



US00D988535S

(12) **United States Design Patent** (10) **Patent No.:** **US D988,535 S**  
**Norell** (45) **Date of Patent:** **\*\* Jun. 6, 2023**

(54) **NMR TUBE**

(74) *Attorney, Agent, or Firm* — The Belles Group, P.C.

(71) Applicant: **Norell, Inc.**, Morganton, NC (US)

(57) **CLAIM**

(72) Inventor: **Gregory B. Norell**, Morganton, NC (US)

The ornamental design for a NMR tube, as shown and described.

(73) Assignee: **Norell, Inc.**

**DESCRIPTION**

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

(21) Appl. No.: **29/743,325**

(22) Filed: **Jul. 21, 2020**

**Related U.S. Application Data**

(60) Continuation-in-part of application No. 29/671,222, filed on Nov. 26, 2018, now Pat. No. Des. 890,950, (Continued)

(51) **LOC (14) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/224**

(58) **Field of Classification Search**  
USPC ..... D24/224, 107, 216, 226, 227, 230, 232;  
D7/300, 300.2

(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D258,533 S 3/1981 Pagels  
D277,788 S \* 2/1985 Liston ..... D24/224  
(Continued)

**OTHER PUBLICATIONS**

NMR Tube By: Kemtech found on Amazon (Jun. 23, 2022) [https://www.amazon.com/Kemtech-XWE-5MM-7-50-Synthware-Borosilicate-Diameter/dp/B06Y1VTDNK/ref=sr\\_1\\_6?crd=](https://www.amazon.com/Kemtech-XWE-5MM-7-50-Synthware-Borosilicate-Diameter/dp/B06Y1VTDNK/ref=sr_1_6?crd=) (Date is not available).\*

*Primary Examiner* — Rebecca Tsehaye

FIG. 1 is a perspective view of a NMR tube in accordance with a first embodiment of the new design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a right side view thereof;  
FIG. 5 is a left side view thereof;  
FIG. 6 is a top view thereof;  
FIG. 7 is a bottom side view thereof;  
FIG. 8 is a close-up of area 8 of FIG. 1;  
FIG. 9 is a close-up of area 9 of FIG. 2;  
FIG. 10 is a perspective view of a NMR tube in accordance with a second embodiment of the new design;  
FIG. 11 is a front view thereof;  
FIG. 12 is a rear view thereof;  
FIG. 13 is a right side view thereof;  
FIG. 14 is a left side view thereof;  
FIG. 15 is a top view thereof;  
FIG. 16 is a bottom side view thereof;  
FIG. 17 is a close-up view of area 17 of FIG. 10;  
FIG. 18 is a close-up view of area 18 of FIG. 11;  
FIG. 19 is a perspective view of a NMR tube in accordance with a third embodiment of the new design;  
FIG. 20 is a front view thereof;  
FIG. 21 is a rear view thereof;  
FIG. 22 is a right side view thereof;  
FIG. 23 is a left side view thereof;  
FIG. 24 is a top view thereof;  
FIG. 25 is a bottom side view thereof;  
FIG. 26 is a close-up view of area 26 of FIG. 19;  
FIG. 27 is a close-up view of area 27 of FIG. 20;  
FIG. 28 is a perspective view of a NMR tube in accordance with a fourth embodiment of the new design;  
FIG. 29 is a front view thereof;  
FIG. 30 is a rear view thereof;  
FIG. 31 is a right side view thereof;

(Continued)

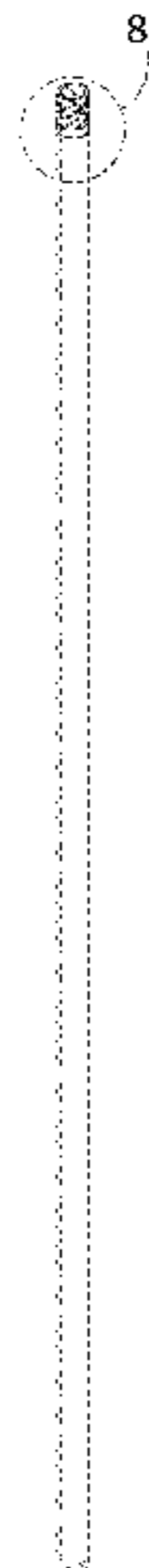


FIG. 32 is a left side view thereof;  
 FIG. 33 is a top view thereof;  
 FIG. 34 is a bottom side view thereof;  
 FIG. 35 is a close-up view of area 35 of FIG. 28;  
 FIG. 36 is a close-up view of area 36 of FIG. 29;  
 FIG. 37 is a perspective view of a NMR tube in accordance with a fifth embodiment of the new design;  
 FIG. 38 is a front view thereof;  
 FIG. 39 is a rear view thereof;  
 FIG. 40 is a right side view thereof;  
 FIG. 41 is a left side view thereof;  
 FIG. 42 is a top view thereof;  
 FIG. 43 is a bottom side view thereof;  
 FIG. 44 is a close-up view of area 44 of FIG. 37; and,  
 FIG. 45 is a close-up view of area 45 of FIG. 38.  
 The broken lines consisting of evenly spaced dash lines in the drawings depict portions of the NMR tube that form no part of the claimed design. The broken lines consisting of short and long dash lines encircling the enlarged detail views are for annotative purposes that form no part of the claimed design.

**1 Claim, 15 Drawing Sheets**

**Related U.S. Application Data**

which is a continuation of application No. 29/610,078, filed on Jul. 10, 2017, now Pat. No. Des. 838,000, which is a division of application No. 29/535,310, filed on Aug. 5, 2015, now Pat. No. Des. 794,821, and a division of application No. 29/533,168, filed on Jul. 15, 2015, now Pat. No. Des. 794,820.

(58) **Field of Classification Search**  
 CPC ..... G01V 3/00; G01R 33/30  
 See application file for complete search history.

(56)

**References Cited**

U.S. PATENT DOCUMENTS

D292,735	S	*	11/1987	Lovborg .....	D24/224
D318,728	S		7/1991	Braune	
D325,444	S		4/1992	Murashita et al.	
D332,198	S		1/1993	Goodman, Jr.	
D371,269	S		7/1996	Shattuck et al.	
6,054,857	A		4/2000	Doty	
D427,477	S	*	7/2000	Pope .....	D7/300.2
D444,887	S		7/2001	Conway	
D470,761	S		2/2003	Kelvie	
D490,532	S	*	5/2004	Van Damme .....	D24/232
D497,509	S		10/2004	Nelson	
6,917,201	B2		7/2005	Swiet	
7,075,303	B2		7/2006	Cavaluzzi et al.	
D540,380	S	*	4/2007	Hoshiya .....	D24/224
D550,496	S		9/2007	Stribling et al.	
7,830,148	B2		11/2010	Tanaka	
D628,708	S		12/2010	Anderson	
8,098,069	B1		1/2012	Bez et al.	
D674,649	S		1/2013	Ludwig et al.	
8,421,458	B2		4/2013	Lowery, Jr. et al.	
D719,388	S	*	12/2014	Ecseri .....	D7/300.2
D726,550	S		4/2015	Lu	
D732,871	S	*	6/2015	Zeghibe .....	D7/300.2
D749,884	S		2/2016	Martins	
D757,476	S	*	5/2016	O'Neill .....	D7/300.2
D768,868	S		10/2016	Inoue	
D794,820	S		8/2017	Norell	
D794,821	S		8/2017	Norell	
D834,215	S	*	11/2018	D'Aoust .....	D24/216
D838,000	S		1/2019	Norell	
D843,008	S		3/2019	Blaszczak et al.	
D846,327	S	*	4/2019	Peterson .....	A23L 27/74 D7/300.2
D853,164	S		7/2019	Pepper	
D866,235	S		11/2019	Pepper	
D890,950	S	*	7/2020	Norell .....	D24/224
D940,893	S	*	1/2022	Wisherd .....	D24/224
D943,107	S	*	2/2022	Goh .....	D24/216
D944,411	S	*	2/2022	Goh .....	D24/216
D954,294	S	*	6/2022	Keller .....	D24/224
2009/0128151	A1		5/2009	Norell	
2011/0275153	A1		11/2011	Butler et al.	
2012/0194194	A1		8/2012	Norell	

