



US00D865174S

(12) **United States Design Patent** (10) **Patent No.:** **US D865,174 S**
Auld et al. (45) **Date of Patent:** **** Oct. 29, 2019**

(54) **SHAFT ASSEMBLY FOR SURGICAL STAPLER**

(71) Applicant: **ETHICON LLC**, Guaynabo, PR (US)

(72) Inventors: **Michael D. Auld**, Blue Ash, OH (US);
Brett E. Swensgard, West Chester, OH (US);
Sol Posada, Cincinnati, OH (US);
Michael J. Vendely, Lebanon, OH (US);
Frederick E. Shelton, IV, Hillsboro, OH (US)

(73) Assignee: **Ethicon LLC**, Guaynabo, PR (US)

(**) Term: **15 Years**

(21) Appl. No.: **29/608,977**

(22) Filed: **Jun. 27, 2017**

(51) **LOC (12) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/145**

(58) **Field of Classification Search**

USPC D24/127, 133, 143, 145, 146, 147;
227/175.1, 179.1

CPC A61B 17/10; A61B 17/068; A61B 17/122;
A61B 17/115; A61B 17/072; A61B
17/07207; A61B 17/064; A61B 17/0469;
A61B 17/320092; A61B 2017/2925;
A61B 2017/00017; A61B 2017/320093;
A61B

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D541,418 S * 4/2007 Schechter D24/144
D631,964 S * 2/2011 Miles D24/133
D680,646 S * 4/2013 Hunt D24/145

(Continued)

FOREIGN PATENT DOCUMENTS

EP 3064141 A1 * 9/2016 A61B 17/072
EP 3178413 A1 * 6/2017 A61B 17/07207

Primary Examiner — Wan Laymon

Assistant Examiner — Clint A Samuel

(74) *Attorney, Agent, or Firm* — Frost Brown Todd LLC

(57) **CLAIM**

The ornamental design for a shaft assembly for surgical stapler, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a shaft assembly for surgical stapler, showing our new design;

FIG. 2 is a rear perspective view of the shaft assembly of FIG. 1;

FIG. 3 is a right elevational view of the shaft assembly of FIG. 1;

FIG. 4 is a left elevational view of the shaft assembly of FIG. 1;

FIG. 5 is a front elevational view of the shaft assembly of FIG. 1;

FIG. 6 is a rear elevational view of the shaft assembly of FIG. 1;

FIG. 7 is a top plan view of the shaft assembly of FIG. 1;

FIG. 8 is a bottom plan view of the shaft assembly of FIG. 1;

FIG. 9 is an enlarged perspective view of a distal portion of the shaft assembly of FIG. 1, the portion being indicated by the broken line circle labeled as "FIG. 9" in FIG. 1;

