



US00D913337S

(12) **United States Design Patent**
Chu

(10) **Patent No.:** **US D913,337 S**

(45) **Date of Patent:** **** Mar. 16, 2021**

(54) **COMPRESSOR INTERNAL CONTROL VALVE**

2019/0154168 A1* 5/2019 Kume F16K 31/0613
2019/0226467 A1* 7/2019 Kume F16K 11/14
2019/0316697 A1* 10/2019 Kume F04B 27/14

(71) Applicant: **Henry C. Chu**, Orange, CA (US)

(72) Inventor: **Henry C. Chu**, Orange, CA (US)

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

(21) Appl. No.: **29/676,668**

(22) Filed: **Jan. 14, 2019**

(51) **LOC (13) Cl.** **15-02**

(52) **U.S. Cl.**
USPC **D15/9**

(58) **Field of Classification Search**
USPC D15/7-9; D23/23-237, 244-249;
D13/107, 133
CPC F04B 27/1804; F04B 2027/1827; F04B
2027/1845

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D453,939 S *	2/2002	Ochiai	.....	D15/9
D467,871 S *	12/2002	Ochiai	.....	D13/133
2002/0117642 A1 *	8/2002	Iwata	.....	F04B 27/1804 251/61.4
2004/0202552 A1 *	10/2004	Okii	.....	F04B 27/1804 417/222.2
2009/0035156 A1 *	2/2009	Higashidozono ...	.....	F04B 27/1804 417/270
2012/0056113 A1 *	3/2012	Tano	.....	F04B 27/1804 251/25
2015/0004010 A1 *	1/2015	Saeki	.....	F04B 27/1804 417/213
2017/0363080 A1 *	12/2017	Chu	.....	F04B 49/24
2018/0291888 A1 *	10/2018	Tonegawa	.....	F16K 31/0613

OTHER PUBLICATIONS

Aliexpress, High Quality Auto AC Compressor Internal Control Valve VS16/VS18, (site visited May 18, 2020) , sold on Aliexpress.com URL:<<https://www.aliexpress.com/item/32824107169.html>> (Year: 2020).*

(Continued)

Primary Examiner — Sheryl Lane
Assistant Examiner — Mark T. Philipps
(74) *Attorney, Agent, or Firm* — Browdy and Neimark, PLLC