\* cited by examiner

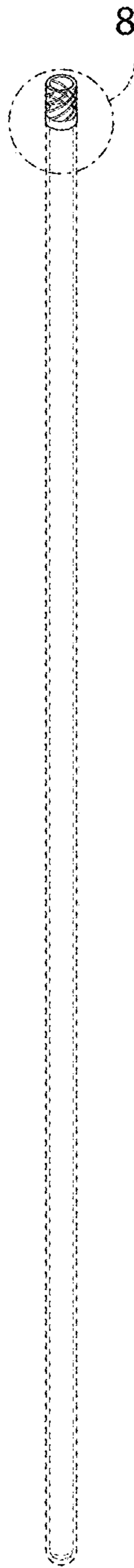


FIG. 1

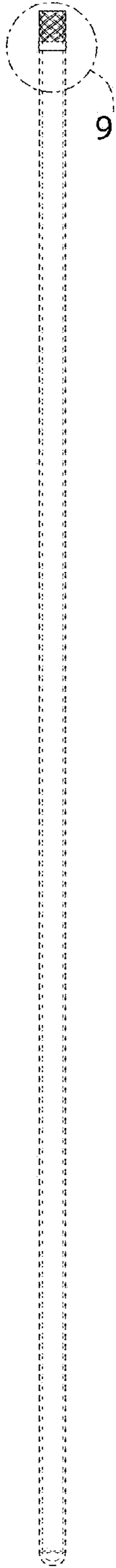


FIG. 2

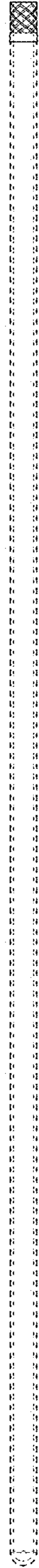


FIG. 3

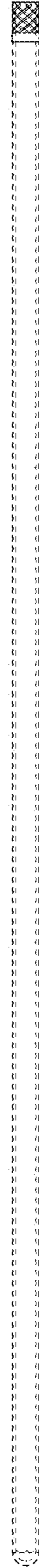


FIG. 4

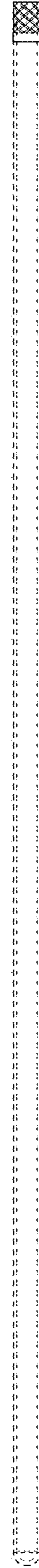


FIG. 5



FIG. 6



