US00D745148S

(12) **United States Design Patent**
Gaynor et al.

(10) **Patent No.: US D745,148 S**
(45) **Date of Patent: ** Dec. 8, 2015**

(54) **VAGINAL MANIPULATOR**

(71) Applicant: **Coloplast A/S**, Humlebaek (DK)

(72) Inventors: **Allen Gaynor**, Coon Rapids, MN (US); **Sarah J. Deitch**, Minneapolis, MN (US); **Jeffrey Brian Taylor**, Forest Lake, MN (US); **Michael M. Witzmann**, Shoreview, MN (US); **Ty Erickson**, Idaho Falls, ID (US); **Thomas KraMer**, Minneapolis, MN (US); **William Atwood**, Coon Rapids, MN (US)

(73) Assignee: **Coloplast A/S**, Humlebaek (DK)

(**) Term: **14 Years**

(21) Appl. No.: **29/486,303**

(22) Filed: **Mar. 28, 2014**

(51) **LOC (10) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/141**; D24/147

(58) **Field of Classification Search**
USPC D24/108, 127, 133, 135, 141, 143, 147; 600/37, 106, 202, 204, 219, 220, 222; 606/119, 147; 128/834
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

832,201	A	10/1906	Kistler
1,331,737	A	2/1920	Ylisto
3,749,088	A	7/1973	Kohlmann
4,350,251	A	9/1982	Merck
4,638,792	A	1/1987	Burgin
5,113,846	A	5/1992	Hiltebrandt et al.
5,235,996	A	8/1993	Beswick
5,358,496	A	10/1994	Ortiz et al.
5,409,496	A	4/1995	Rowden et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CN	201179265	Y	1/2009
CN	201481386	U	5/2010

(Continued)

OTHER PUBLICATIONS

CooperSurgical; The RUMI II System:The right Choice For all Pelvic Laparoscopic Procedures; Feb. 2011.

Primary Examiner — Garth Rademaker
Assistant Examiner — Samantha Q Lawrence
(74) *Attorney, Agent, or Firm* — Coloplast Corp., Coloplast A/S; Nick Baumann

(57) **CLAIM**

The ornamental design for a vaginal manipulator, as shown and described.

DESCRIPTION

FIG. **1** is an isometric view of a vaginal manipulator showing a head attached to a handle with door located on a bottom side of the head, the door being in a closed position.

FIG. **2** is a left side view of the vaginal manipulator illustrated in FIG. **1**.

FIG. **3** is a right side view of the vaginal manipulator illustrated in FIG. **1**.

FIG. **4** is a top view of the vaginal manipulator illustrated in FIG. **1**.

FIG. **5** is a bottom view of the vaginal manipulator illustrated in FIG. **1**.

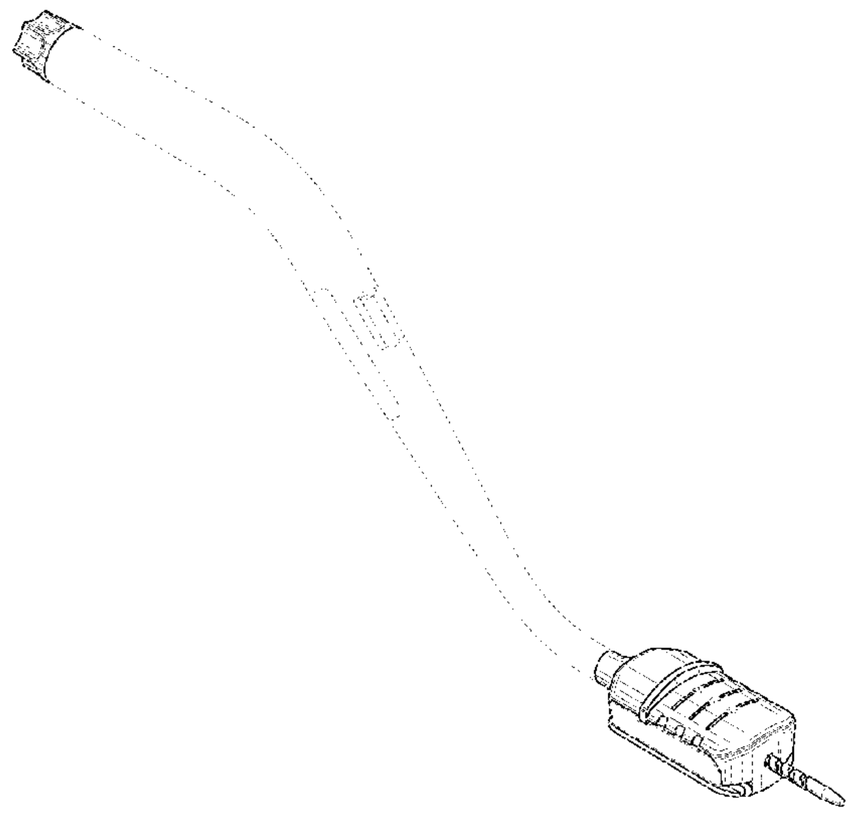
FIG. **6** is a front view of the vaginal manipulator illustrated in FIG. **1**.

