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

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(54) **VAGINAL MANIPULATOR**

FOREIGN PATENT DOCUMENTS

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

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(Continued)

OTHER PUBLICATIONS

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

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

(57) **CLAIM**

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

(21) Appl. No.: **29/486,306**

**DESCRIPTION**

(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.

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 illus-  
trated 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 illus-  
trated 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.

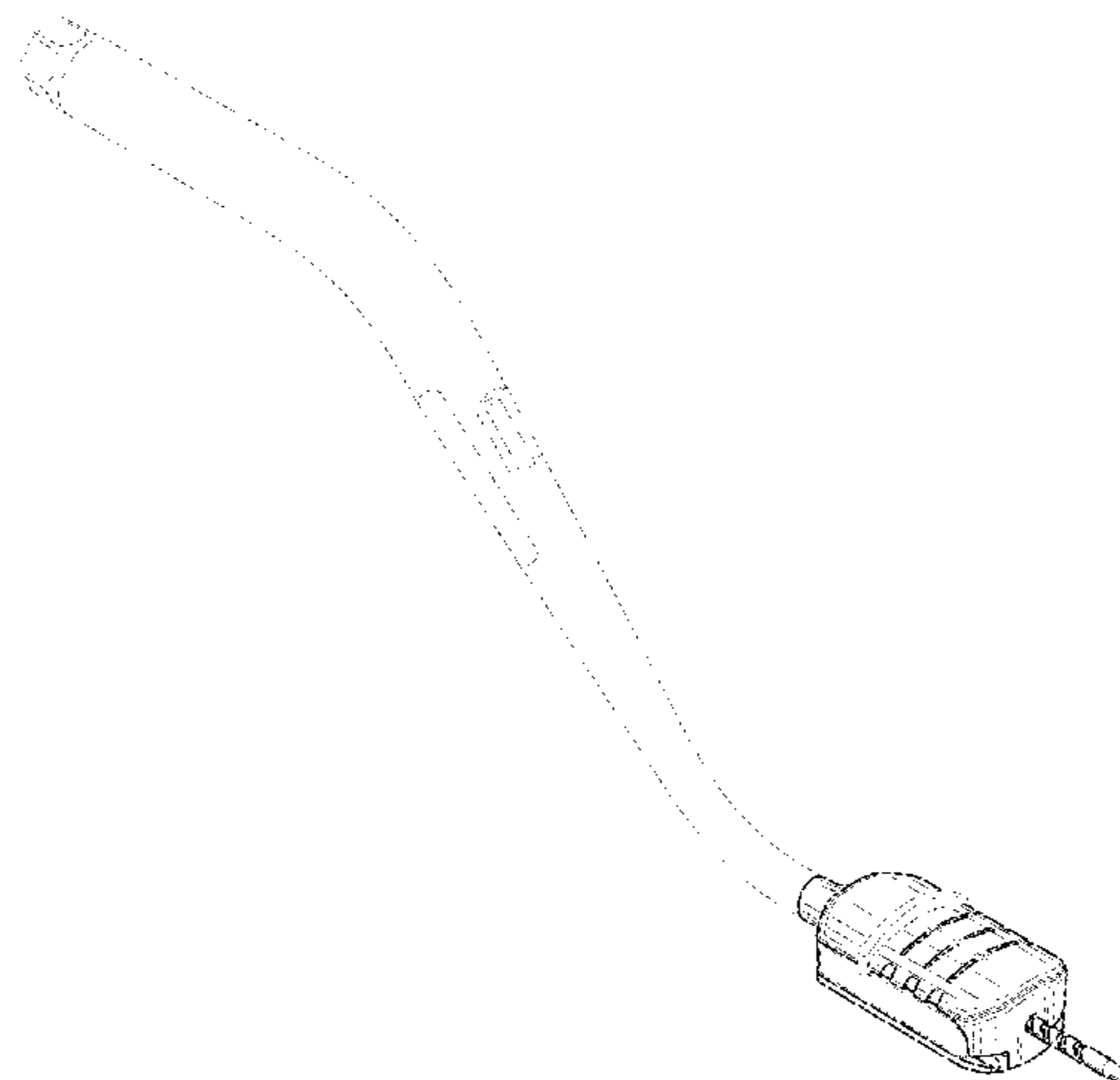
(56) **References Cited**

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.       |

(Continued)