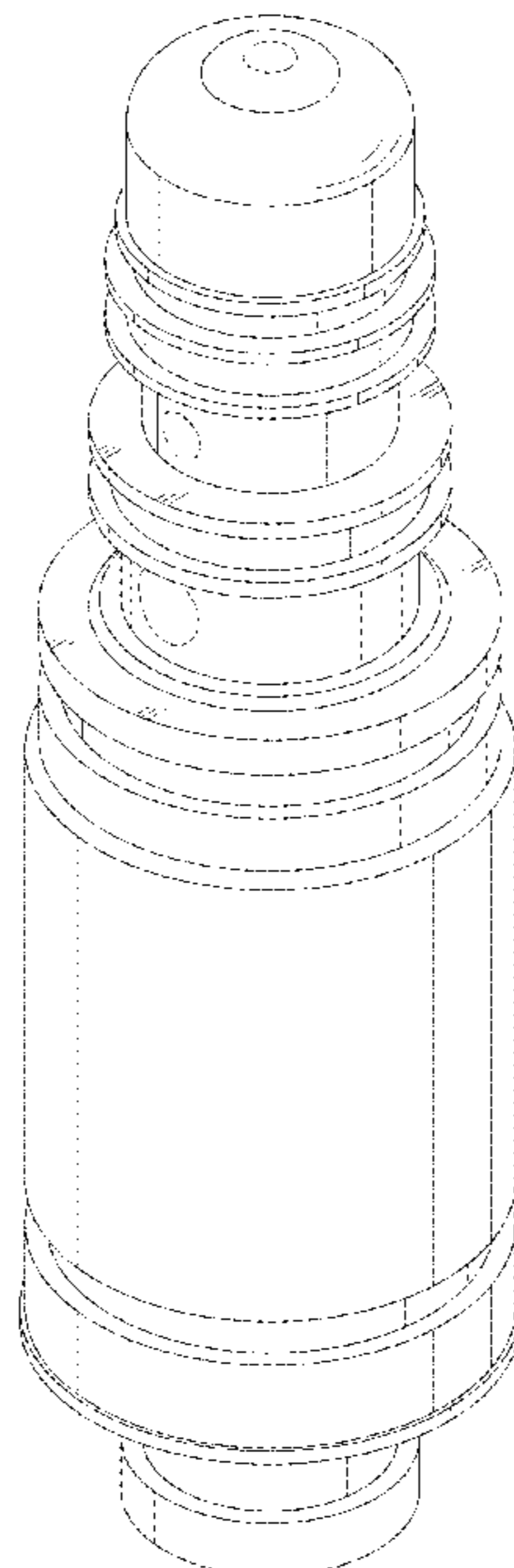
(57) **CLAIM**

The ornamental design for a compressor internal control valve, as shown and described.

DESCRIPTION

FIG. 1 is a front and upper perspective view of a compressor internal control valve showing my new design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a top plan view thereof;
FIG. 5 is a bottom plan view thereof;
FIG. 6 is a left side elevational view thereof;
FIG. 7 is a right side elevational view thereof;
FIG. 8 is a rear and upper perspective view thereof;
FIG. 9 is a front and bottom perspective view thereof; and,
FIG. 10 is a front and upper perspective view thereof.
The broken lines represent portions of the compressor internal control valve and form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

OTHER PUBLICATIONS

Jacques Gordon, Variable Displacement A/C Compressor, (May 29, 2013), Mobile Air-conditioning Society (MACS) World Wide Blog, URL: <<https://macsworldwide.wordpress.com/2013/05/29/variable-displacement-ac-compressor/>> (Year: 2013).*

Pit Stop Auto, New A/C Compressor Control Valve-EX 10460C, (site visited May 18, 2020) sold at Pitstopauto.com URL:<https://pitstopauto.com/Catalog/FeedPart?part_id=15430&vep_id=0> (Year: 2020).*

