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

(10) **Patent No.: US D800,817 S**

(45) **Date of Patent: ** Oct. 24, 2017**

(54) **360 DEGREE OPTICAL DEVICE**

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

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(51) **LOC (10) Cl.** **16-01**

(52) **U.S. Cl.**
USPC **D16/202**; D16/208

(58) **Field of Classification Search**
USPC D16/200–220, 229, 230, 242, 244, 245, D16/238, 225; D14/496, 203.1, 203.3, D14/203.7; D28/41

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D312,263	S	11/1990	Charles	
D491,594	S *	6/2004	Senda	D16/202
D617,796	S *	6/2010	Ando	D14/411
D669,933	S *	10/2012	van der Lande	D19/123
D720,791	S *	1/2015	Nagai	D16/219
D732,594	S *	6/2015	Kawa	D16/202
9,204,115	B1 *	12/2015	Yu	G01J 3/0264

(Continued)

FOREIGN PATENT DOCUMENTS

CN	303842611	*	9/2016
CN	303842612	*	9/2016
JP	D1559677	*	1/2017

OTHER PUBLICATIONS

VIRB 360 Garmin, announced 2017 [online], [site visited Aug. 3, 2017], Available from Internet, URL: <https://buy.garmin.com/en-US/US/p/562010>.*

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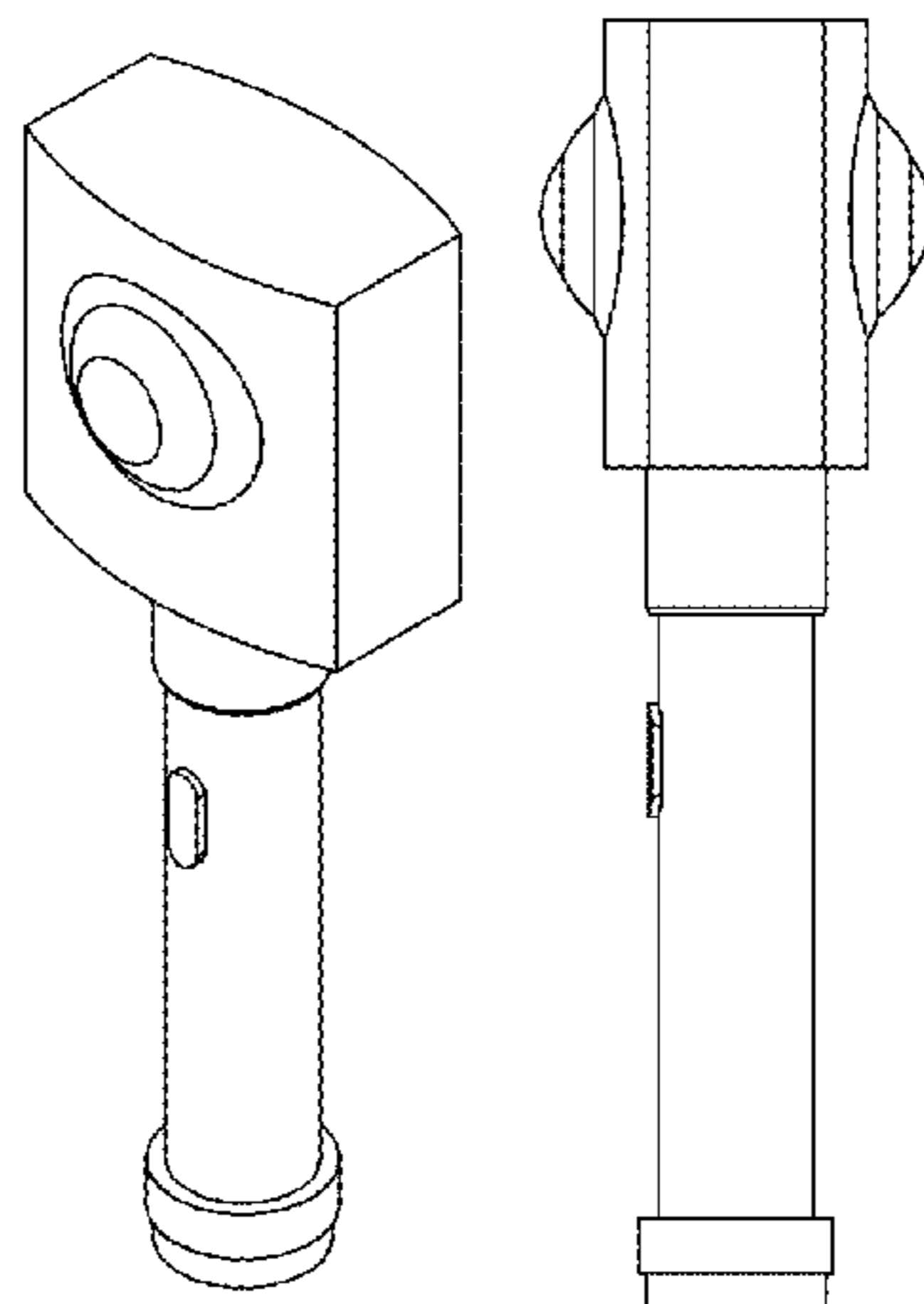
(57) **CLAIM**

The ornamental design for a 360 degree optical device, as shown and described.

DESCRIPTION

FIG. 1 is a top view of a first and second embodiment of a 360 degree optical device showing the new design; FIG. 2 is a perspective view thereof; and FIG. 3 is a front view thereof; and FIG. 4 is a side view thereof; and FIG. 5 is a top view of the top portion of the 360 degree optical device shown separately to show portions of the design not visible while combined; FIG. 6 is a rear perspective view thereof; FIG. 7 is a front view thereof; and FIG. 8 is a side view thereof; and FIG. 9 is a bottom view thereof; and FIG. 10 is a perspective bottom view thereof; and FIG. 11 is a front view of the handle of the first embodiment of the 360 degree optical device shown separately to show portions of the design not visible while combined; FIG. 12 is a top view thereof; and FIG. 13 is a perspective view thereof; and FIG. 14 is a cross-sectional view of section A-A of FIG. 11, with the top insert not being bisected by the section; FIG. 15 is an exploded view thereof; and FIG. 16 is a front view of the handle of the second embodiment of the 360 degree optical device shown separately to show portions of the design not visible while combined; FIG. 17 is a top view thereof; and FIG. 18 is a side view thereof; and FIG. 19 is a perspective view thereof; and, FIG. 20 is a cross-sectional view of section B-B of FIG. 16. The two embodiments are characterized by different connection mechanisms on the top facet of the handle that can attach and detach from the optical device.

