invent, with cytological material in its interior.

9. In accordance with the first device and the fifth device of the invention of the PI0602136-0, and in accordance with one nineth device of the invention of the PI0602136-0, was created a gynecological *surged device for collection of the cytological material of the surface of the portion, previous and posterior wall of the 5 vaginal canal, for the preventive examination of Papanicolaou, internal use of one *model of pipe for vaults, of the PI0602136-0, a pipe in format of a spoon, formed of a silica article, flexible, constructed with the punctures that it sucks horizontal line, in format of a bolter for superior and with rises laterals in the rim and obtuse in section frontal; linked in the section of it brings to a parted pipe that is connected to a system 10 electronic Injection with bombs that collecting turbo for surface of the device sucks gynecological teething ring and the section of the pipe that ejects spare air, connected to a bomb that it ejects; said device gynecological teething ring, in use:
1°) its section frontal is pushed individually for front on slope, for surface of the portion;
2°) the device model of pipe for vaults is pulled 2cm. for it brings harvesting, sucking;
15 3°) the pulled gynecological teething ring for brings, collected;
4 °) devices walls vaginal pushed by fist on slope;
5°) pipe model for vaults is removed of vaginal the vaginal canal with devices walls having harvested sucking; it comes to collect by means of suction and physical displacement. An adapter for optional control of the ticket of the air that it sucks and the 20 air was foreseen that ejects of the system electronic ejection mounted with bombs.

The pipe of the device for vaults of the PI0602136-0, came as a Wiper Device for the Restoration of the Circumcision for the New Will and could be acquired in different sizes and diameters.

The invention of the PI0602136-0, was described, to follow, regarding to the 25 illustrated drawings, in which:

1.Fig.1, shows laterally for sections (, B, C, D) invents it of the pipe (1) for vaults;

fig.1-A it shows transversal cut, of the section frontal (B and C), sides (F and E) of the tracks (6-A) of the internal section, and flattened inferior side (3-A) of 30 the pipe (1);

fig.1-B it shows transversal cut, tracks (6-B) of the internal section, inferior side (3) of the leaked section of the mouth (2) and rises (4) of the pipe (1);

fig.1-C shows inferior side of the pipe (1);

2. Fig.2 show laterally for sections (A, B, C) of it invent of the device duchy (16) for vaults and internal use of the device pipe for vaults (fig 1);

Fig.2-A laterally shows to the device duchy for vaults (16), in the internal section of the pipe (fig 1);

5 fig.2-B it shows to lateral a model of mouth and verticalizado track of the device (fig 1);

Fig.2-C laterally shows to the device duchy (16) in use, in disposal surrounding in 360°, the vaults posterior (AP) and in the previous one (AA);

Fig.2-D shows to cut vertex of the device duchy (16) in use in the vaults;

10 Fig. 2-E shows to cut frontal of the section frontal (a) of the device duchy (16) and (d) of the device (fig 1);

Figs. 2-F and 2-G show to project and appearance of the fixed system \x{201C} electronic injection of reservoirs (22) separate for use of devices;

Fig. 2-H came showing fig. 2, for better hygienic cleaning of the col, for a device 15 duchy with system of it I invent EP0363519 the 1, with a bomb (47) that it ejects, internal heater (48); that it does not suck and that its duchy is not folded for vaults, is different; it does not take care of to ace vaults.

3. Fig.3 shows to a device model duchy (30) for vaults of a pipe (18 - J), that it ejects for system (29) of manual resource;

20 4. Fig.4 inside shows to lateral of a gynecological device applicator (42) of the pipe (1), for application of creams for physical resource;

Fig.4- the sample laterally the not taken care of previous and posterior vaults with product (31-F) of the current model of applicator (31-C);

5. Fig.5 and 5-A inside show to lateral of a device gynecological 25 swab (32) of the pipe (1), for collection of the cytological material of the vaults for physical resource;

Fig.5-B shows to a device model swab (32 \x{2013} B) for collection of cytological material and device use I speculate (40-D);

6. Fig.6 laterally shows of the device pipe gynecological teething ring (33) for 30 collection of the cytological material of the vaults of the col of the uterus for resource of suction and physical displacement;

Fig. 6-A shows to transversal cut of the section frontal of the device gynecological teething ring (33), vertical rises with rims obtuse (OB); e in clipping the rises (4-C) horizontal obtuse;

7. Fig.7 and fig.7-A show to lateral of the device gynecological teething ring (34) for collection of cytological material of the cervical canal for resources of suction and physical displacement;

fig.7-A shows to lateral cut of the device gynecological teething ring (34) for 5 cervical canal, and rises (4-C) with horizontal rims, obtuse (C) for inferior, a model of rises for collection of the cytological material of the cervical and uterine canal (35), for resources of suction and physical displacement;

8. Fig.8 and fig 7-A shows to lateral cut in clipping of the device gynecological teething ring (35) and rises (4-C) with horizontal rims, obtuse for inferior 10 (c); e shows in clipping (second) the pipe (1-2), carrying two punctures (5) inside of the pipe (1), that it leads until the isthmus (i) of the uterus the device teething ring (35) for uterine canal for its internal part to external it in the uterine canal, for collection of the cytological material of the uterine canal for resources of suction and physical displacement;

15 9. Fig.9 shows to the device gynecological teething ring frontalmente (36);

fig. 9-A shows to lateral of the section frontal (36) and obtuse (4-D) of the device gynecological teething ring;

fig.9-B shows to transversal cut of the pipes 18-S and 18-J, of the devices (36), on the part intern of the pipe (fig. 1);

20 fig.9-C shows to the device gynecological teething ring laterally (36) to collect in the surface of the vaginal portion and walls, in the internal section of the pipe (fig 1);

fig.9-D shows to an adapting device (38) for option of controls for valves (38-A) of the tickets of the air and liquids of the system mounted (fig.2-F) for devices for 25 use in the pipe (fig.1); e

Figs.10 shows to frontal and figs laterally. 1, 2, of it I invent of disposition three-function gynecological spatula of the MU 7702087-1U, for collection of the cytological material; that it is not folded; to take care of the vaults it is necessary to dilator vaginal canal with I speculate, and device use clamp; being that its section (9) is 30 penetrated in the uterine canal and the section (10) it turns in the surface of the portion for collection;

Figs.11 shows the walls in the dilated vaginal canal and hidden for device use I speculate (40-D); device use clamp (40); device spatula (39-A) in the surface of the

portion (39) and collection of cytological material in the uterus for examination of Papanicolaou.

E the pioneer patent of the PI0602136-0, was described regarding to the drawings above related, in such a way:

5 An anatomical, prolonged and horizontal pipe (1); carrying the spring spiral (7); the adjuster (8,) with orringues (9) for adjustments of the devices functions supporting it; said adjuster, leaked horizontally in its center for where if it puts into motion the pipe of the fist (10-A) with pipe of device for use in its interior. e on measures (12) of the said adjuster (8), that it functions measuring the part frontal of the device that if dislocates
10 for is of the mouth (2), on the part external of the said pipe for the vaults (1), becoming practical and efficient its use in the col of the uterus; in the present disposal, the pipe (1), its inferior side (3-A), and section frontal (d) are flattened, leaked (3), e folded in curve for superior corresponding to the angles of the mouth (2), more allowing movements to move away, to approach and to oscillate in turns of 360° skirting the
15 uterine portion, for internal displacements of devices for exterior, superior side in use in the vaults of the col and for it brings, for its interior; to move itself for front, for it brings for effect of the spring spiral (7), regulating adjuster (8), for the differences of the depths of the vaults posterior and the previous one at the moment of the turns in 360° when surrounding in functioning in the vaults in the col of the uterus, without the
20 necessity of dilations of the reproductive agencies. With linked adequate devices to a system (2-F) fixed mounted and placed in the use position, to eradicate HPV`S and primitive hostesses whom if they form as barns in the vaults, of the remaining portions of the cultures of the alkaline and harmonies bases; e without the necessity of dilator the vaginal canal, using as patrol device pipe for vaults (1).

25 Of conformity with how much they illustrate the related devices above (figs.2 - 2-F), the gift pioneer patent, consisted in a model of duchy for vaults of internal use of pipe (1), one duchy (16) that it ejects and it sucks for vase bide for electronic system collecting turbo; formed of a prolonged, flexible pipe (18-J), diametrical and with one duchy (16), prolonged, tubular and rounded off; carrying parted pipe (18-S) and that
30 he is fixed horizontally in the interior of the fist (10-A) for manuscript for effect of the spring (7), of the device pipe (fig 1); e pipe flexible, prolonged and parted (18-J and 18-S) linked the bomb (- 18 J - B) that it ejects e (18-S - B) the bomb that it sucks of the fixed system mounted (fig. 2-F); of separate reservoirs (22, 22-A, 22-B, 22-C), for use of product adjusted for HPV `S; said system mounted for use (fig 2-F), external

warming door (23), warm circulator air drier (24), filter (25), regulators (26), measurers (27); for device use duchy (16) for the vaults.

3. Of conformity with how much it illustrates (fig 3) the gift pioneer patent it consists of a device model duchy for the vaults (30) for internal use of the pipe (1), object of the 5 gift pioneer patent, carrying similar reservoir to a syringe pipe; linked to a prolonged and flexible pipe (18-J), that it is dislocated by means of the spring (7); of the fist adjuster (8) with or rings (9) for adjustments and fist (10-A); it came to eject for resource of manual system (29), and to drain for exterior between caneletas and protectors (13-1 and 13).

10 4. Of conformity with how much it illustrates (fig.4) the gift pioneer patent it consists of a device model applicator for the vaults (31); for internal use of the pipe (1), a pipe (31), to dislocate creams for the vaults for resource of manual, physical ejector; carrying adjuster (8) with or rings (9) for adjustments.

5. Of conformity with how much they illustrate (figs.5 and 5-A) consists of a device 15 model gynecological swab (32) for collection of the cytological material of the vaults for the preventive examination of Papanicolaou, for internal use of the pipe (1), a pipe (32), for collection for resource of physical displacement; carrying adjuster (8) with orringues (9) for adjustments.

6. Of conformity with how much they illustrate (figs.6 and 6-A), the gift pioneer patent 20 consists of a device gynecological teething ring (33) for collection of the cytological material of the vaults for the preventive examination of Papanicolaou, for internal use of the pipe (1); it came to collect for resource of suction and physical displacement; carrying adjuster (8) with orringues (9) for adjustments.

7. Of conformity with how much they illustrate (figs.7 and 7-A) the gift pioneer patent 25 it consists of a device gynecological teething ring (34) for collection of the cytological material of the cervical canal for the preventive examination of Papanicolaou, for internal use of one *model of the pipe for vaults (1), and use of the system electronic Injection of the device (fig 6); a pipe (18-S), constructed folded for superior, obtuse and with punctures of duchy in its section frontal (34); linked in the section of it brings to a 30 pipe parted that its extremities are connected to a system electronic Injection of the device (fig 6), with bombs that frontal of the device sucks for surface of the section gynecological teething ring (34); e the section of the pipe (18-J) that it ejects spare air intercalated in the section frontal, hardwired to a bomb that it ejects; it came to collect

for resource of suction and physical displacement; it came carrying adjuster (8) with orringues (9) for adjustments.

8. Of conformity with how much they illustrate (figs.8 and 7-A), a device is mentioned to it gynecological teething ring (35) for collection of the cytological material of the 5 uterine canal for the preventive examination of Papanicolaou, for internal use of one *model of the pipe for vaults (1), and use of the system electronic Injection of the device (fig. 6); it came to collect by means of suction and physical displacement in the uterine canal; e the section frontal (d) of the pipe for vaults (1) was formed as the characteristics of the device of (fig 7); it came carrying adjuster (8) with orringues (9) 10 for adjustments.

9. Of conformity with how much they illustrate (figs.9 and 9-D), it consists of a device gynecological teething ring (36) for collection of the cytological material of the surface of the portion (39) in the ectocervicix, of the walls previous and posterior vaginal for the preventive examination of Papanicolaou, for internal use of one *model of the pipe 15 (1), object of the clear gift, and for use of the system electronic Injection of the device (fig 6); a device (36) tubular prolonged, formed of a silica article, in format of a spoon in its section frontal; constructed with the punctures horizontal and in format of one it bolts (36-E) for superior; with rises (4-E) intercalated with spaces (36-D) in the rim lateral, and rise (4 - D) obtuse collecting in the section frontal; the devices of the 20 walls vaginal (36-A and 36 - B) if dislocate individually from (36) from the surface of the portion, for fist (8) for front on slopes (36-C), for superior and for it brings, for inferior; linked in the section of it brings to a parted pipe that is connected to a system electronic Injection of sixth invents with bombs that gynecological teething ring sucks for surface of the bolter (36-E) of the pipe of the device (36); e the section of the pipe 25 (18 - J) that it ejects spare air, connected to a bomb that it ejects; it comes to collect by means of suction and physical displacement; in the objective gift of I invent it, the section frontal (d) of the pipe for vaults (1), comes with its closed inferior side (3); a device is foreseen adapting (38), (fig.9-D) for option of controls for valves (38-A) of the tickets of air; it came carrying adjuster (8) with orringues (9) for adjustments.