**1 Claim, 6 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

5,409,496 A 4/1995 Rowden et al.  
 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 Shafer 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 Fairney et al.  
 2013/0085508 A1 \* 4/2013 Hess ..... 606/119  
 2013/0197537 A1 \* 8/2013 Fairney 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 10151429 A2 12/2010  
 WO 2011044343 A2 4/2011  
 WO 11082350 A1 7/2011

\* cited by examiner

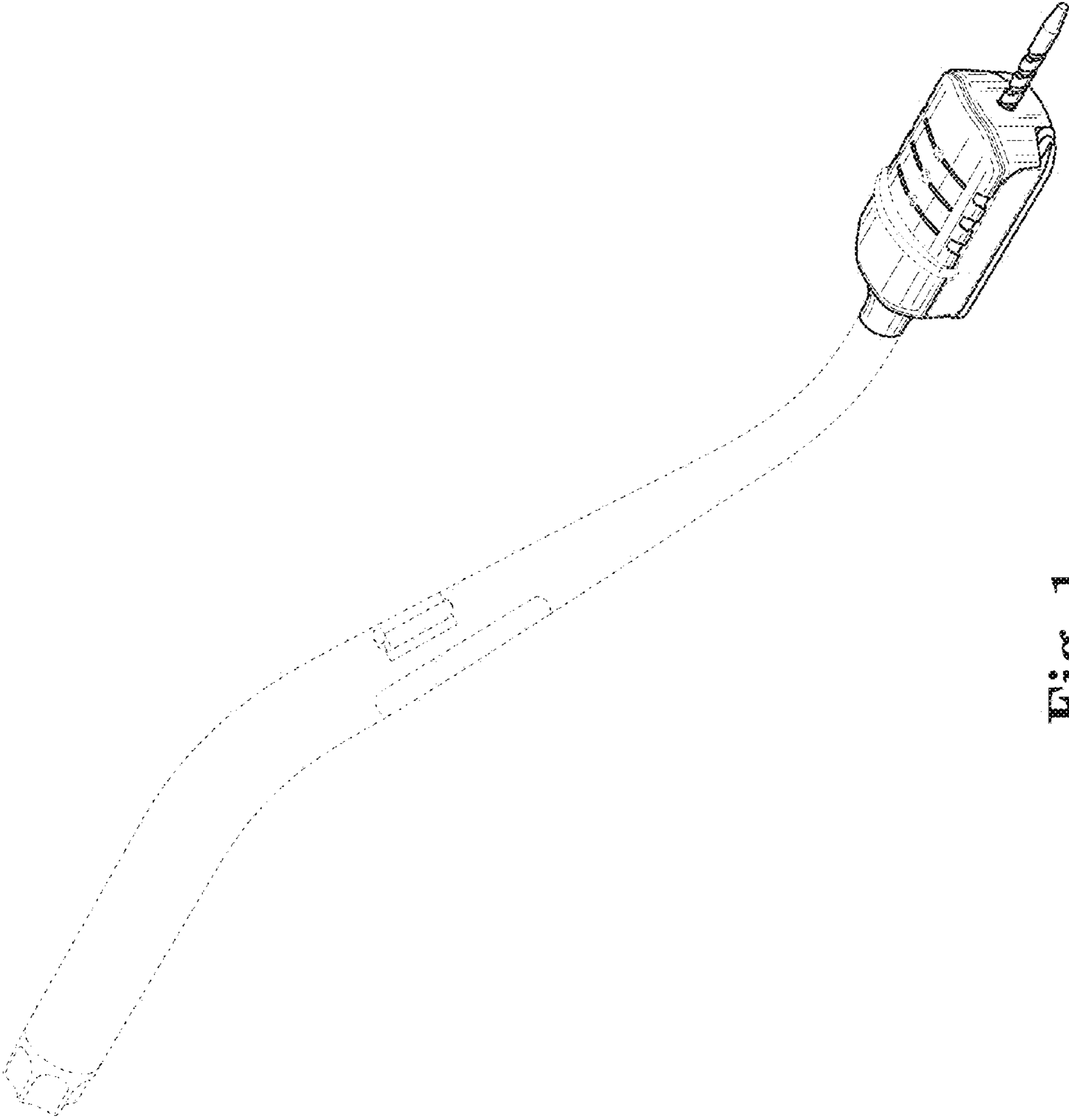


Fig. 1