1 Claim, 5 Drawing Sheets



(58) **Field of Classification Search**

CPC H04N 7/181; H04N 7/183; H04N 7/18;
H04N 3/08; H04N 5/23248; H04N
5/23287; H04N 5/23258; H04N 5/2251;
H04N 5/2252; H04N 2007/145; H04N
7/00; G01C 11/025; G02B 5/00; G03B
15/00; G03B 15/03; G03B 17/56; G03B
17/02; G03B 17/30; G03B 17/04; G03B
17/00; G03B 19/04; G03B 3/00; B60R
1/00; B60R 2300/105; G08B 13/19619;
G08B 13/1963; G08B 13/19632; G08B
13/19621; F16M 11/04; F16M 13/00;
Y02E 60/12

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

9,575,346 B2 * 2/2017 Tseng G02F 1/133308
D785,694 S * 5/2017 Fujii D16/214
2004/0032435 A1 * 2/2004 Silverbrook B41J 2/01
347/2
2012/0069165 A1 * 3/2012 Choi H04N 1/00413
348/61
2012/0206565 A1 * 8/2012 Villmer H04N 1/00
348/36
2016/0044227 A1 * 2/2016 Johnson G03B 17/561
348/211.2
2017/0102606 A1 * 4/2017 Pavis H04N 5/2251
2017/0195533 A1 * 7/2017 Seo G02B 7/021