* cited by examiner

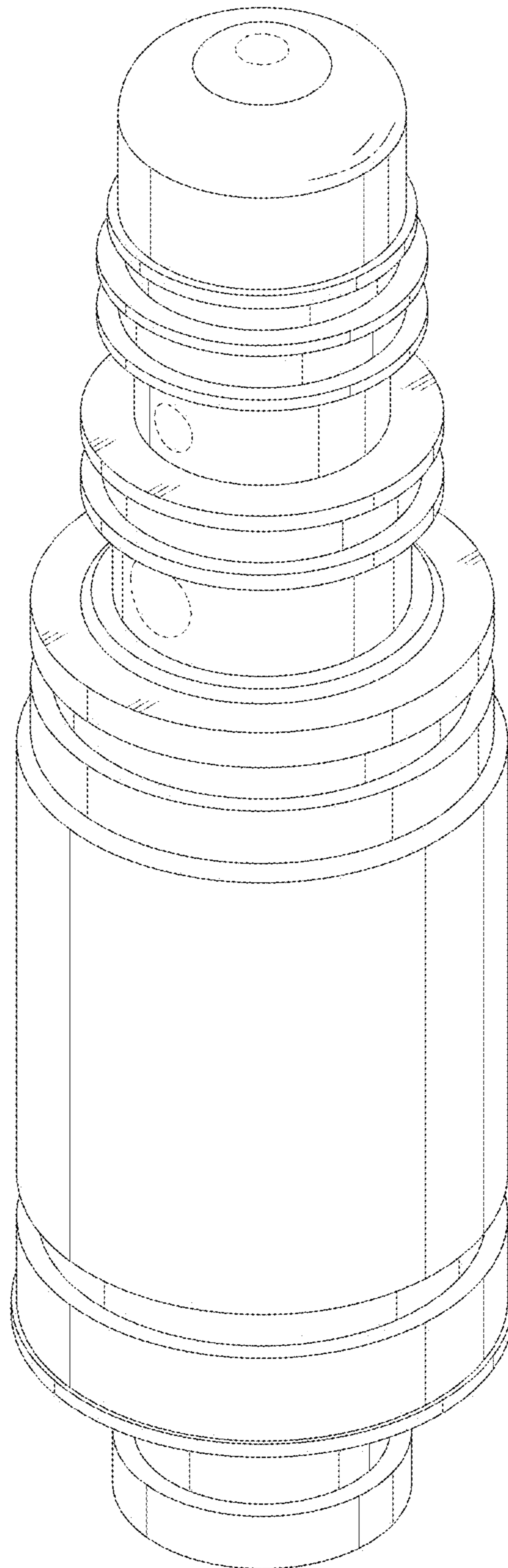


FIG. 1