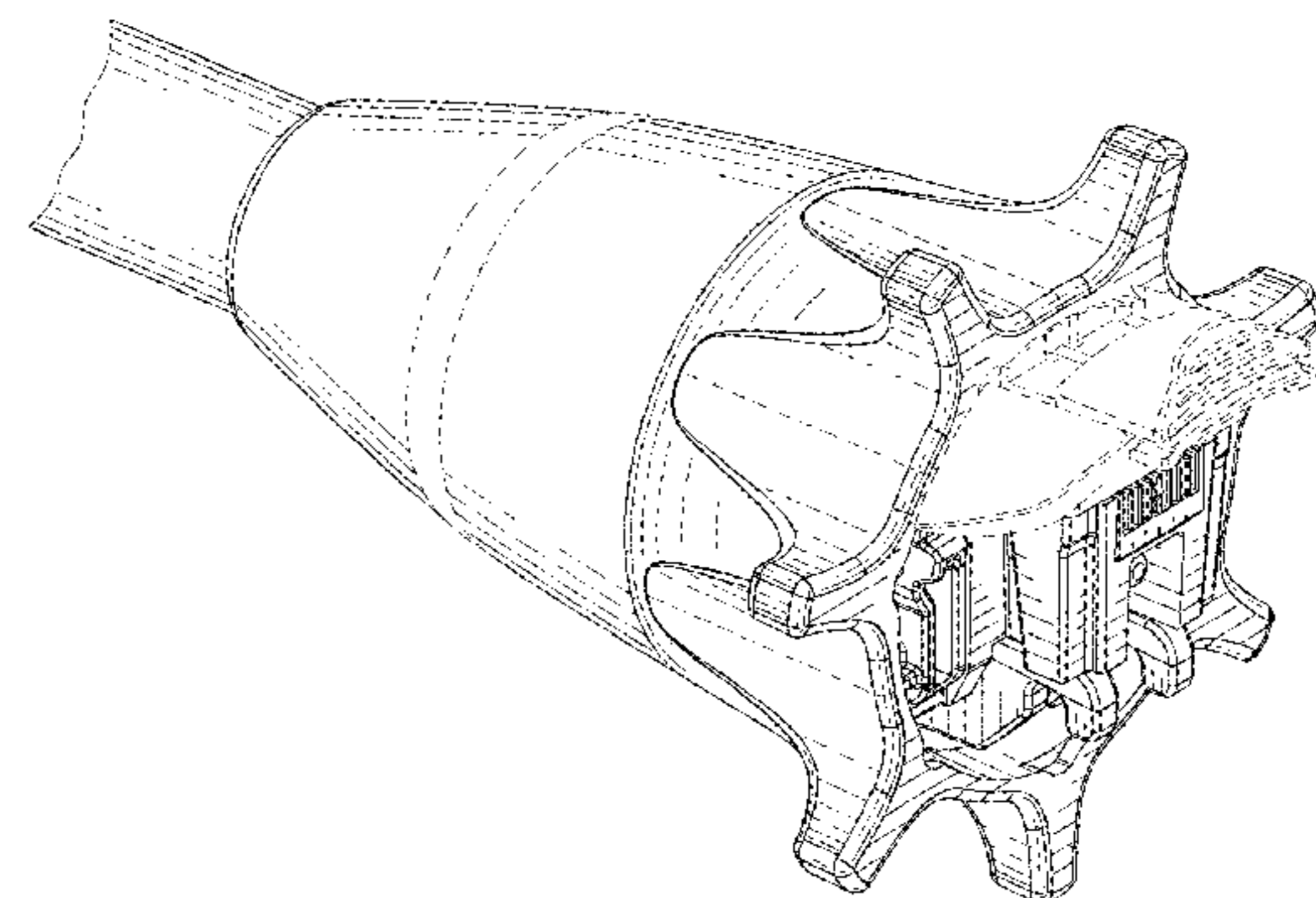
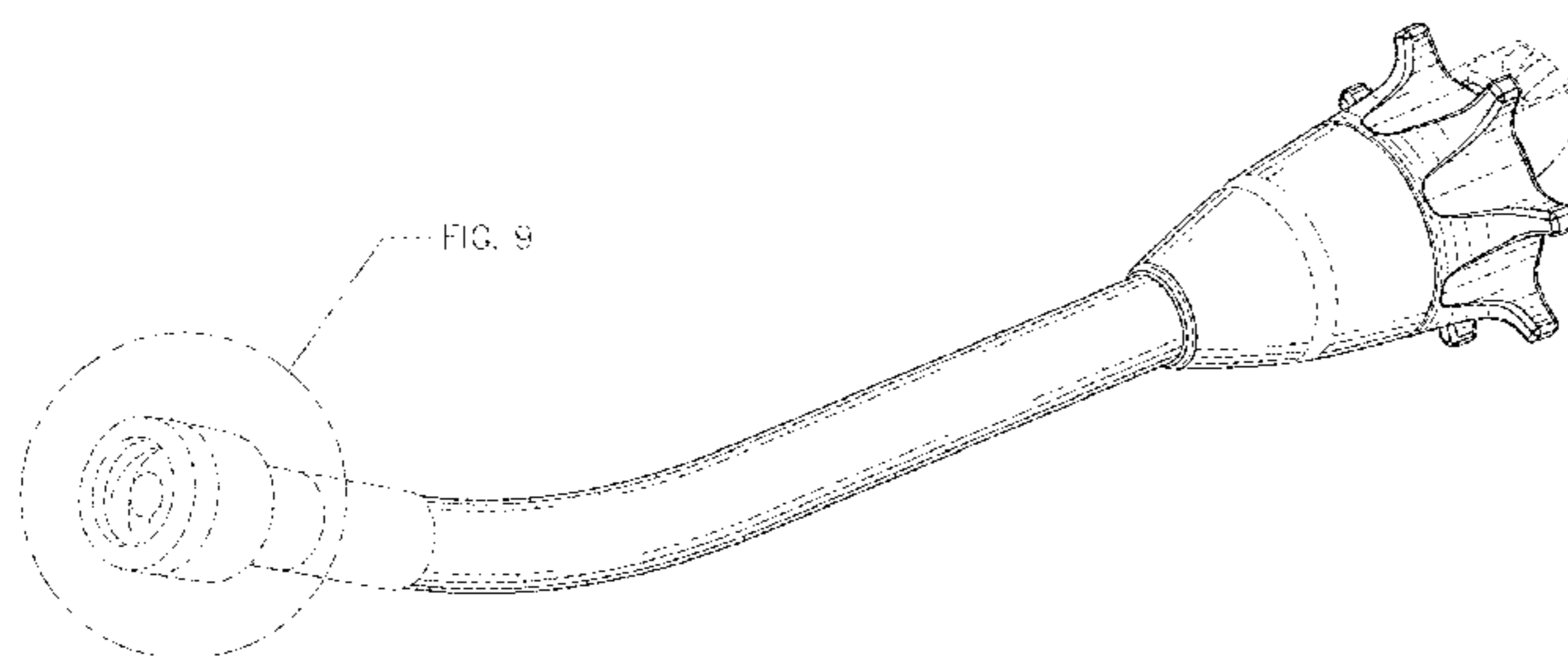
FIG. 10 is another enlarged perspective view of the distal portion of FIG. 9;

FIG. 11 is an enlarged perspective view of a proximal portion of the shaft assembly of FIG. 1, the portion being indicated by the broken line circle labeled as "FIG. 11" in FIG. 2; and,

FIG. 12 is another enlarged perspective view of the proximal portion of FIG. 11.

The distal and proximal shaft assembly portions shown in broken lines are unclaimed environment, and form no part of the claimed design.

1 Claim, 11 Drawing Sheets



(58) **Field of Classification Search**

CPC 2017/320094; A61B 2017/320095; A61B
2017/320097

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D681,202 S * 4/2013 Hunt D24/145
D700,325 S * 2/2014 Nalagatla D24/145
D800,904 S * 10/2017 Leimbach D24/145
10,111,679 B2 * 10/2018 Baber A61B 90/92
2014/0367448 A1 * 12/2014 Cappola A61B 17/29
227/177.1
2016/0270788 A1 * 9/2016 Czernik A61B 17/07207
2018/0168592 A1 * 6/2018 Overmyer A61B 34/30
2018/0168597 A1 * 6/2018 Fanelli A61B 17/07207
2018/0168634 A1 * 6/2018 Harris A61B 17/07207
2018/0303481 A1 * 10/2018 Shelton, IV A61B 17/072
2018/0317921 A1 * 11/2018 Cabrera A61B 17/0682
2018/0360445 A1 * 12/2018 Shelton, IV A61B 17/07207
2019/0000471 A1 * 1/2019 Shelton, IV A61B 34/30
2019/0015097 A1 * 1/2019 Williams A61B 17/068
2019/0059892 A1 * 2/2019 Miller A61B 17/07207