FIG. 7

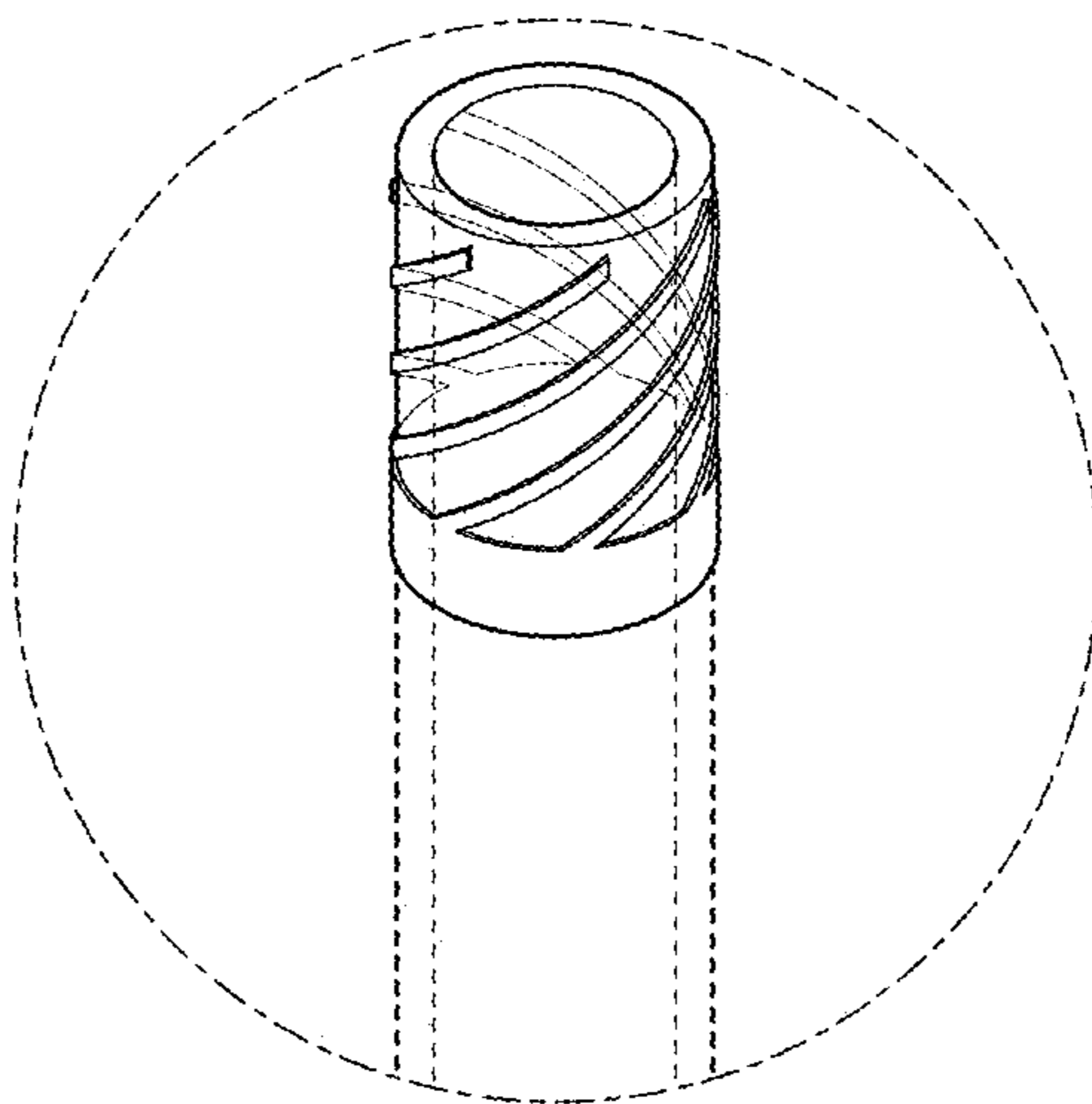


FIG. 8

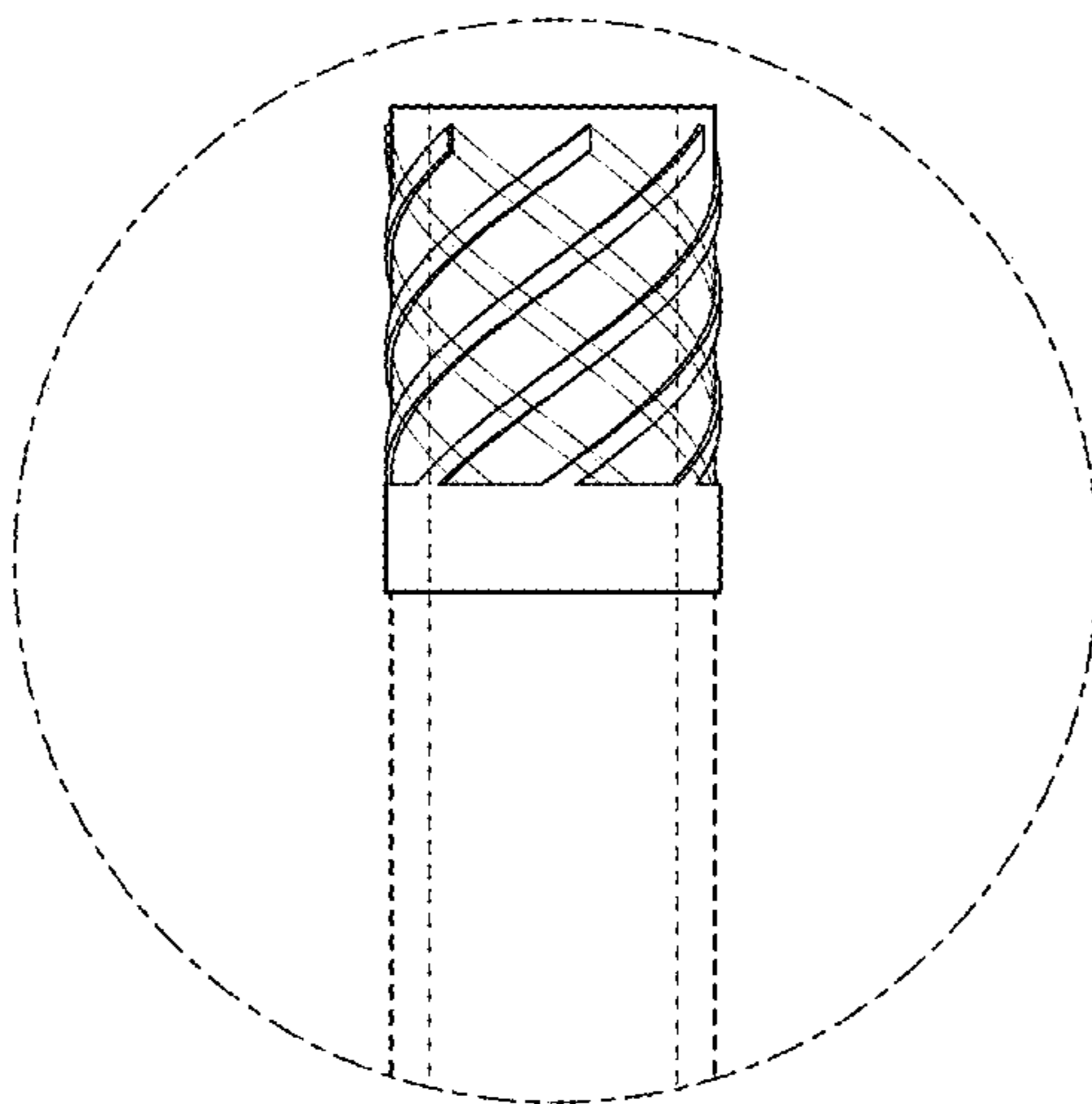


FIG. 9

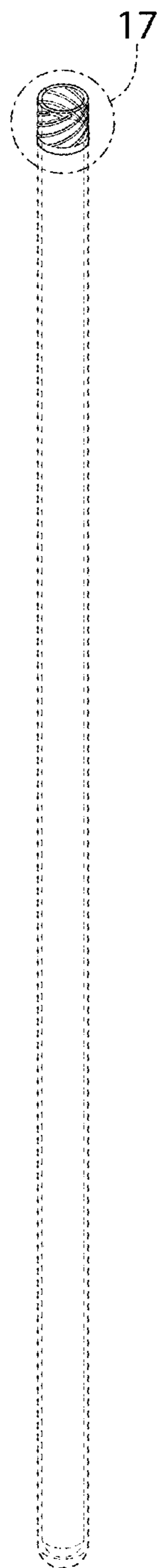


FIG. 10

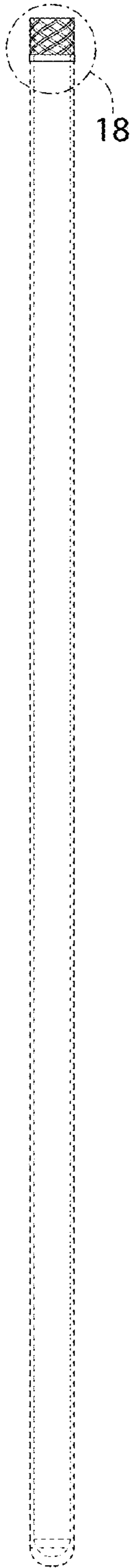


FIG. 11

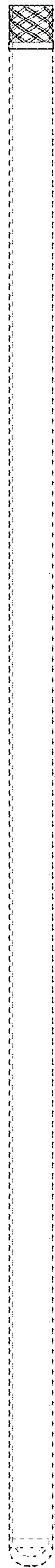


FIG. 12

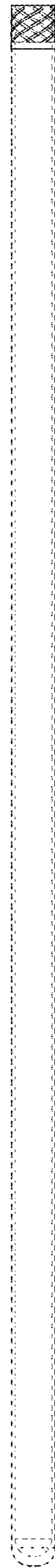