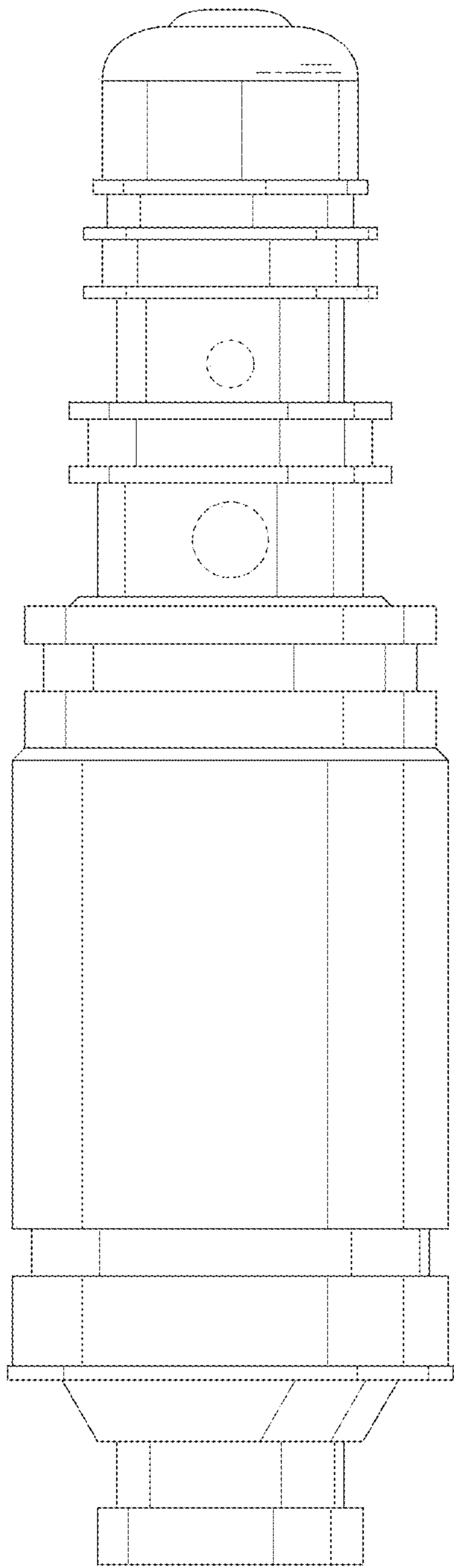


FIG. 2

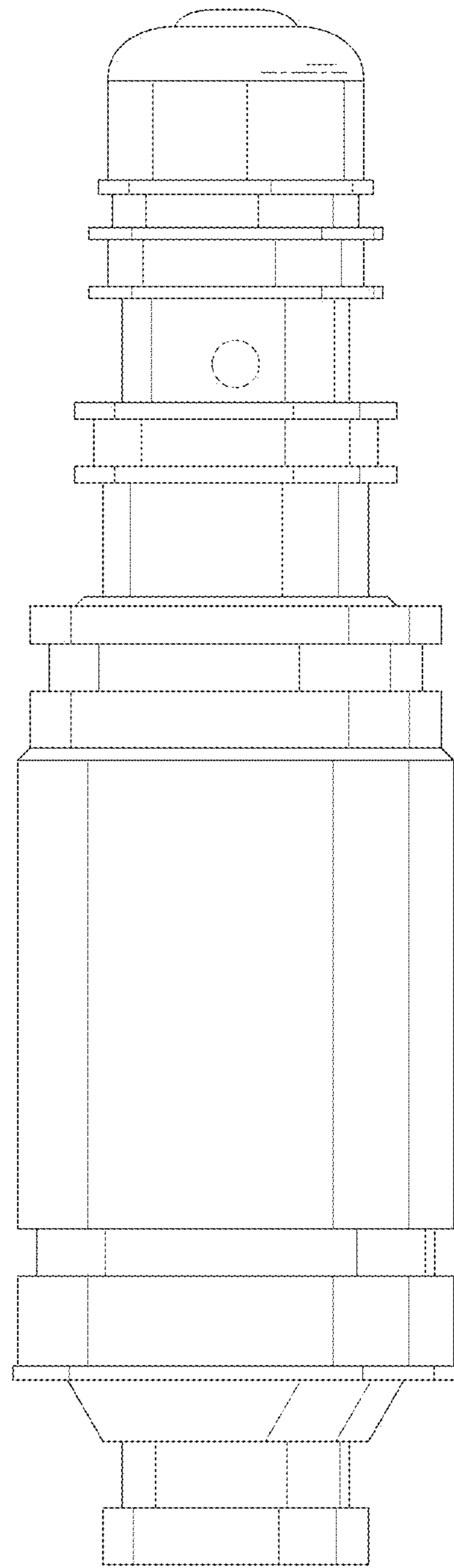


FIG. 3