* cited by examiner

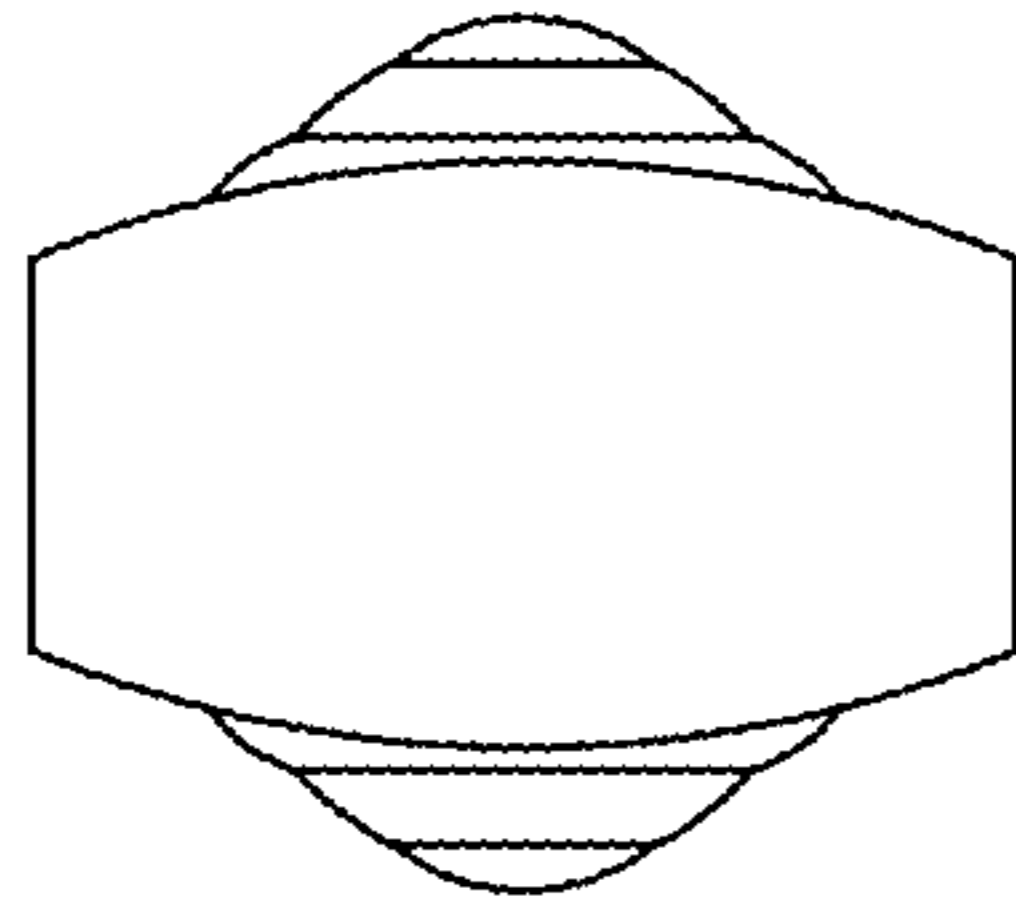


FIG. 1

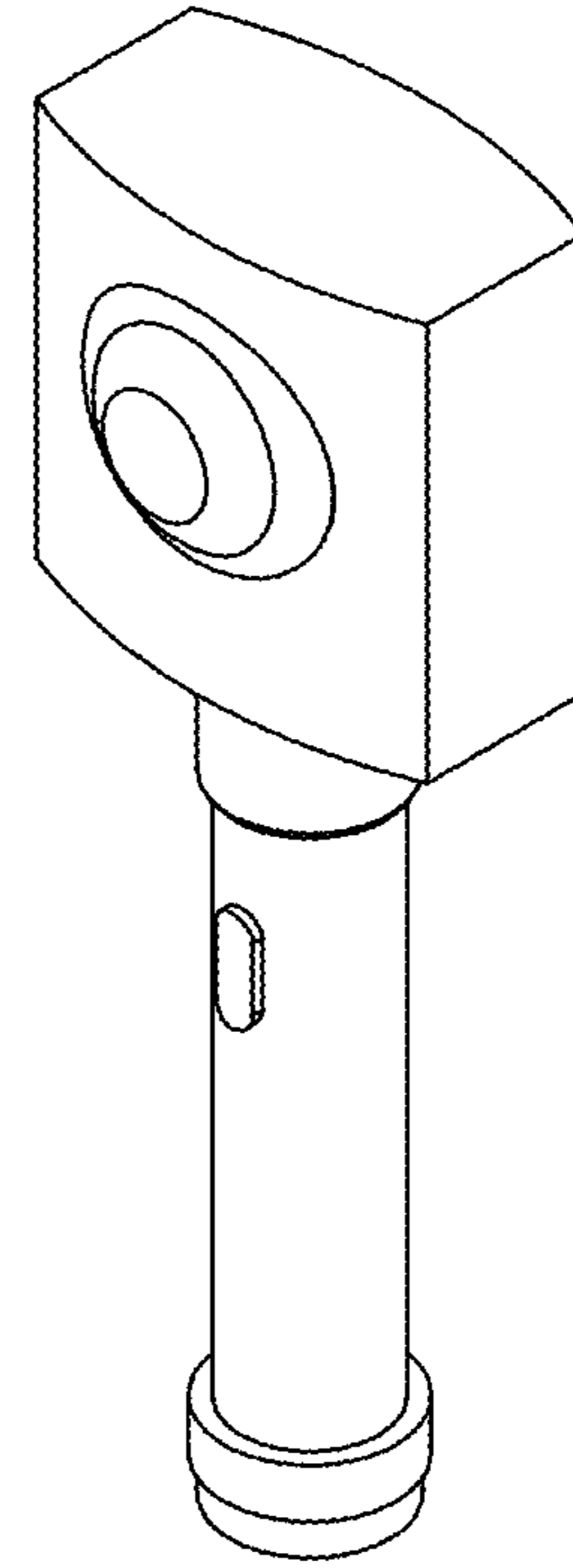


FIG. 2