30 In view of the inefficiency in the manuscript of the devices: fig.1; fig.2; fig.3; fig.4; fig. 5; fig.6; fig.7; fig.8; fig.9, for use in the interior of the pipe (fig.1 of the PI0602136-0), had the tension caused for the curves of the sections frontals of these devices, for having them been in the dependence of the spring (7) for the adjustment in the reach between the different depths previous and posterior to surround in the vaults

of the col at the moment of the displacements for the construction of the fist (10-A) with the adjuster (8) and orringues of adjustments (9) that it does not possess thread.

To guarantee the best efficiency in the manuscript of device for use of the conducting pipe the CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL was developed the disposal, that brings:

1-a. A model of pipe of the PI0602136-0, for vaults of the col of uterus formed with a fist that adjusts the devices for use in its interior for metric thread system, object of the clear gift of Model of Utility, that comes to better the reach in the adjustment of the manuscript of the proper user, when in use, it enters the different depths of the vaults previous and posterior in the col.

2-a. The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL was developed the disposal, that brings a model of device duchy of two pipes prolonged and flexible with the section frontal in the form 15 of a small ball for better landslide; carrying cantos and quinas rounded off and with lateral openings for better liquid draining it stops the suction of the pipe that it sucks; a device model duchy that it brings the chock in a position of the section of brings of the prolonged and horizontal pipe for the rabbet of the fist, carrying metric thread for adjustment of this duchy;

20 3-a. The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL, a model of device for collection of the cytological material of the cervical canal was developed the disposal, in form of a brush in the section frontal obtuse, for use in the conducting pipe;

4-a. The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR 25 VAULTS OF the COL OF UTERUS, that brings a model of device duchy of manual use, formed of a pipe prolonged flexible with the section was developed the disposal frontal obtuse in the form of a small ball for better landslide; carrying cantos and quinas rounded off and with lateral openings for better liquid draining for the suction of the punctures that flow off for exterior of the pipe and to vulvae; a device model duchy that 30 it brings the chock in a position of the behind section of the prolonged and horizontal pipe for the rabbet of the fist, carrying metric thread for adjustment of this duchy;

5-a. the CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL, a model of device (Fig. was developed the disposal 9-A), of (fig. 9 ; pg 16 of the PI0602136-0) that it comes with the pipe for collection of

the material of the surface of the portion with its behind section with chock for use of the fist adjuster with metric thread;

6-a. The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL, a device model was developed the disposal swab for 5 collections of the cytological material in the vaults of the col, with the section frontal obtuse, for use in the conducting pipe;

7-a. The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL, a model of gynecological device was developed the disposal applicator for applications in the vaults of the col, in salient format diametrical 10 in its section frontal obtuse, for use of the conducting pipe;

8-a. The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL, the model of the device was developed the disposal (fig.6; pg.14 of the PI0602136-0), understood for a model of a prolonged and flexible pipe obtuse in its section frontal, for applications and collections of the cytological 15 material of the vaults of the col, that brings the chock in the behind section of its prolonged and flexible pipe; it comes to use of the fist adjuster with metric thread (8-M) of the conducting pipe;

9-a. The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS, understood for flexible and obtuse devices was 20 developed the disposal prolonged in its section frontal (fig.7 and fig.8, pg. 15 of the PI0602136-0), to applications of products and collections of the cytological material of the cervical and uterine canal, come carrying the chock in the behind section of its pipe prolonged and flexible for use of the fist adjuster with metric thread of the conducting pipe.

25 The CLEAR GIFT DE MODELO OF UTILITY OF PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL will start to be described regarding to the illustrated drawings, in which:

A fig.1-A.2, laterally shows to the behind section (a) of the conducting pipe for vaults, carrying thread in its internal section (8-M), for adjustment of devices in the fist 30 (8-A);

Fig.1-8-2, shows the fist laterally (8-A) carrying metric thread (8-M), for manual adjustment of the devices in the conducting pipe when in use in the vaults;

Fig 2,2 shows to device model duchy (16.2) that it ejects and it sucks (18-J and 18-S) and carrying chock (21-M) for use of the fist (8-A) of the pipe (1-A-2); e fig. 2.2-E, shows to the section frontal transversally obtuse of the device duchy;

Fig. 7.2 laterally show a model of gynecological collector for collection in the

5 cervical canal, formed of a brush (4-2) that if fold for superior, on the inside of the conducting pipe, for its section frontal (34-2) and carrying chock (21-M);

10 fig.3-M, shows to only jatea device duchy manual that of section frontal obtuse with chock (21-M), for use of the fist with thread (8-A) and carrying chock (21-M).

Fig. 9-A, shows device for collection of the cytological material of the surface of the
15 portion in the ectocérvicix and carrying chock (21-M);

Fig. 5-B laterally shows a model of gynecological collecting swab for collection in the cervical canal (4-2) that if fold on the inside of the conducting pipe for its section frontal (34-2) and carrying chock (21-M);

Fig. 4-B, laterally shows to device for applications of products in the vaults of the
20 col with its section obtuse and carrying chock (21-M); e fig. 4-C, shows to cut of the section frontal of this applicator;

Fig. 6-B laterally shows to the model of the device (fig.6; pg.14 of the PI0602136-0), for applications and collections of the cytological material of the vaults of the col, that brings the chock (21-M); it comes to use of the fist adjuster (8-A,) with metric
25 thread (8-M) of the conducting pipe; e (fig. 6-A) shows to cut frontal of this device;

Figs. 7-B and fig.8-B; it laterally shows to the models of the devices (fig.6; pg.15 of the PI0602136-0), for applications and collections of the cytological material of the cervical canal that brings the chock (21-M) for use of the fist adjuster (8-A,) with metric thread (8-M) of the conducting pipe; e fig. 7-A shows to cut frontal of these devices;

30 The CLEAR GIFT DE MODELO OF UTILITY OF PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL will start to be described regarding to the drawings of the devices above related a model (fig.1-A. - 2) of the pipe (fig.1; pg.1 of the PI0602136-0), formed for:

1-a.Um anatomical, prolonged and horizontal pipe (1-A..2); folded in curves for
35 inferior and superior, verticalizada, obtuse (2) in its superior side in the section frontal (d) and leaked anatomical mouth in the inferior side (3), carrying external rises (4) with cantos and rounded off, diametrical quinas and prolonged to surround in the vaults,

object of the clear gift; e each said rise (4), if extends external for stretch of the sections (D, C and B), of the pipe (1-A. - 2), formed slippery ones (4) have the purpose to improve the displacements between the epitheliums and the walls of the genital agencies; the stretch of the behind section (B) of the said pipe (fig.1-A--2), are formed 5 with two punctures (5A and 5B) in its sides upper/lower; said punctures (5A and 5B) they are made use on the part external of vulva for the equalizações in drainings of the compression and suction; in two lateral faces (E end F; fig.1-A) internal of the pipe (1-A-2), carries tracks corridors (6-A and 6-B) internal, for the displacements of pipes of devices for use of the conducting pipe; said tracks (6-A), they initiate locating device 10 for use from the mouth (2) of the section (D for B) of the conducting pipe; said conducting pipe, being able to be squared by its interior (C-12), for located displacements of devices; it comes with a fist adjuster (8-A,) with metric thread (8-M), and leaked horizontally in its center for where if it puts into motion with pipes of devices for use in its interior and incased in its hollow (8-C) of the internal section for 15 chock (21-M) of the devices for use in the vaults, and on measures (12) of the scale that functions measuring the part frontal of the device that if dislocates for is of the mouth (2), on the part external of the said pipe for the vaults (1-A-2), becoming practical and efficient its use in the col of the uterus; in the present disposal, the pipe (1-A-2), its inferior side (3-A), and section frontal (D; fig.1-B) is flattened; 20 (leaked (3; fig.1-C), and folded in curve for superior corresponding to the angles of the mouth (2), more allowing movements to move away themselves, to approach and to oscillate in turns of 360° skirting the uterine portion, offering to comfort and comfort for internal displacements of devices for exterior, superior side and brings, its interior when in use in the vaults of the col.

25 **2-a.** Of conformity with how much they illustrate the devices above related the Clear Present a of Model of Utility Preventive Device For Vaults of the Col of Uterus, it consists of a model of duchy (16.2) for vaults, of internal use of the pipe model (fig 1-A.2), formed of a parted pipe prolonged, flexible (18-J and 18-S), that it ejects and it sucks for electronic system collecting turbo; one duchy diametrical (Fig. 2.2-E) in a 30 format of a small ball; projected folded in curve for superior obtuse in the section frontal (a), to wash and to disinfect in the vaults; carrying lateral openings (4-L); carrying tracks intercalated for sections (and the B) lateral (19 and 19-A), horizontal lines; verticalizados or carrying its body in squared format (c 12), for displacements for internal section of the pipe (1-A-2); carrying pipe parted (18-S) with chock (21-M) and

hat he is fixed horizontally in the interior of the fist adjuster (8-A) that it carries metric thread (8-M) for displacement of devices on the part intern of the pipe (1-A-2); e flexible, prolonged and parted pipe (18-J and 18-S) linked bomb (18 - J - B) that it ejects and to the pipe (18-S - B) the bomb that it sucks of the fixed system mounted (fig. 5 2-F of), separate reservoirs (22, 22-A, 22-B, 22-C), for use of product adjusted for HPV 'S; said system mounted for use (fig 2-F; pg. 7, of the PI06021360), that it carries external heater (23); warm circulator air drier (24); filter (25); regulators (26) and measurers (27), for device use duchy (16.2) for the vaults of the col.

3-a. The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR 10 VAULTS OF the UTERUS COL, a device model was developed the disposal (fig 7.2; pg. 19) to collect cytological material of the cervical canal formed by a brush (4-2), that if fold for superior in its section frontal (34-2) to if dislocating on the part intern of the mouth (2) of the pipe (1-A-2) for resources of the internal section of the adjuster with thread and for chock (21-M) of the device; carrying tracks intercalated for sections (and 15 the B), laterals (19 and 19-A), horizontal lines; verticalizados or carrying its body in squared format (c 12), for displacements for internal section of the pipe (1-A-2); e when removed of the canal on the part intern of the conducting pipe (1-A-2), this collector is ejected for is of the bit conducting pipe (1-A-2); the device when removed, cut in the section (A) for a shears and immerge into a vase with appropriate product.

20 4-a. Of conformity with how much they illustrate the devices above related the Clear Gift Model of Utility Preventive Device For Vaults of the Col of Uterus, it consists of a model of duchy for vaults that Fig. only ejects (3 M; pg. 20) of internal use of the conducting pipe (fig. 1-A.2), a model of duchy (16.2-b), formed of a prolonged pipe flexible (18-J) and obtuse in its section frontal (a); the behind section of this pipe is 25 linked to a reservoir as an injection syringe that it ejects for resources manual; one duchy (16,2), in a model with format of a small ball; projected folded in curve for superior (a), carrying lateral openings (4-L); carrying tracks intercalated for sections (and the B), laterals (19 and 19-A), horizontal lines; verticalizados or carrying its body in squared format (c 12), for displacements for internal section of the pipe (1-A-2); 30 carrying pipe prolonged (18-J) with chock (21-M) and that he is fixed horizontally in the interior of the fist adjuster (8-A) that it carries metric thread (8-M) for displacement of devices on the part intern of the pipe (1-A-2); it comes to wash and to disinfect in the vaults;

5 **it.** the CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL was developed the disposal, a model of the device that comes carrying the pipe (36) of the PI0602136-0 fig. 9 ; pg. 16, represented for the pipe (36-A, Fig. 9-A; pg. 20) of the Clear Gift of Model of Utility, come to collection of the 5 cytological material of the surface of the portion, in the present disposal the behind section of this pipe (36-A), come to use of the fist adjuster (8-A,) with metric thread (8-M), and leaked horizontally in its center for where if it puts into motion with pipes of devices for use in the interior of the pipe (1-A-2), and the section of brings of the said one (36-A), incased in the hollow (8-C) of the internal section of the adjuster for its 10 chock (21-M), and on measures (12) of the scale that functions measuring the part frontal of the device (36-A) that it is dislocated for it are of the mouth of the conducting pipe (1-A-2) that it collects in the surface of the portion; carrying tracks intercalated for sections (and the B), laterals (19 and 19-A), horizontal lines; verticalizados or carrying its body in squared format (c 12), for displacements for internal section of the pipe (1- 15 A-2);