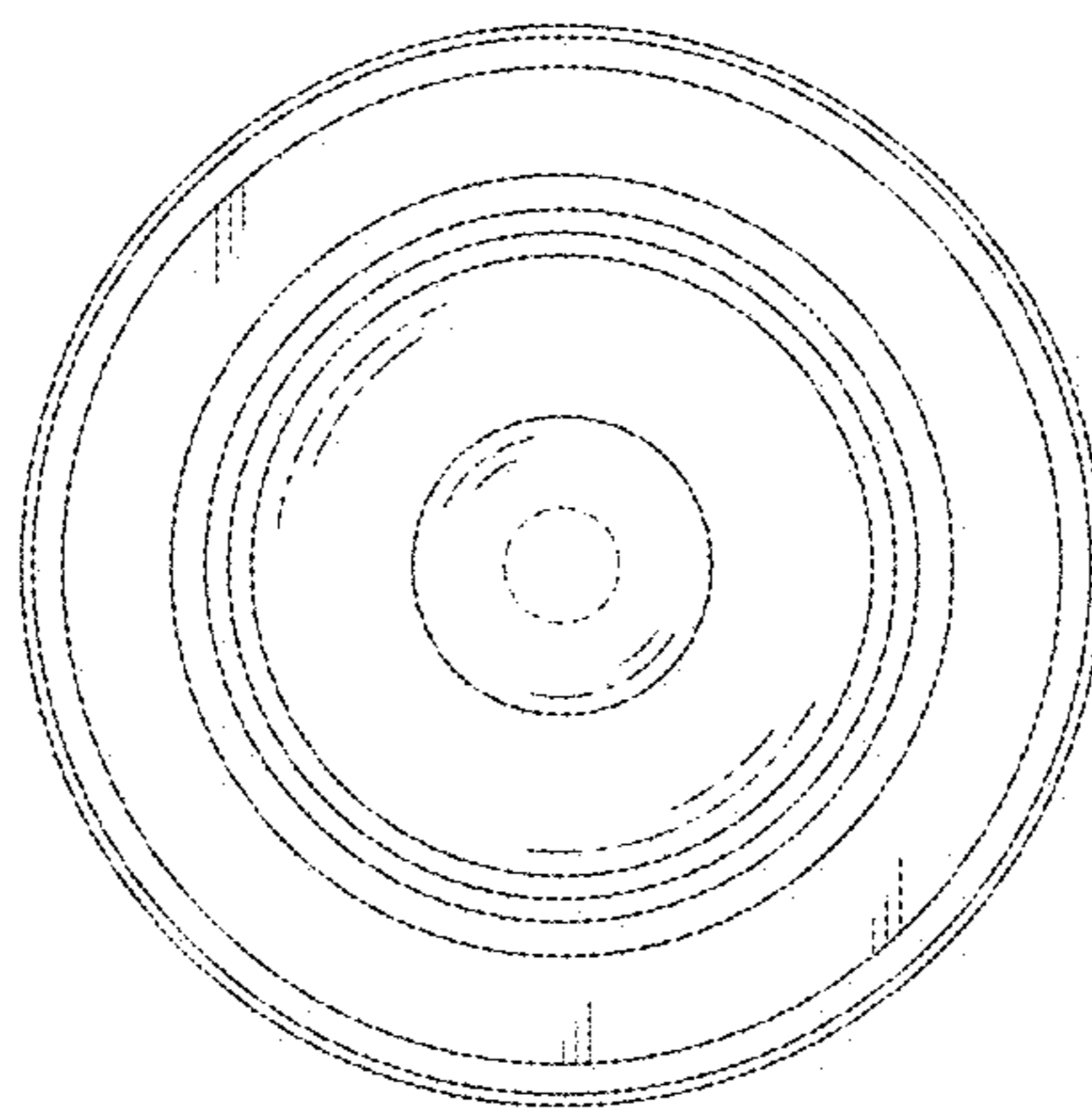


FIG. 4

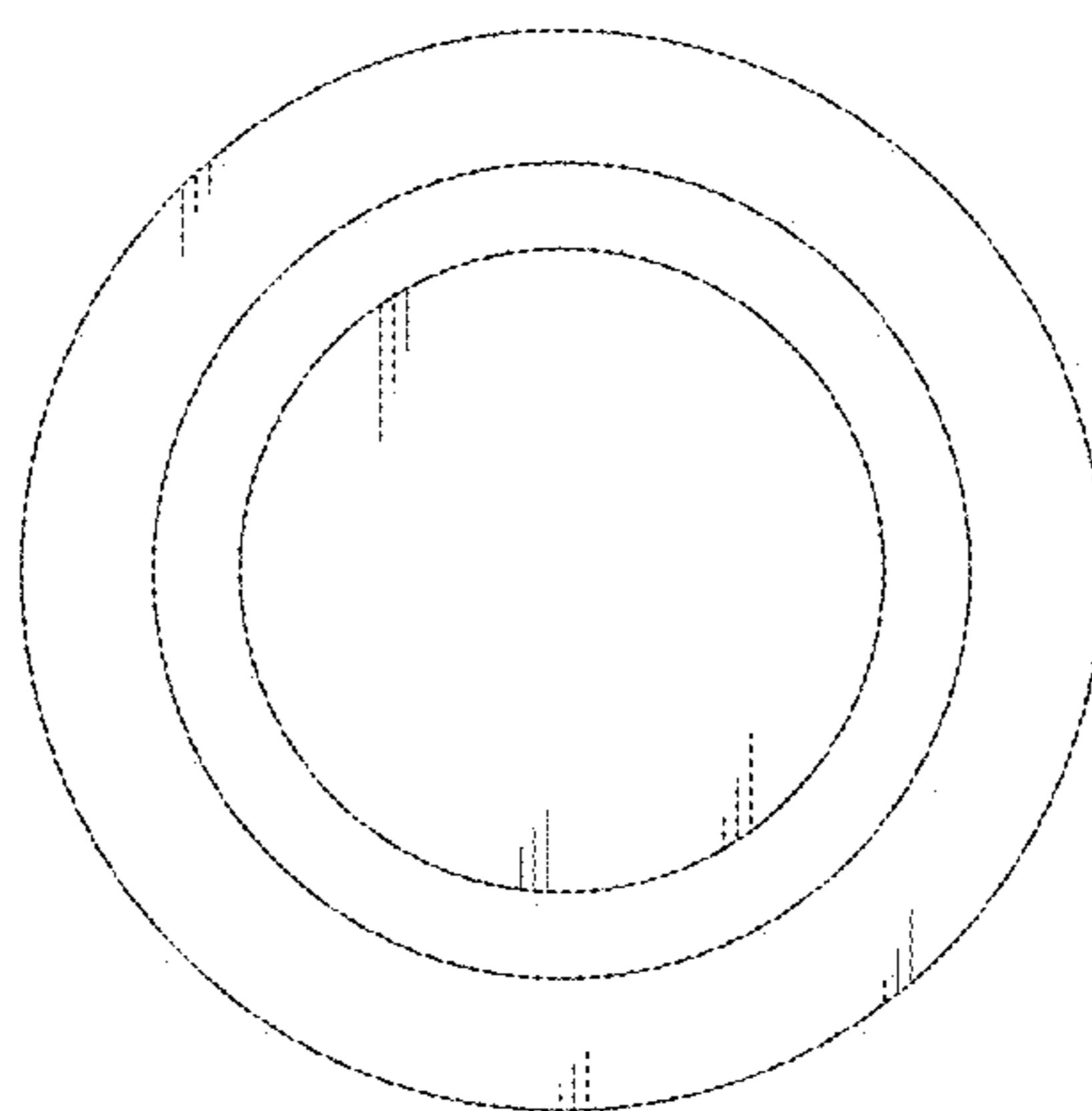


