



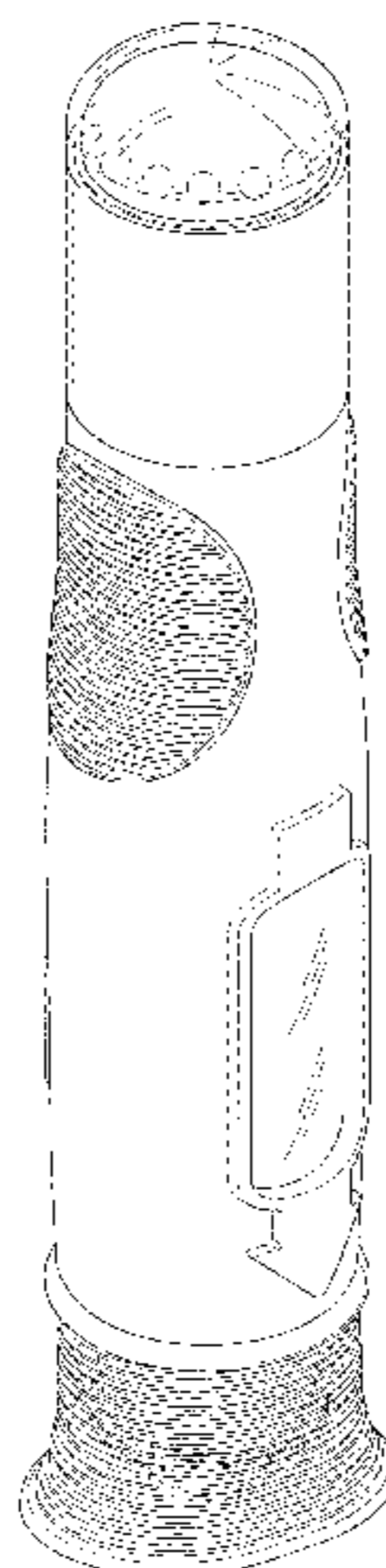
US00D973866S

(12) **United States Design Patent** (10) **Patent No.:** **US D973,866 S**
Bourelle et al. (45) **Date of Patent:** **** Dec. 27, 2022**

- (54) **HANDHELD DRUG DELIVERY DEVICE**
- (71) Applicant: **AMGEN INC.**, Thousand Oaks, CA (US)
- (72) Inventors: **Dylan Bourelle**, Woodland Hills, CA (US); **Edgar Frausto**, Thousand Oaks, CA (US); **Clare O'Malley**, Thousand Oaks, CA (US); **Jakob Halkjaer Pedersen**, Frederiksberg (DK); **Joshua Jay Dudman**, Copenhagen (DK)
- (73) Assignee: **AMGEN INC.**, Thousand Oaks, CA (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/757,411**
- (22) Filed: **Nov. 5, 2020**
- (51) **LOC (13) Cl.** **24-02**
- (52) **U.S. Cl.**
USPC **D24/113**
- (58) **Field of Classification Search**
USPC D24/112, 113, 114, 133, 186, 127-131;
D19/115-123, 177, 193
CPC A61M 5/3156; A61M 5/31591; A61M 5/3155; A61M 5/3157; A61M 5/24; A61M 5/31501; A61M 5/31551; A61M 5/31585
See application file for complete search history.

D627,061 S	11/2010	Van Der Stappen
D628,690 S	12/2010	Galbraith
D629,509 S	12/2010	Julian et al.
D640,786 S	6/2011	Sato et al.
D660,958 S	5/2012	McLoughlin et al.
8,298,194 B2	10/2012	Moeller
D671,638 S	11/2012	Young et al.
D696,397 S	12/2013	Guarraia et al.
D696,772 S	12/2013	Schneider et al.
D696,773 S	12/2013	Schneider et al.
D696,774 S	12/2013	Guarraia et al.
D696,775 S	12/2013	Guarraia et al.
8,608,709 B2	12/2013	Moeller et al.
D697,205 S	1/2014	Schneider et al.
D708,317 S	7/2014	Schneider et al.
D714,932 S	10/2014	Hall et al.
D715,422 S	10/2014	Hall et al.
D717,428 S	11/2014	Sendatzki et al.
D721,802 S	1/2015	Ohashi
D722,158 S	2/2015	Magome et al.
D722,256 S	2/2015	Kita
8,945,065 B2	2/2015	Torris et al.
D726,902 S	4/2015	McLoughlin et al.
D728,782 S	5/2015	Dubuc et al.
D732,161 S	6/2015	Ohashi
D732,661 S	6/2015	Dubuc et al.
D735,848 S	8/2015	Dubuc et al.
D737,639 S	9/2015	Masalin et al.
D739,011 S	9/2015	Morrison et al.
D739,932 S	9/2015	Ratjen et al.
D755,956 S	5/2016	McLoughlin et al.
D757,255 S	5/2016	Wohlfahrt et al.
D758,566 S	6/2016	Chen
D758,567 S	6/2016	Wohlfahrt et al.
D758,568 S	6/2016	Wohlfahrt et al.
D758,569 S	6/2016	Wohlfahrt et al.
D758,570 S	6/2016	Wohlfahrt et al.
D758,571 S	6/2016	Geert-Jensen et al.
D759,813 S	6/2016	Newman et al.
D759,814 S	6/2016	Newman et al.
D765,239 S	8/2016	Hauck et al.
D765,240 S	8/2016	Hauck et al.
D766,425 S	9/2016	Hauck et al.
D767,119 S	9/2016	Hauck et al.
D770,610 S	11/2016	Saussaye et al.
D773,648 S	12/2016	Wohlfahrt et al.
D773,650 S	12/2016	Fourt et al.
D774,639 S	12/2016	Saussaye et al.
D774,641 S	12/2016	Miggels et al.
D775,279 S	12/2016	Shen
D780,909 S	3/2017	Burkett et al.
D783,816 S	4/2017	Wohlfahrt et al.
9,623,199 B2	4/2017	Richter et al.

- (56) **References Cited**
U.S. PATENT DOCUMENTS
- 758,567 A 4/1904 Siebelist.
- 3,316,909 A 5/1967 Cowley
- D321,472 S 11/1991 Evans et al.
- D443,641 S 6/2001 Mader
- D497,806 S 11/2004 Nichols et al.
- D509,296 S 9/2005 Minshull et al.
- D545,895 S 7/2007 Okutani
- D612,486 S 3/2010 Van Der Stappen
- D619,244 S 7/2010 Van Der Stappen
- D622,374 S 8/2010 Julian et al.
- D626,994 S 11/2010 Gerules



D788,909 S	6/2017	Ratjen	
D789,519 S	6/2017	Ratjen et al.	
D790,686 S	6/2017	Cox et al.	
D793,547 S	8/2017	Burkett et al.	
D794,178 S	8/2017	Daniel et al.	
D794,777 S	8/2017	Daniel et al.	
D794,778 S	8/2017	Daniel et al.	
D799,026 S	10/2017	Jones et al.	
D802,748 S	11/2017	Mills et al.	
D809,137 S	1/2018	Ratjen	
D810,280 S	2/2018	Tharp et al.	
D810,282 S	2/2018	Ratjen	
D812,746 S	3/2018	Umemura	
D813,379 S	3/2018	Mills et al.	
D814,022 S *	3/2018	Boyaval	D24/113
D815,732 S	4/2018	Mills et al.	
D816,212 S	4/2018	Daniel et al.	
D819,198 S	5/2018	Boyaval et al.	
D819,200 S	5/2018	Stonecipher et al.	
D819,804 S	6/2018	Knight et al.	
9,987,436 B2	6/2018	Giambattista et al.	
D822,198 S	7/2018	Stonecipher et al.	
D822,199 S	7/2018	Clawson et al.	
D823,459 S	7/2018	Bendek et al.	
D827,127 S	8/2018	Donnelly	
D827,128 S	8/2018	Boyaval et al.	
D830,539 S	10/2018	Boyaval et al.	
10,159,795 B2	12/2018	Cave	
10,265,476 B2	4/2019	Laiosa et al.	
D851,754 S	6/2019	Boyaval et al.	
D857,192 S	8/2019	Burkett et al.	
D861,859 S	10/2019	Rapp et al.	
D864,378 S	10/2019	Tafazoli et al.	
D866,751 S	11/2019	Rogge et al.	
D866,752 S	11/2019	Rogge et al.	
D866,757 S *	11/2019	Diluzio	D24/133
D868,245 S	11/2019	Holmqvist et al.	
D868,961 S	12/2019	Stewart et al.	
D870,270 S	12/2019	Burkett et al.	
10,512,725 B1	12/2019	Bauss et al.	
D878,560 S	3/2020	Boyaval et al.	
D878,564 S	3/2020	Clawson et al.	
D878,566 S	3/2020	Jansen	
D882,071 S	4/2020	Stonecipher et al.	
D883,475 S	5/2020	Boyaval et al.	
D884,161 S *	5/2020	Stewart	D24/112
D886,281 S	6/2020	Boyaval et al.	
D886,282 S	6/2020	Stonecipher et al.	
D892,311 S	8/2020	Nicholas et al.	
D892,312 S	8/2020	Nicholas et al.	
10,780,256 B2	9/2020	Cordoba et al.	
D898,189 S	10/2020	Boyaval et al.	
D898,900 S	10/2020	Atterbury et al.	
D922,567 S	6/2021	Boyaval et al.	
D956,212 S *	6/2022	Petersen	D24/113
D958,329 S *	7/2022	Bourelle	D24/113
D962,423 S *	8/2022	Melander	D24/113
2004/0068283 A1	4/2004	Fukuzawa et al.	
2006/0100655 A1	5/2006	Leong et al.	
2008/0269682 A1	10/2008	Kavazov et al.	
2008/0269692 A1	10/2008	James et al.	
2012/0123350 A1	5/2012	Giambattista et al.	
2013/0060231 A1	3/2013	Adlon et al.	
2013/0211330 A1	8/2013	Pedersen et al.	
2014/0207073 A1	7/2014	Shang et al.	
2014/0221916 A1	8/2014	Kramer et al.	
2014/0221936 A1	8/2014	Edhouse et al.	
2014/0228769 A1	8/2014	Karlsson et al.	
2014/0330216 A1	11/2014	Weaver et al.	
2014/0336588 A1	11/2014	McLoughlin et al.	
2014/0343507 A1	11/2014	Karlsson et al.	
2014/0364812 A1	12/2014	Lumme et al.	
2014/0371684 A1	12/2014	Holmqvist	
2015/0190577 A1	7/2015	Shaanan et al.	
2015/0335829 A1	11/2015	Giambattista et al.	
2016/0106929 A1	4/2016	Fournier et al.	
2016/0151586 A1	6/2016	Kemp	
2016/0193413 A1	7/2016	Gabrielsson	
2016/0263325 A1	9/2016	Huthmacher et al.	