* cited by examiner

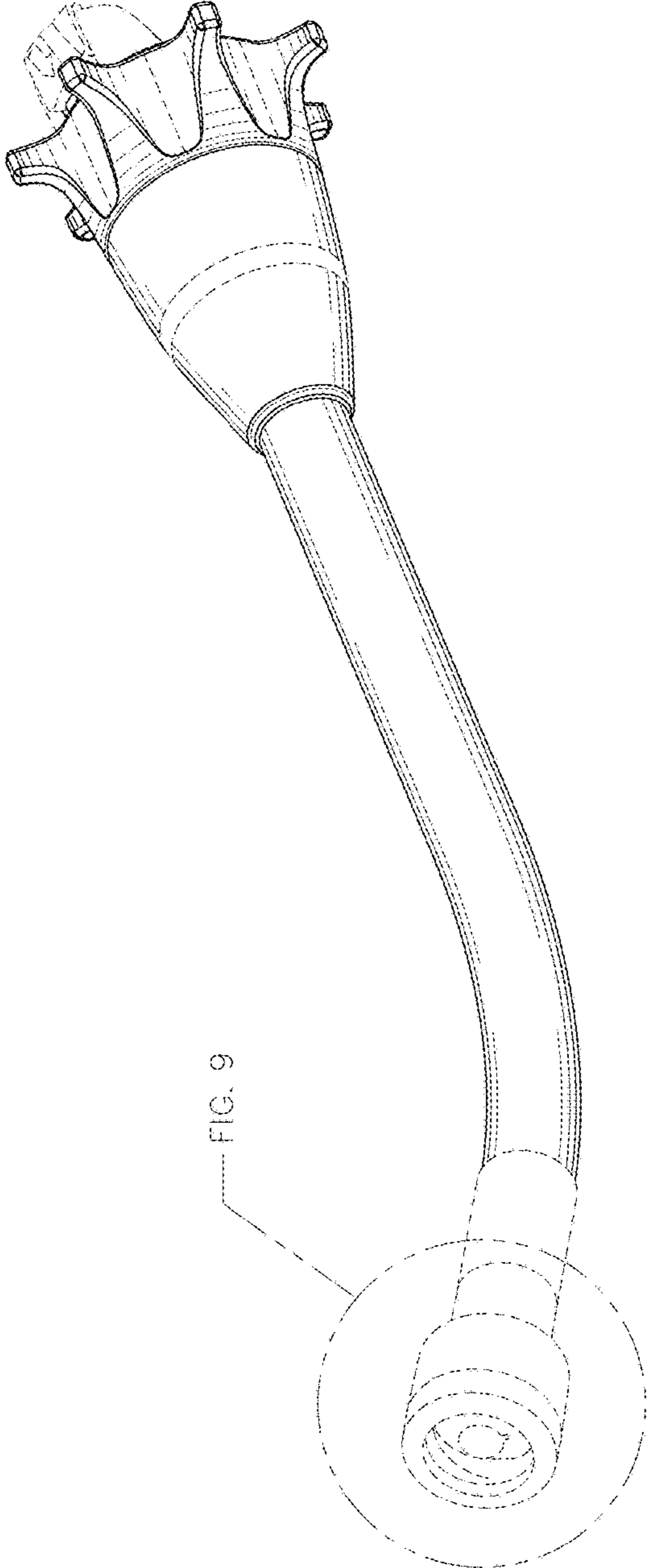


Fig. 1

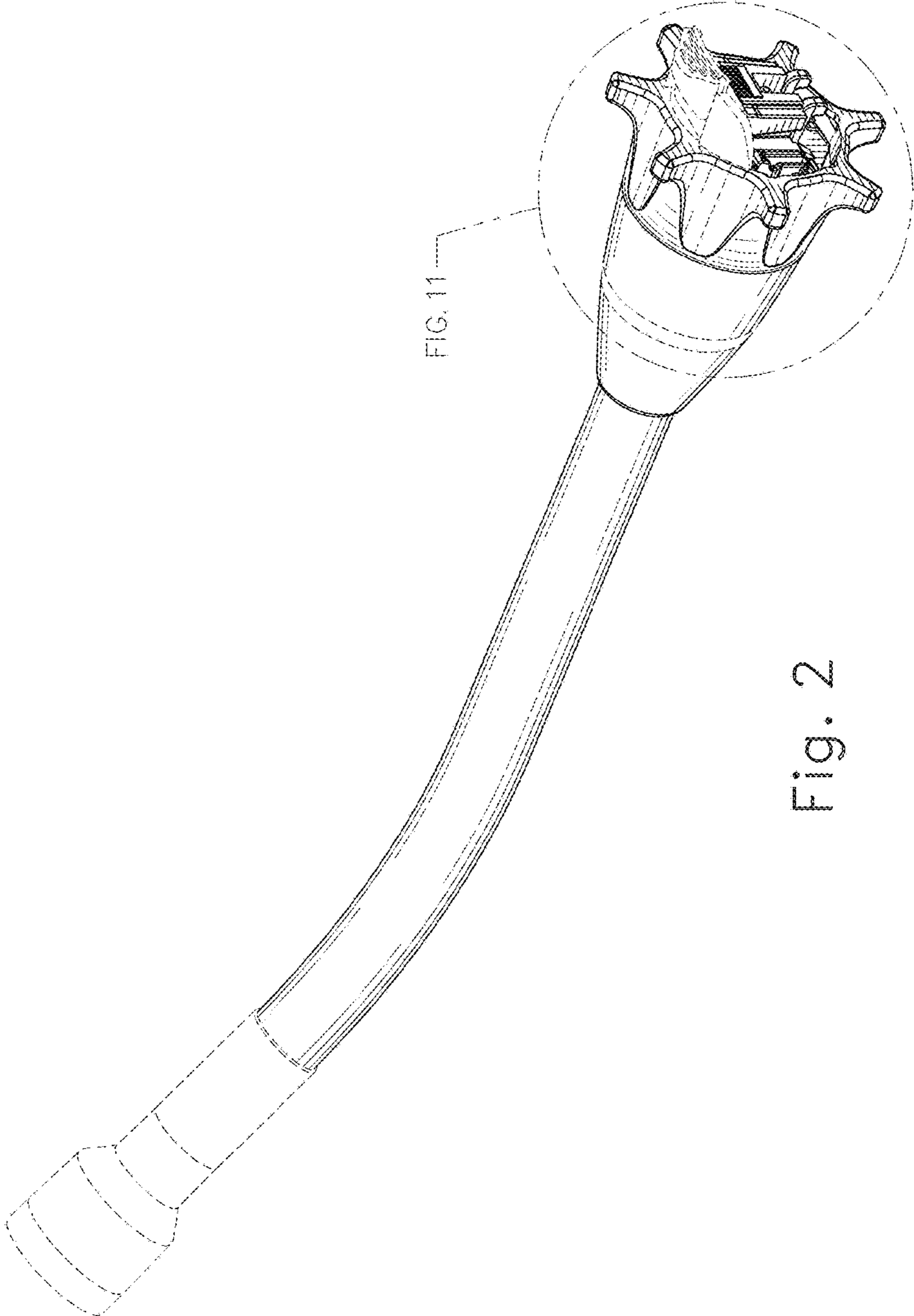