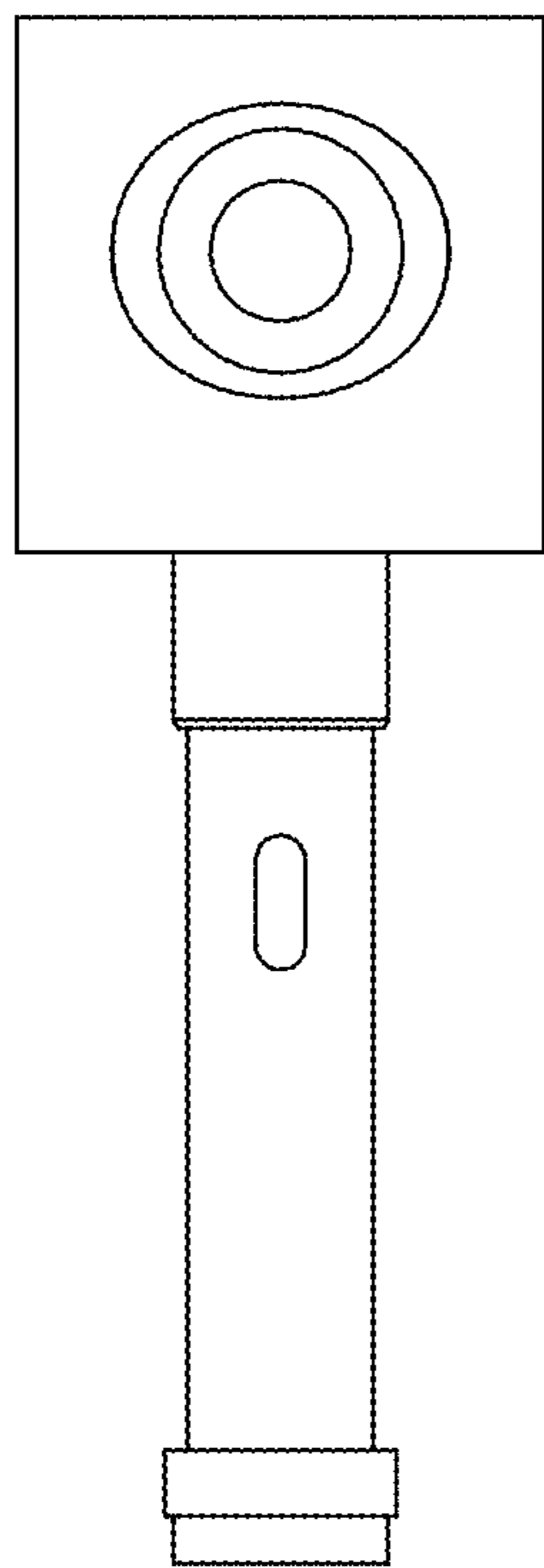


FIG. 3

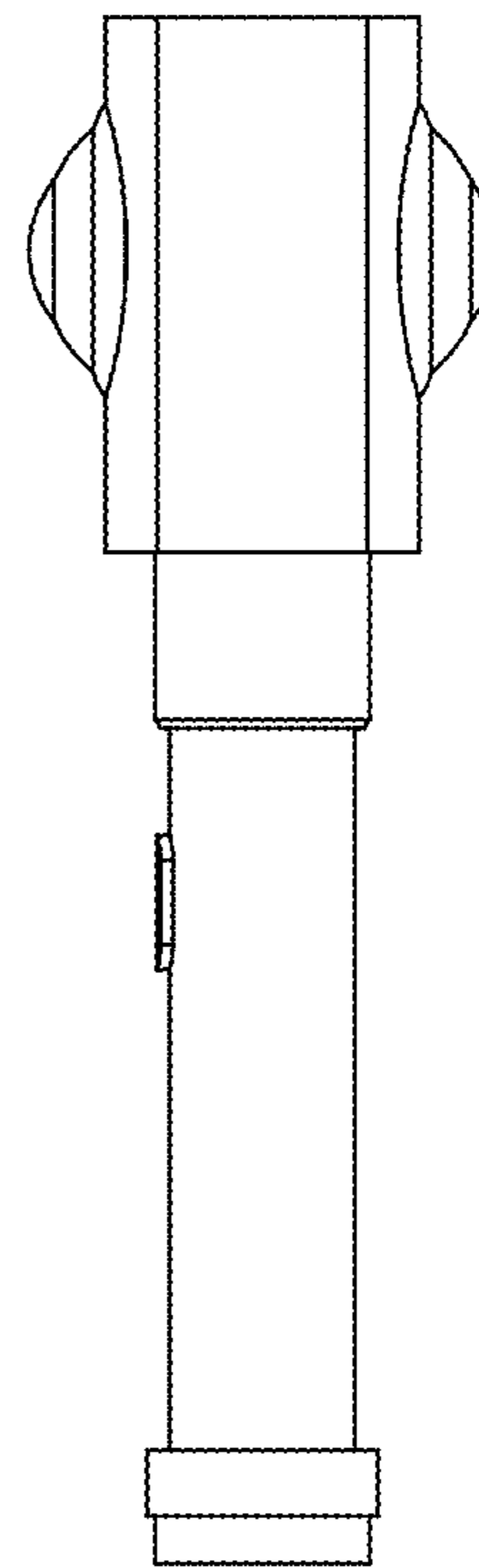


FIG. 4

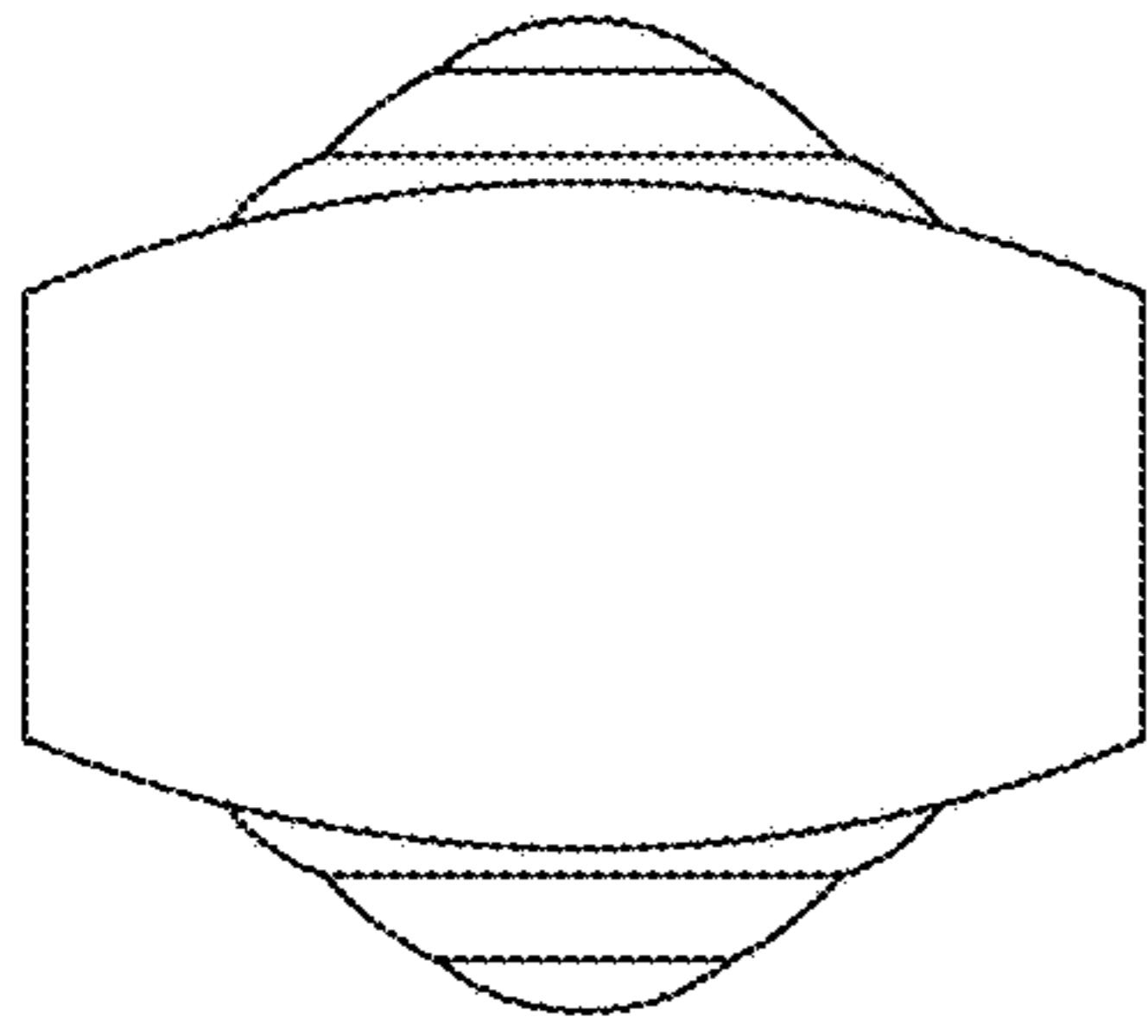


FIG. 5