6 **it.** The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL, a model of collecting device was developed the disposal gynecological swab (fig 5-b; pg.21), stops it collects of the cytological material, formed for a hollow pipe, with the section frontal obtuse; carrying chock (21- 20 M) it comes to use of the fist adjuster (8-A,) with metric thread (8-M) of the conducting pipe; carrying tracks intercalated for sections (and the B), laterals (19 and 19-A), horizontal lines; verticalizados or carrying its body in squared format (c 12), for displacements for internal section of the pipe (1-A-2);

7 **it.** The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR 25 VAULTS OF the UTERUS COL, a model of device for gynecological applicator for the vaults of the col was developed the disposal (fig.4-b; pg.21), formed for a prolonged pipe flexible (31), with diametrical salience in the section frontal obtuse (fig. 4-C); with chock (21-M) it comes to use of the fist adjuster (8-A,) with metric thread (8-M) of the conducting pipe; carrying tracks

30 intercalated for sections (and the B), laterals (19 and 19-A), horizontal lines; verticalizados or carrying its body in squared format (c 12), for displacements for internal section of the pipe (1-A-2);

8 **it.** The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the UTERUS COL, the model of the device was developed the disposal

(fig.6; pg.14 of the PI0602136-0), for applications and collections of the cytological material of the vaults of the col, the device (fig 6-B) that it brings the chock (21-M); it comes to use of the fist adjuster (8-A,) with metric thread (8-M) of the conducting pipe; carrying tracks intercalated for sections (and the B), laterals (19 and 19-A), horizontal 5 lines; verticalizados or carrying its body in squared format (c 12), for displacements for internal section of the pipe (1-A-2);

9 it. The CLEAR GIFT DE MODELO OF UTILITY in PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS, understood for prolonged and flexible devices was developed the disposal (fig.7 and fig.8, pg. 15 of the PI0602136-0), for applications 10 and collections of the cytological material of the cervical and uterine canal, the device (fig. 7-B and fig. 8-B), comes carrying chock (21-M) for use of the fist adjuster (8-A,) with metric thread (8-M) of the conducting pipe, carrying tracks intercalated for sections (and the B), laterals (19 and 19-A), horizontal lines; verticalizados or carrying its body in squared format (c 12), for displacements for internal section of the pipe (1- 15 A-2).

CLAIMS

1a. PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS compounded by a dismissed pipe (fig.-A-2), to lead devices for use in the vaults of the col of uterus, **characterized for** being a prolonged, horizontal pipe, mouth (2); directed for top with rounded off rises for all pipe (fig1-A-2); to carry thread (8-M) in its section of it brings (a); **characterized for** said pipe (1-A-2), to carry a fist adjuster (8-A) with thread (8-M) and hollow (8-C) in its internal section for rabbet of chocks (21 M) for displacements of devices for use in its interior; **characterized for** the pipe (1-A-2) to be anatomical, flattened in the sections (A, B, C, D); folded in curves for inferior and superior in the frontal section (d); anatomical mouth (2) in its superior side to the top, , the section of the front (d),closed or leaked anatomical mouth (2) in the inferior side (3); for this mouth (2) to carry external rises (4) with rounded off, diametrical and prolonged rises and if it extends external for stretch to the sections (D, C and B); **characterized for** in the stretch of the section , it brings (b) to carry two punctures (5A and 5B) in its sides upper/lower and between diametrical protectors (13-1 and 13); **characterized for** the two horizontal sides the vertical sides of the inside conducting pipe ((e) and (f); fig.1-A), to carry running tracks (6-A and 6-B); **characterized for** this conducting pipe, power to be squared on the part of inside (Fig. 1-A, C-12), for adjusted displacements of the models of devices of prolonged pipes squared;

2a. PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS compounded by one douche gynecological dismissible, (Fig. 2.2) by hygienic cleaning and applications in the vaults of the col of uterus, internal use of the pipe (fig.1-A-2), **characterized for** the model of the frontal section of douche (16.2), to be bending for superior; to be constructed in a format of a small ball and that it ejects for the sides openings and frontals of rounded off salience (4-L); carrying and parted prolonged, flexible pipe in the section that brings, ejects (18-J) and the pipe (18-S) sucks it; **characterized for** carrying the chock (21-M) for rabbets in the hollow (8-C) of the fist (8-M) of the conducting pipe (Fig. 1-A-2);**characterized for** carrying tracks intercalated for sections ((a) the (b)) lateral (19 and 19-A), horizontal lines or vertically; **characterized for** carrying its body for external

section prolonged in square formed (c 12) for displacements for square shaped internal section of the pipe (1-A-2);

5 **3a.** PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS compounded by a device to collect substance cytological of the cervical canal, in the form of a brush prolongs and diametrical in its frontal section (fig. 7.2) **characterized for** being a prolonged device formed for a brush (4-2), folded for superior and to fold for superior in its frontal section (34 - 2), if dislocating on the external part from the mouth (2) of the conducting pipe; **characterized for** carrying the chock (21-M) to rabbets in the hollow (8-C) of the fist (8-M) of the conducting pipe (Fig. 1-A-2);

10

15 **4a.** PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS compounded by the bad gynecological douche dismissible (Fig. 2.2) for vaults, of internal use of the pipe (fig.1-A-2), formed of a prolonged, flexible pipe (18-J) **characterized for** the model of the frontal section of the douche (16.2), to be obtuse, bending for superior, in a format of a ball (fig. 2.2-E) with lateral openings and frontals (41-L), with sides and rounded off salient and for the use of manual douche use, **characterized for** carrying the chock (21-M) for rabbets of the prolonged pipe of the hollow (8-C) of the fist (8-A) of the pipe (Fig. 1-A-2); **Characterized for** carrying tracks intercalated for sections (and the B) of the sides (19 and 19-A), horizontal or vertical lines; **characterized for** carrying its body for external section prolonged in a square form (c 12) for displacements for square shaped internal section of the pipe (1-A-2);

20 **5a.** PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS compounded by a device to collect the cytological substances of the surface of the portion (fig. 9-A) **characterized for** by the frontal section (40-D) of the pipe (36-A) to be bending for superior and stops backwards with sides and rounded off salience , collecting; and to carry lateral rises (4 - E) **characterized for** by the section (3) of the pipe (1-A-2) to carry slope for suspension of the front section of the pipe (36-A) **characterized for** by the behind section of this pipe (36-A) to carry chock (21-M) for use of the fist regulator (8-A) with metric thread (8-M) of the pipe (1-A-2);

6a. PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS compounded by a gynecological collecting device, one cotton carries in the form of a swab (fig 5-b; pg. 21), **characterized for** being formed by a hollow pipe (fig. 1-A-2) ; **characterized for** with the frontal section to be obtuse, bending for superior; **characterized for** carrying chock 5 (21-M) for use of the fist adjuster (8-A) with metric thread (8-M) of the conducting pipe.

7a. PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS compounded by a device applicator for applications in the vaults of the col (fig .4-b; pg. 21), formed for a prolonged flexible pipe (31), **characterized for** carrying diametrical salience in the section of the obtuse front, bending superior and to carry lateral openings (fig. 4-C); characterized 10 for carrying chock (21-M) in its section of it brings;

8a. PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS compounded by a device for applications and collections of the cytological material of the vaults, formed of a pipe parted (18-J and 18-S), prolonged and flexible (fig. 6-B), **characterized for** this device to be directed for top, bending for superior in its frontal section when if dislocating 15 for it of the mouth (2) of the conducting pipe; **characterized for** carrying chock (21-M); **characterized for** carrying rounded off rises (4-B), collecting (0B) with frontal and lateral salience(fig. 6-A);

9a. PREVENTIVE DEVICE FOR VAULTS OF the COL OF UTERUS, compounded by devices for applications and collections in the uterine canal (fig. 8-B) and cervical (fig. 7-B), parted, prolonged and flexible to apply products and to collect material cytological; 20 **characterized for** being formed of two conducting pipes (1-A-2) and the pipe (1-2) to lead devices for internal section of the pipe (1-A-2); **characterized for** the pipe (1-2) to carry the puncture (5) and (5-A) in its behind section for draining of air and for these devices to be directed for top , bending for superior in its sections frontals: (35) and (34), carrying 25 rises (4-C) bending it stops backwards (c), of rounded off, collecting relives; **characterized for** the pipes of the same devices to carry chock (21-M) in the behind section.

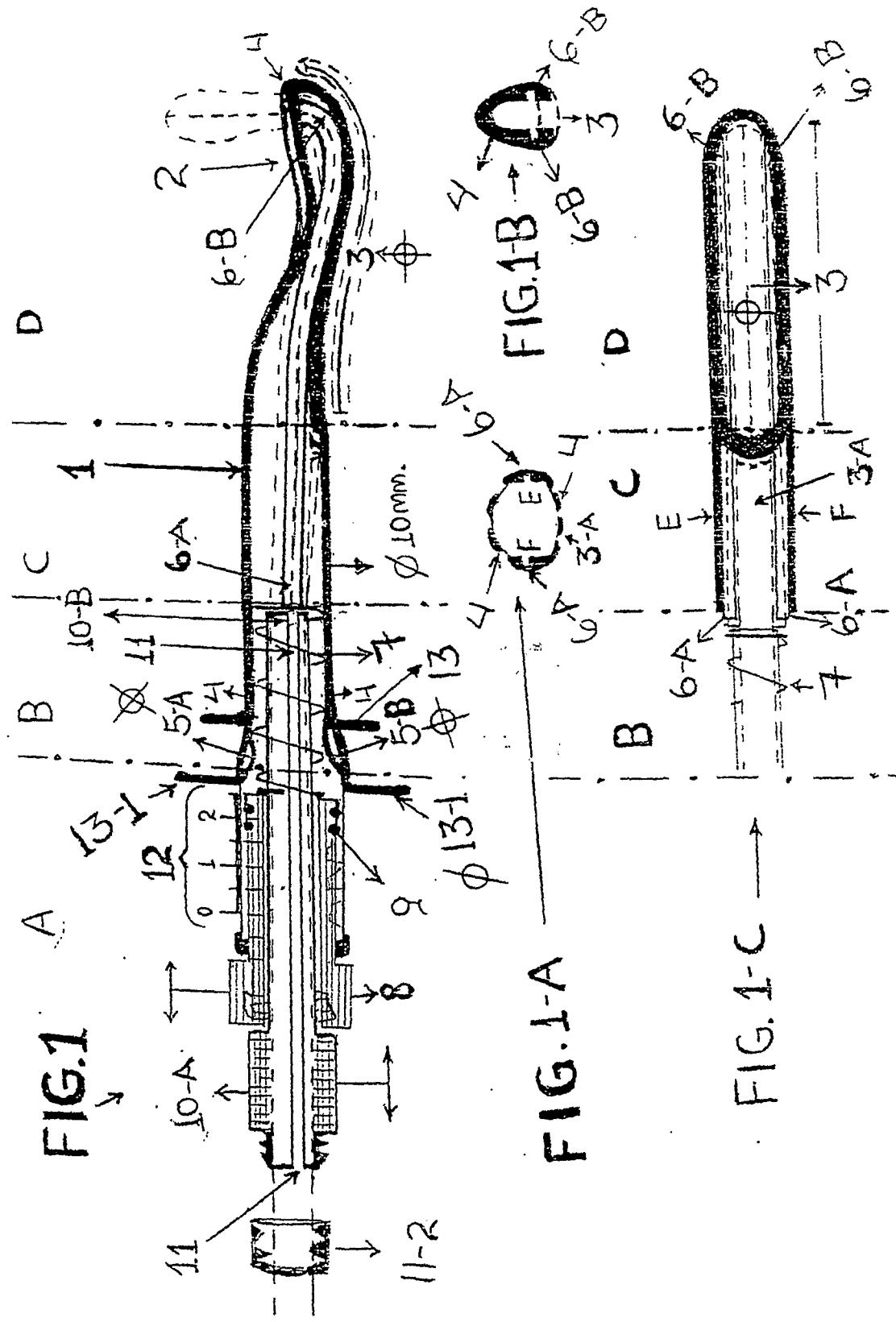
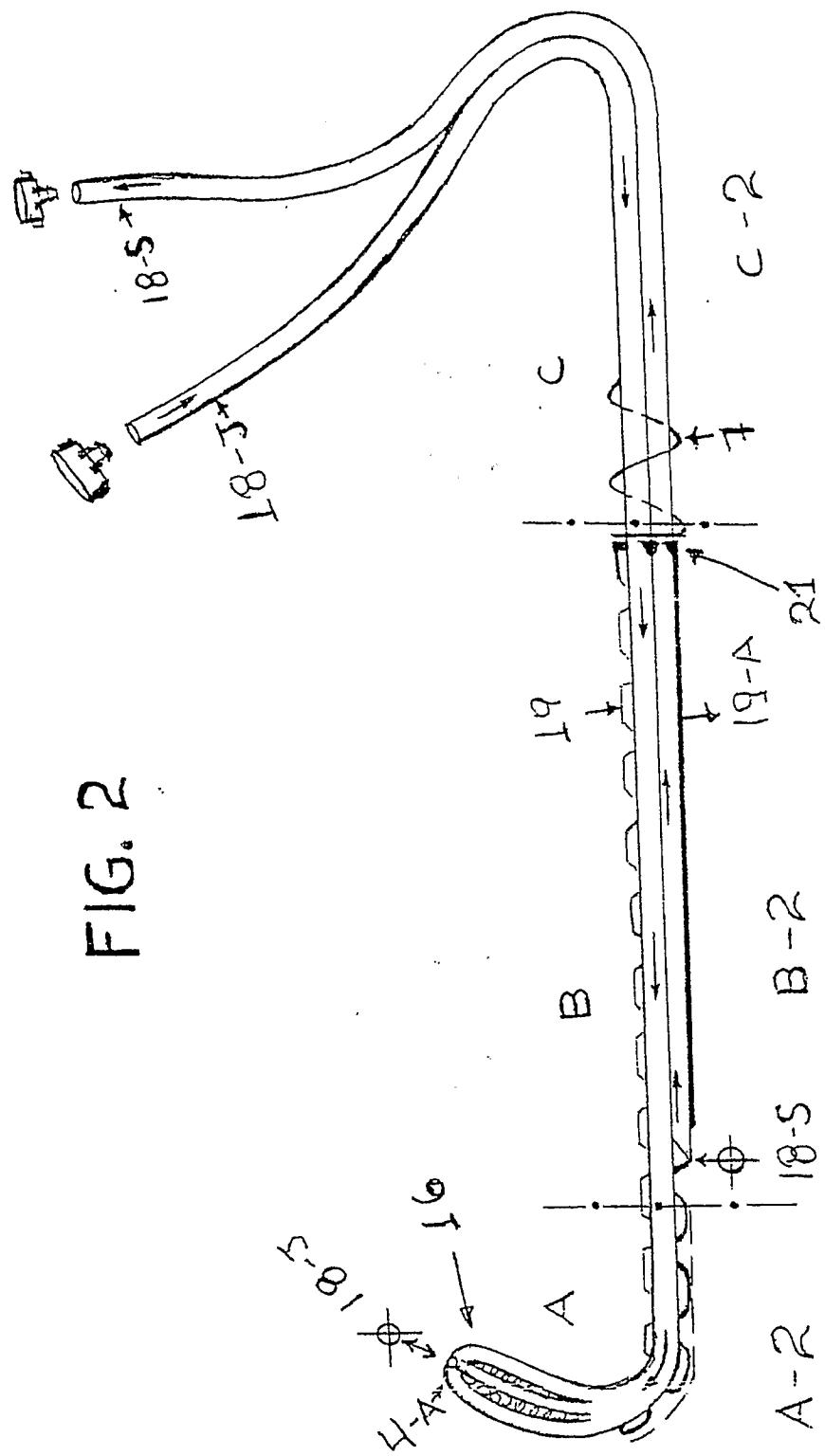