FIG. **7** is a back view of the vaginal manipulator illustrated in FIG. **1**; and,

FIG. **8** is an isometric view of the vaginal manipulator illustrated in FIG. **1** showing the door in an open position.

The broken lines shown in FIGS. **1-8** illustrate portions of the vaginal manipulator that form no part of the claimed design.

1 Claim, 6 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

5,487,377	A		1/1996	Smith et al.
5,490,819	A		2/1996	Nicholas et al.
5,520,698	A		5/1996	Koh
5,562,680	A		10/1996	Hasson
5,656,012	A		8/1997	Sienkiewicz
5,685,826	A		11/1997	Bonutti
5,921,996	A		7/1999	Sherman
5,993,461	A		11/1999	Abae
D421,497	S	*	3/2000	Wattiez D24/141
6,048,308	A		4/2000	Strong
6,174,282	B1		1/2001	Tan
6,183,402	B1		2/2001	Pedersen et al.
6,379,299	B1		4/2002	Borodulin et al.
6,582,451	B1		6/2003	Marucci et al.
6,669,654	B2		12/2003	Diokno et al.
7,060,029	B1		6/2006	Hajianpour
7,384,393	B2		6/2008	Guinan
7,625,377	B2		12/2009	Veldhuizen et al.
7,654,953	B2		2/2010	Borodulin et al.
D643,119	S	*	8/2011	Bardy D24/141
D643,120	S	*	8/2011	Bardy D24/141
D650,904	S	*	12/2011	Kearsley D24/133
D660,428	S	*	5/2012	Hohl D24/141
D667,550	S	*	9/2012	Keckstein D24/141
D673,271	S	*	12/2012	George D24/135
8,734,337	B2	*	5/2014	Deitch et al. 600/220
D710,497	S	*	8/2014	Pham et al. D24/130
8,808,175	B2	*	8/2014	Deitch et al. 600/220
8,814,789	B2	*	8/2014	Deitch et al. 600/220
2001/0021854	A1		9/2001	Donnez et al.
2002/0022771	A1		2/2002	Diokno et al.
2003/0176883	A1		9/2003	Sauer et al.
2003/0187334	A1		10/2003	Biswas
2004/0059362	A1		3/2004	Knodel et al.
2004/0116955	A1		6/2004	Foltz et al.
2004/0225196	A1		11/2004	Ruane
2005/0085827	A1		4/2005	G. et al.
2005/0182416	A1		8/2005	Lim et al.
2005/0234294	A1		10/2005	Saadat et al.
2005/0261683	A1		11/2005	Veldhuizen et al.
2006/0020271	A1		1/2006	Stewart et al.
2006/0069436	A1		3/2006	Sutton et al.
2006/0085013	A1		4/2006	Dusek et al.
2006/0178562	A1		8/2006	Saadat et al.
2006/0241652	A1		10/2006	Doll et al.
2006/0271073	A1		11/2006	Lam et al.
2006/0293567	A1		12/2006	Borodulin et al.
2007/0027466	A1		2/2007	Ortiz et al.
2007/0209222	A1		9/2007	Fischer et al.
2007/0249989	A1		10/2007	Longo et al.
2008/0033471	A1		2/2008	Paz et al.
2008/0039865	A1		2/2008	Shaher et al.
2008/0058833	A1		3/2008	Rizvi
2008/0161825	A1		7/2008	Greenhalgh et al.
2008/0208210	A1		8/2008	Blair et al.
2008/0312508	A1		12/2008	Shulman
2010/0106163	A1		4/2010	Blair et al.
2010/0114106	A1		5/2010	Weber
2010/0130817	A1		5/2010	Conlon
2010/0249498	A1		9/2010	Wingardner et al.
2010/0280309	A1		11/2010	Von Pechmann
2010/0280524	A1		11/2010	Lopez Zepeda
2010/0305578	A1		12/2010	Auerbach et al.
2011/0034776	A1		2/2011	Dixon et al.
2011/0259344	A1		10/2011	Ahluwalia
2011/0306832	A1		12/2011	Bassan et al.
2012/0016185	A1		1/2012	Sherts et al.
2012/0041268	A1		2/2012	Grey et al.
2012/0109147	A1		5/2012	Auerbach et al.
2012/0157761	A1		6/2012	Crank et al.
2013/0019753	A1		1/2013	Gleason
2013/0072749	A1		3/2013	Fairneny et al.
2013/0085508	A1	*	4/2013	Hess 606/119
2013/0197537	A1	*	8/2013	Fairneny et al. 606/119
2013/0274558	A1		10/2013	Deitch et al.
2013/0274560	A1		10/2013	Deitch et al.
2013/0274561	A1		10/2013	Deitch et al.
2013/0317301	A1		11/2013	Deitch et al.
2014/0025084	A1		1/2014	Taylor et al.
2014/0052143	A1		2/2014	Deitch et al.
2014/0107424	A1		4/2014	Taylor et al.
2015/0051608	A1	*	2/2015	Gaynor 606/119
2015/0099924	A1	*	4/2015	Carey 600/37
2015/0105792	A1	*	4/2015	Adams et al. 606/119