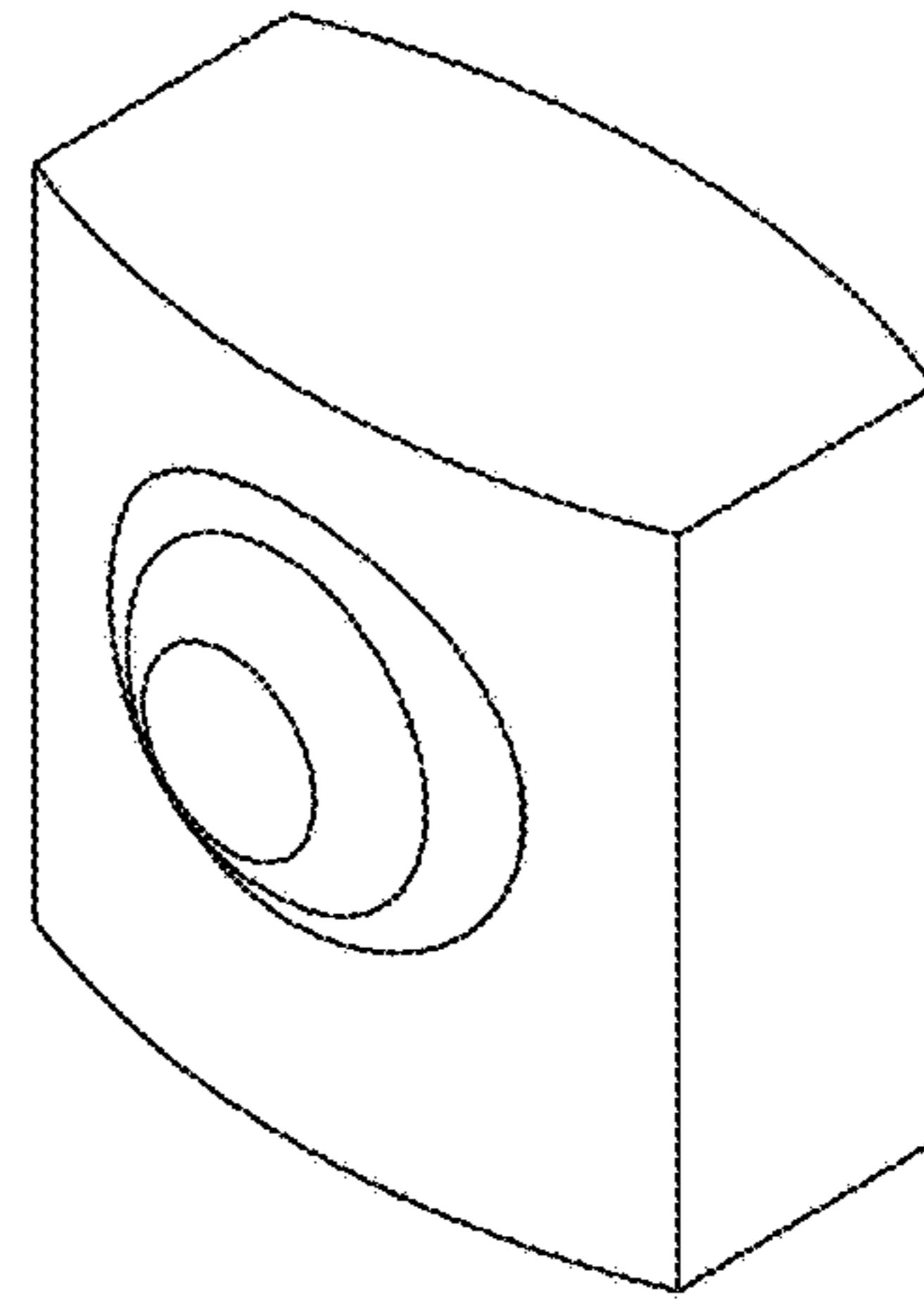


FIG. 6

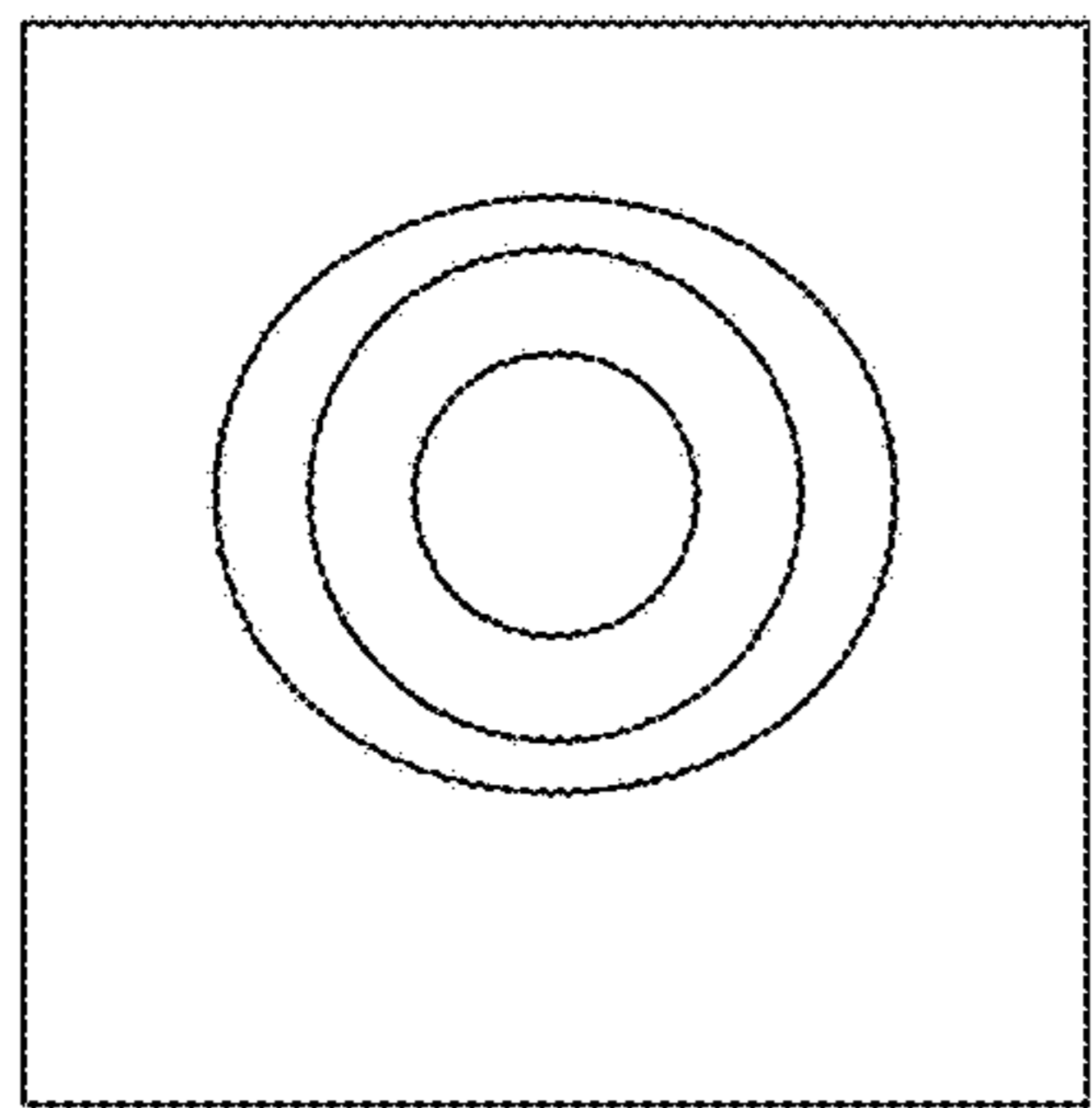


FIG. 7

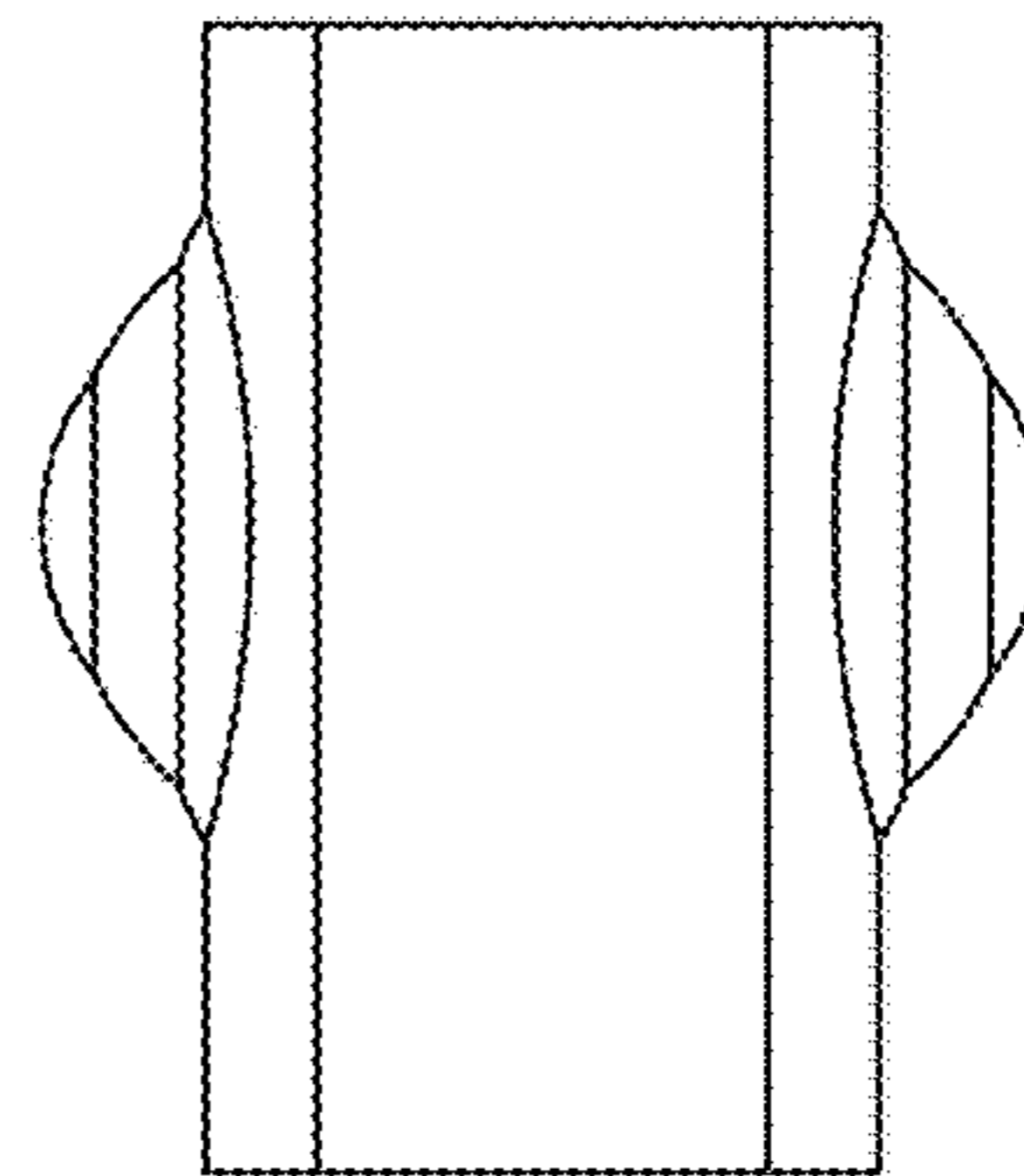


FIG. 8