FIG. 2



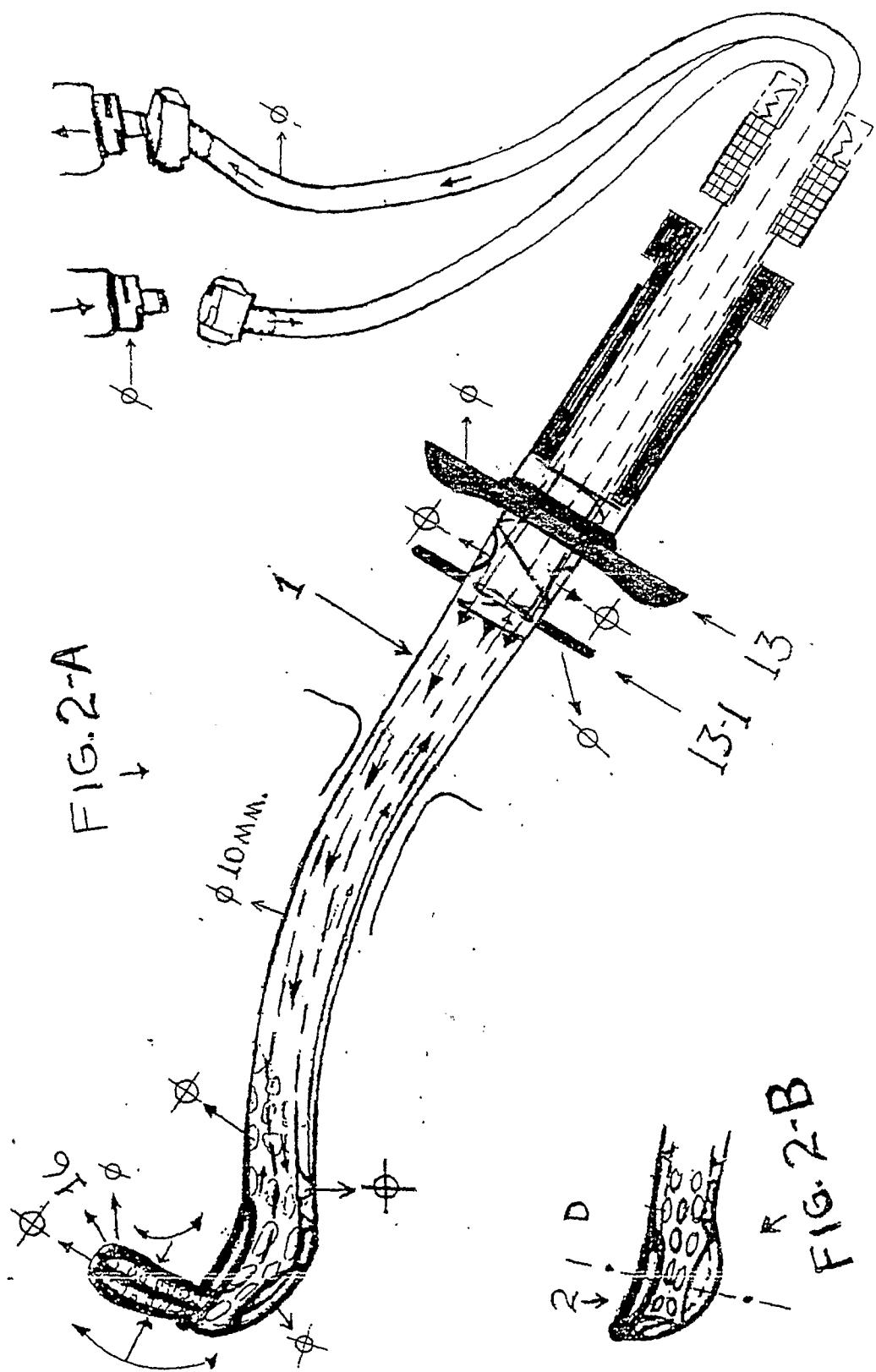


FIG. 2-C

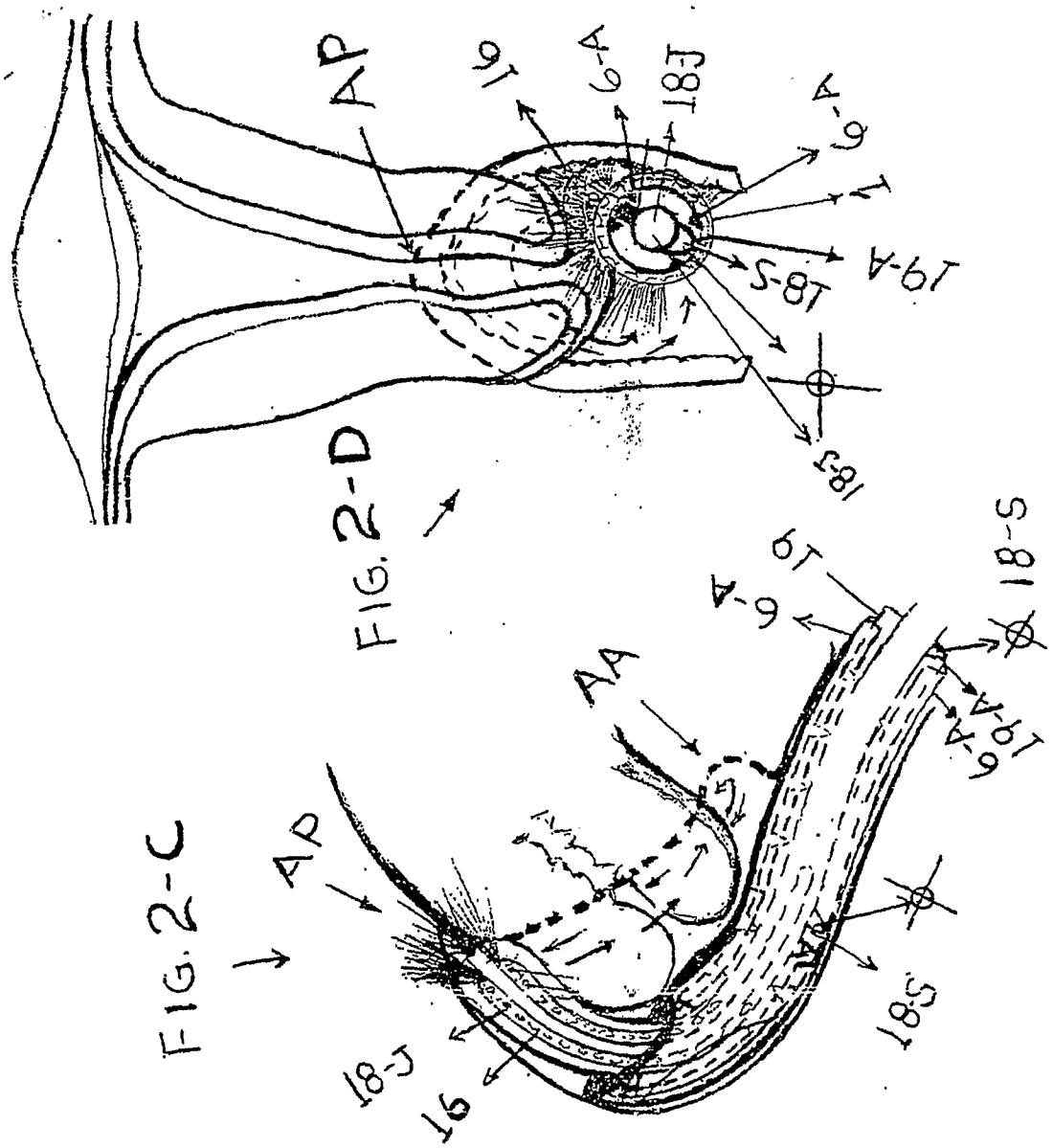


FIG. 2-E

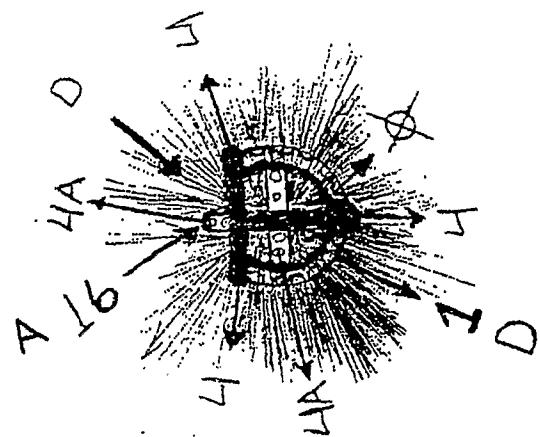
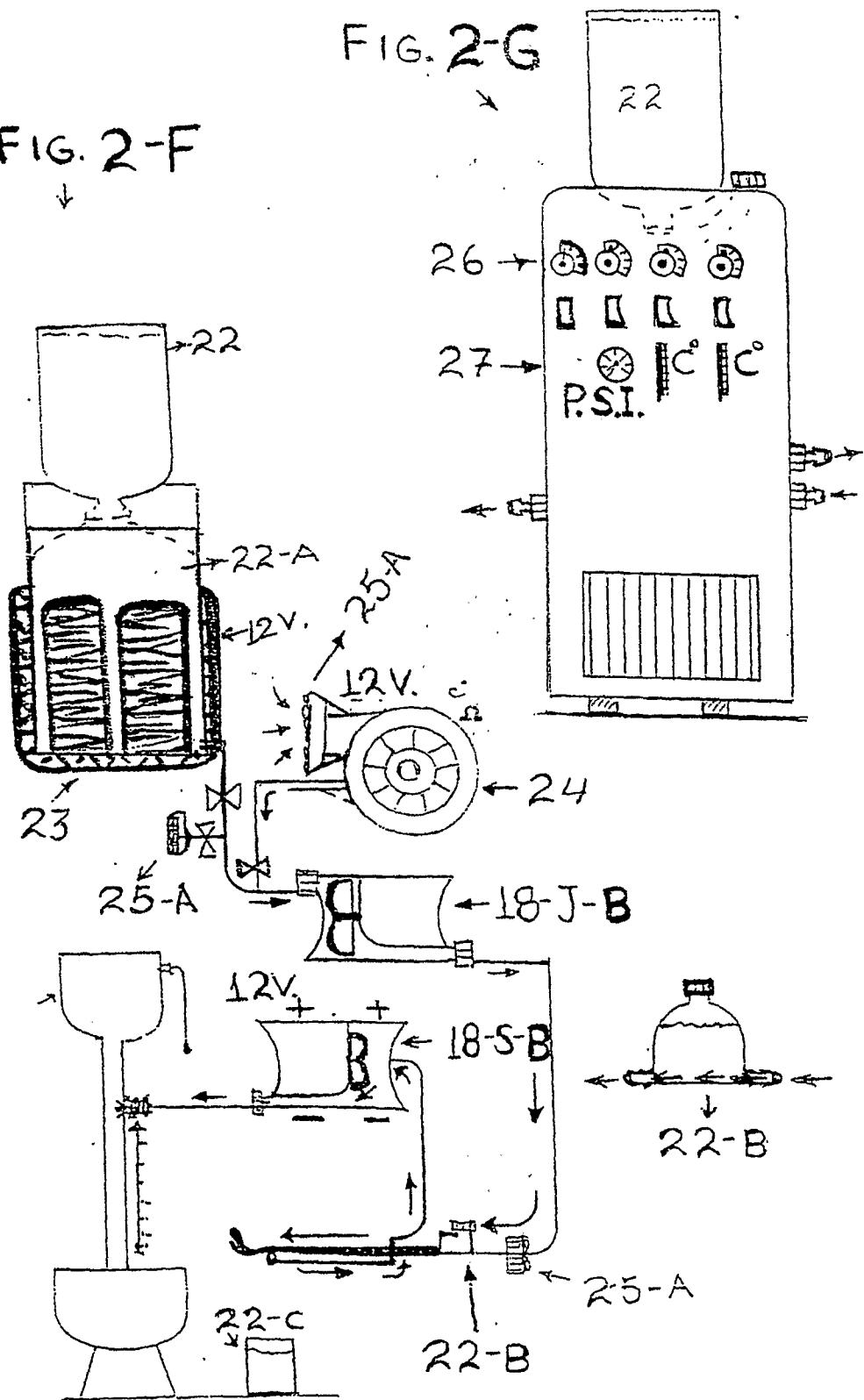
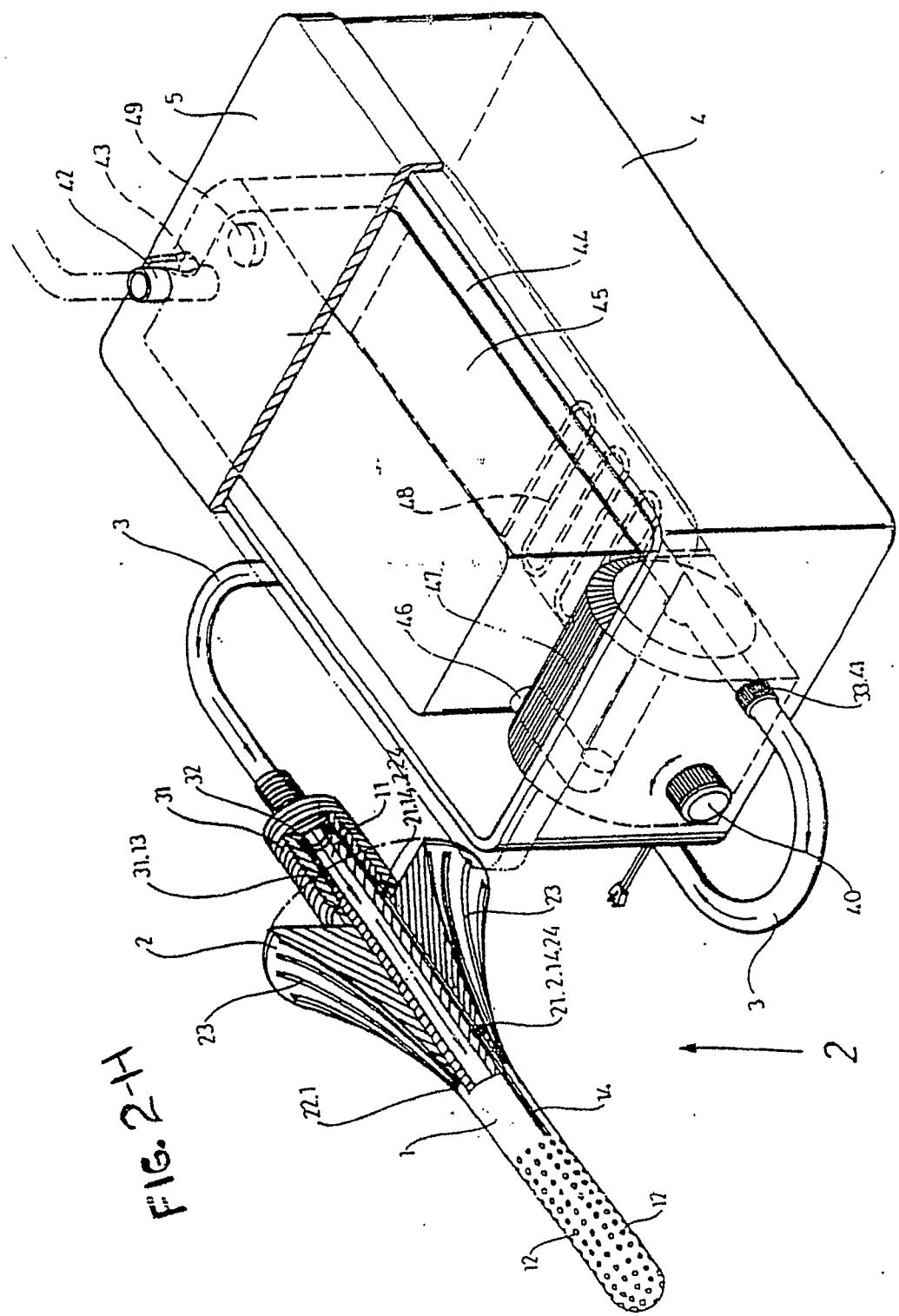