FOREIGN PATENT DOCUMENTS

WO	9400061	A1	1/1994
WO	9603930	A1	2/1996
WO	9811818	A1	3/1998
WO	2005055819	A1	6/2005
WO	2008136024	A1	11/2008
WO	2010083836	A1	7/2010
WO	2010151429	A2	12/2010
WO	2011044343	A2	4/2011
WO	2011082350	A1	7/2011

* cited by examiner

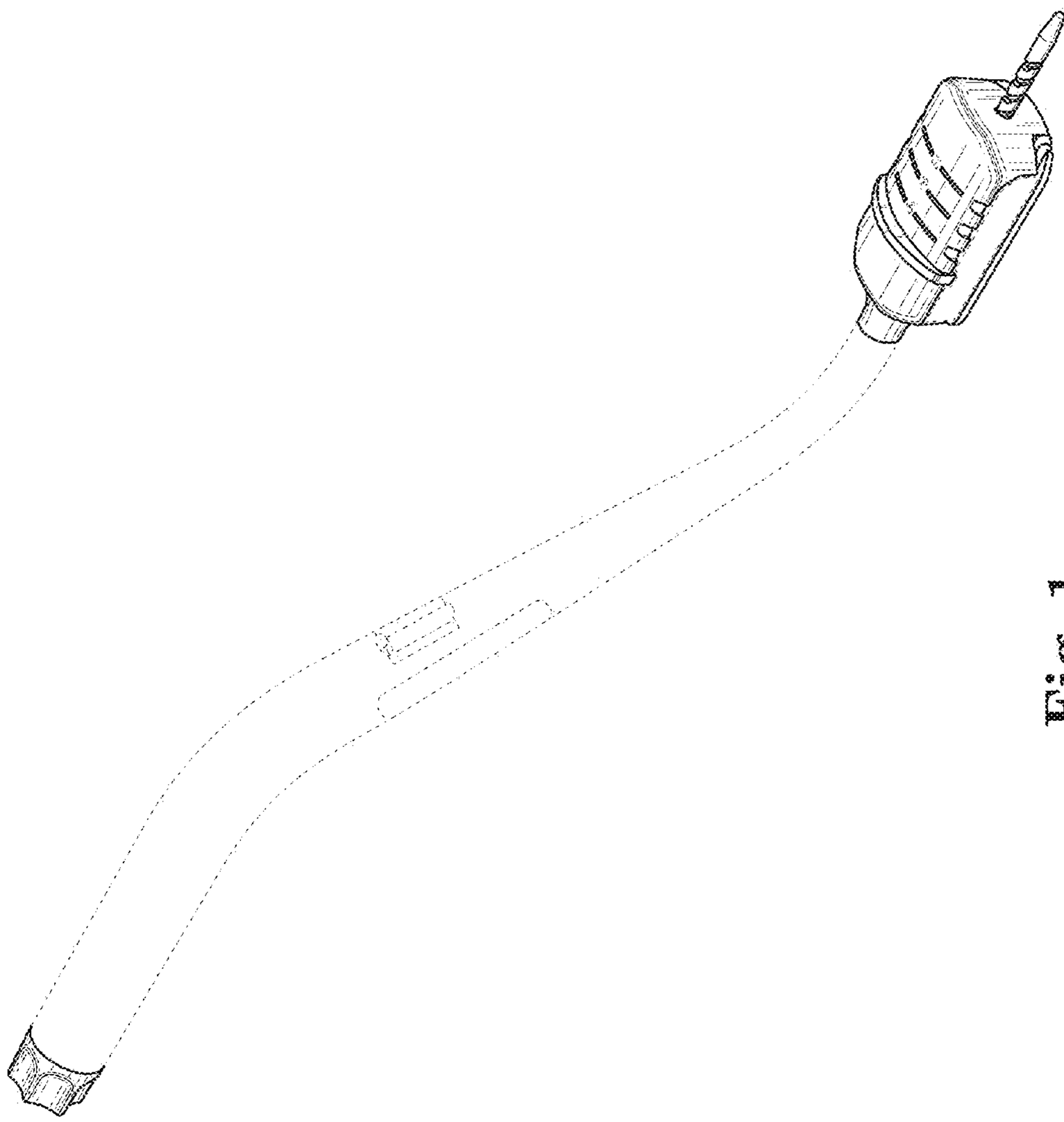


Fig. 1

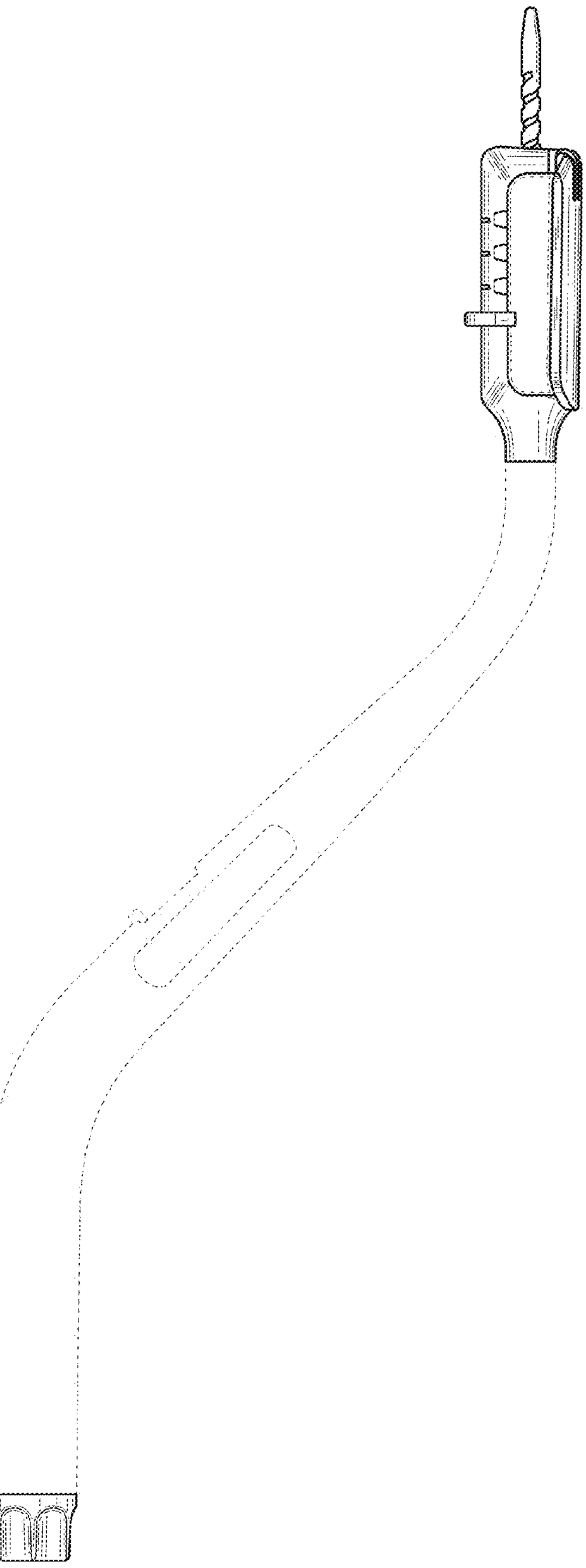


Fig. 2

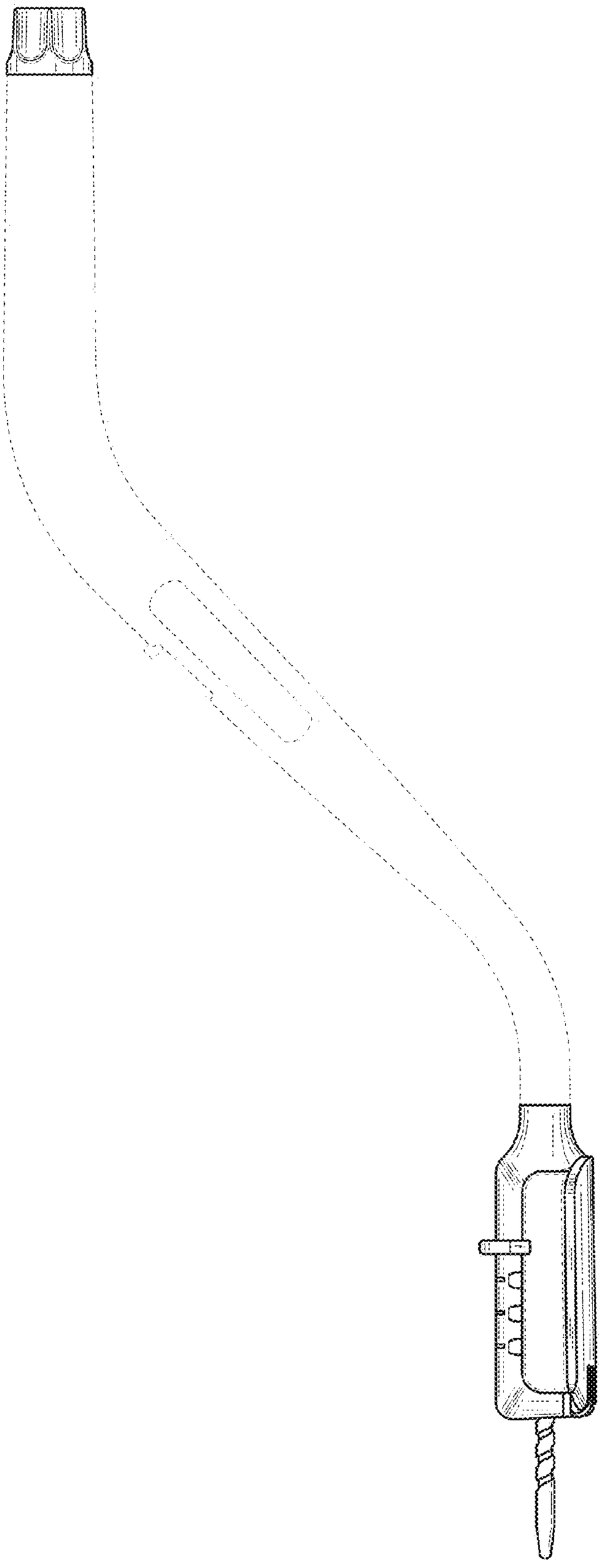