2016/0303327 A1	10/2016	Moren	
2017/0128668 A1	5/2017	Miller et al.	
2017/0182242 A1	6/2017	Galitz et al.	
2018/0043101 A1	2/2018	Weaver et al.	
2018/0104413 A1	4/2018	McLoughlin et al.	
2019/0266921 A1	8/2019	Chang	
2019/0298924 A1	10/2019	Gibson et al.	
2020/0179612 A1	6/2020	Wei	
2020/0258425 A1	8/2020	Foley et al.	
2021/0093789 A1	4/2021	Plambech et al.	
2021/0093796 A1 *	4/2021	Finkelstein	A61M 5/3157
2021/0093797 A1	4/2021	Finkelstein et al.	
2021/0121633 A1 *	4/2021	Finkelstein	A61M 5/2422

FOREIGN PATENT DOCUMENTS

CN	302858428 S	6/2014
CN	304223460 S	7/2017
EM	008038723-0005 *	7/2020
GB	9008041362-0012 *	7/2020
GB	6133358 *	4/2021
JP	D1607619 *	6/2018
RU	100256 U1	12/2010
RU	100299 U1	12/2010
TW	D179360	11/2016
TW	D179362	11/2016

OTHER PUBLICATIONS

Aimovig, Amgen, [Postdate unknown], [Site seen Sep. 6, 022], Seen at URL: <https://www.amgeninjectiondemos.com/Aimovig> (Year: 2022).*

Parental Drug Association, “Trends in the Self-injection Device Market & next Generation Platform Technologies,” [postdate 2018], [Site seen Sep. 6, 2022], Seen at URL: <https://pda-asiapacific.glueup.com/resources/protected/organization/1176/event/26285/93bd1ce6-33aa-48c1-b0b7-9833dd5155bc.pdf> (Year: 2022).*

Industrial Design DM/092744, Millennium Pharmaceuticals, Inc., Registration date Sep. 6, 2016.

Internet publication <https://www.youtube.com/watch?v=VbGb5lt9n80>, dated Sep. 30, 2014.

Office Action and Search Report for Taiwan application No. 1066305338, dated Mar. 26, 2018.

Office Action, Israel Design Office, Application No. 60912, dated Mar. 4, 2018.

McGowan, 30 Years in the Making—An Inside Perspective on the Emergency of Autoinjectors, ONdrugDelivery Magazine, Issue 101, pp. 20-23 (Oct. 2019).

* cited by examiner

Primary Examiner — Natasha Vujcic
 Assistant Examiner — Gilbert B Ford
 (74) Attorney, Agent, or Firm — Marshall, Gerstein & Borun LLP

(57) CLAIM

We claim, the ornamental design for a handheld drug delivery device, as shown and described.

DESCRIPTION

This patent or application file contains a least one drawing executed partly in color. Copies of this patent or patent application publication with drawing(s) partly in color will be provided by the Office upon request and payment of any necessary fee.

FIG. 1 is a perspective view showing a first new design for a handheld drug delivery device;

FIG. 2 is a front view of the handheld drug delivery device of FIG. 1;

FIG. 3 is a rear view of the handheld drug delivery device of FIG. 1;
FIG. 4 is a right-side view of the handheld drug delivery device of FIG. 1;
FIG. 5 is a left-side view of the handheld drug delivery device of FIG. 1;
FIG. 6 is a top view of the handheld drug delivery device of FIG. 1;
FIG. 7 is a bottom view of the handheld drug delivery device of FIG. 1;
FIG. 8 is a perspective view of the handheld drug delivery device of FIG. 1 with its cap removed;
FIG. 9 is a perspective view showing a second new design for a handheld drug delivery device;
FIG. 10 is a front view of the handheld drug delivery device of FIG. 9;
FIG. 11 is a rear view of the handheld drug delivery device of FIG. 9;
FIG. 12 is a right-side view of the handheld drug delivery device of FIG. 9;
FIG. 13 is a left-side view of the handheld drug delivery device of FIG. 9;
FIG. 14 is a top view of the handheld drug delivery device of FIG. 9;
FIG. 15 is a bottom view of the handheld drug delivery device of FIG. 9;
FIG. 16 is a perspective view of the handheld drug delivery device of FIG. 9 with its cap removed;
FIG. 17 is a perspective view showing a third new design for a handheld drug delivery device;
FIG. 18 is a front view of the handheld drug delivery device of FIG. 17;

FIG. 19 is a rear view of the handheld drug delivery device of FIG. 17;
FIG. 20 is a right-side view of the handheld drug delivery device of FIG. 17;
FIG. 21 is a left-side view of the handheld drug delivery device of FIG. 17;
FIG. 22 is a top view of the handheld drug delivery device of FIG. 17;
FIG. 23 is a bottom view of the handheld drug delivery device of FIG. 17;
FIG. 24 is a perspective view of the handheld drug delivery device of FIG. 17 with its cap removed;
FIG. 25 is a perspective view showing a fourth new design for a handheld drug delivery device;
FIG. 26 is a front view of the handheld drug delivery device of FIG. 25;
FIG. 27 is a rear view of the handheld drug delivery device of FIG. 25;
FIG. 28 is a right-side view of the handheld drug delivery device of FIG. 25;
FIG. 29 is a left-side view of the handheld drug delivery device of FIG. 25;
FIG. 30 is a top view of the handheld drug delivery device of FIG. 25;
FIG. 31 is a bottom view of the handheld drug delivery device of FIG. 25; and,
FIG. 32 is a perspective view of the handheld drug delivery device of FIG. 25 with its cap removed.
The broken lines show portions of the handheld drug delivery device that form no part of the claimed design.