FIG. 13

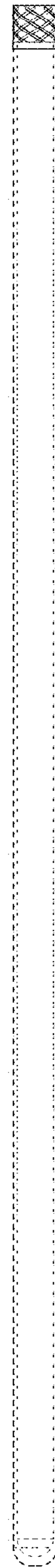


FIG. 14



FIG. 15



FIG. 16

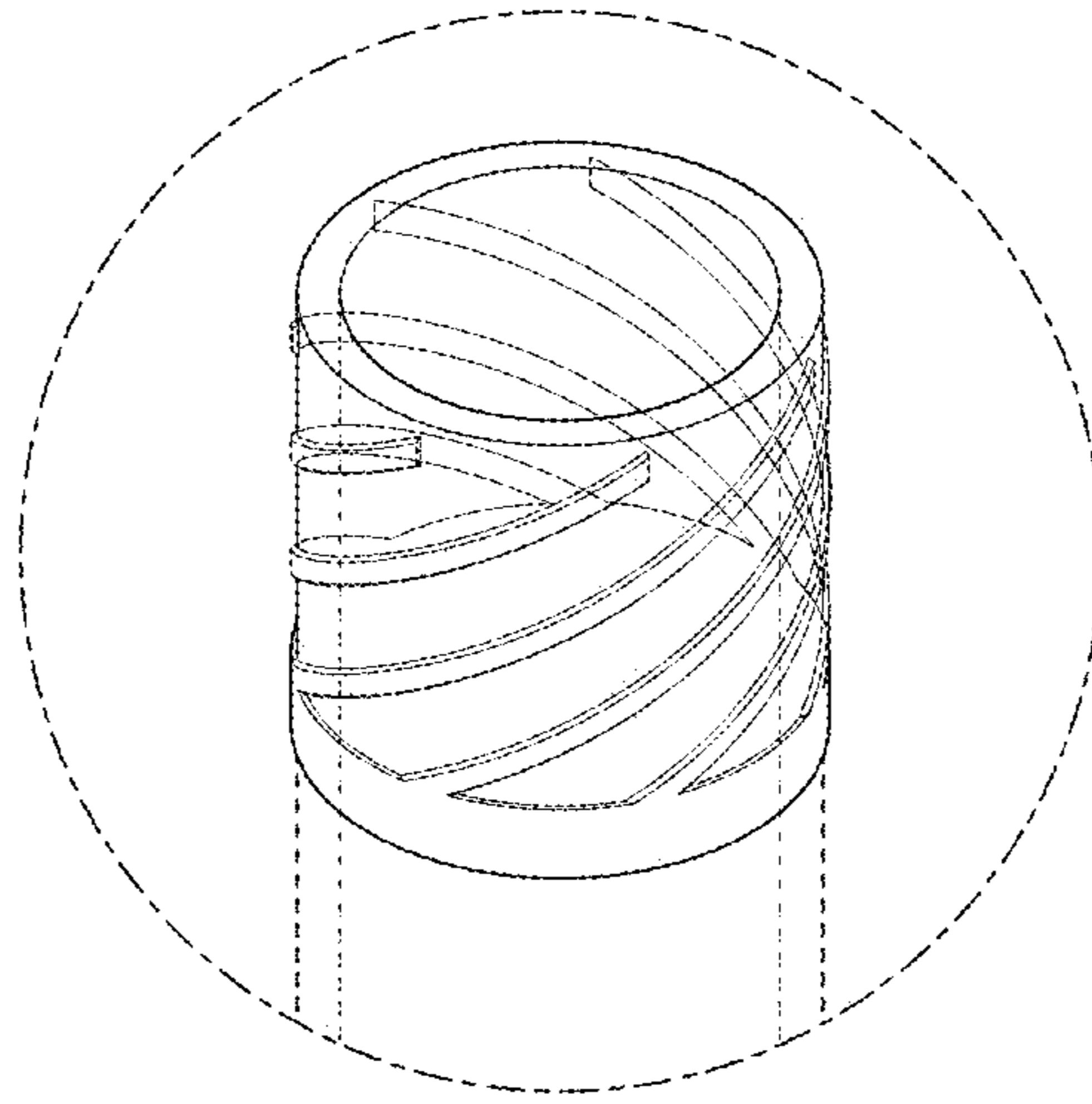


FIG. 17

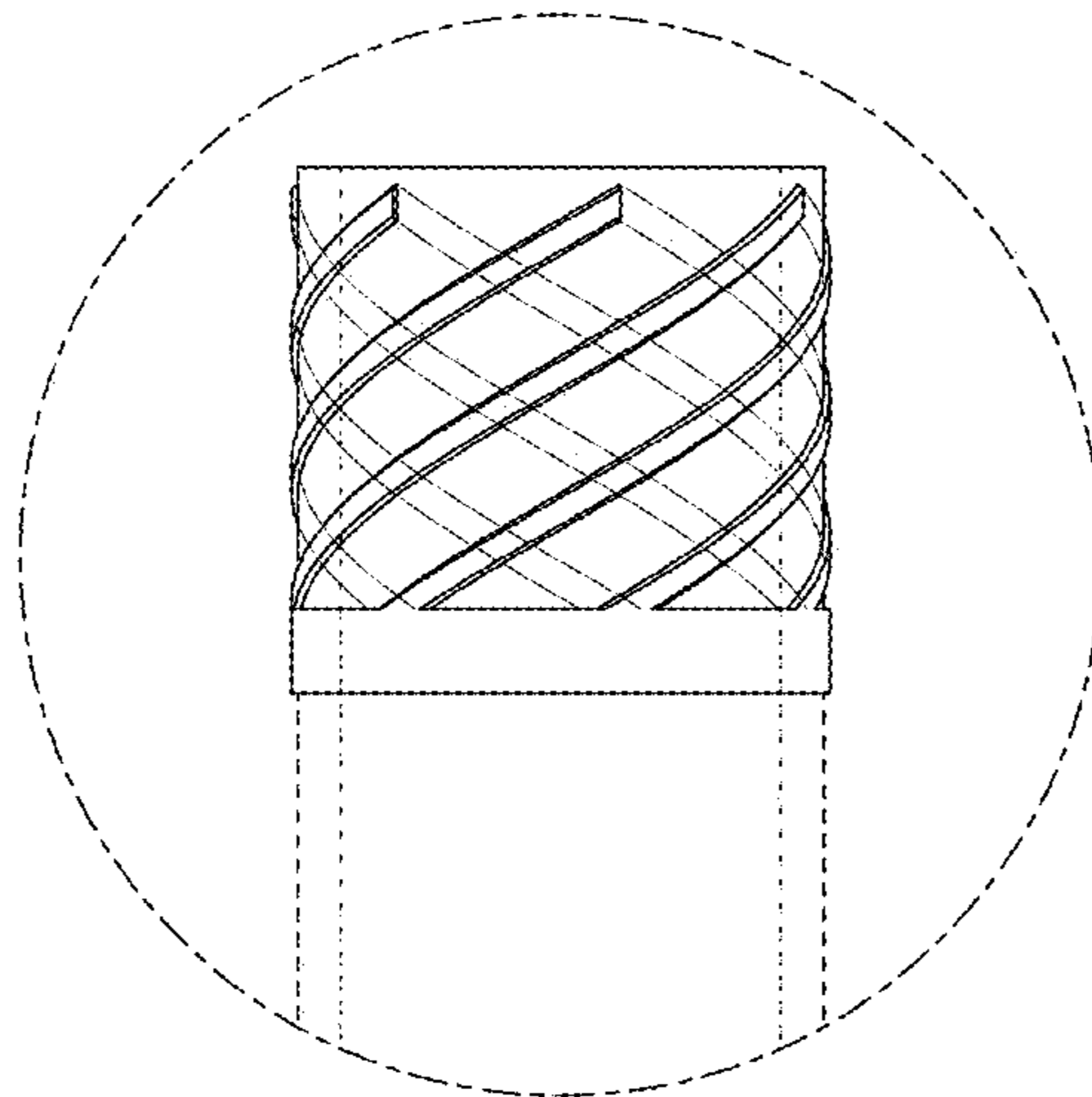


FIG. 18



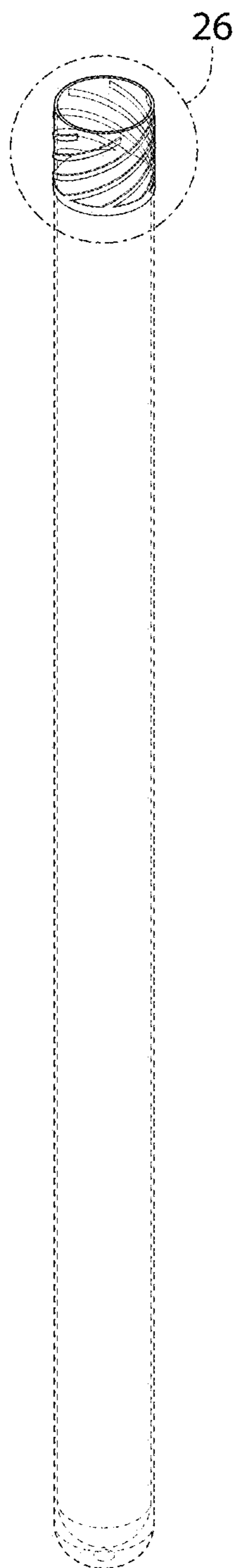
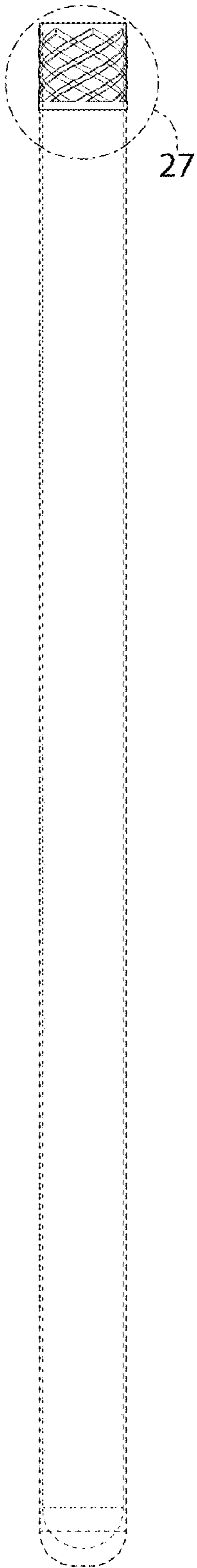