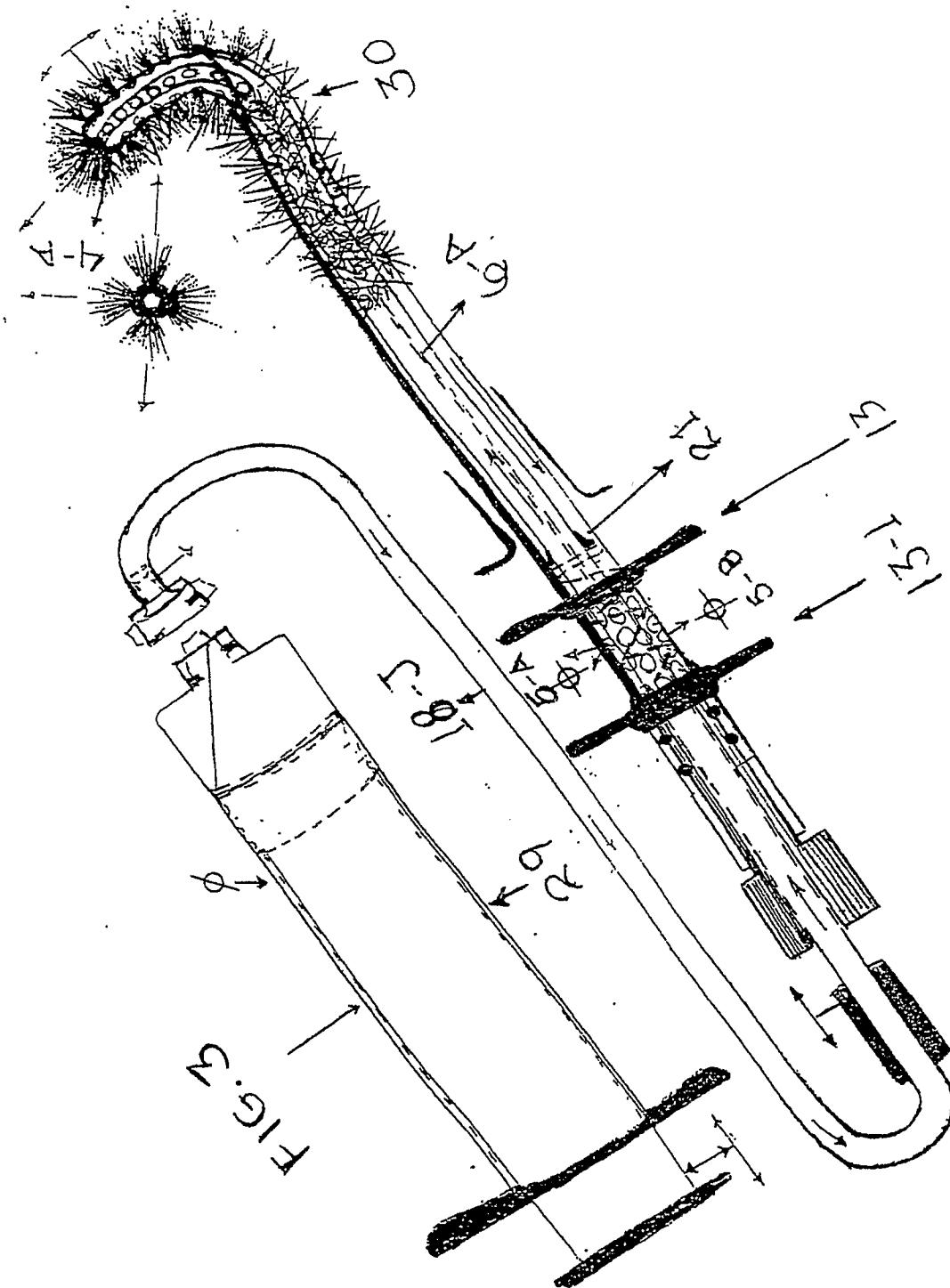
FIG. 2-D

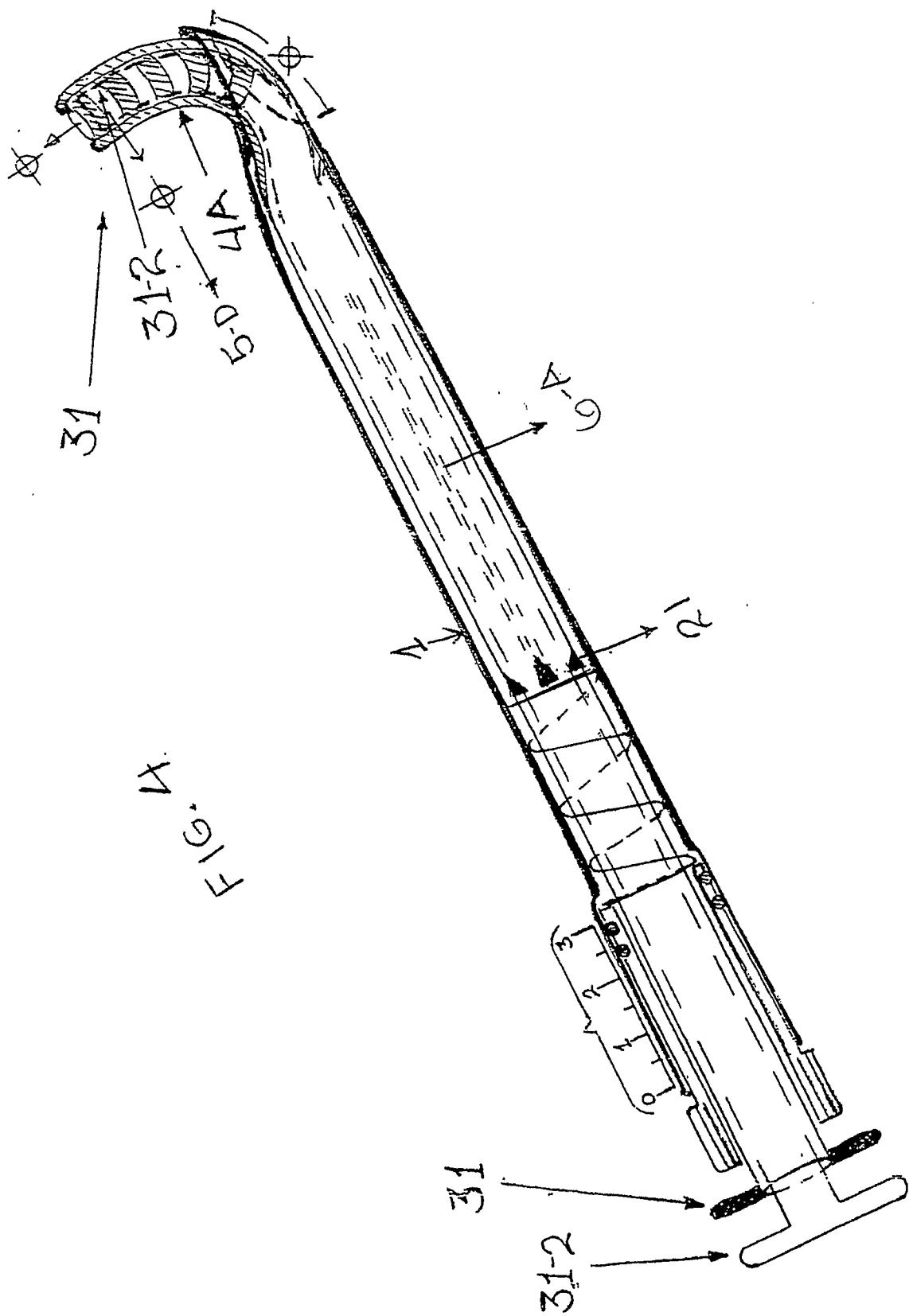
FIG. 2-F

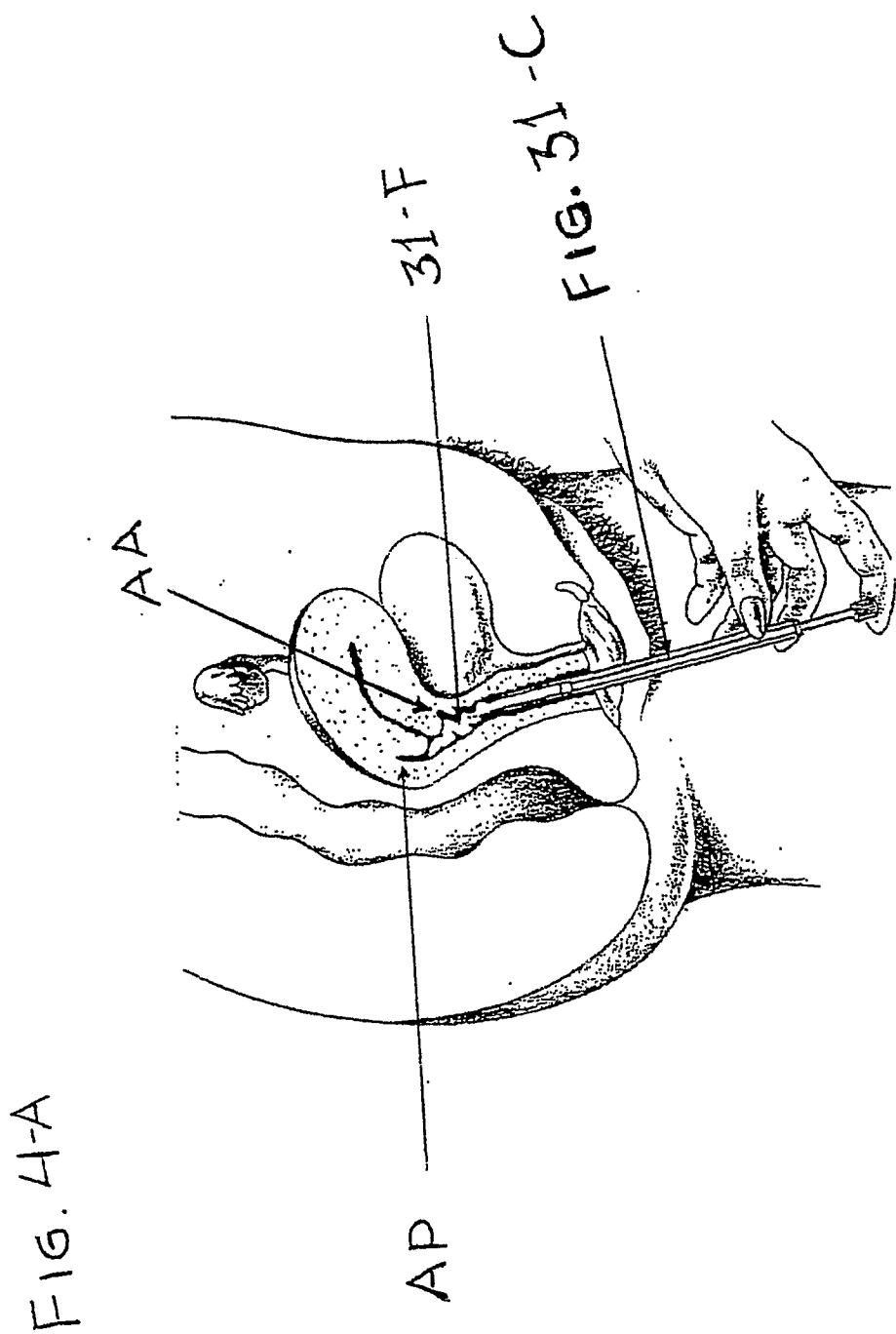