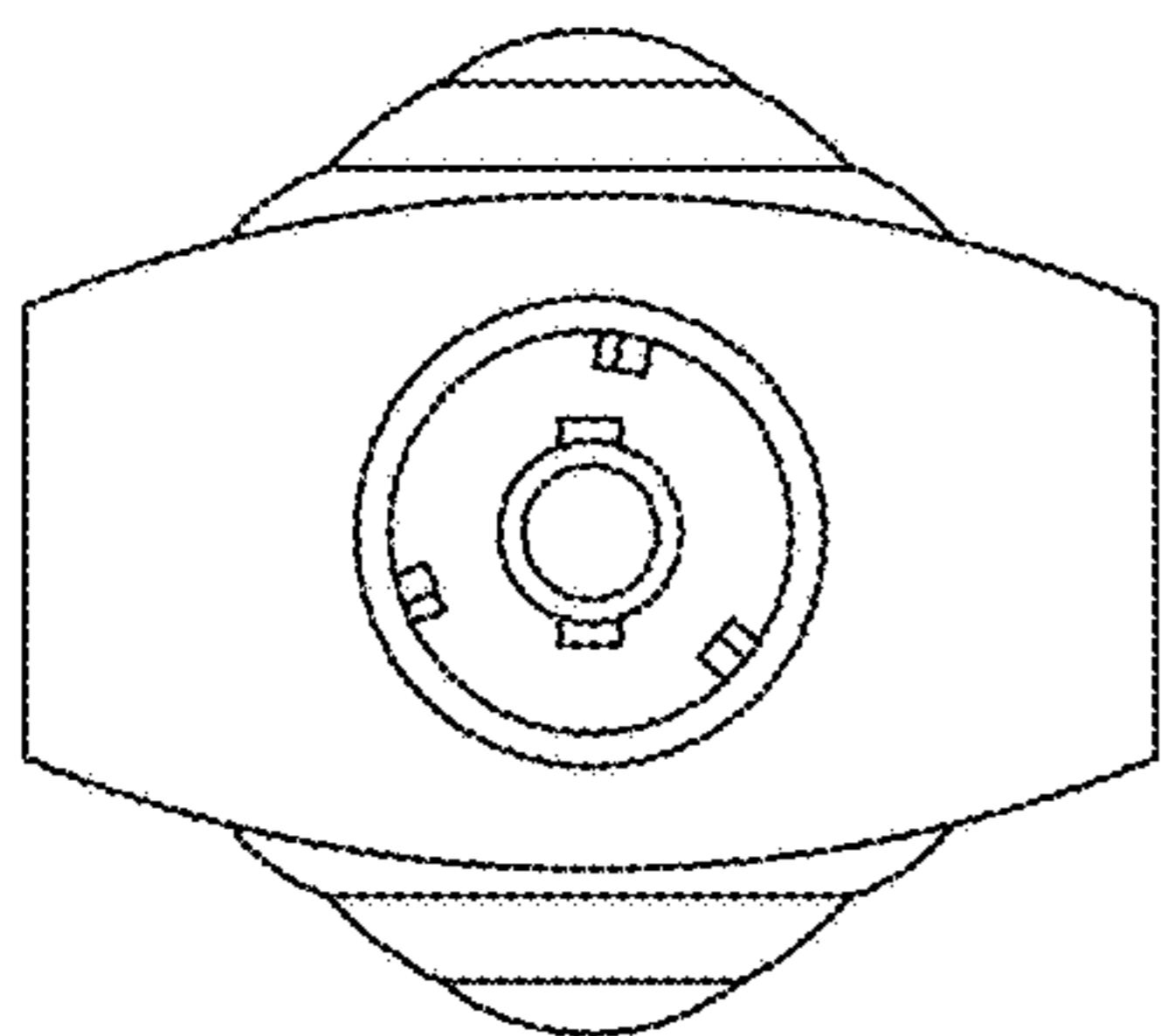


FIG. 9

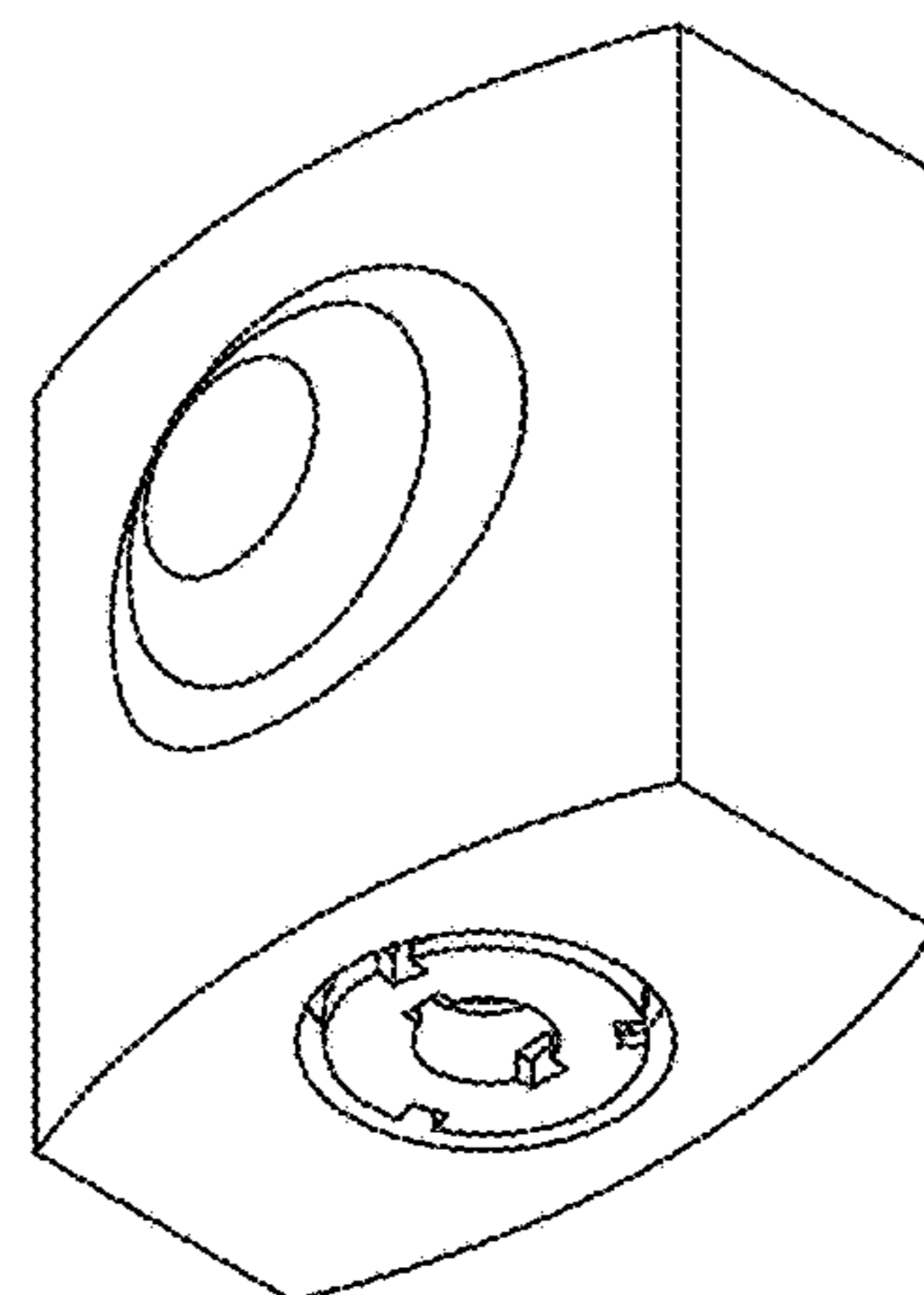


FIG. 10

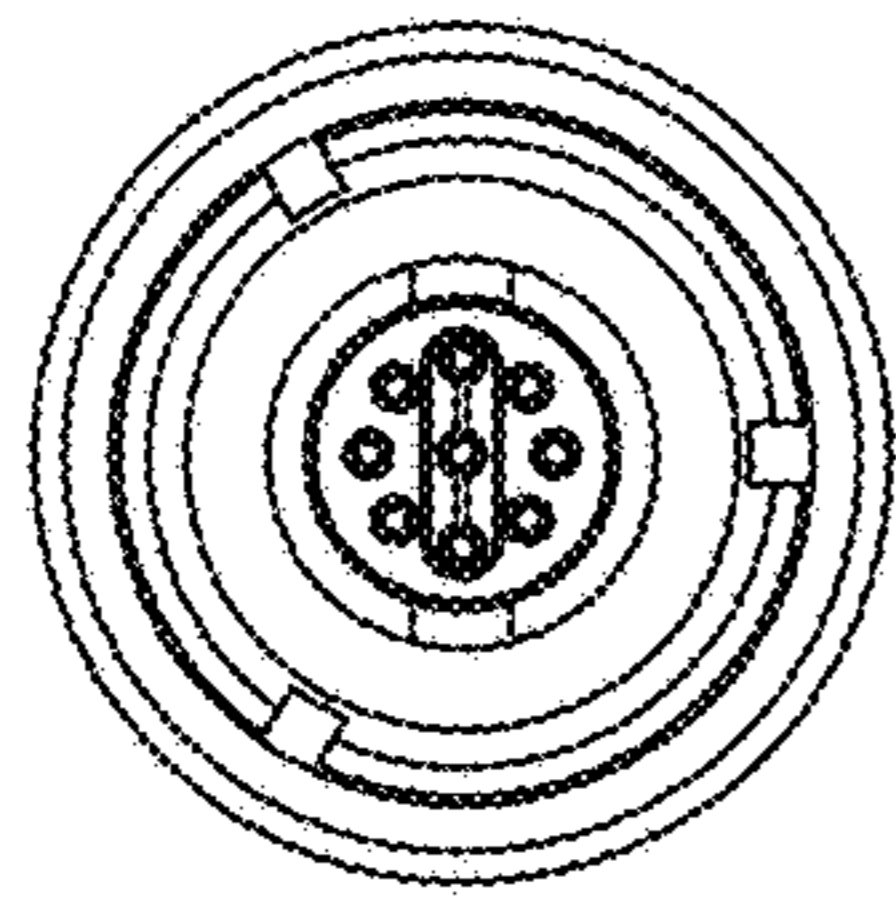