Fig. 3

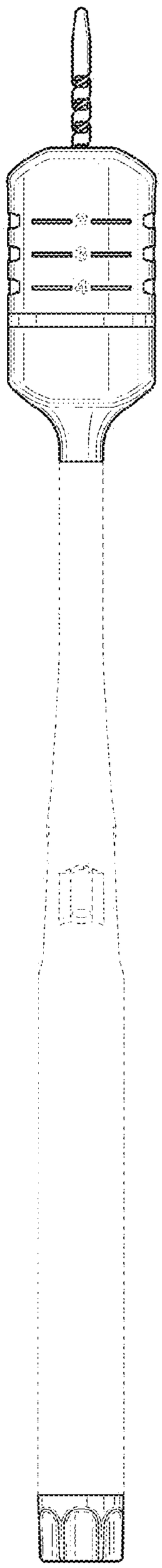


Fig. 4

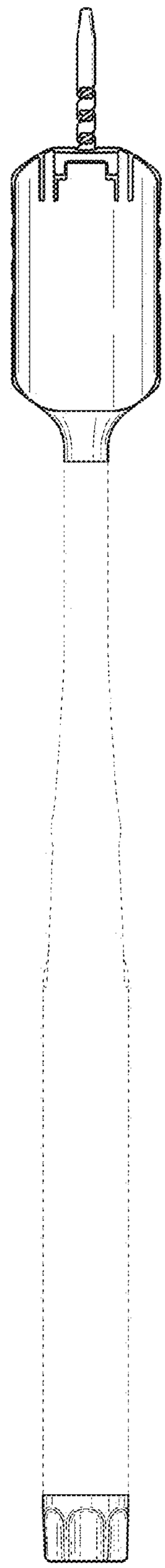


Fig. 5