FIG. 2-G











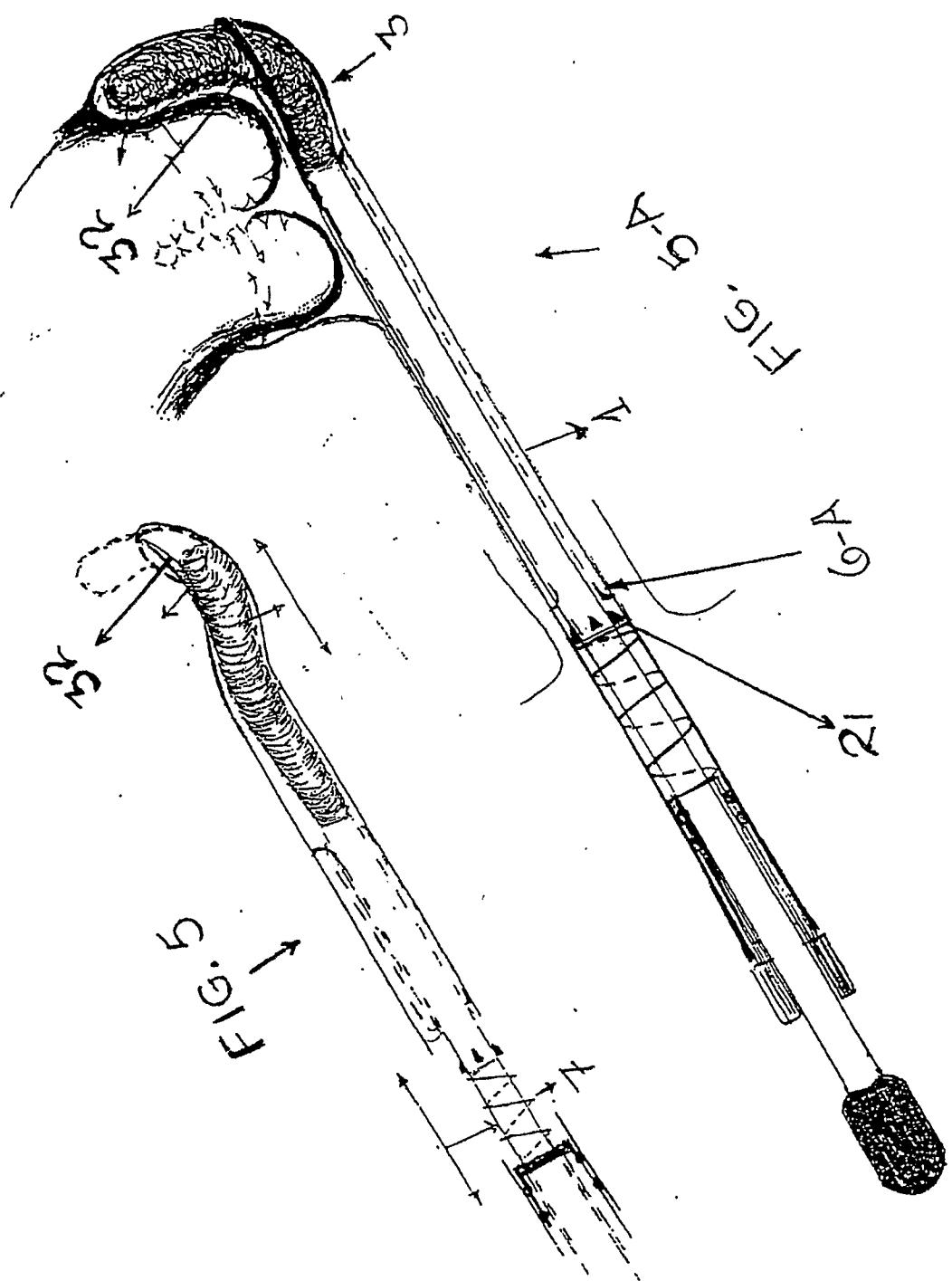
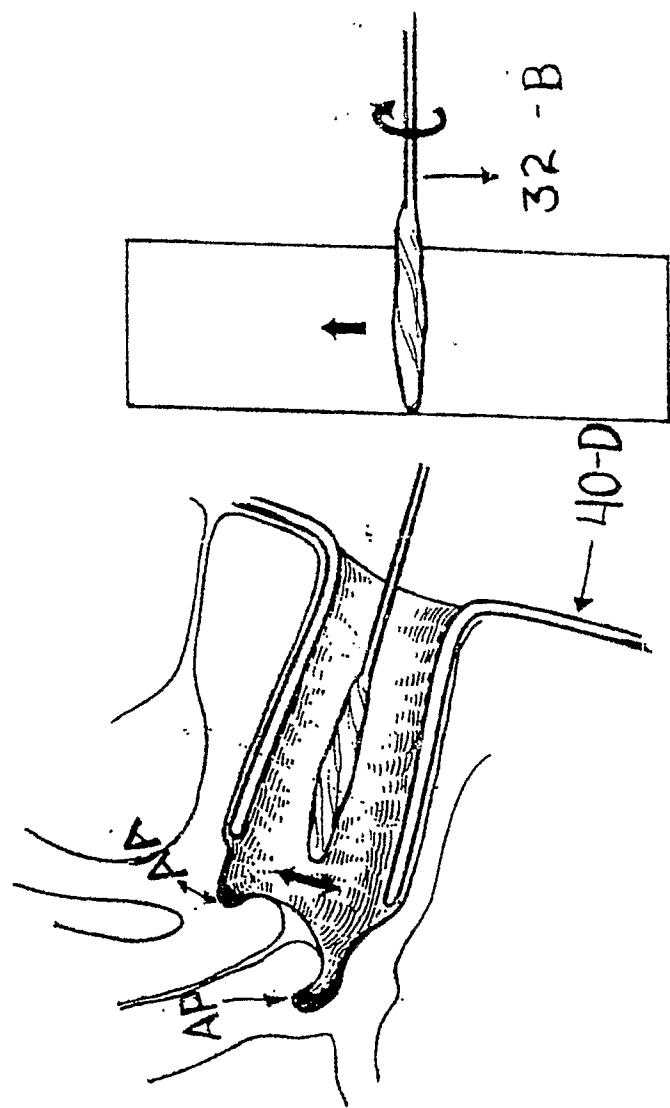