FIG. 19



27

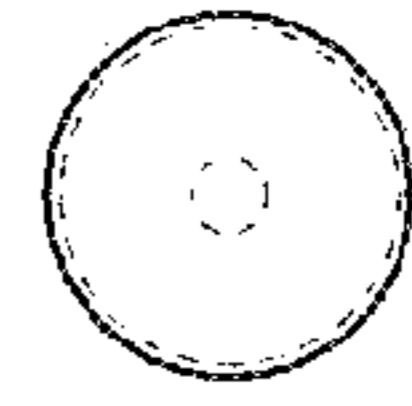
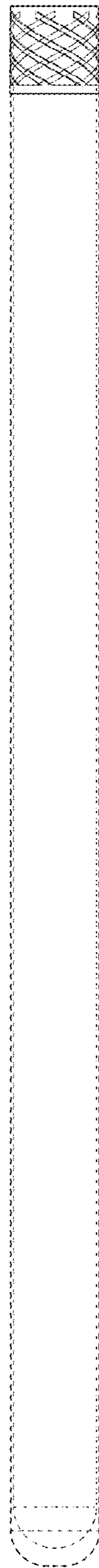
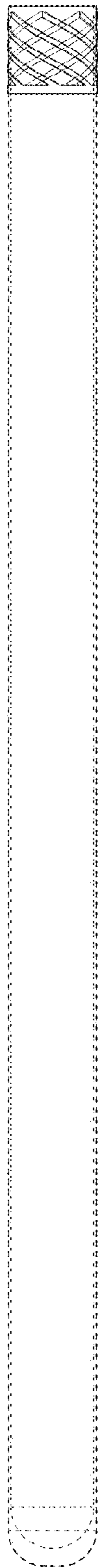
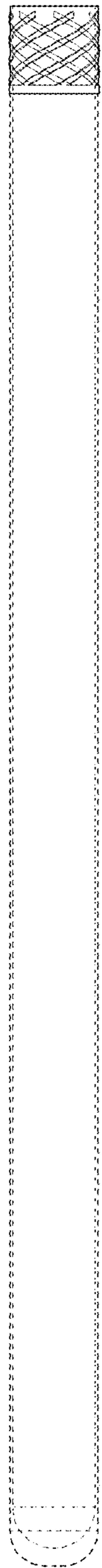