FIG. 11

Fig. 2

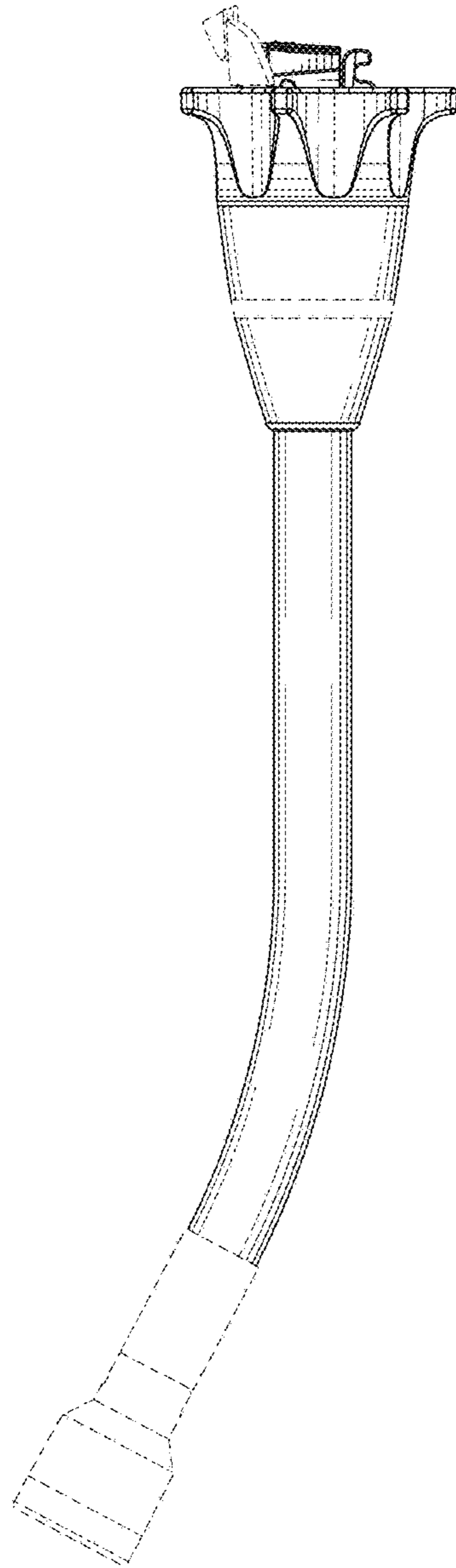


Fig. 3

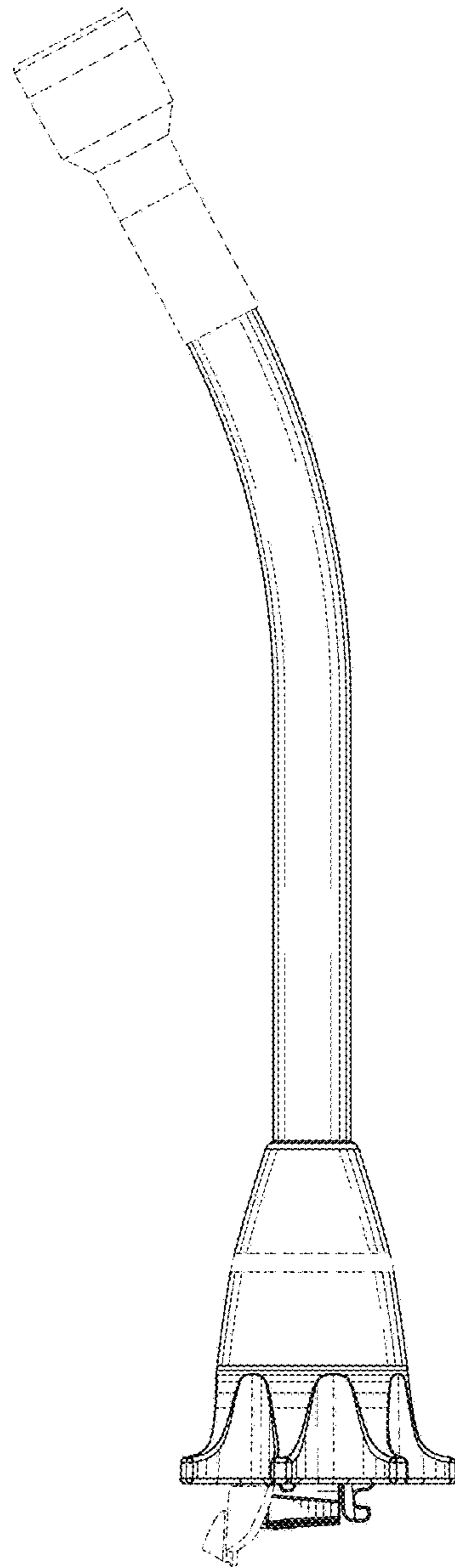