FIG. 5

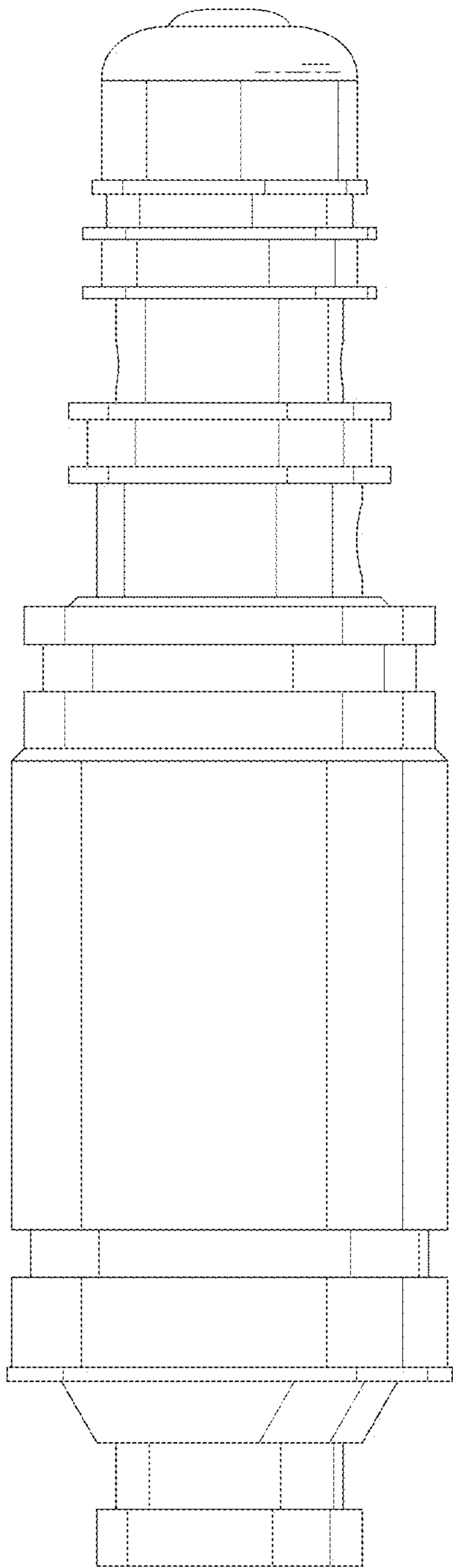


FIG. 6

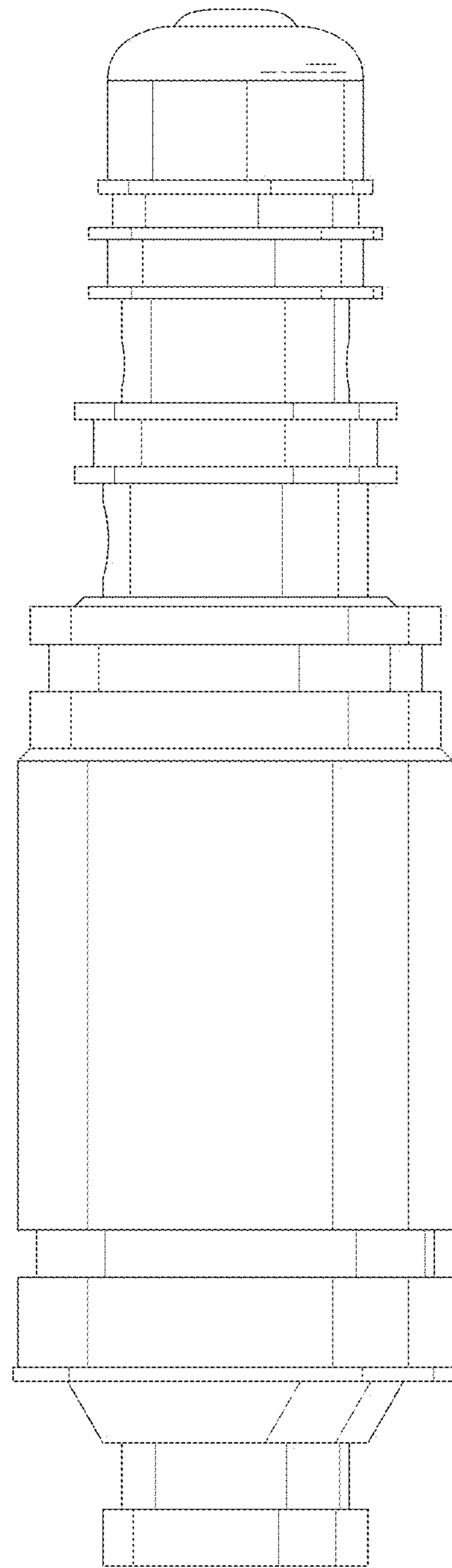