FIG. 24

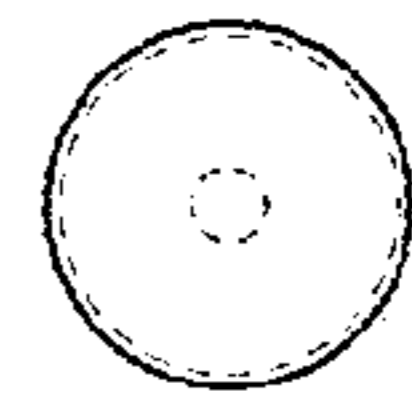


FIG. 25

FIG. 20

FIG. 21

FIG. 22

FIG. 23

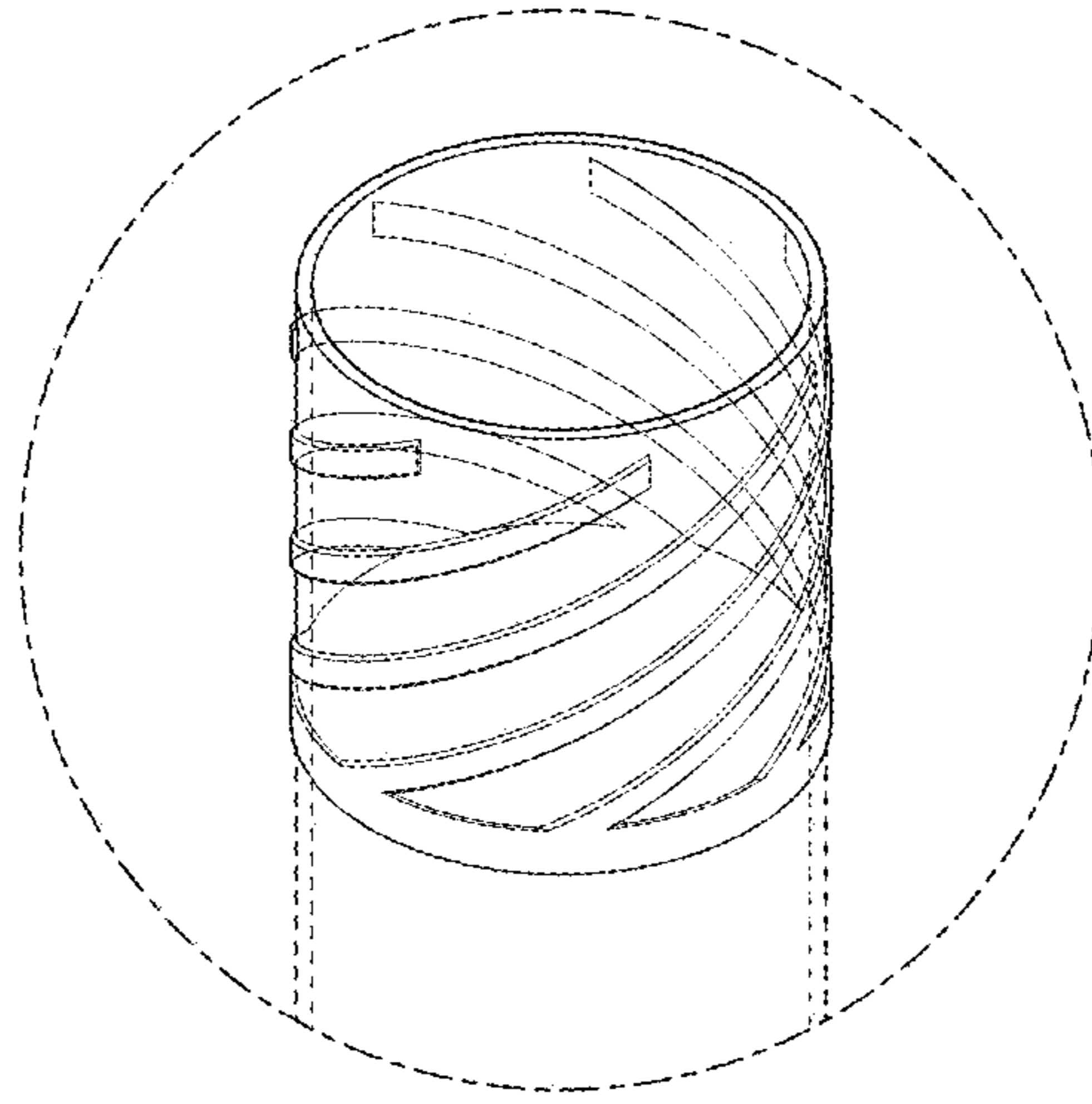


FIG. 26

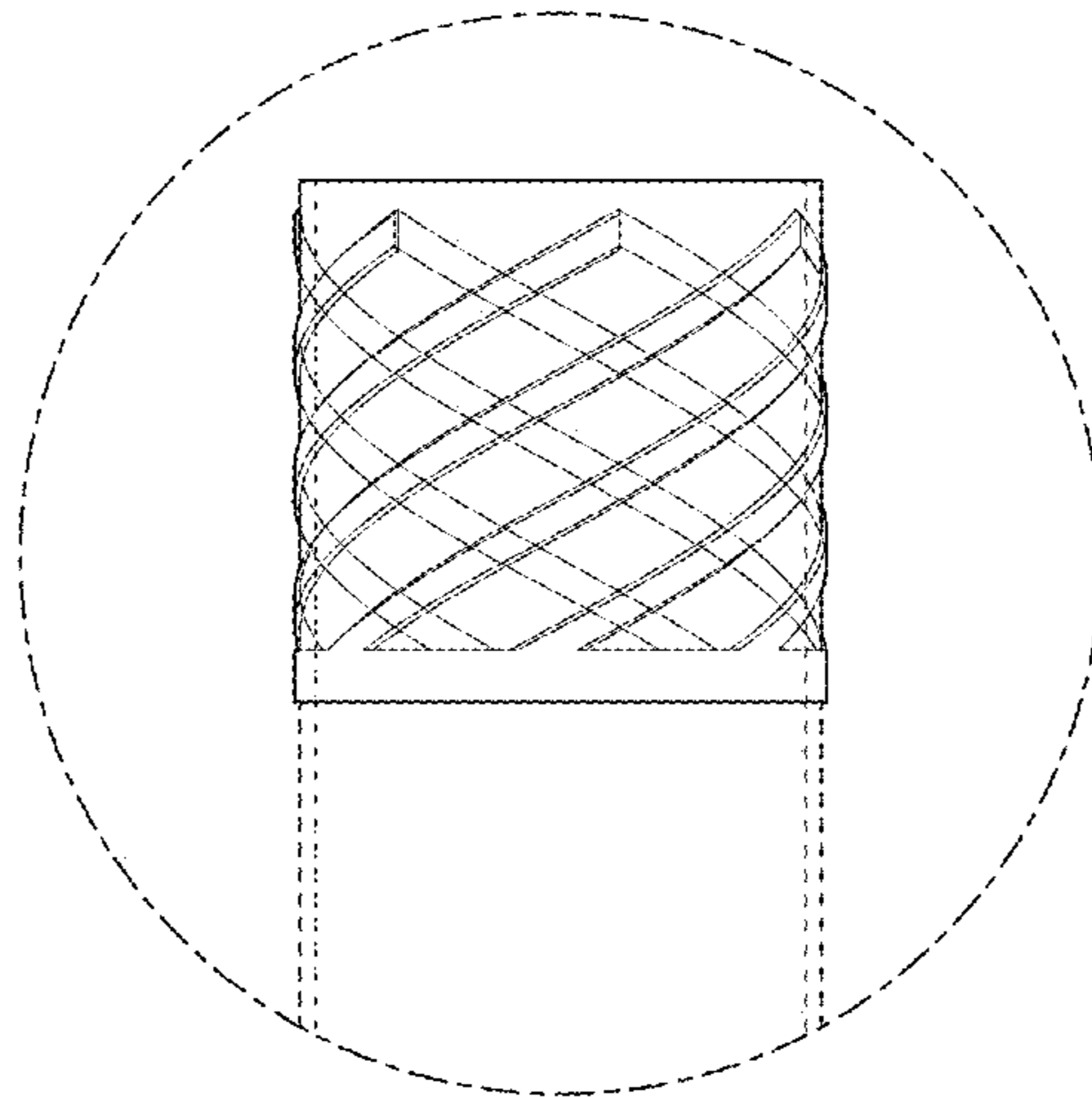


FIG. 27

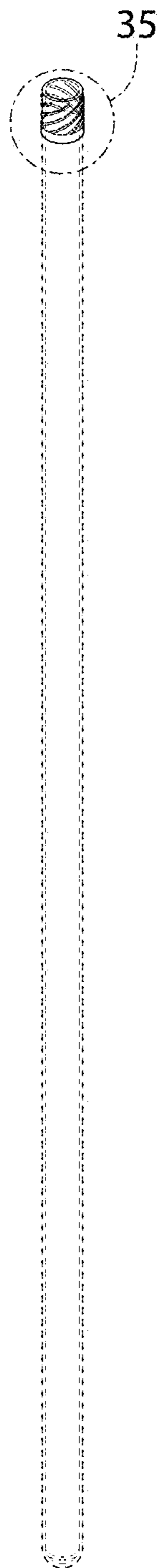


FIG. 28

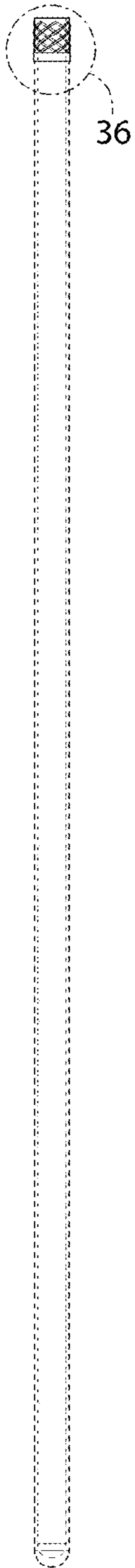