Fig. 4

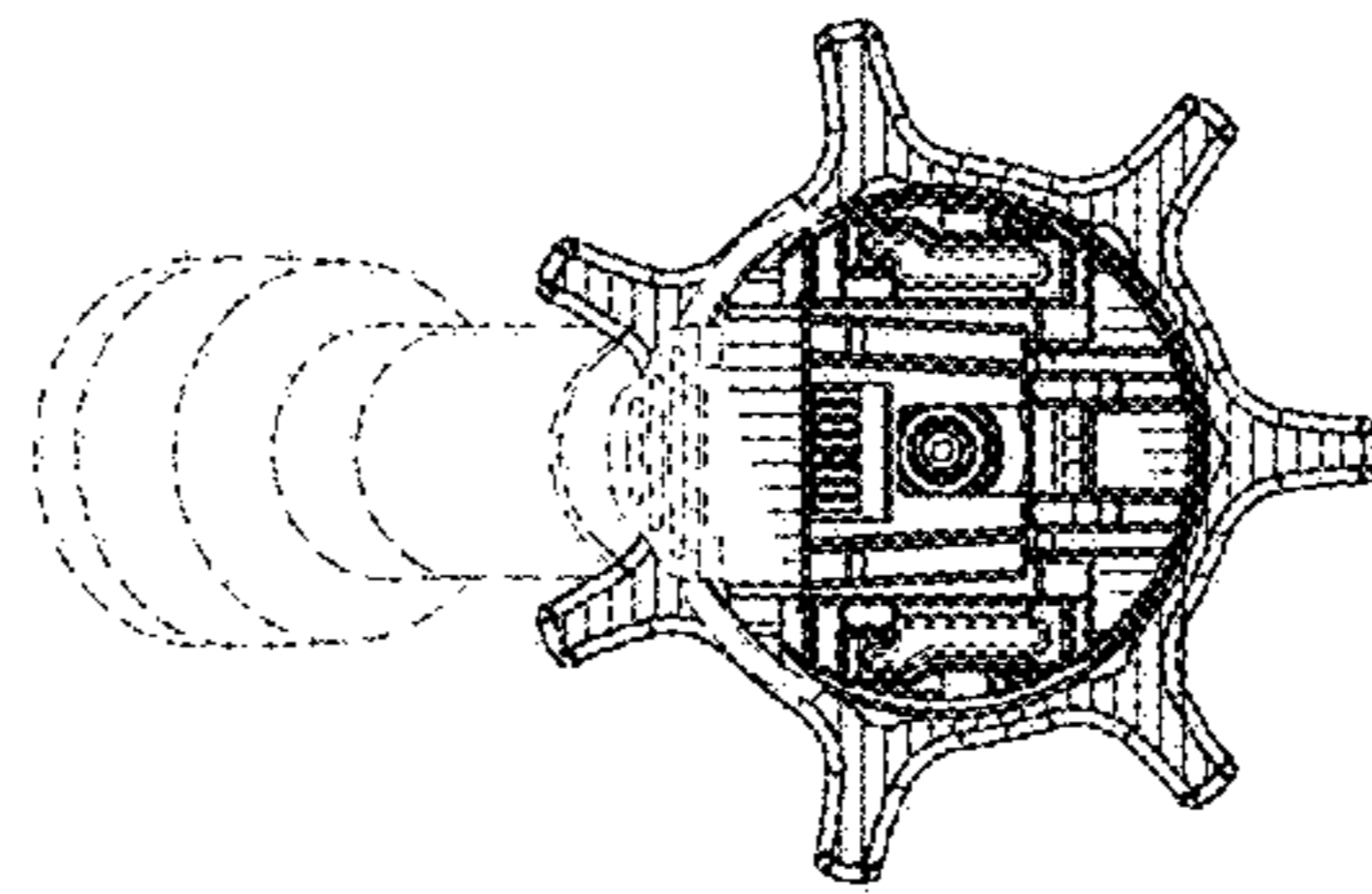


Fig. 6

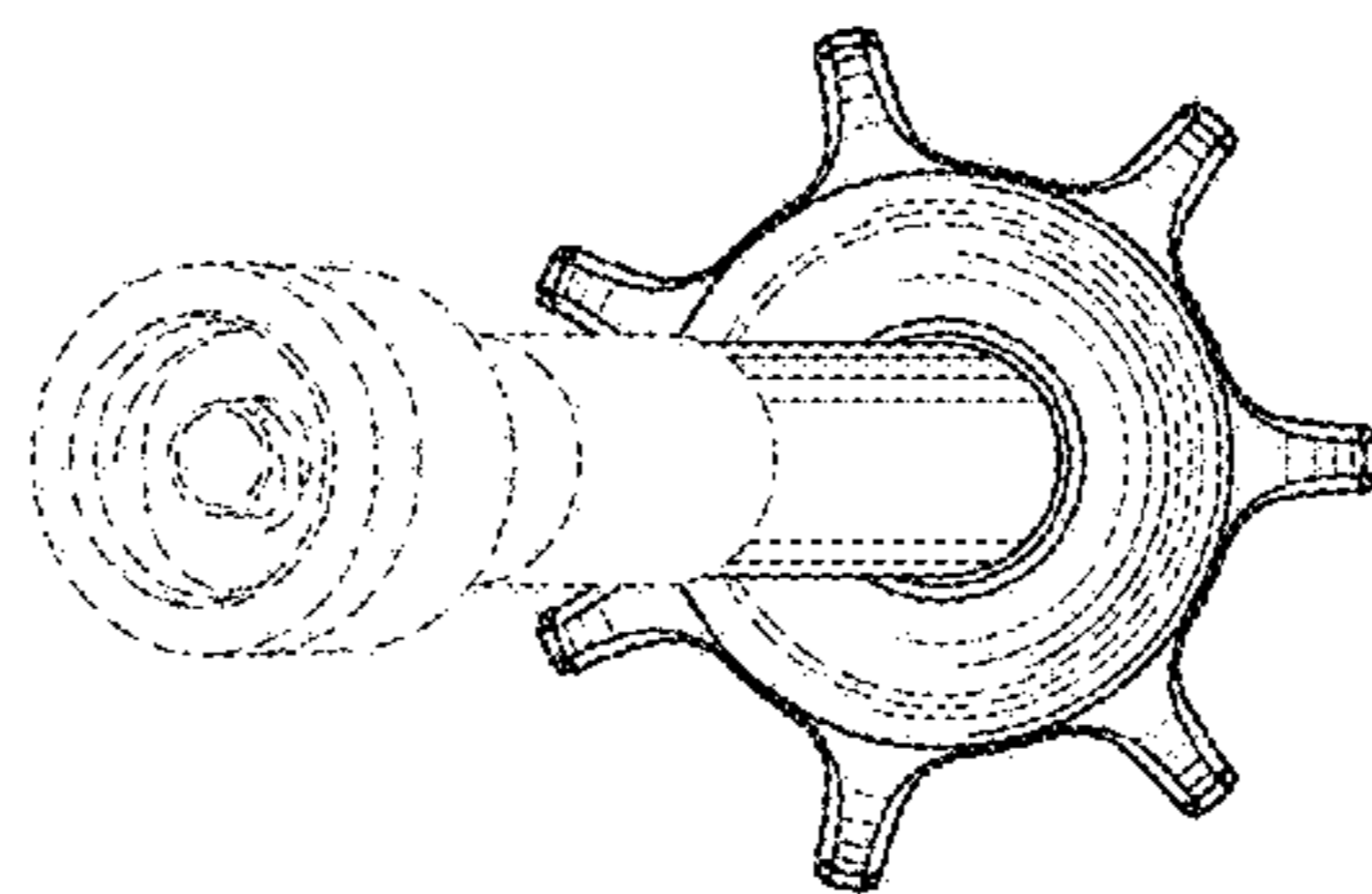