FIG. 7

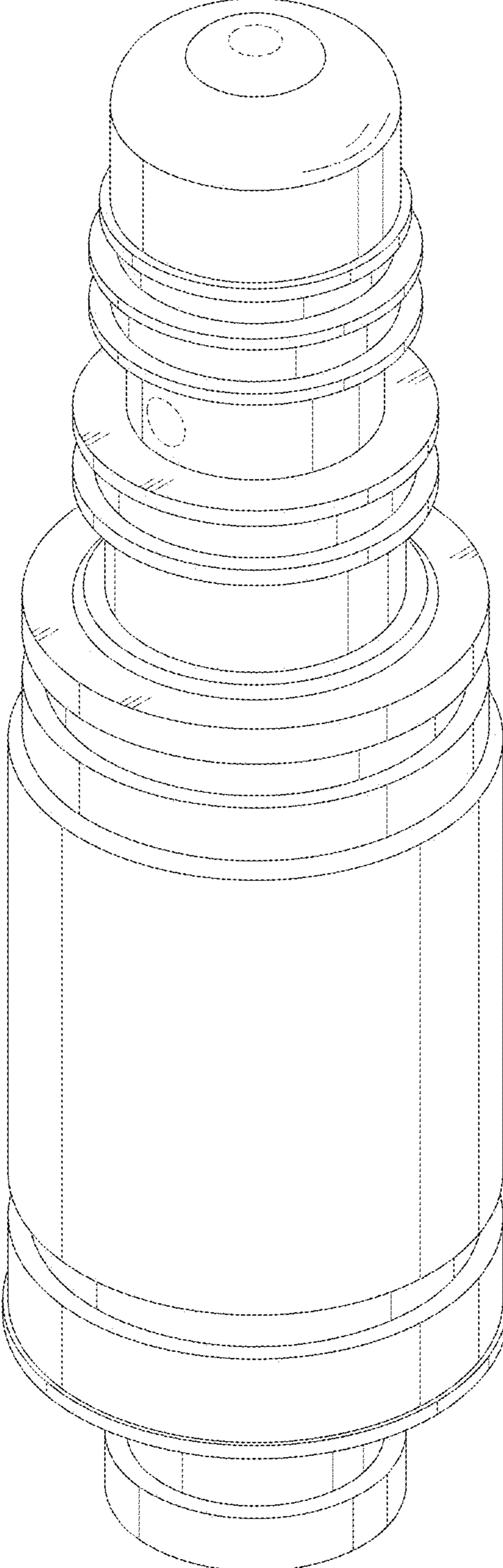


FIG. 8