FIG. 29

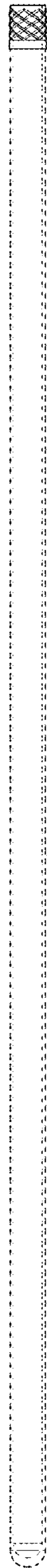


FIG. 30

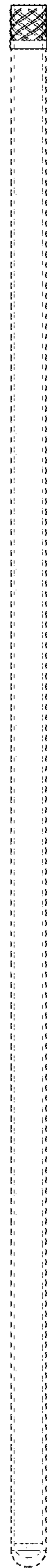


FIG. 31

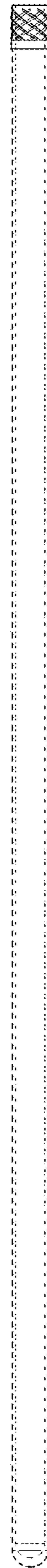


FIG. 32



FIG. 33



FIG. 34

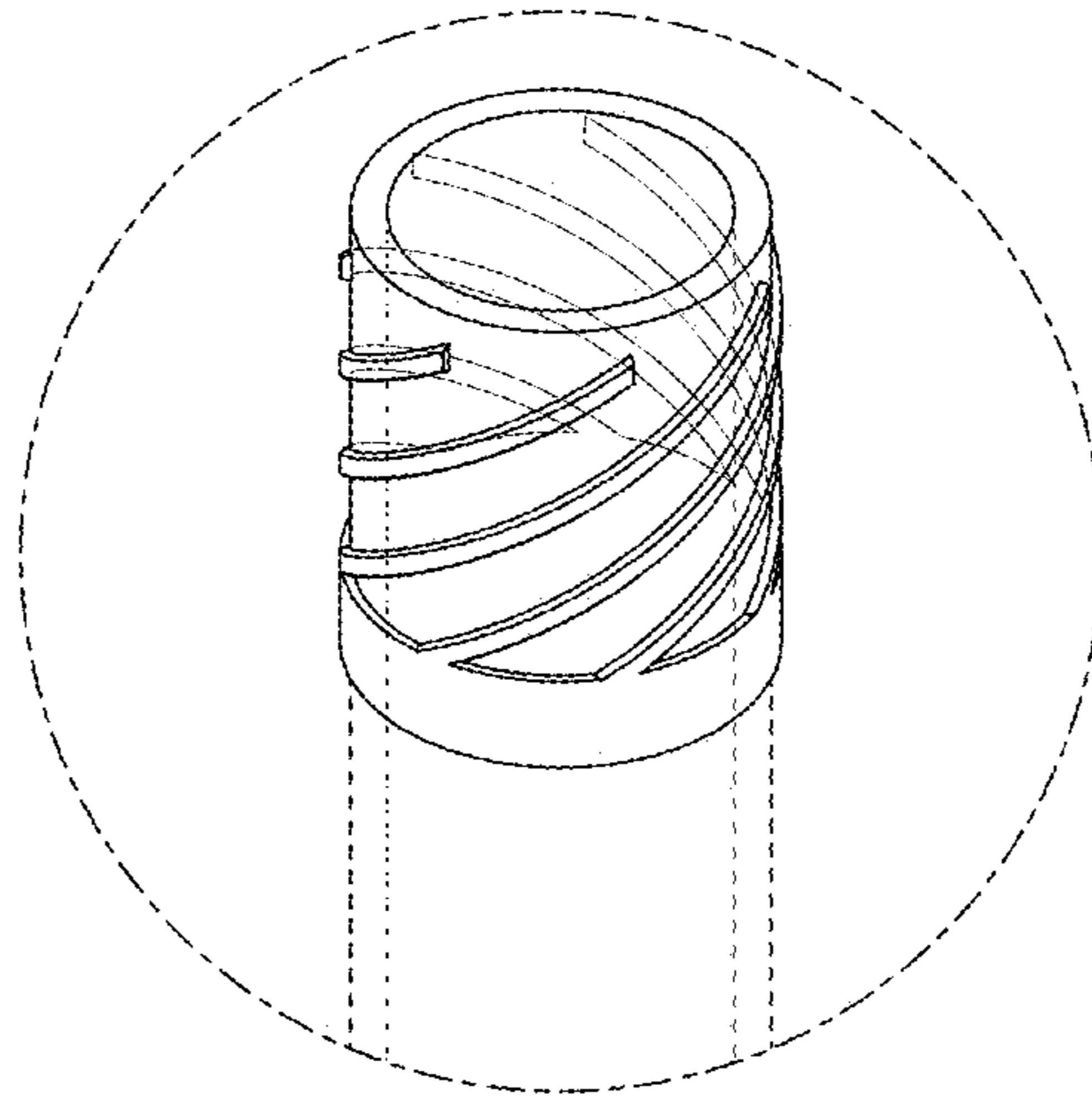


FIG. 35

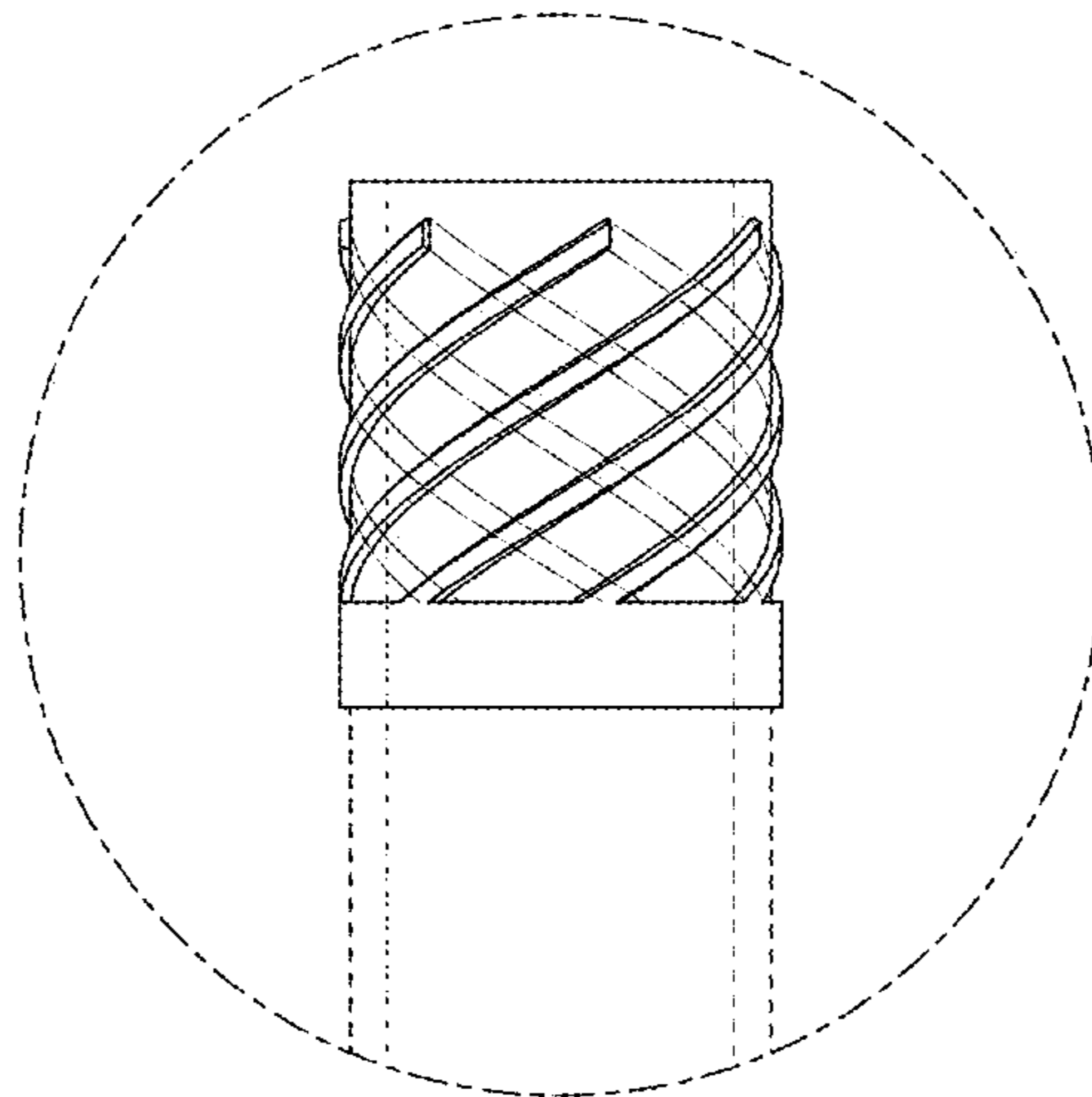


FIG. 36