Fig. 5

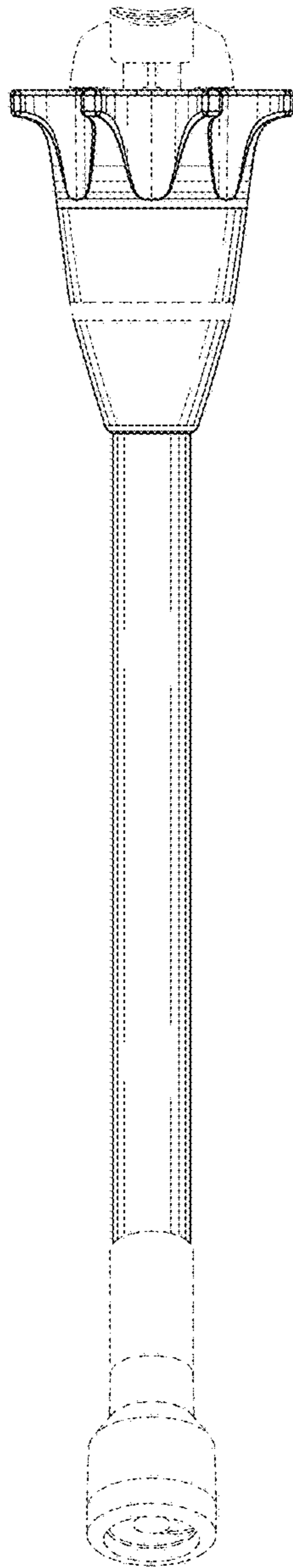


Fig. 7

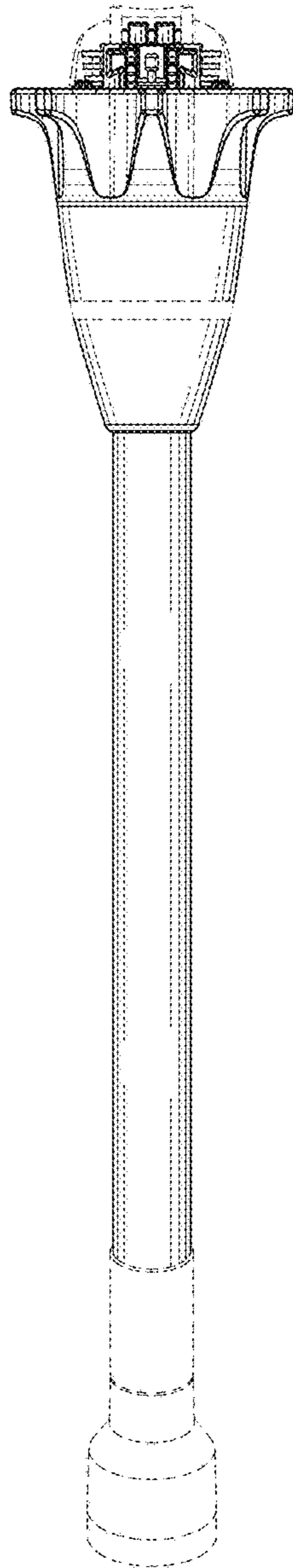