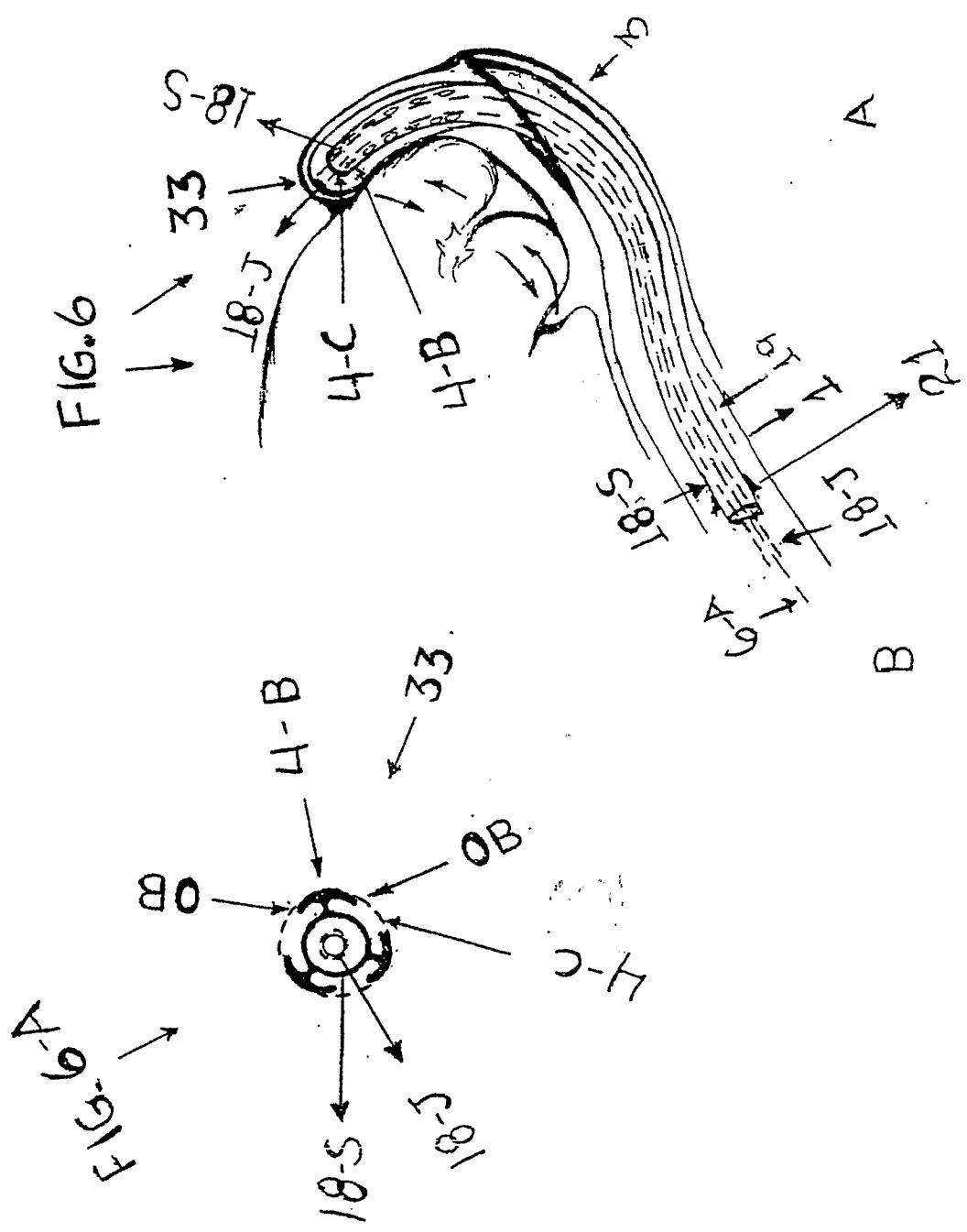
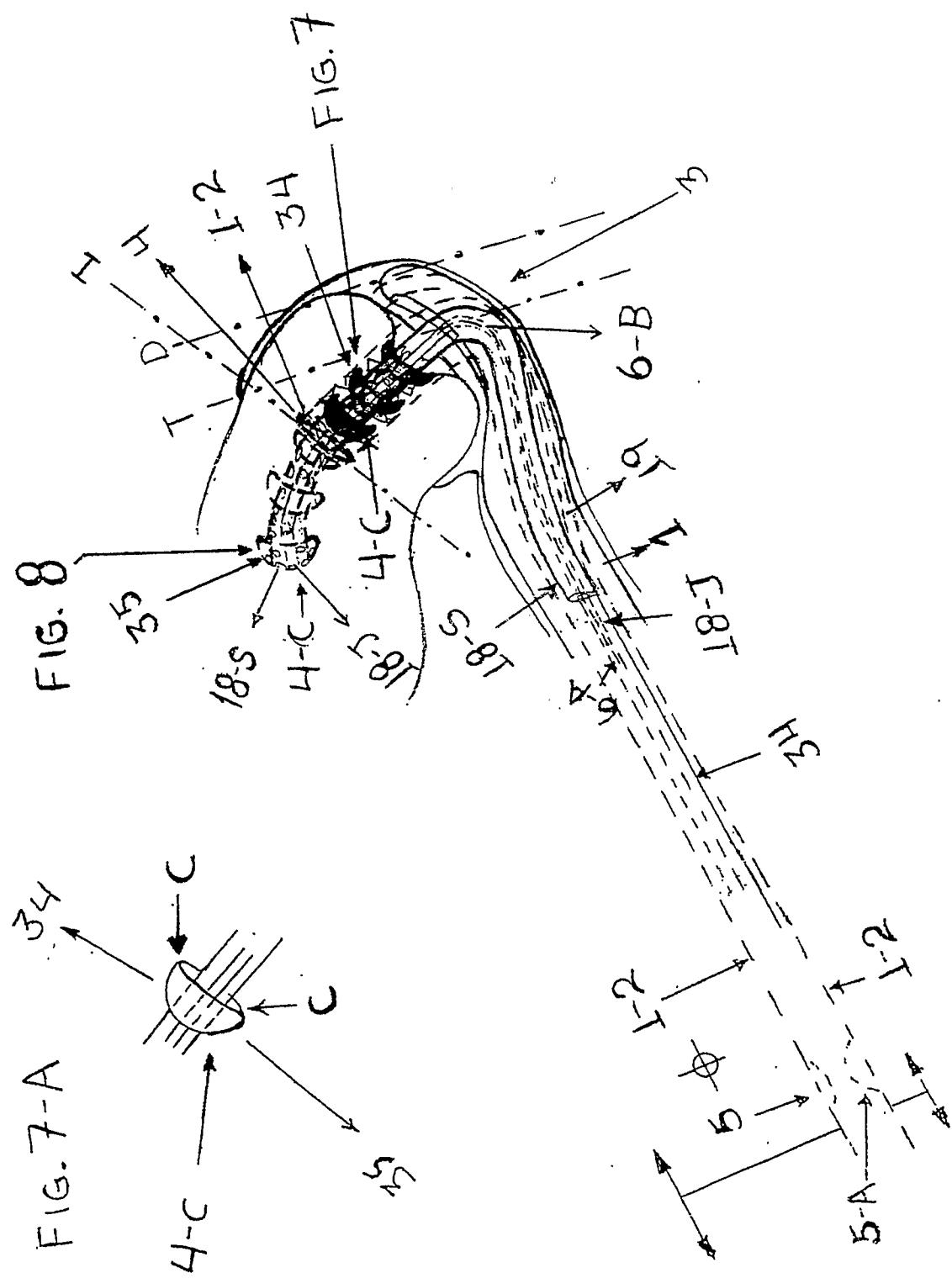
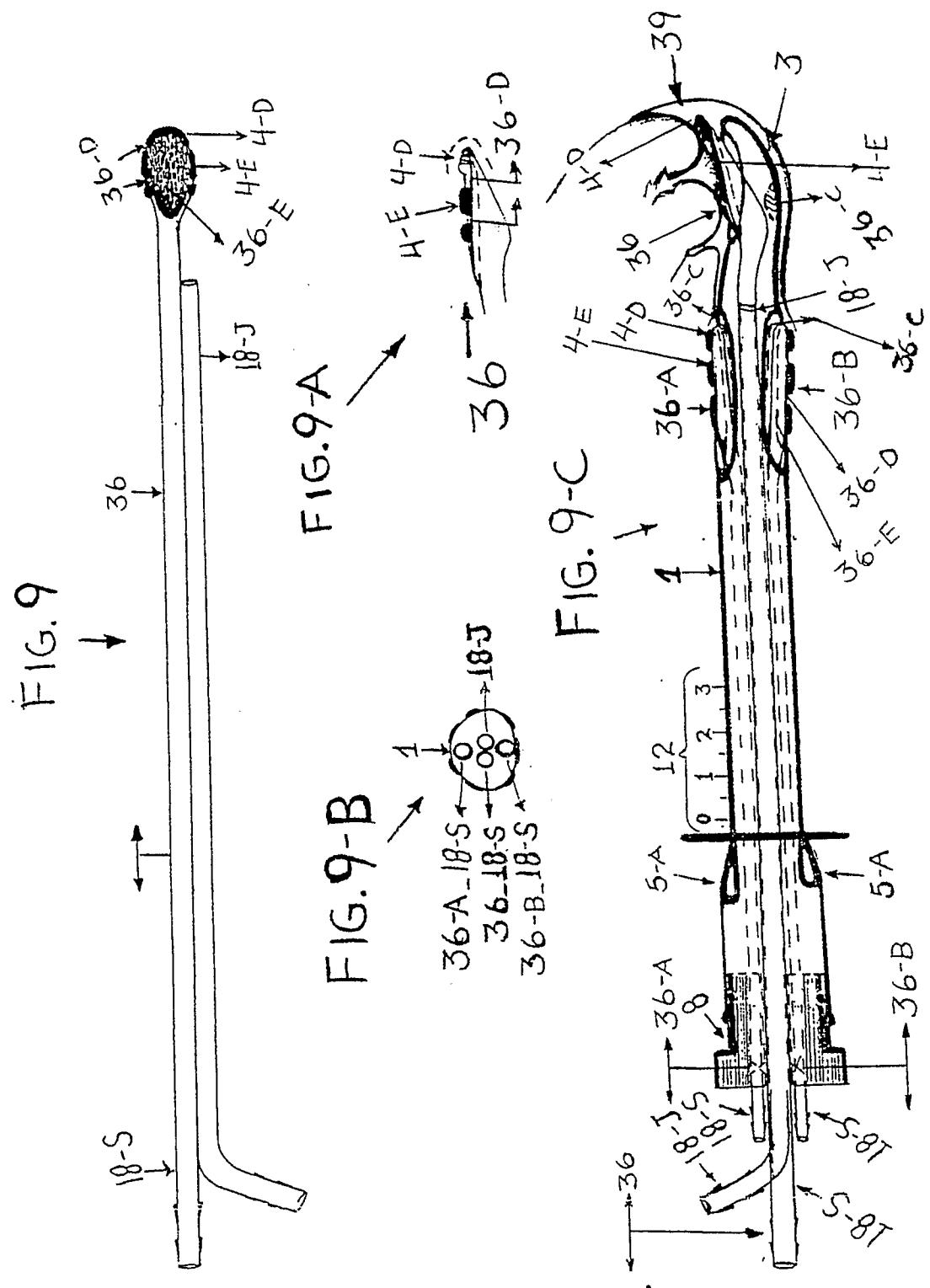