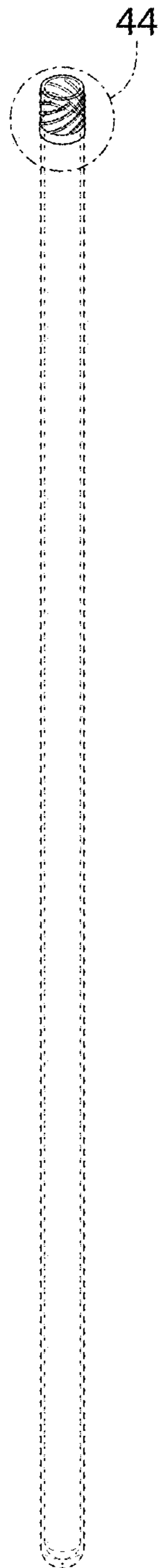


FIG. 37

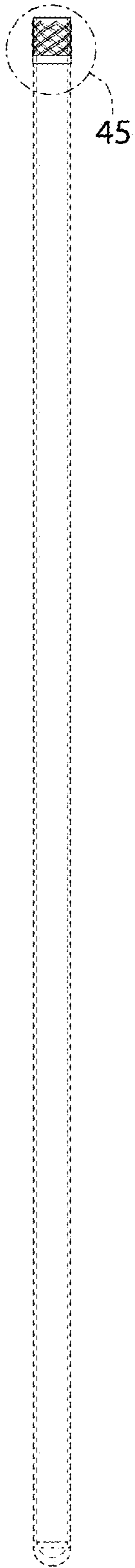


FIG. 38

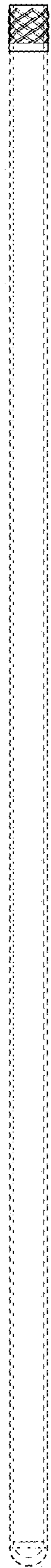


FIG. 39



FIG. 40



FIG. 41



FIG. 42



FIG. 43



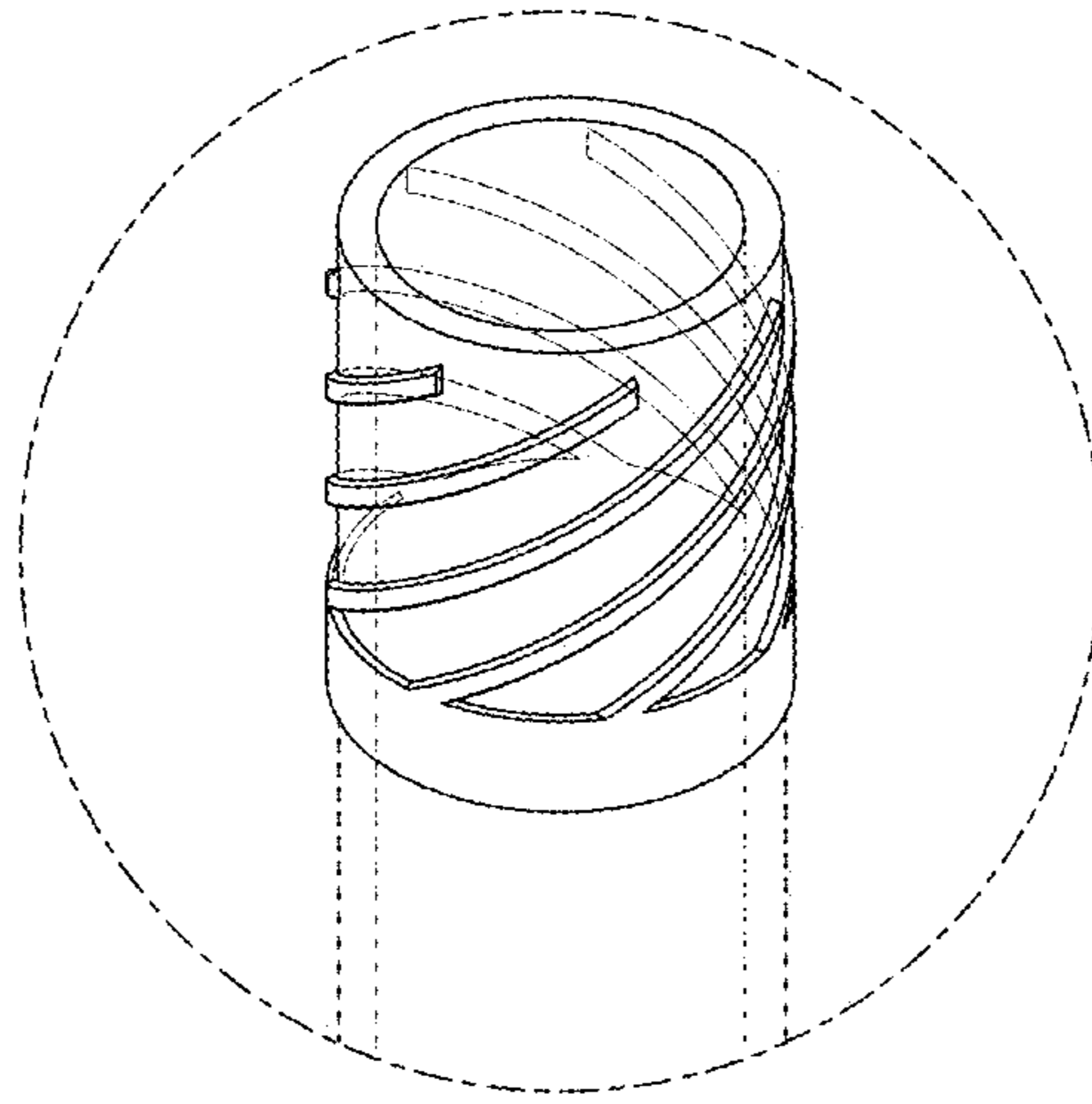


FIG. 44

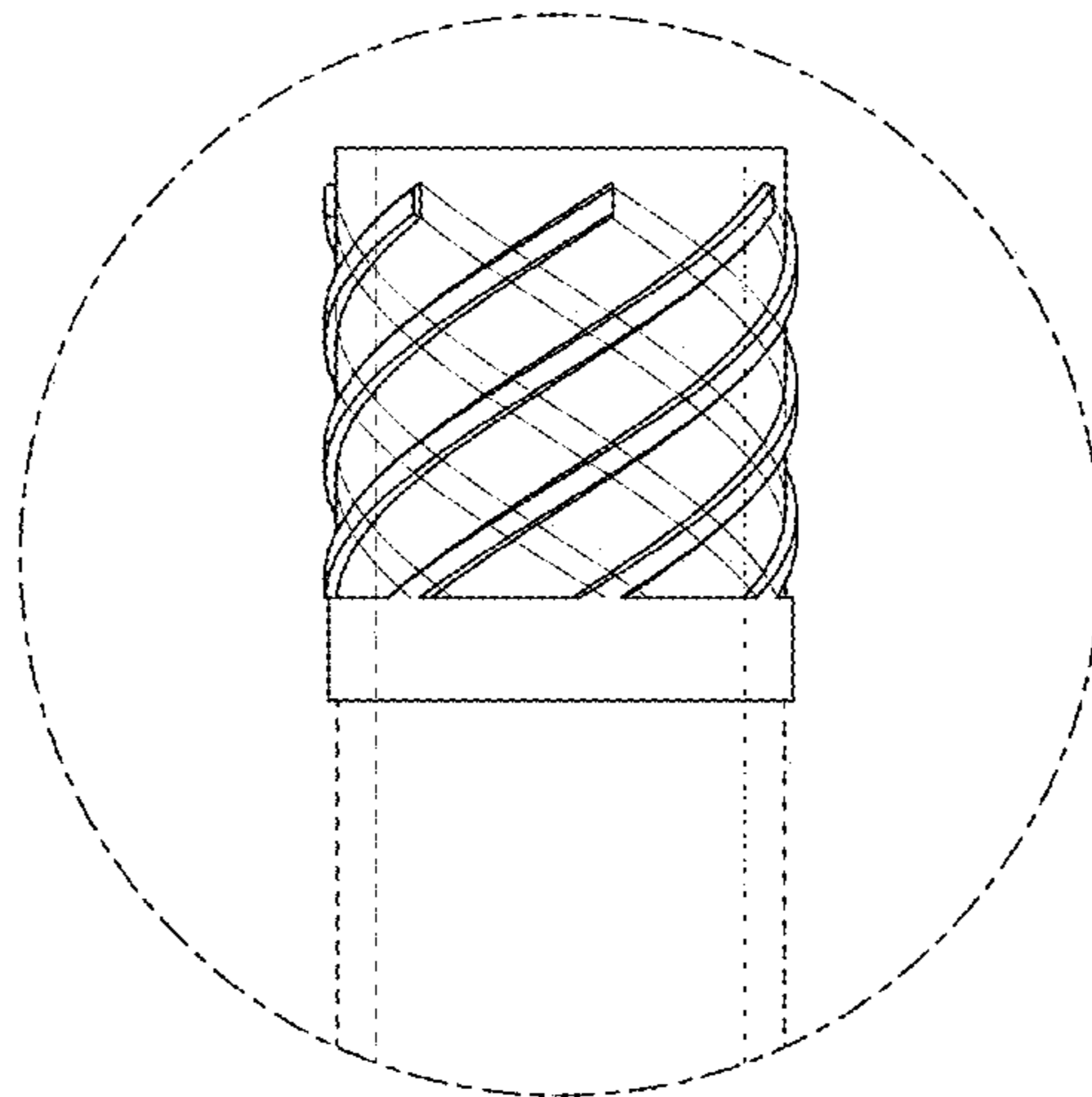


FIG. 45