Fig. 8

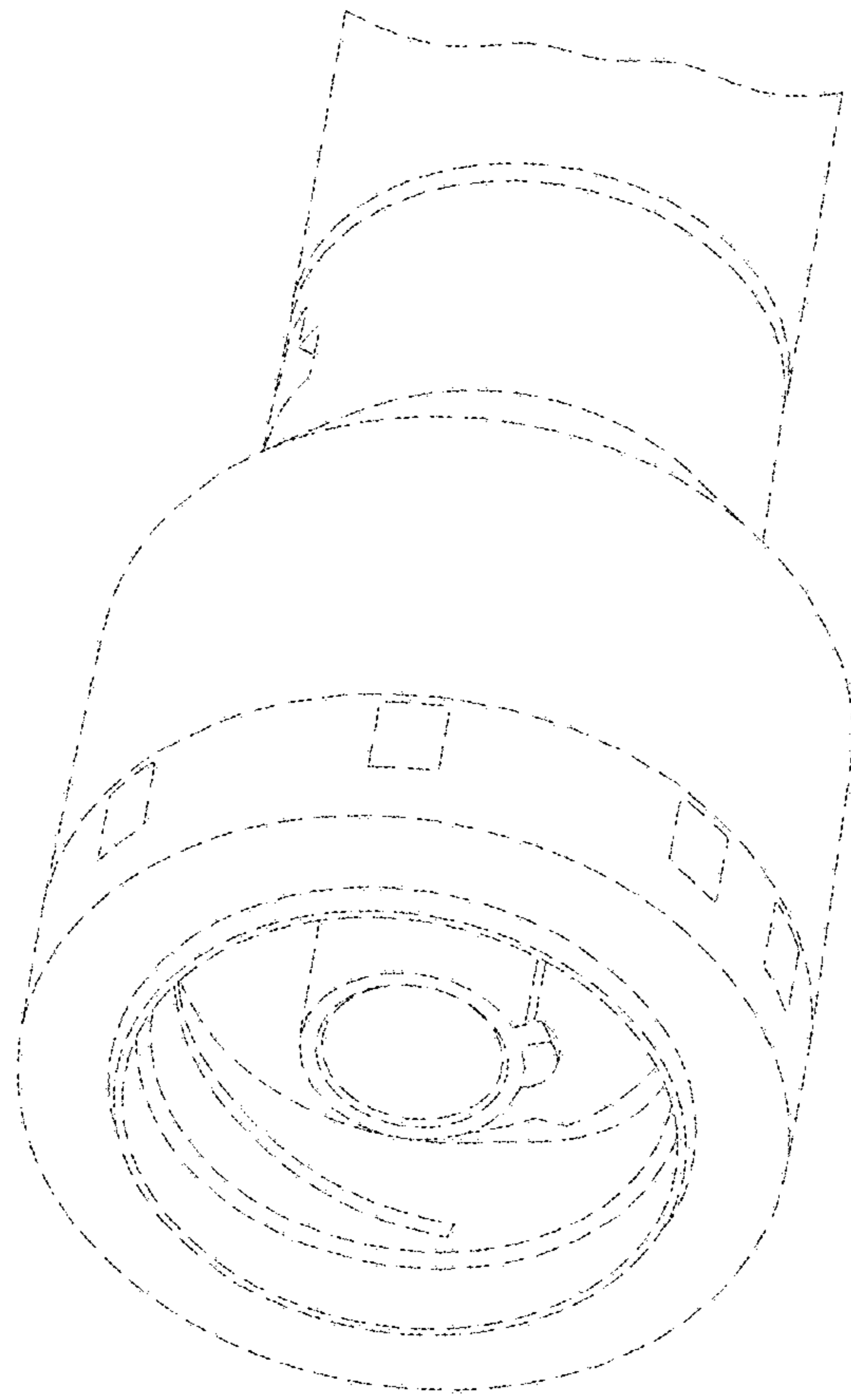


Fig. 9

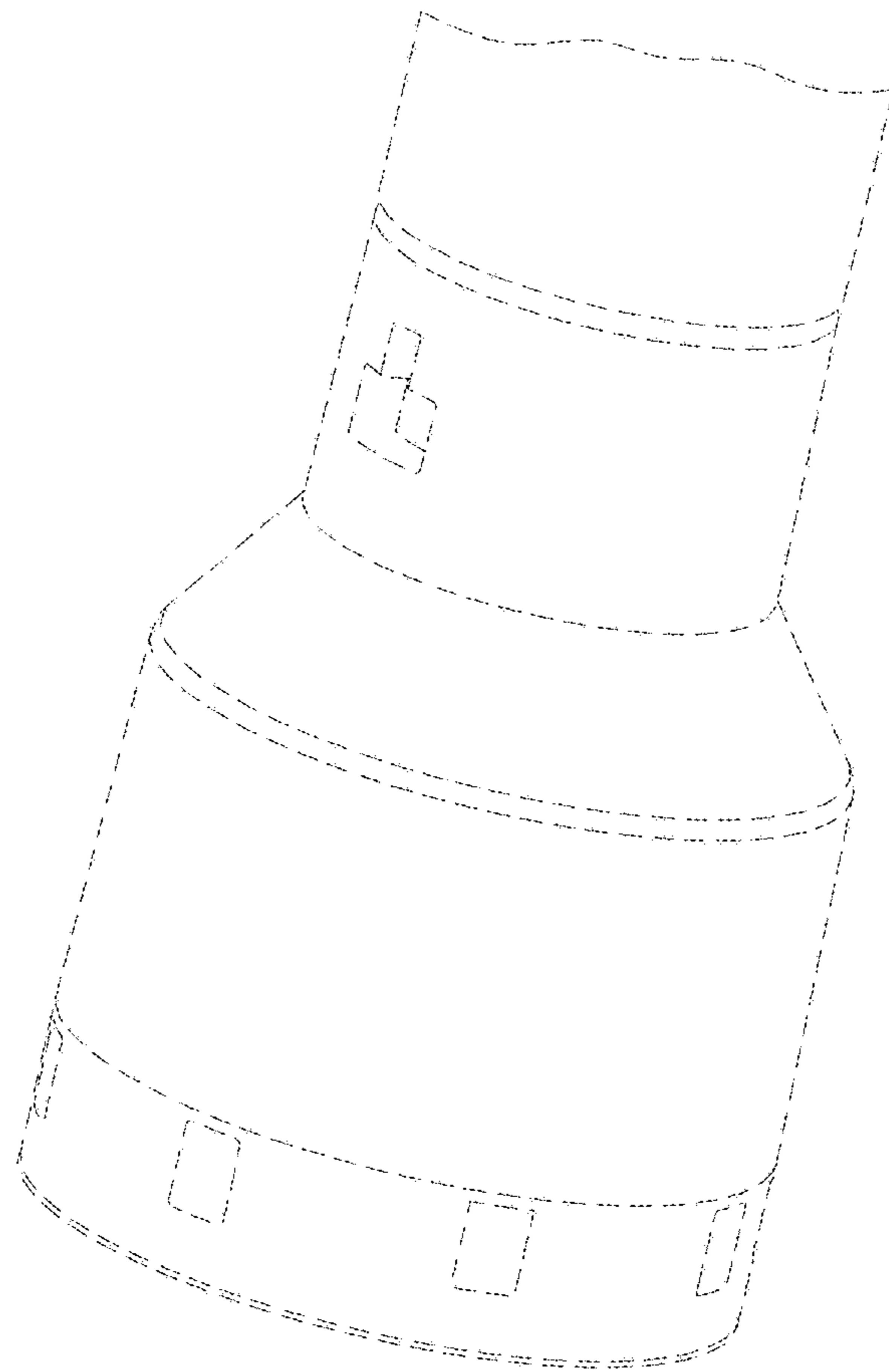