**1 Claim, 20 Drawing Sheets
(5 of 20 Drawing Sheet(s) Filed in Color)**

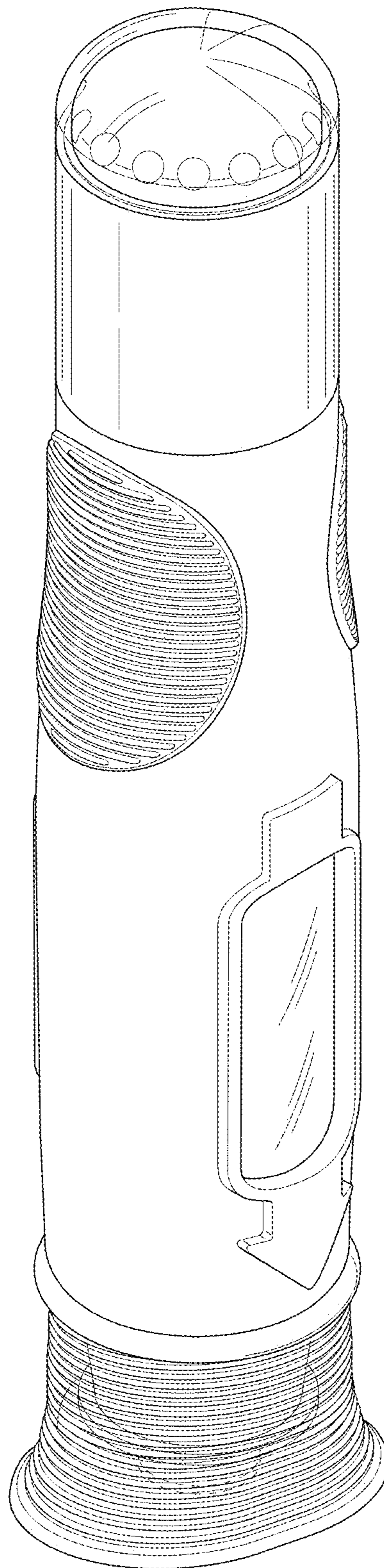


FIG. 1

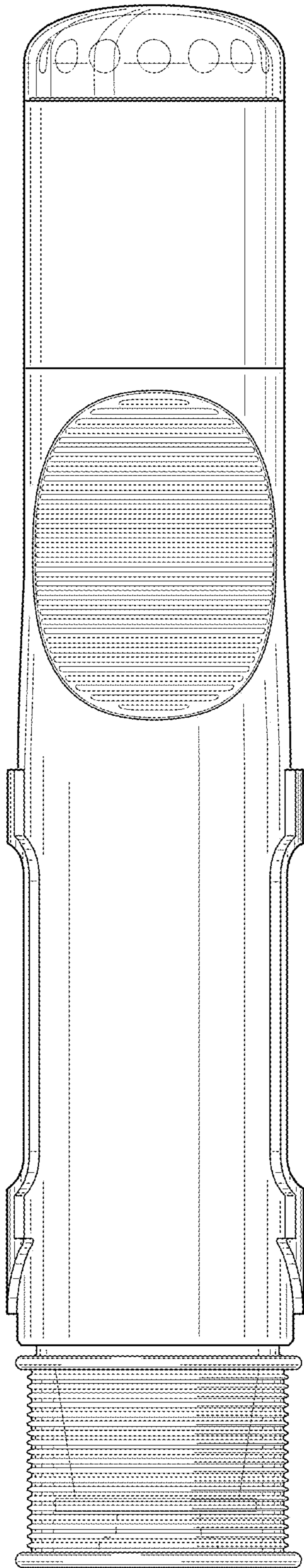


FIG. 2

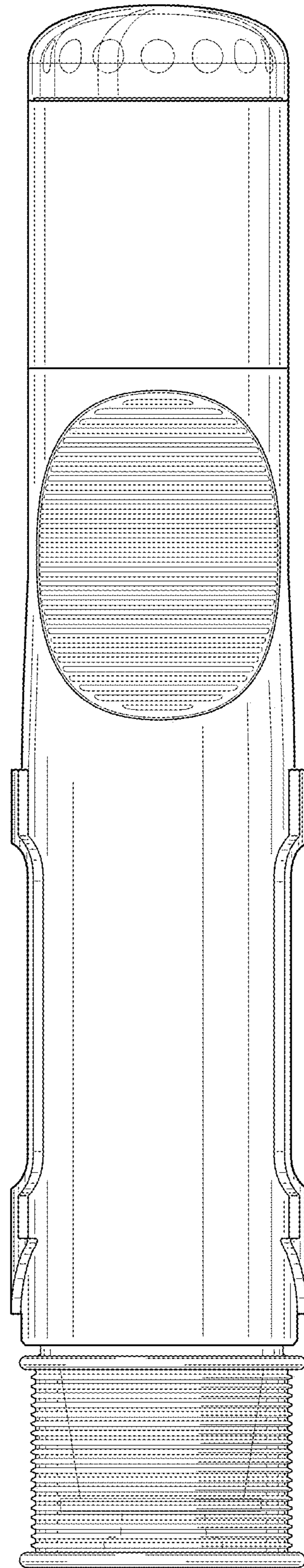