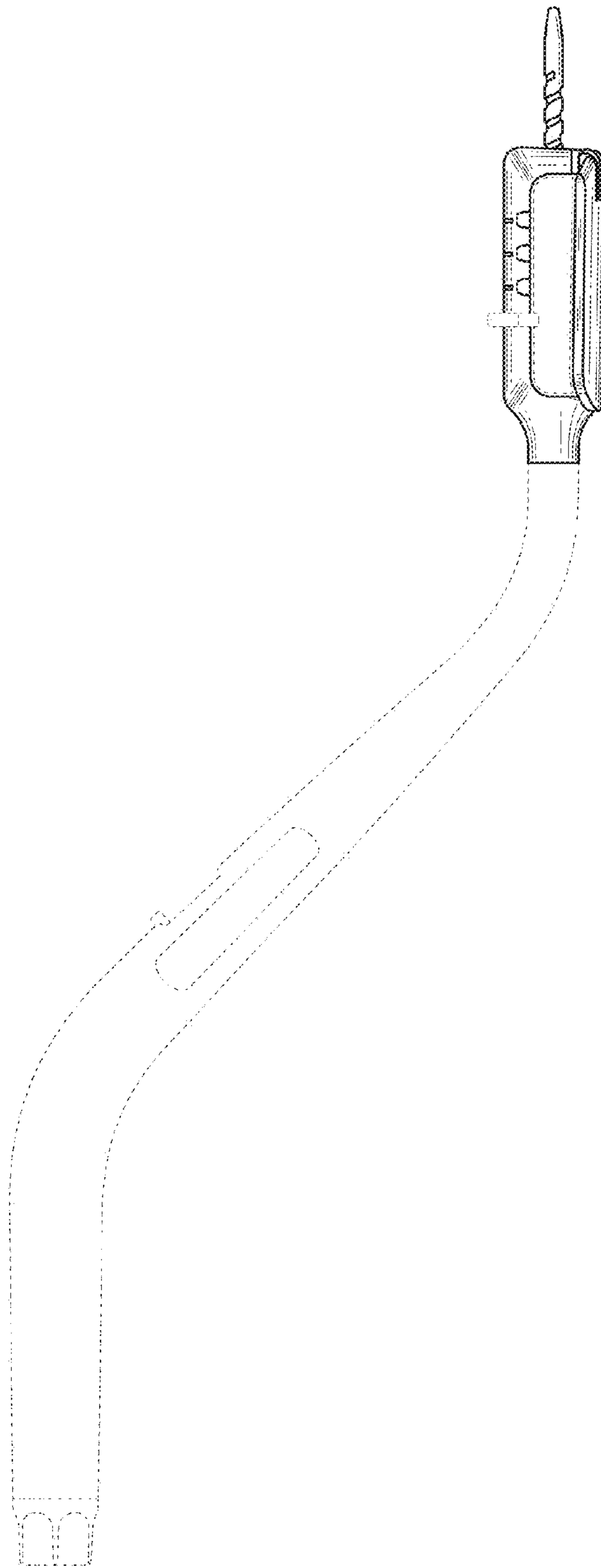


Fig. 2

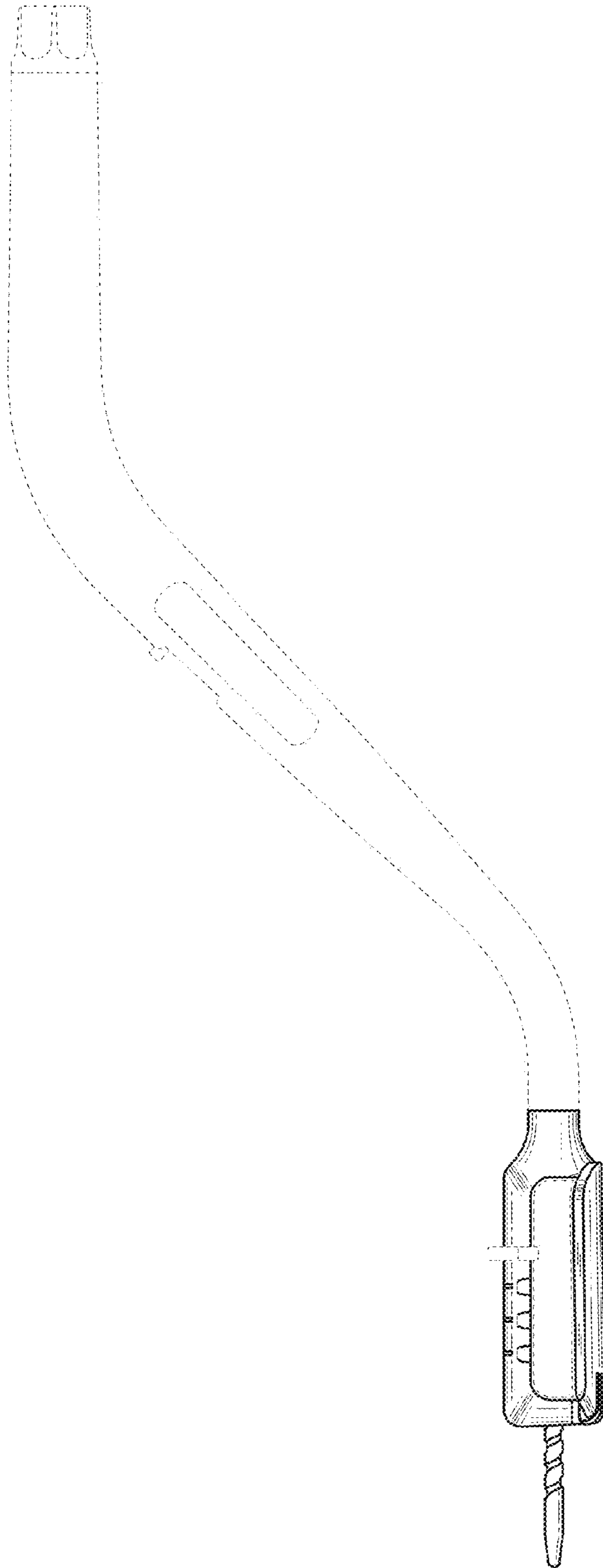


Fig. 3

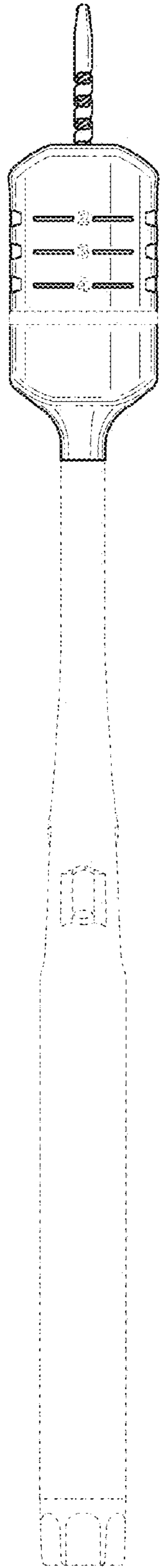


Fig. 4

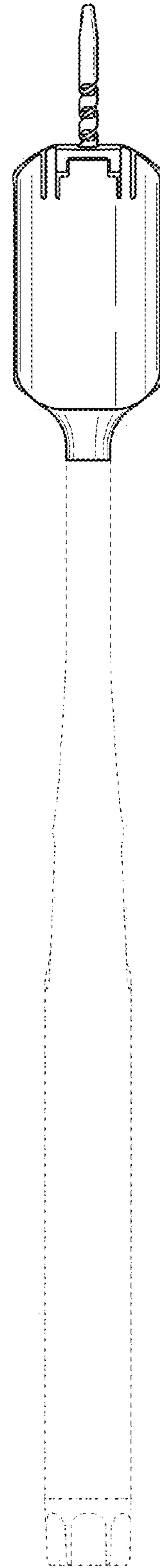