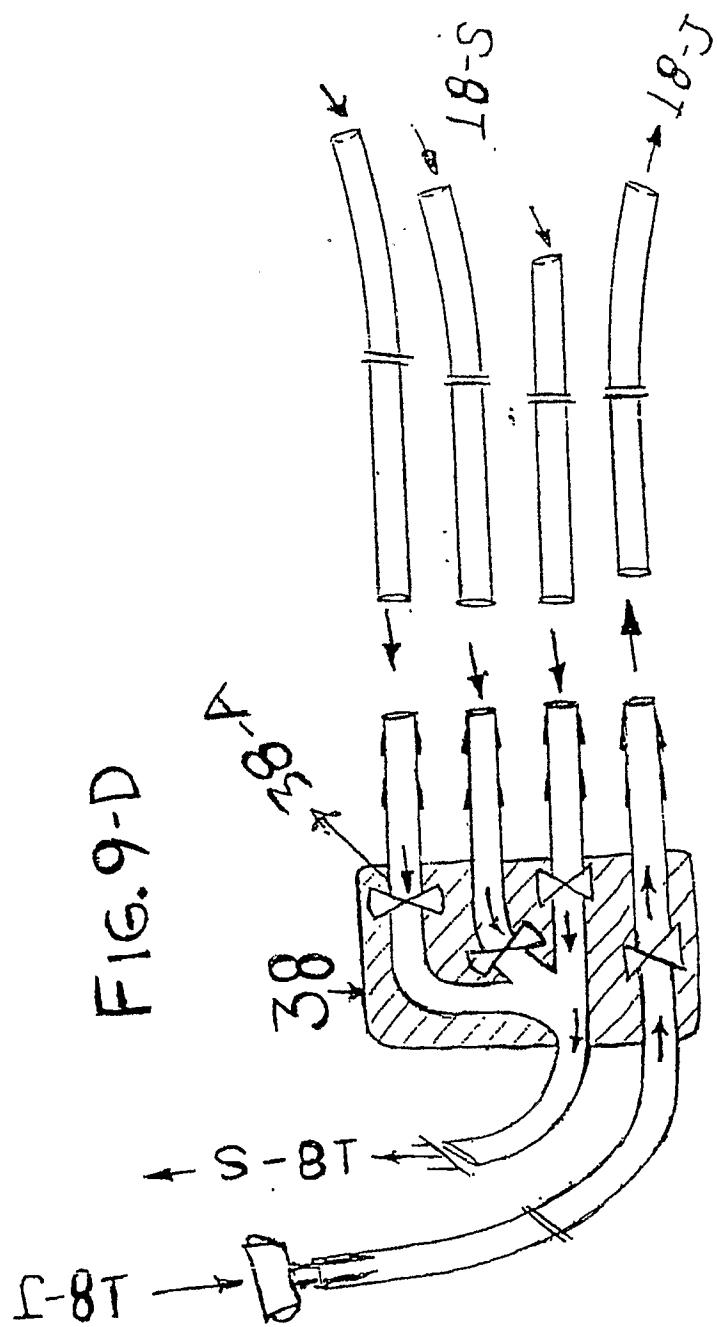
FIG. 5-B



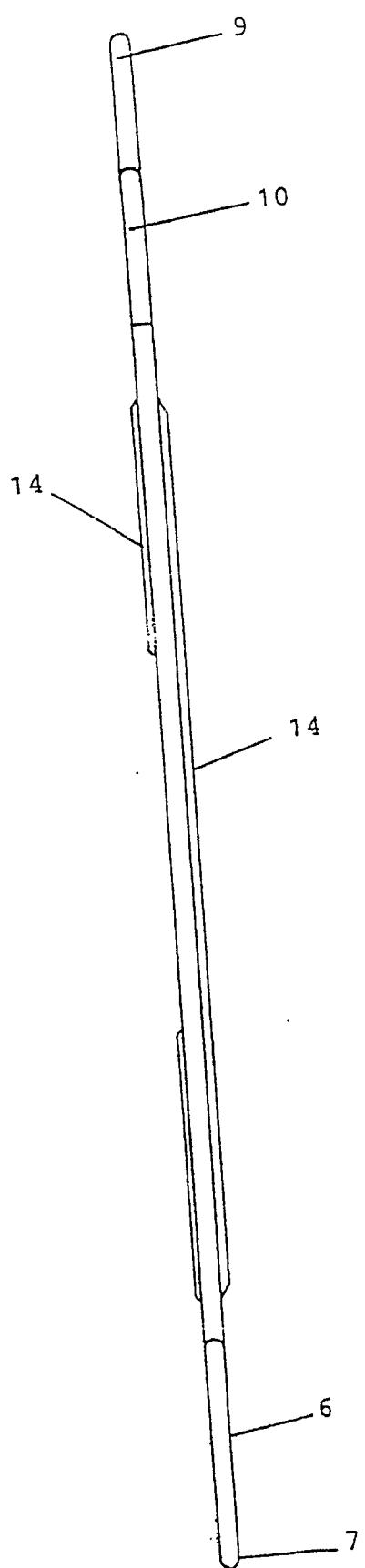
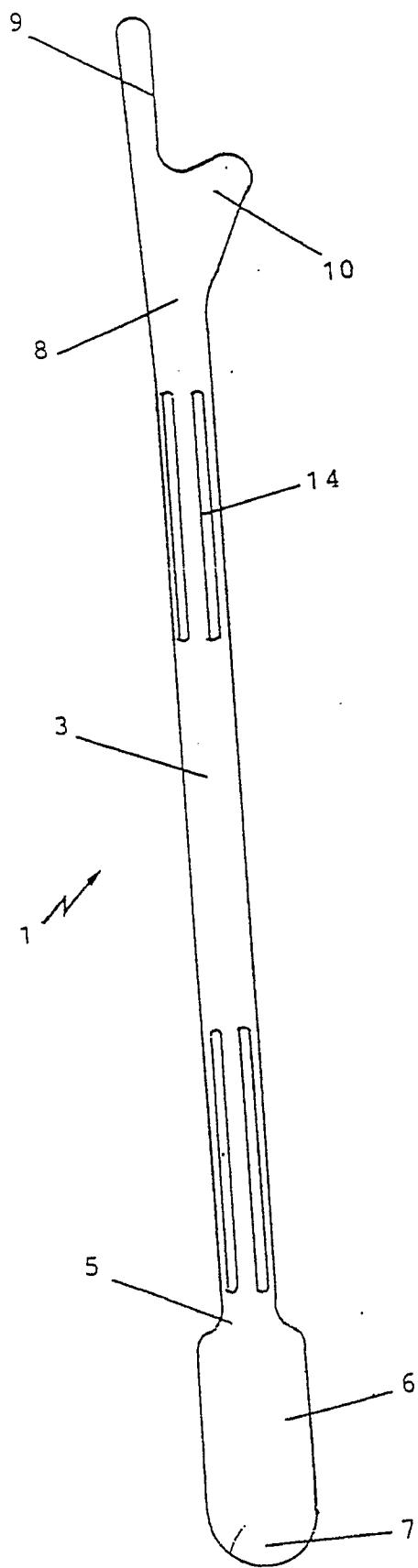


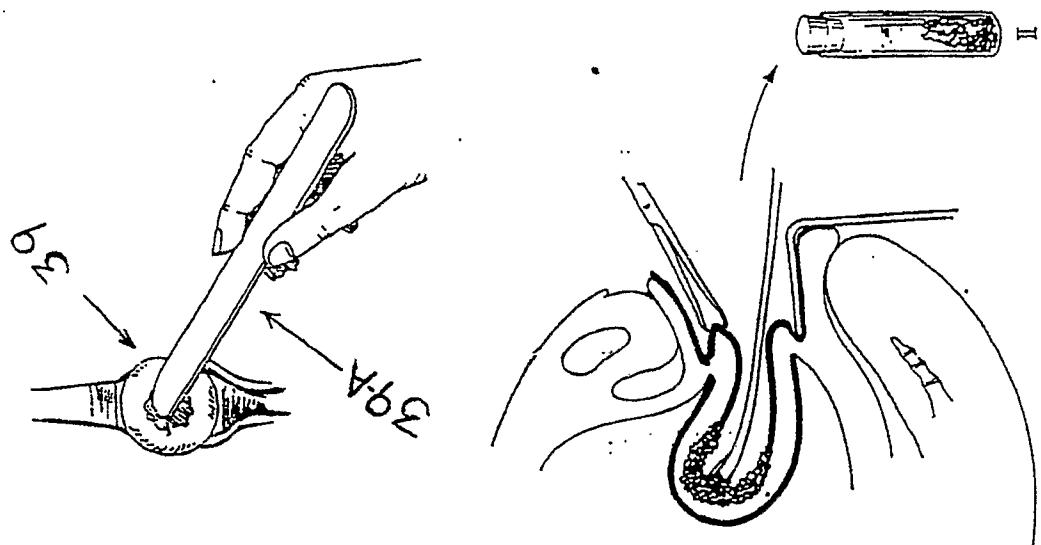




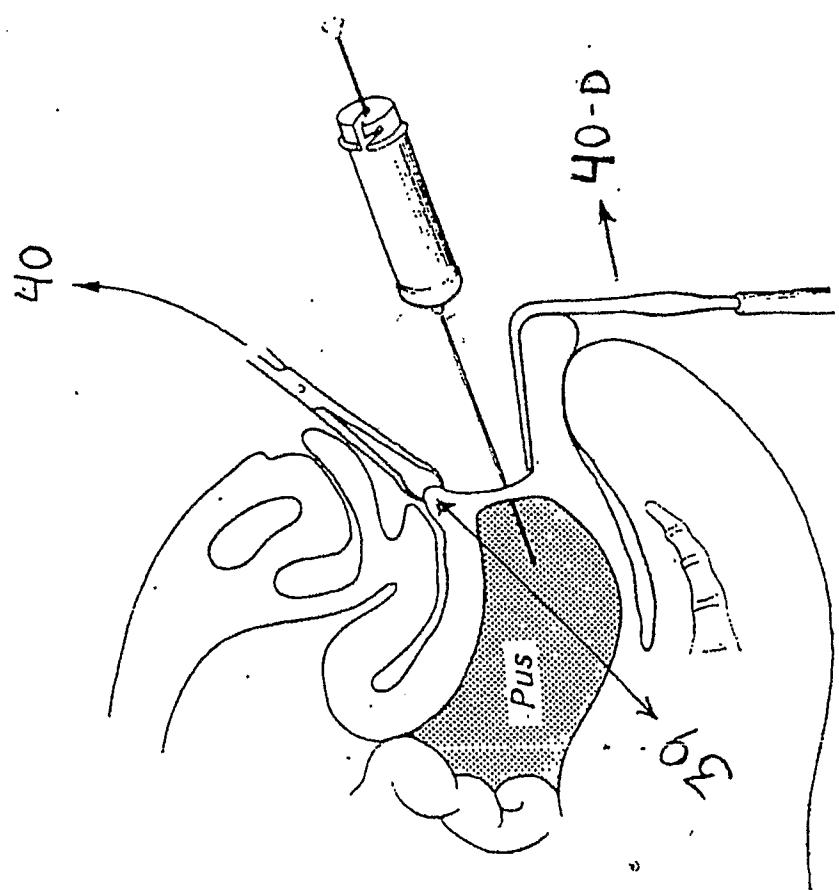


FIGS 10





FIGS. 11



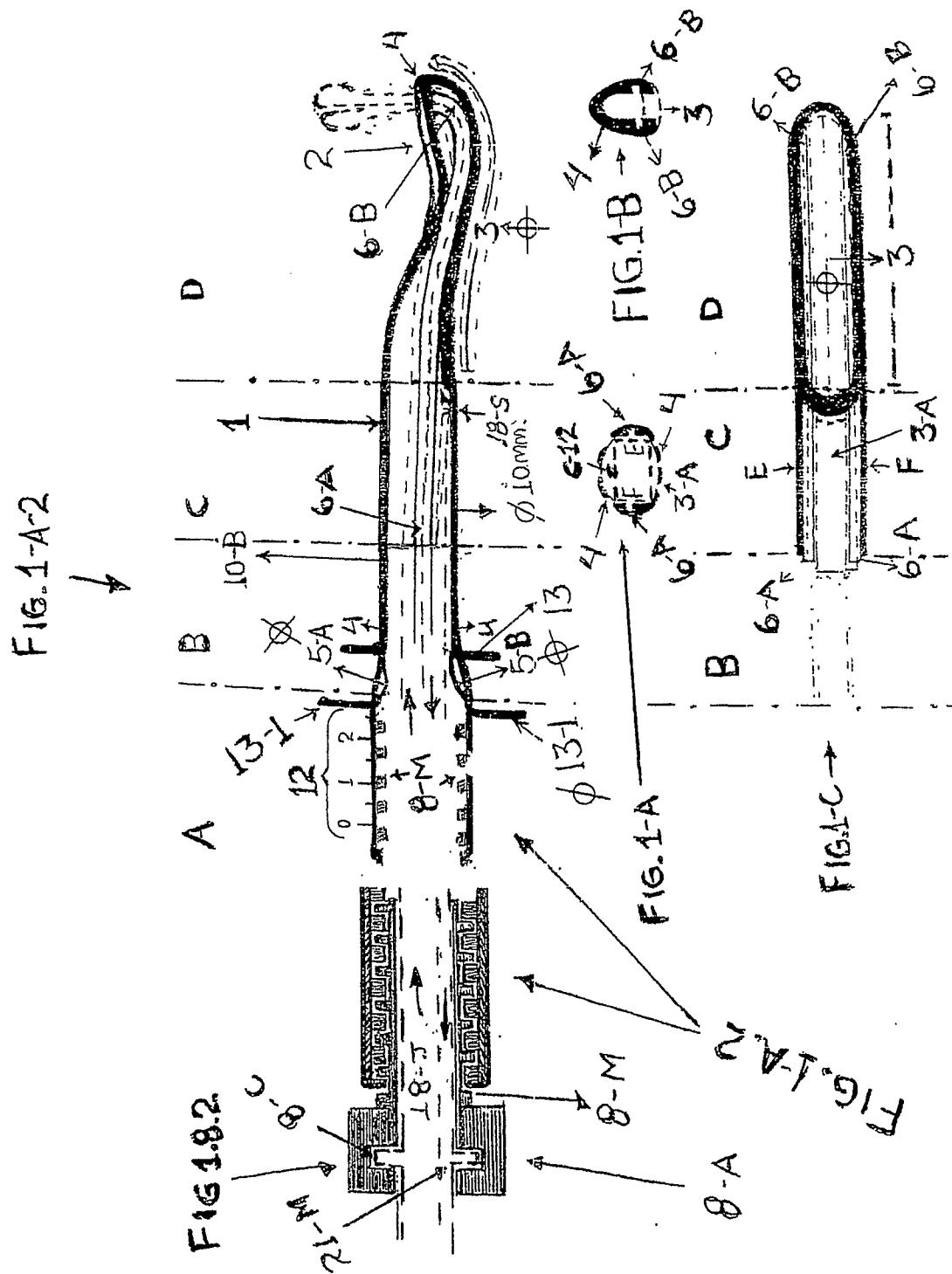


FIG. 2.