FIG. 3

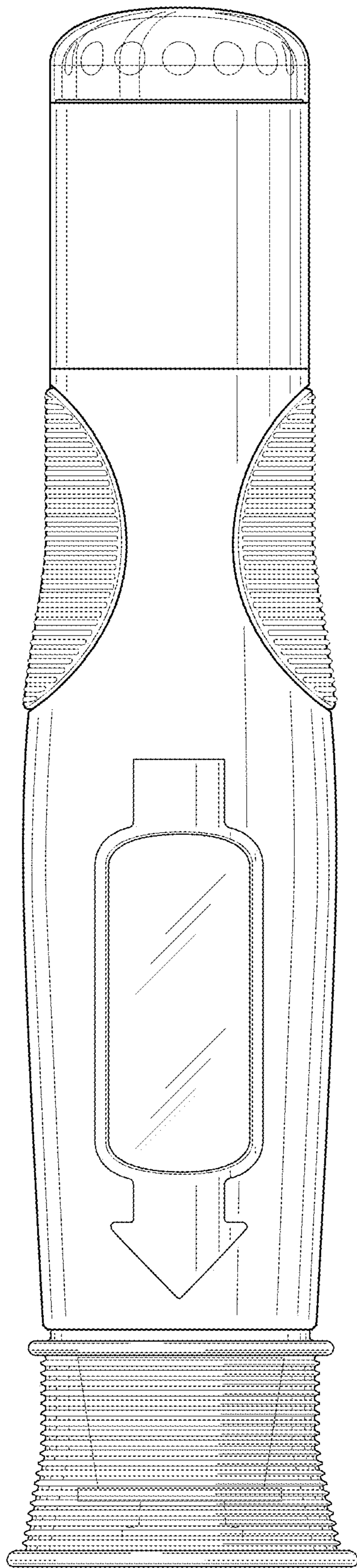


FIG. 4

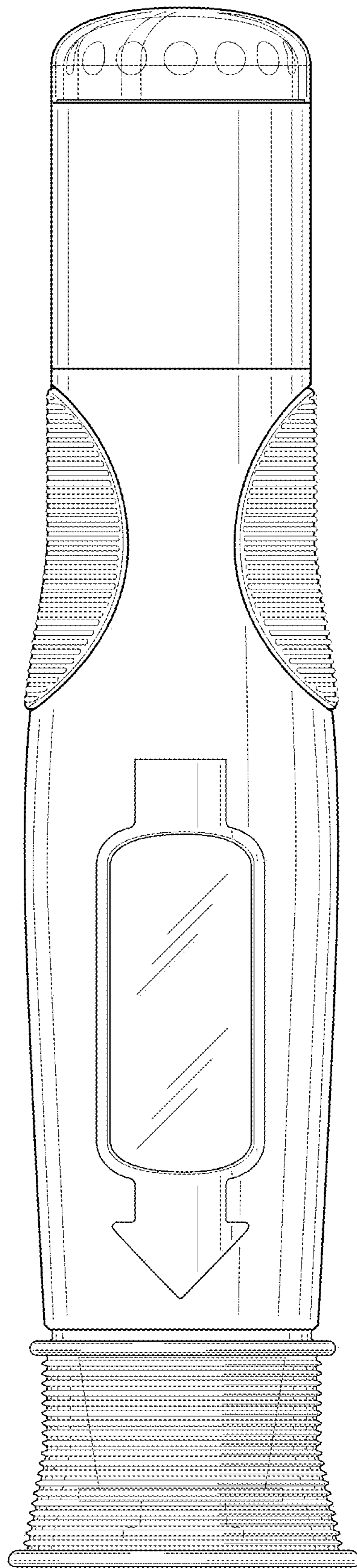


FIG. 5

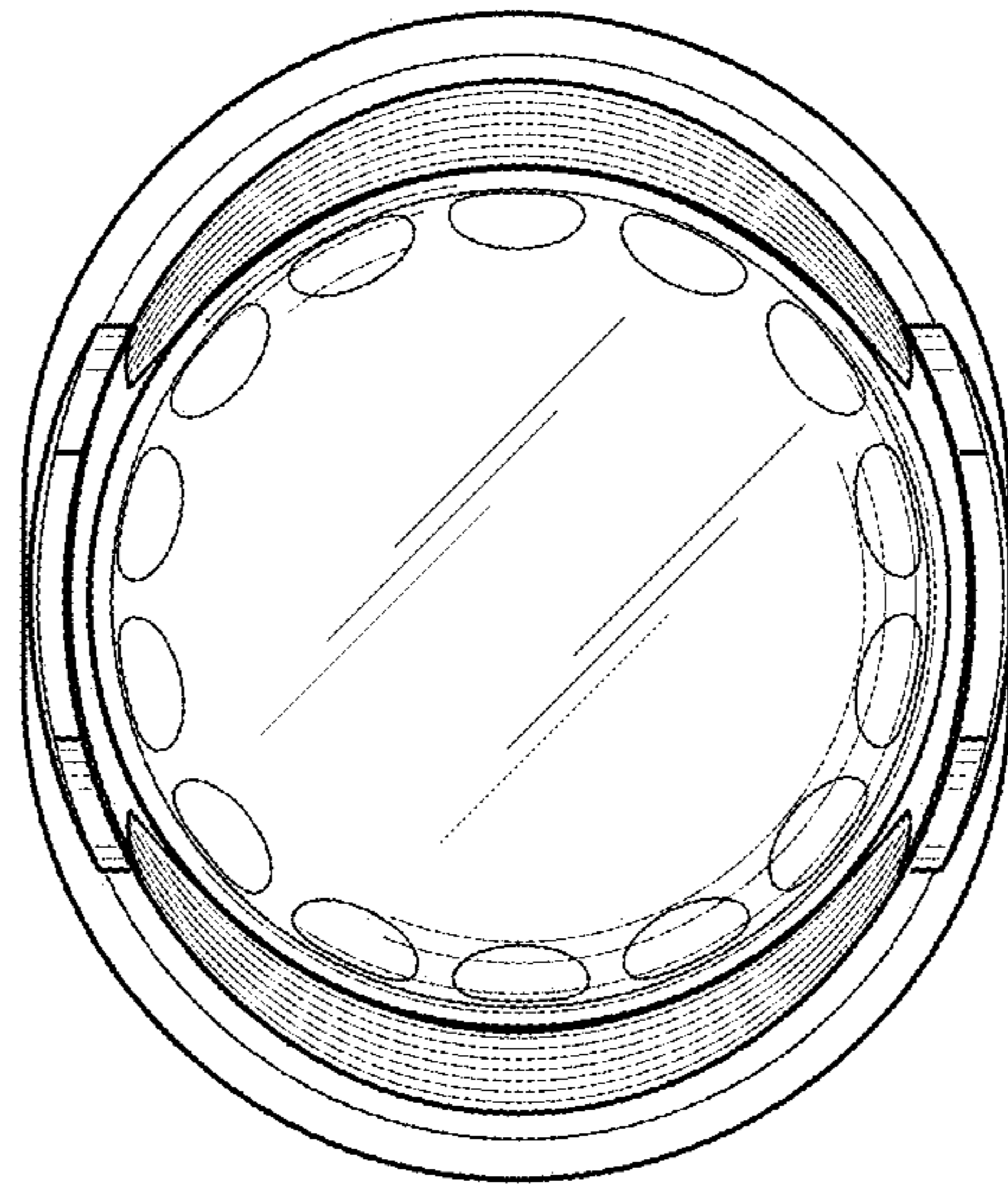


FIG. 6

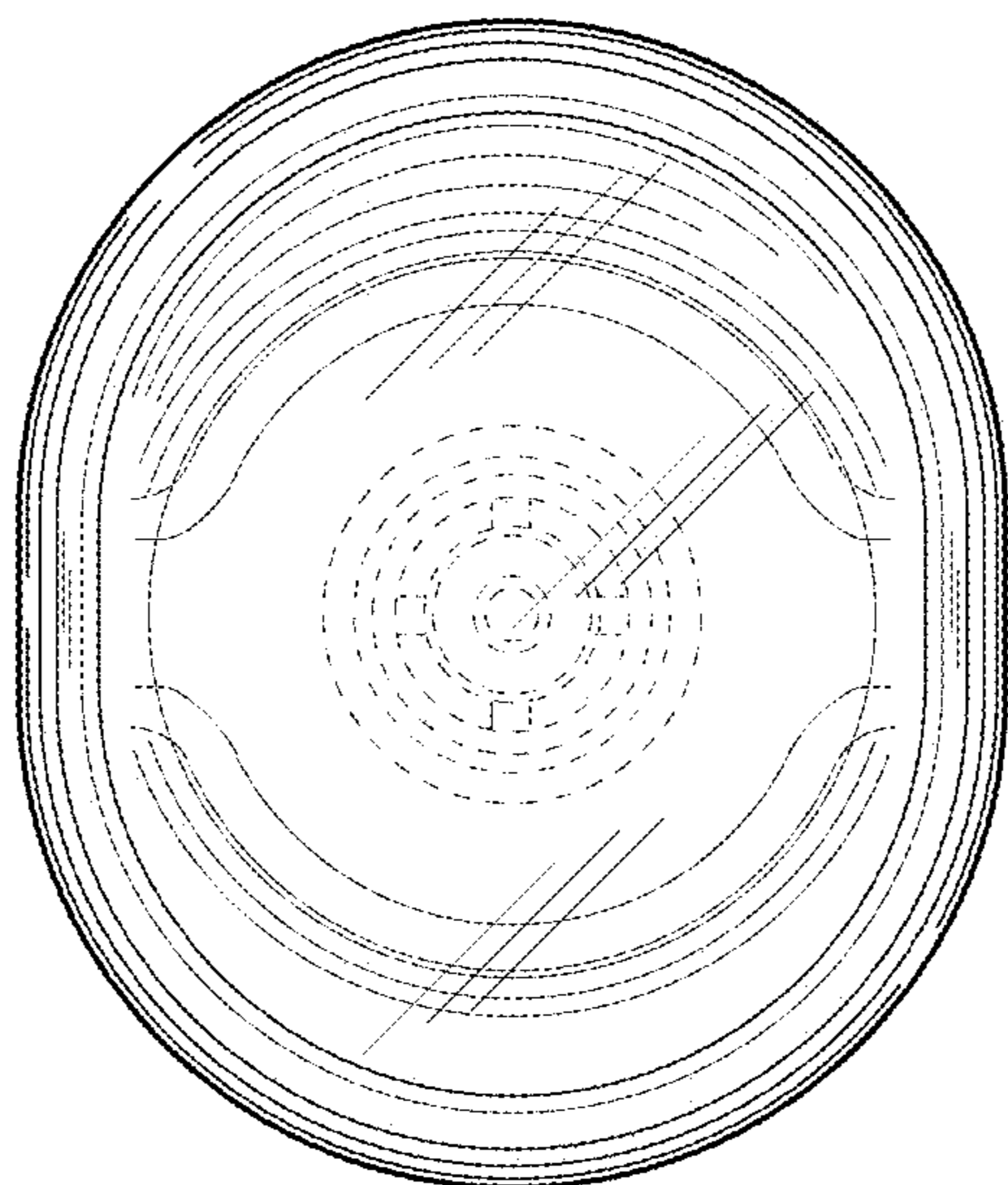