Fig. 5

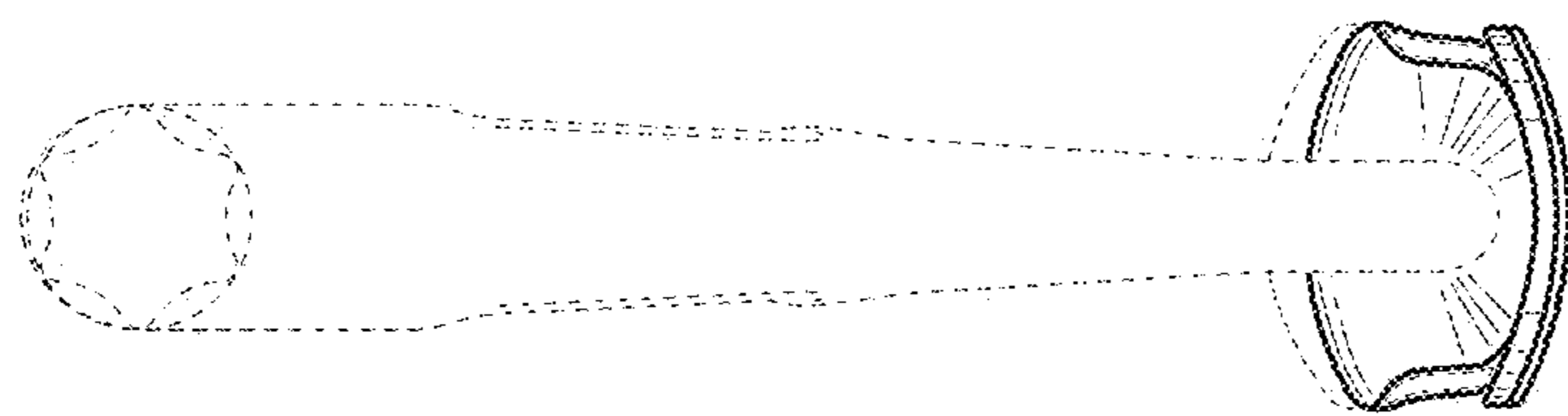


Fig. 7

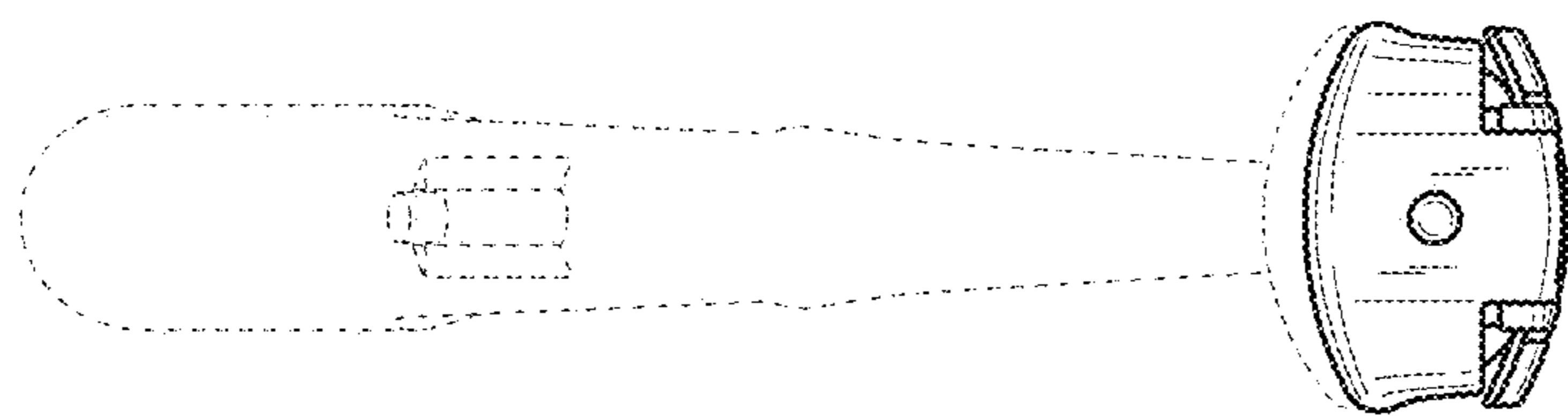


Fig. 6

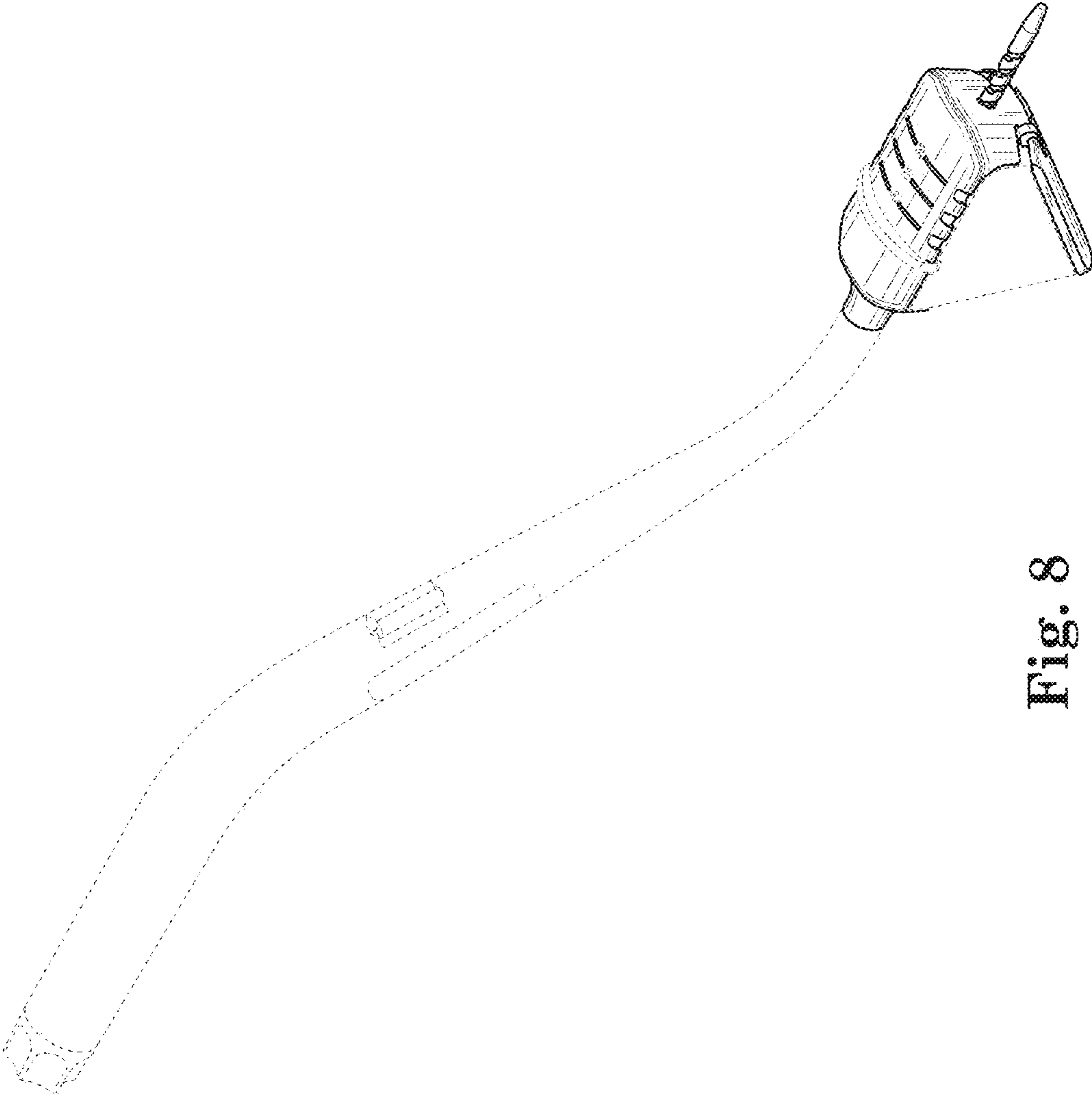


Fig. 8