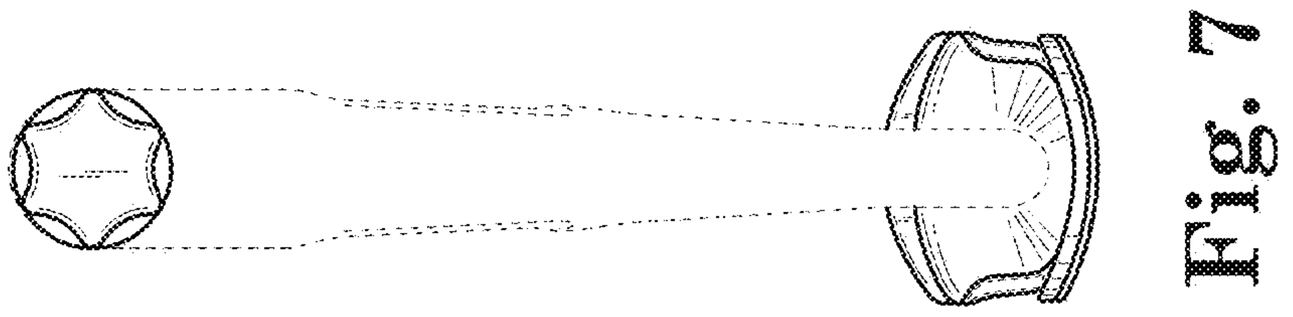


Fig. 7

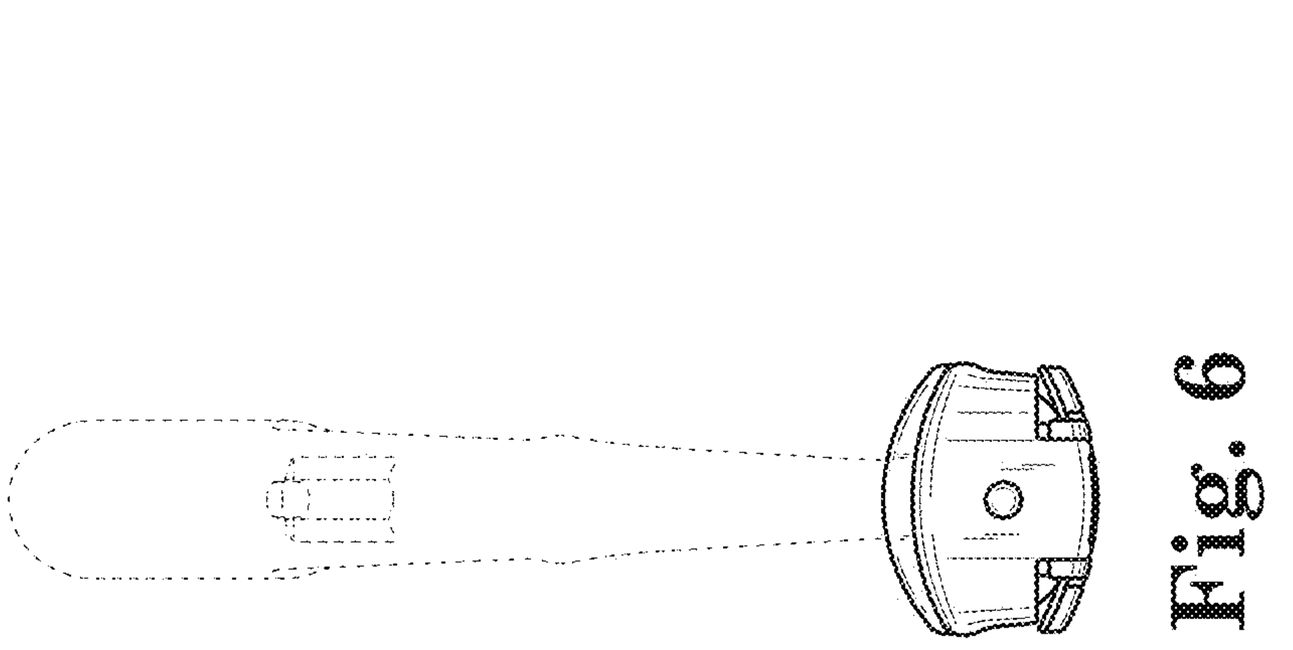


Fig. 6

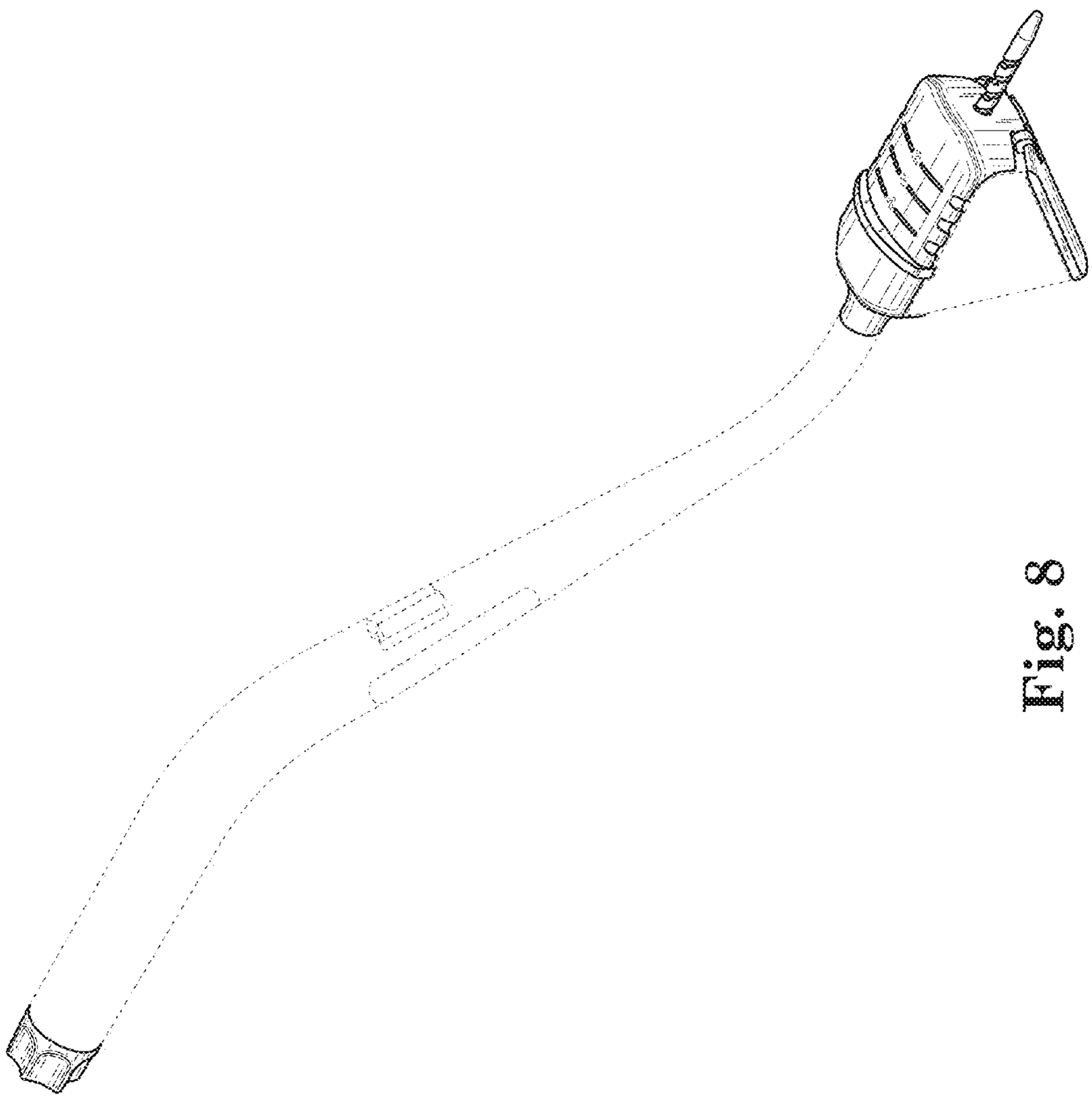


Fig. 8