FIG. 12

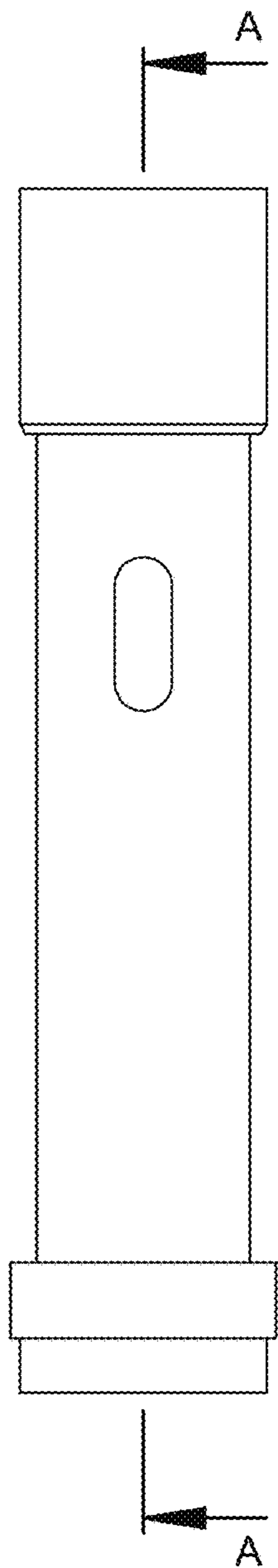


FIG. 11

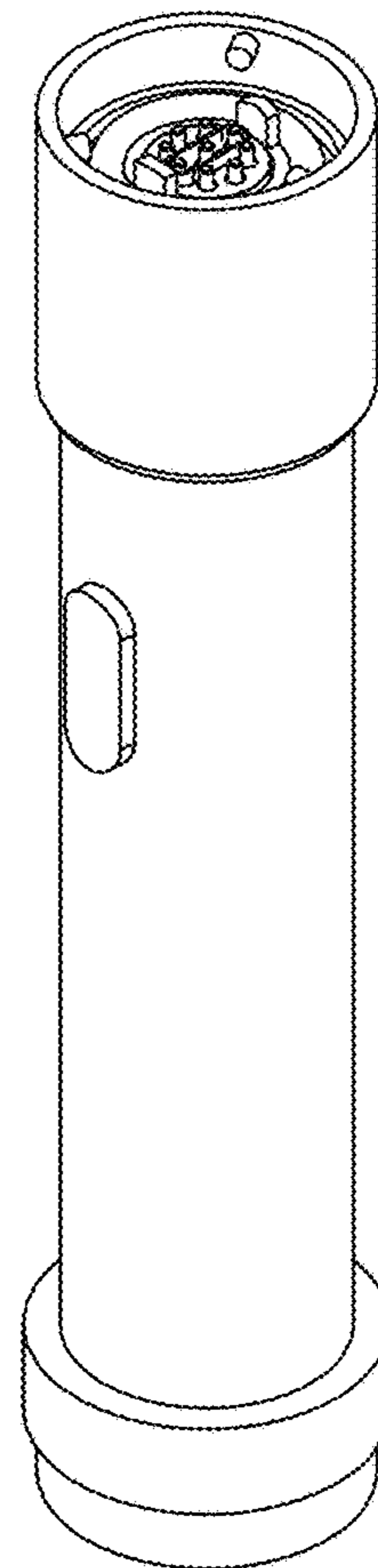
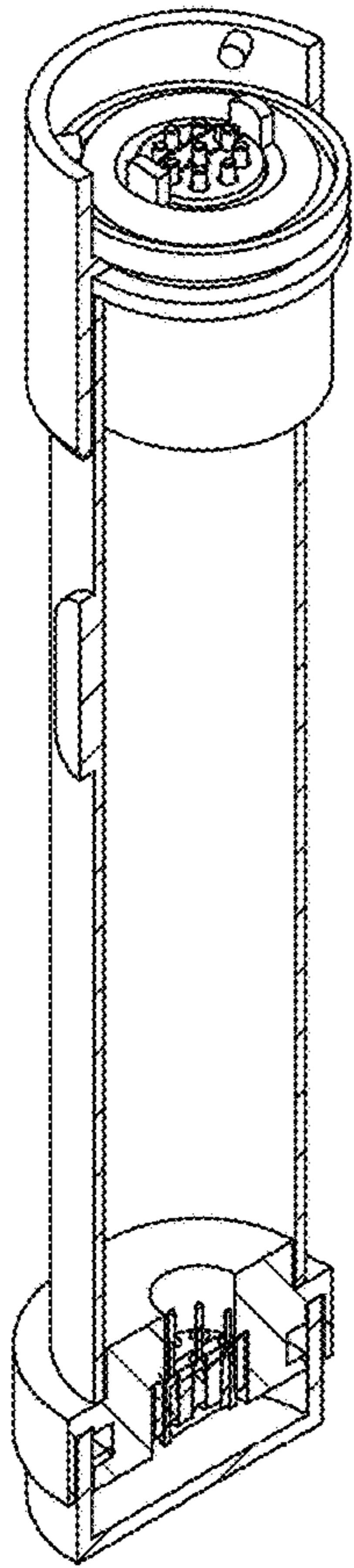