FIG. 7

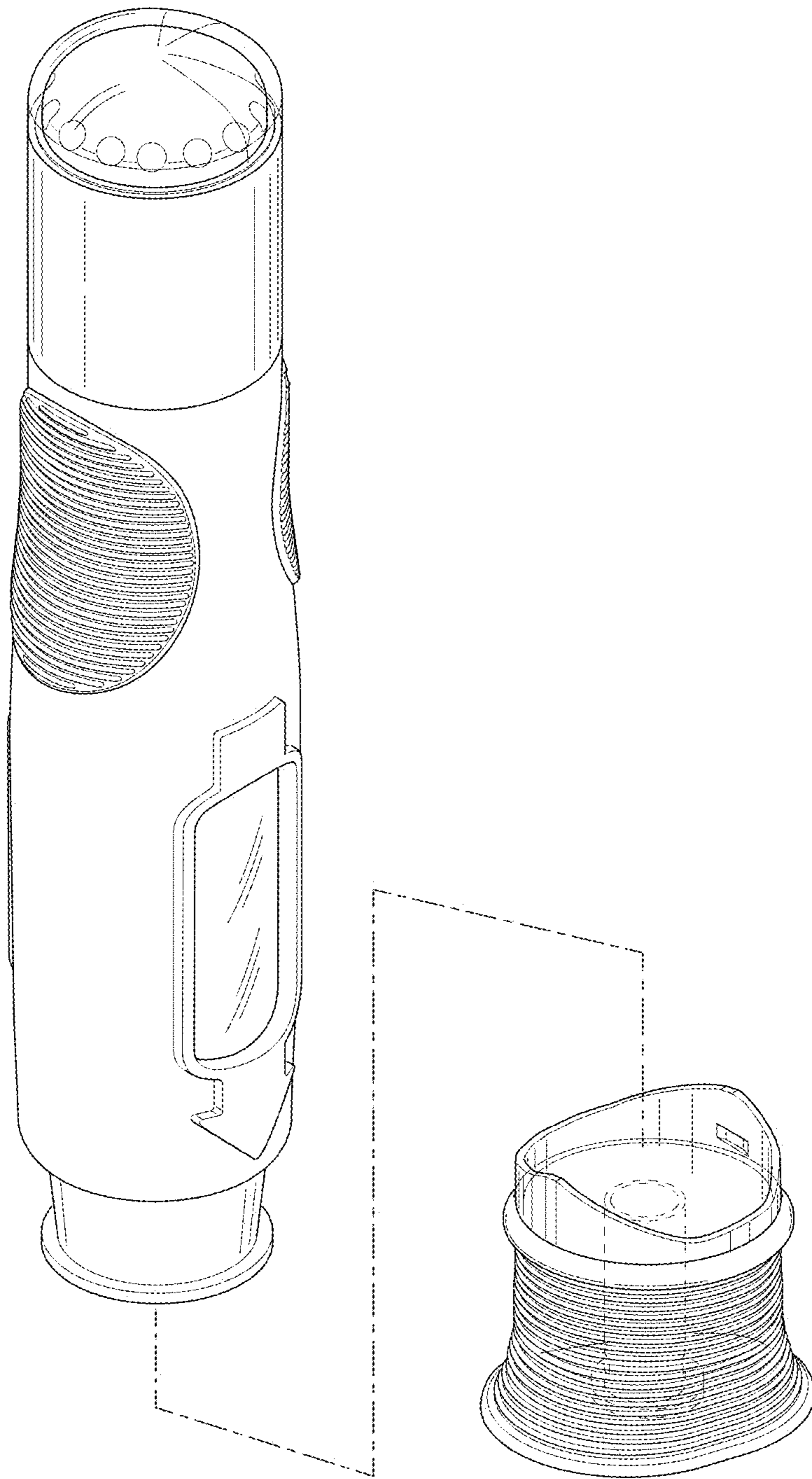


FIG. 8

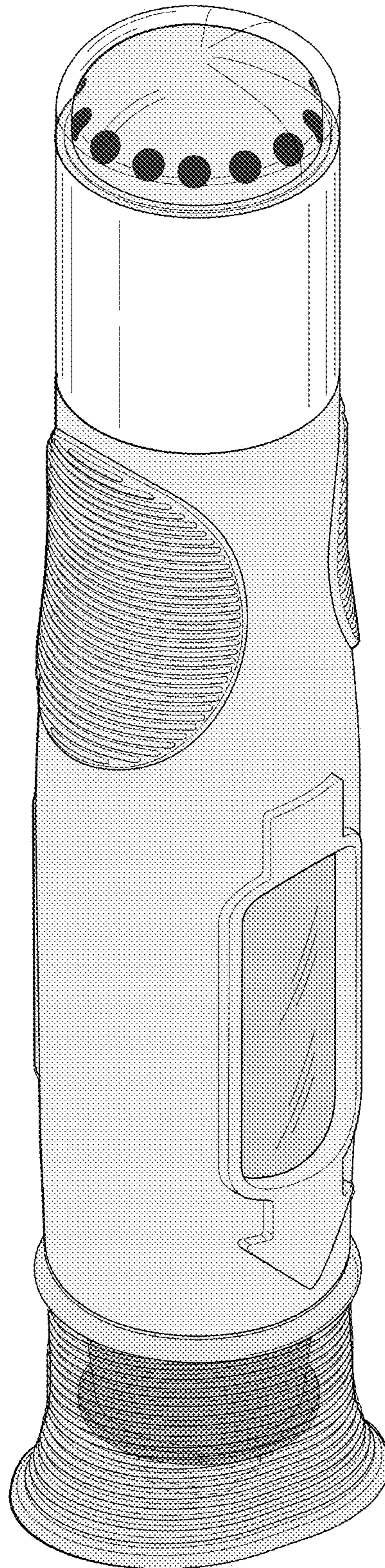


FIG. 9

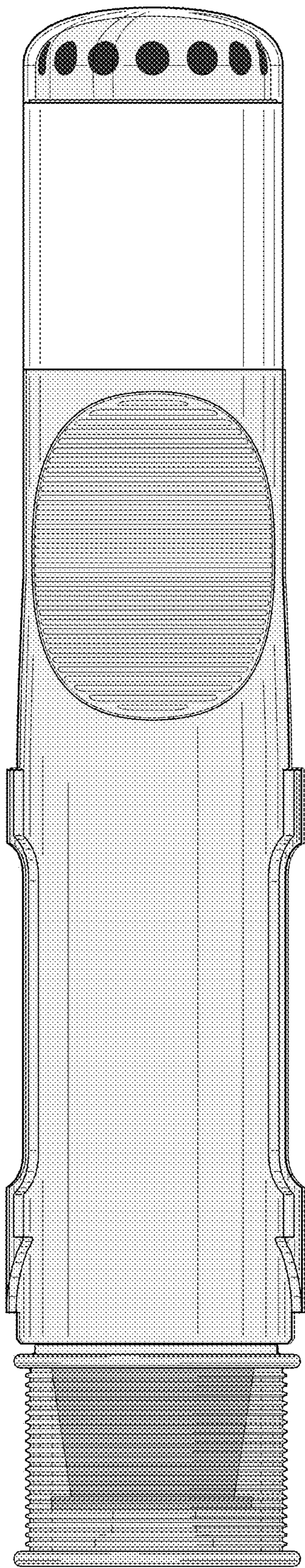


FIG. 10