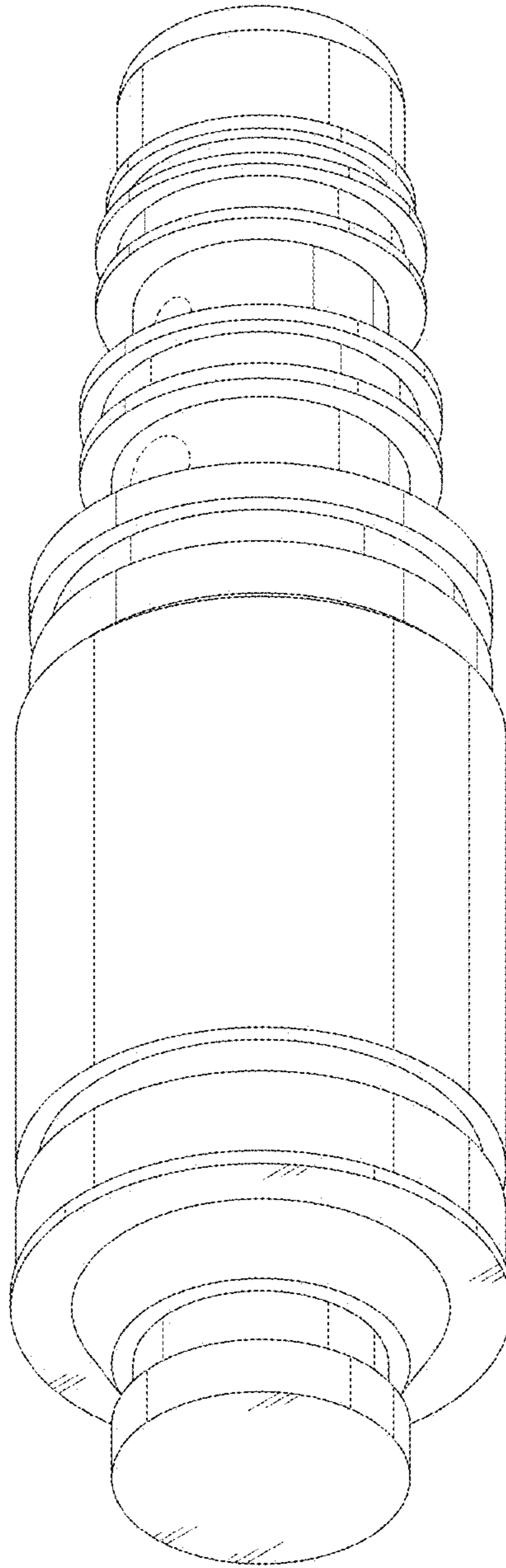


FIG. 9

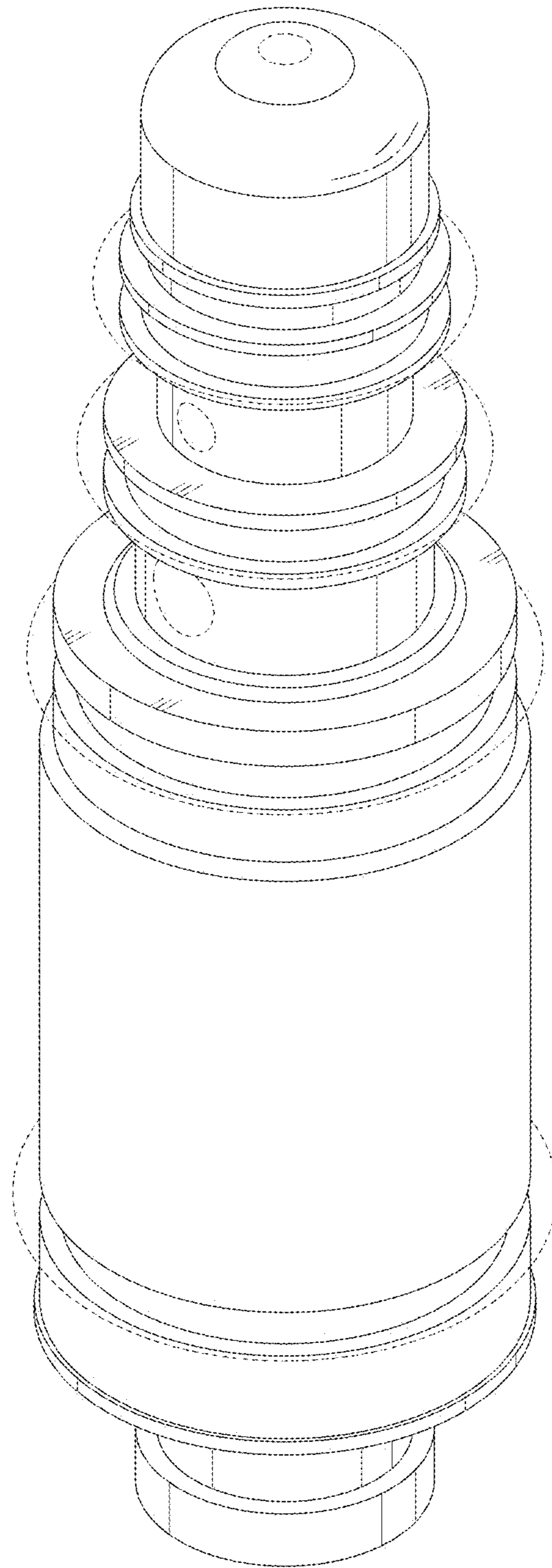


FIG. 10