FIG. 13



SECTION A-A

FIG. 14

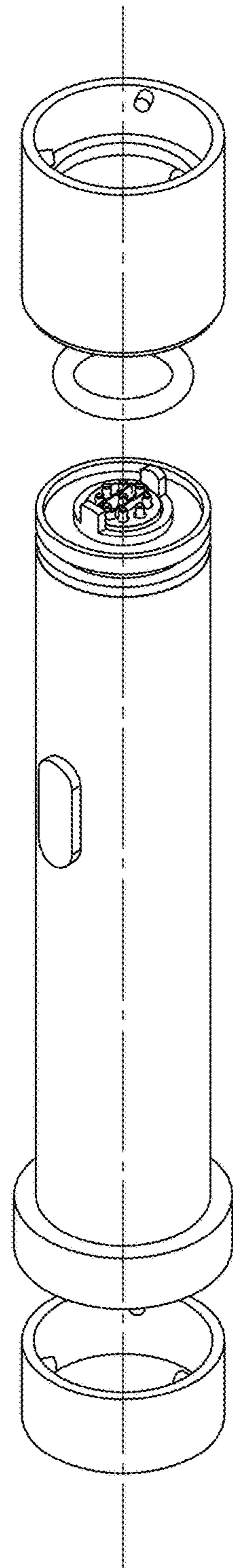


FIG. 15

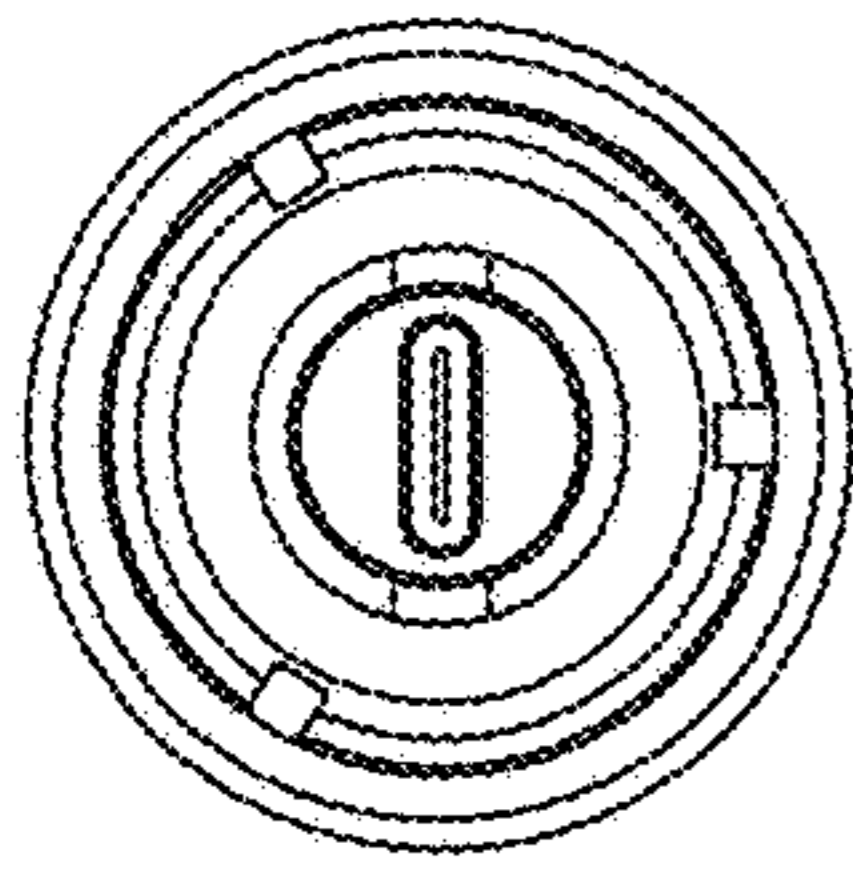


FIG. 17

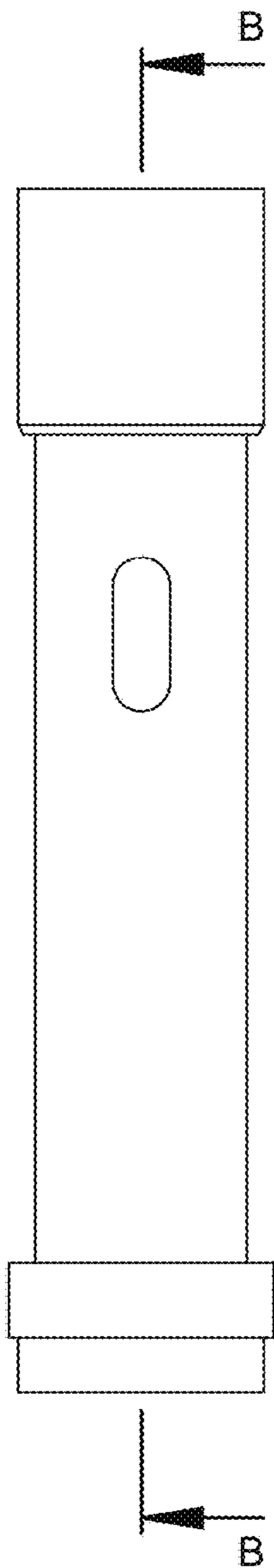


FIG. 16

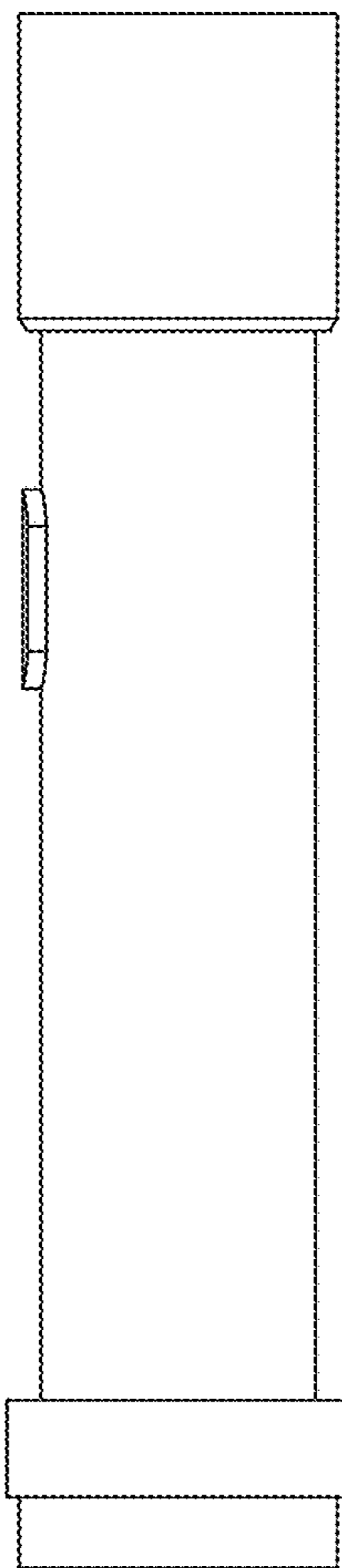


FIG. 18

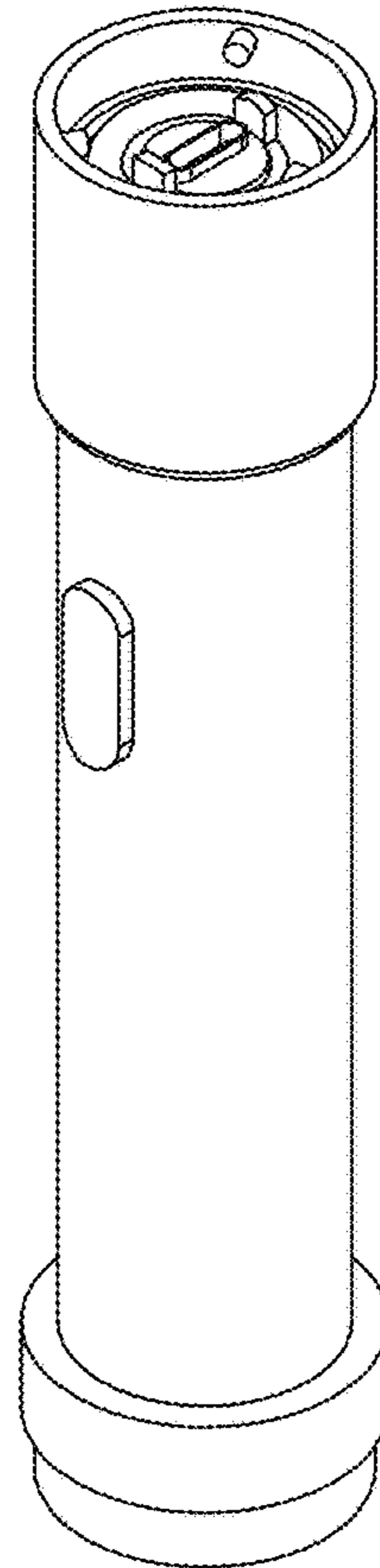
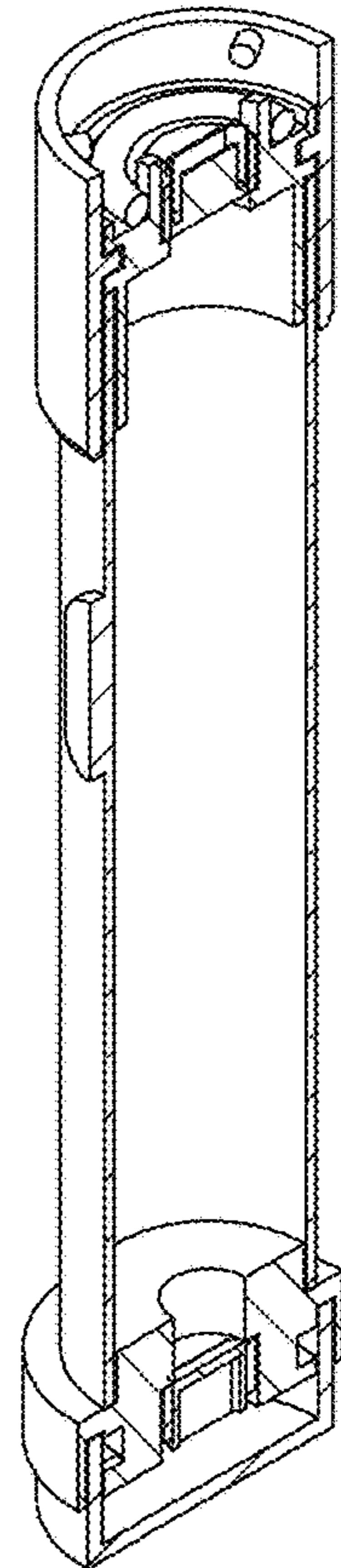


FIG. 19



SECTION B-B

FIG. 20