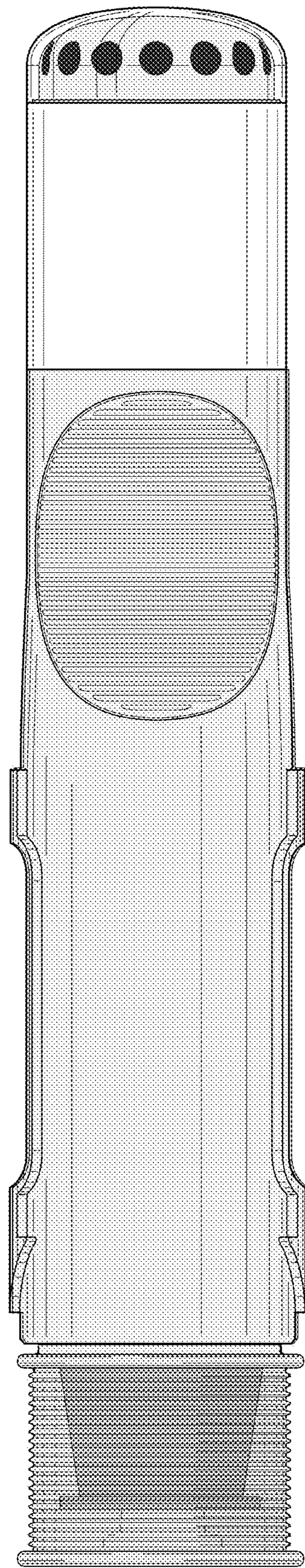


FIG. 11

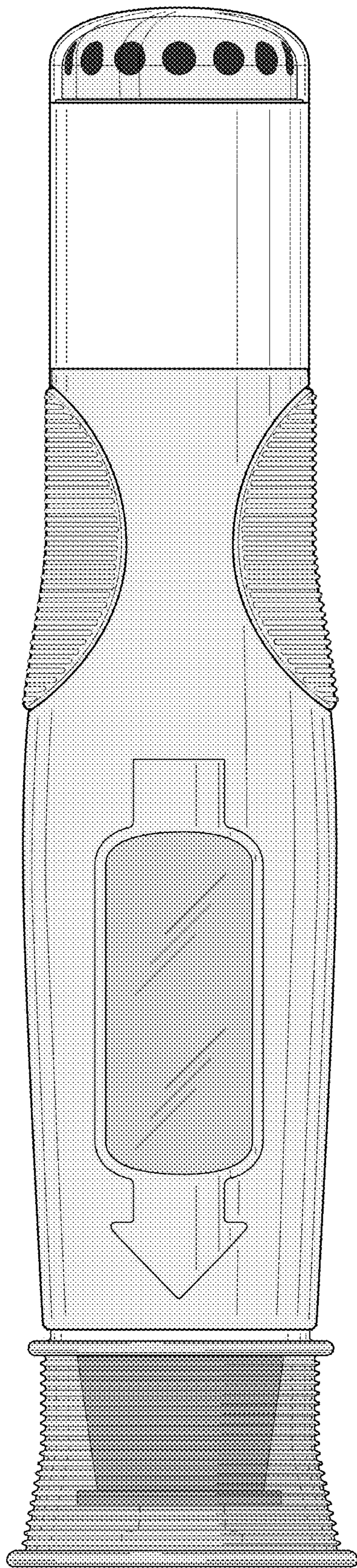


FIG. 12

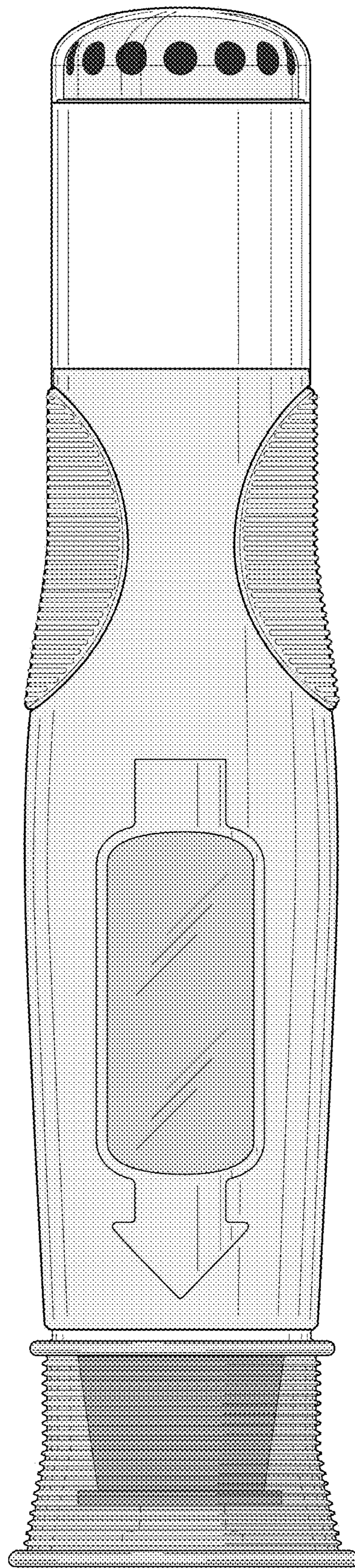


FIG. 13

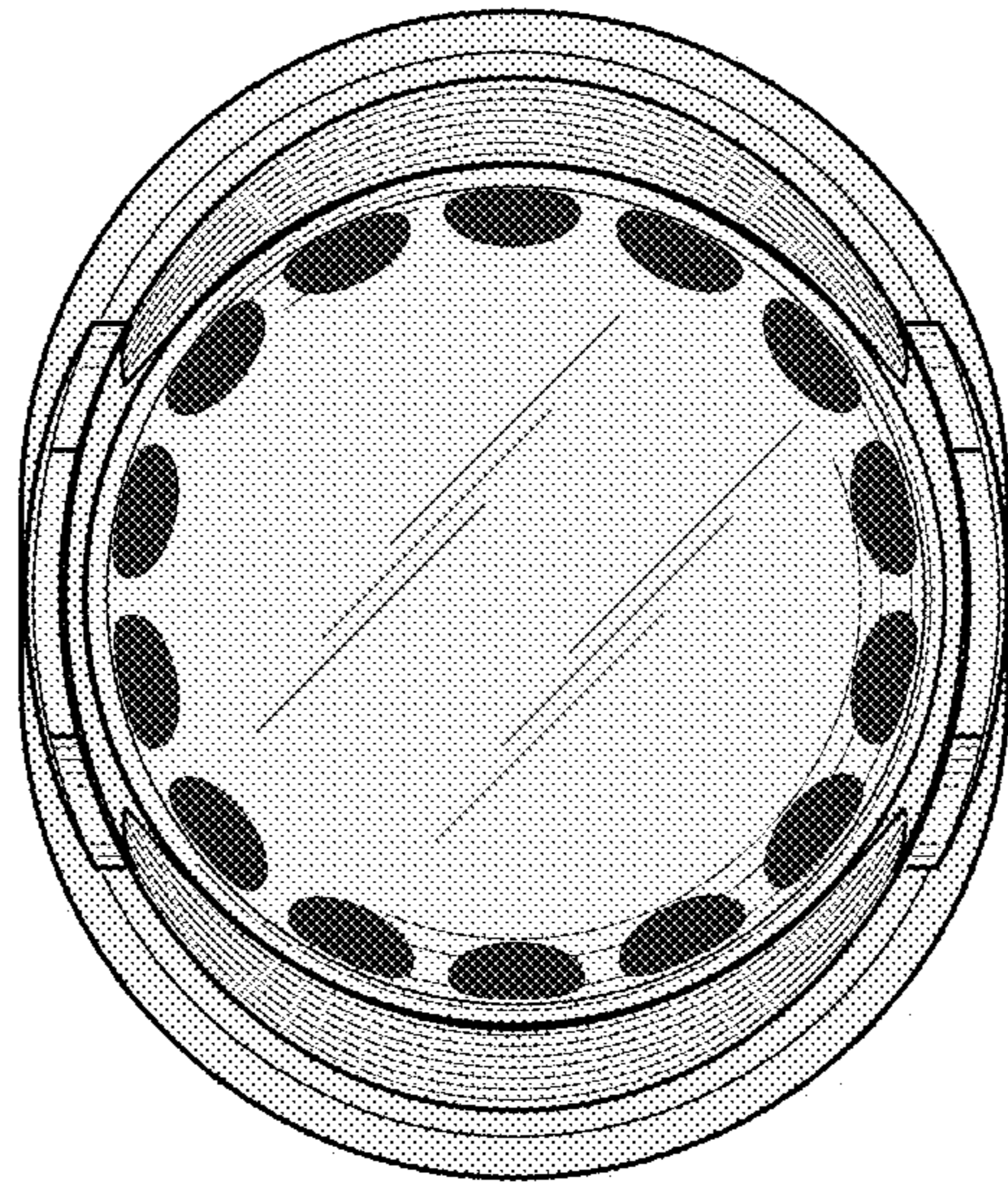


FIG. 14