Fig.10

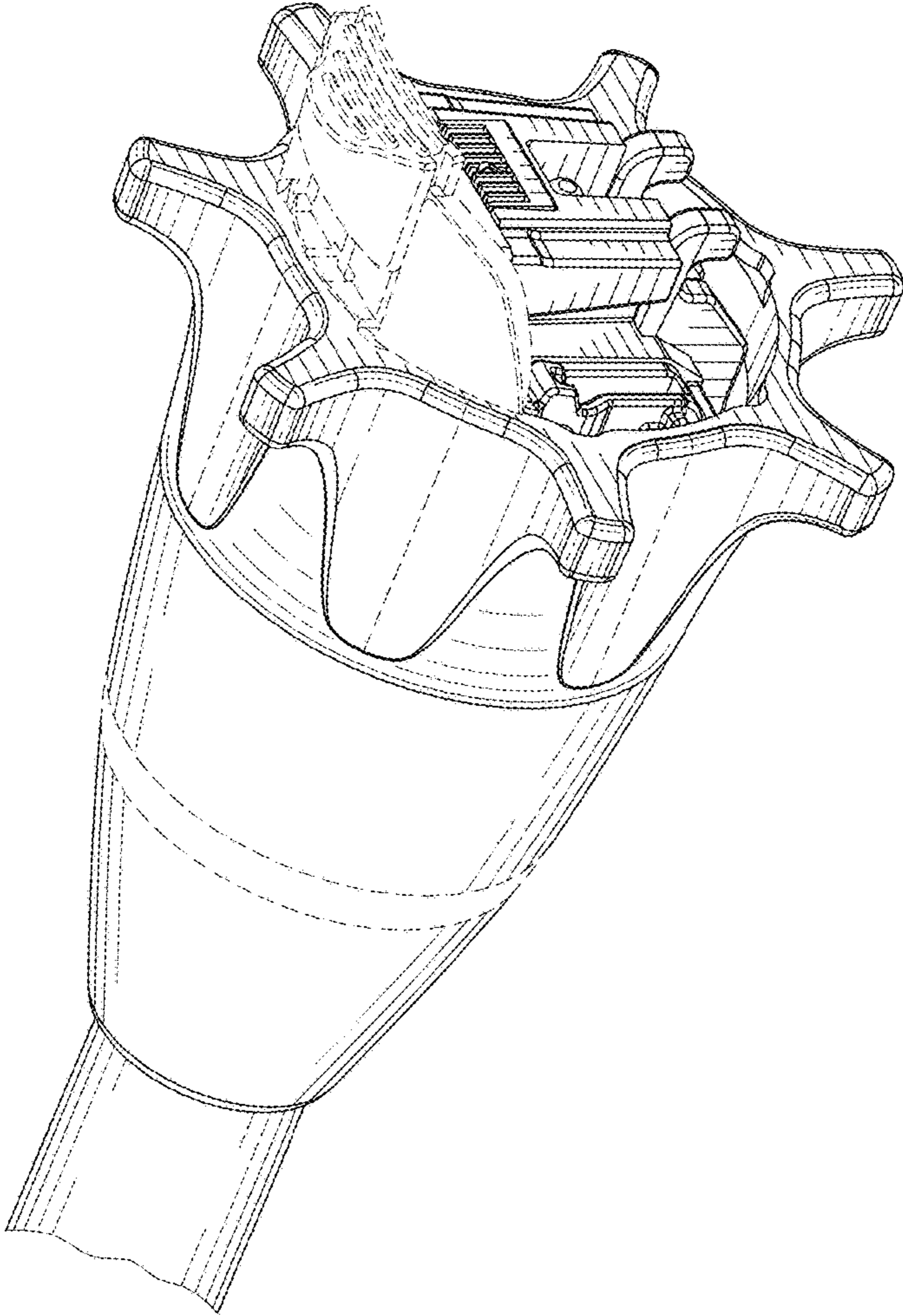


Fig. 11

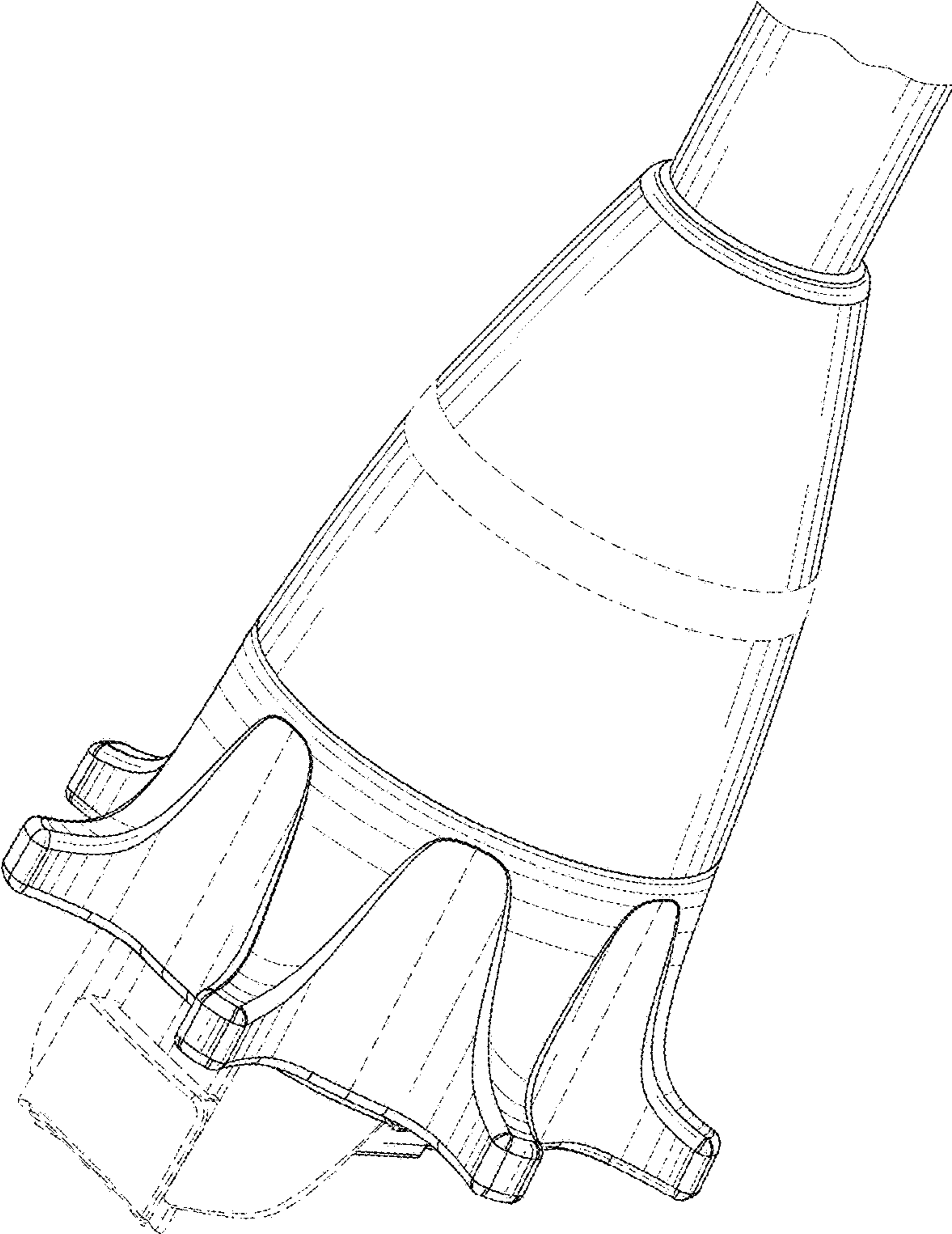


Fig.12