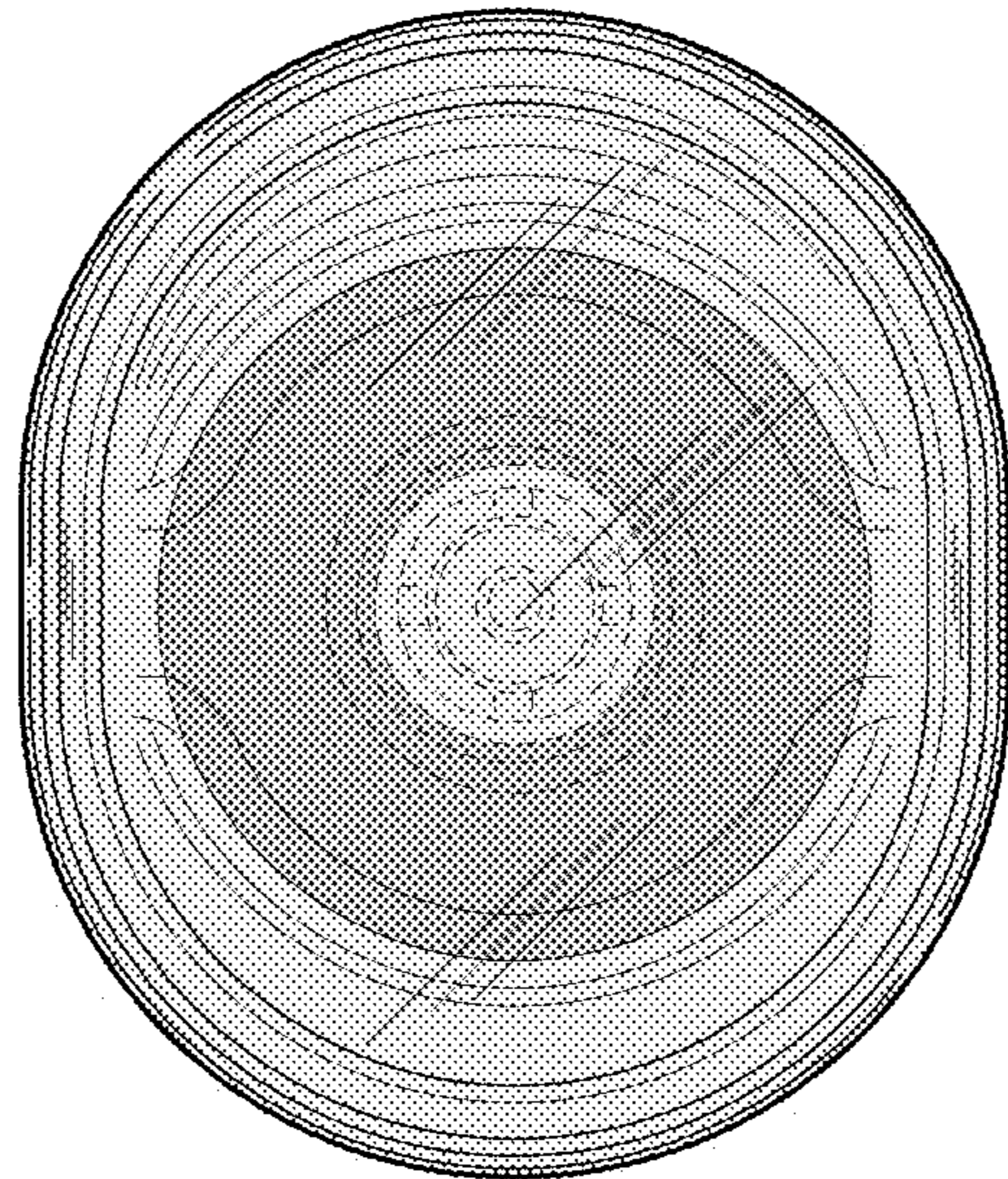


FIG. 15

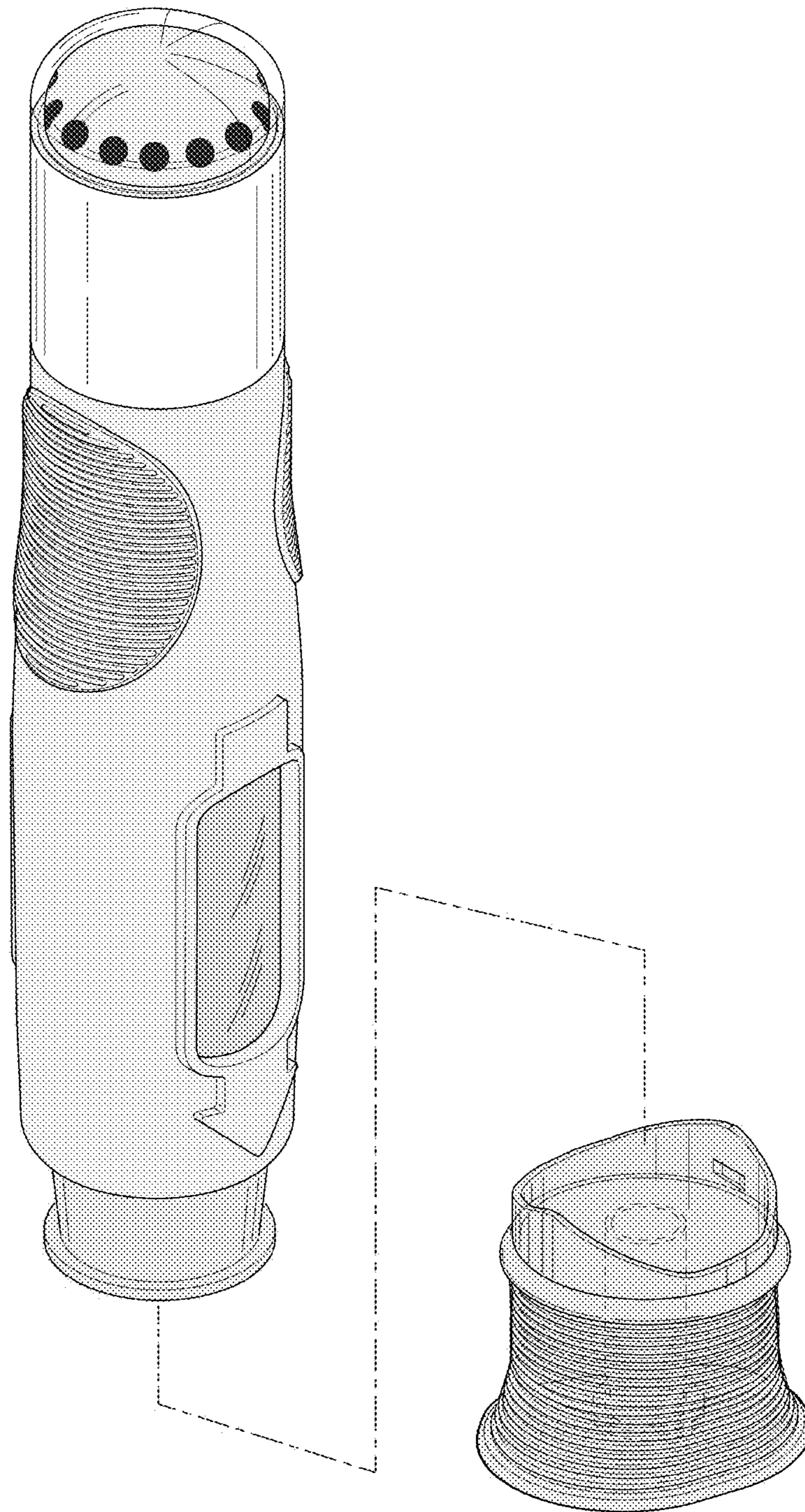


FIG. 16

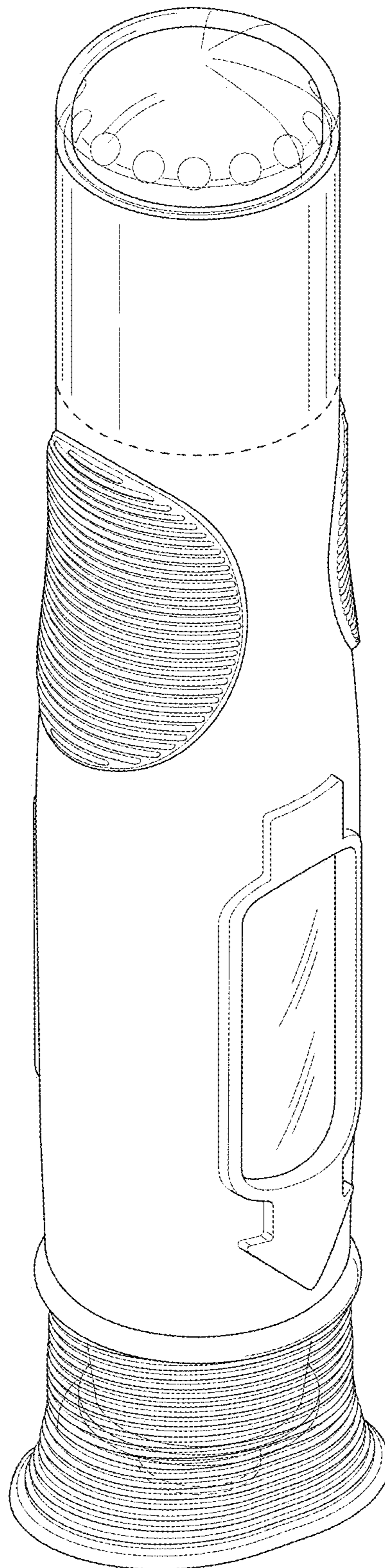


FIG. 17

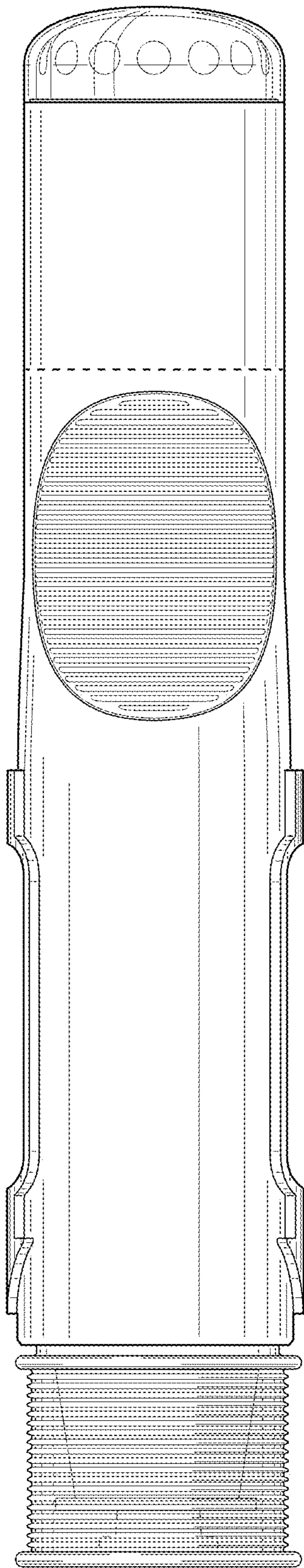


FIG. 18

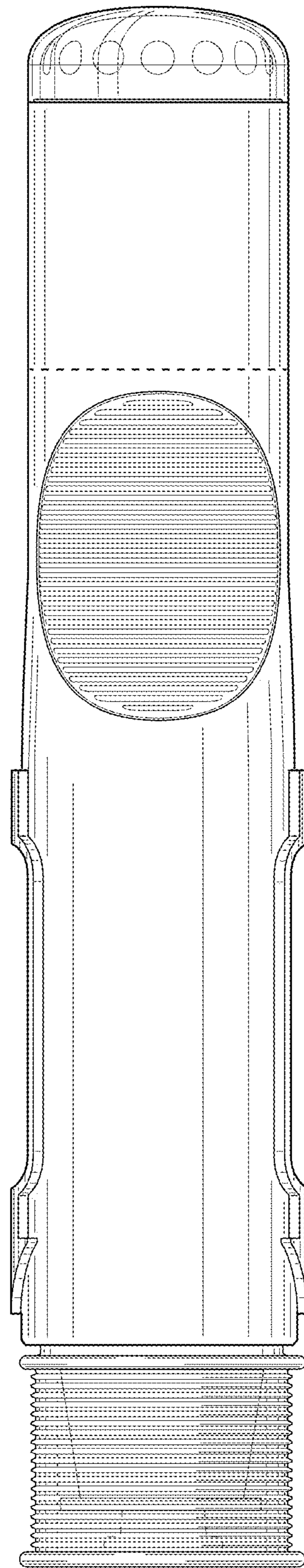


FIG. 19

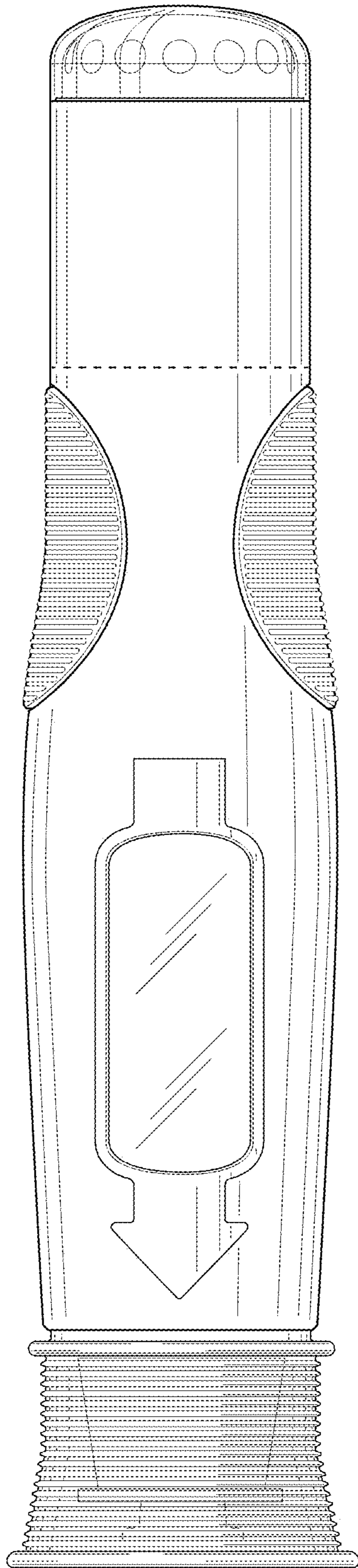


FIG. 20

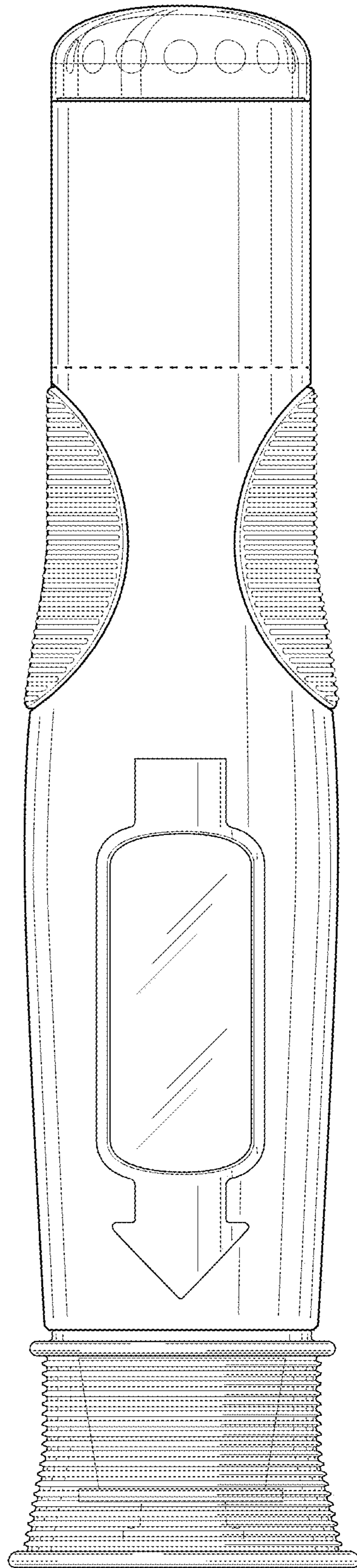


FIG. 21

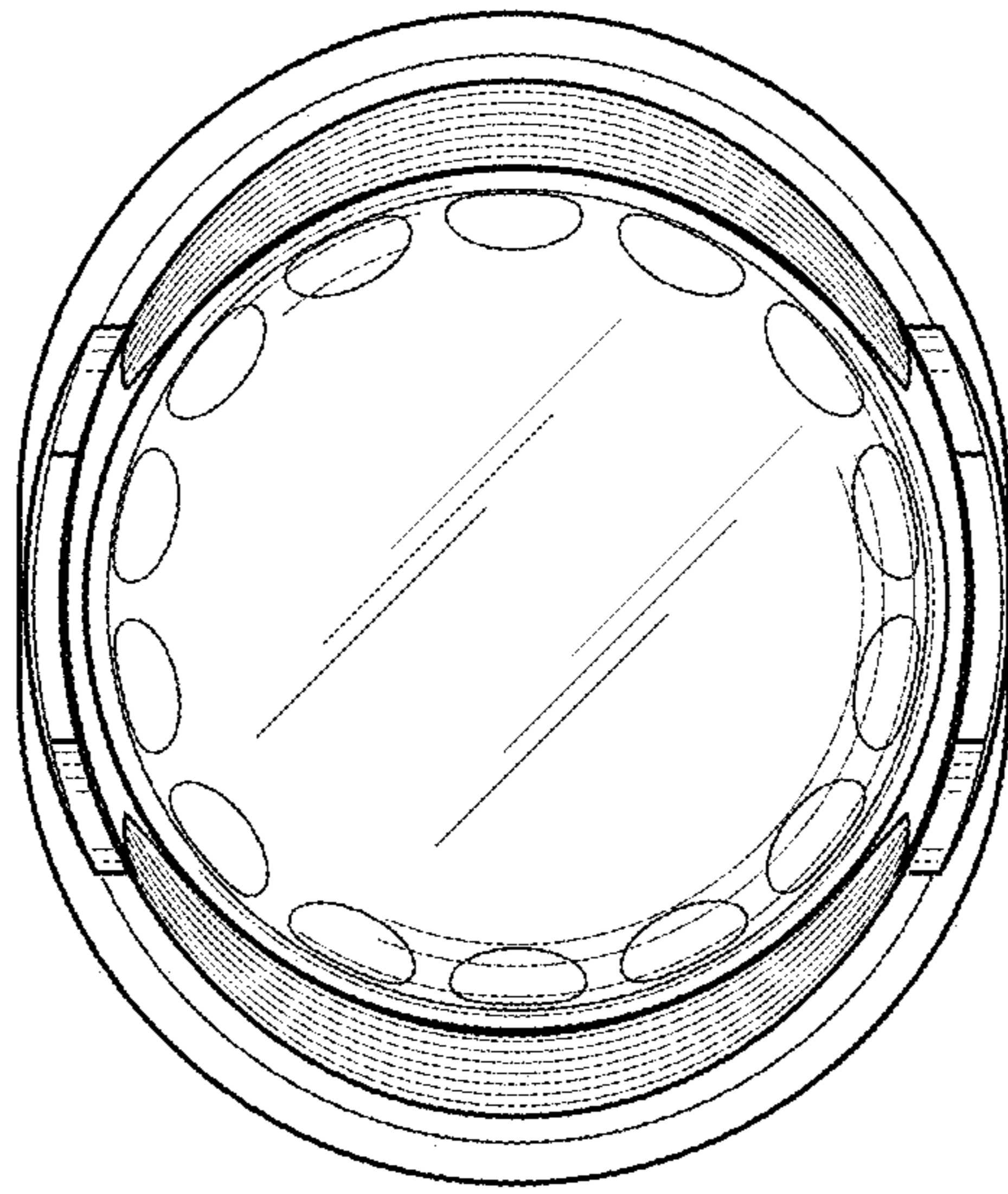


FIG. 22

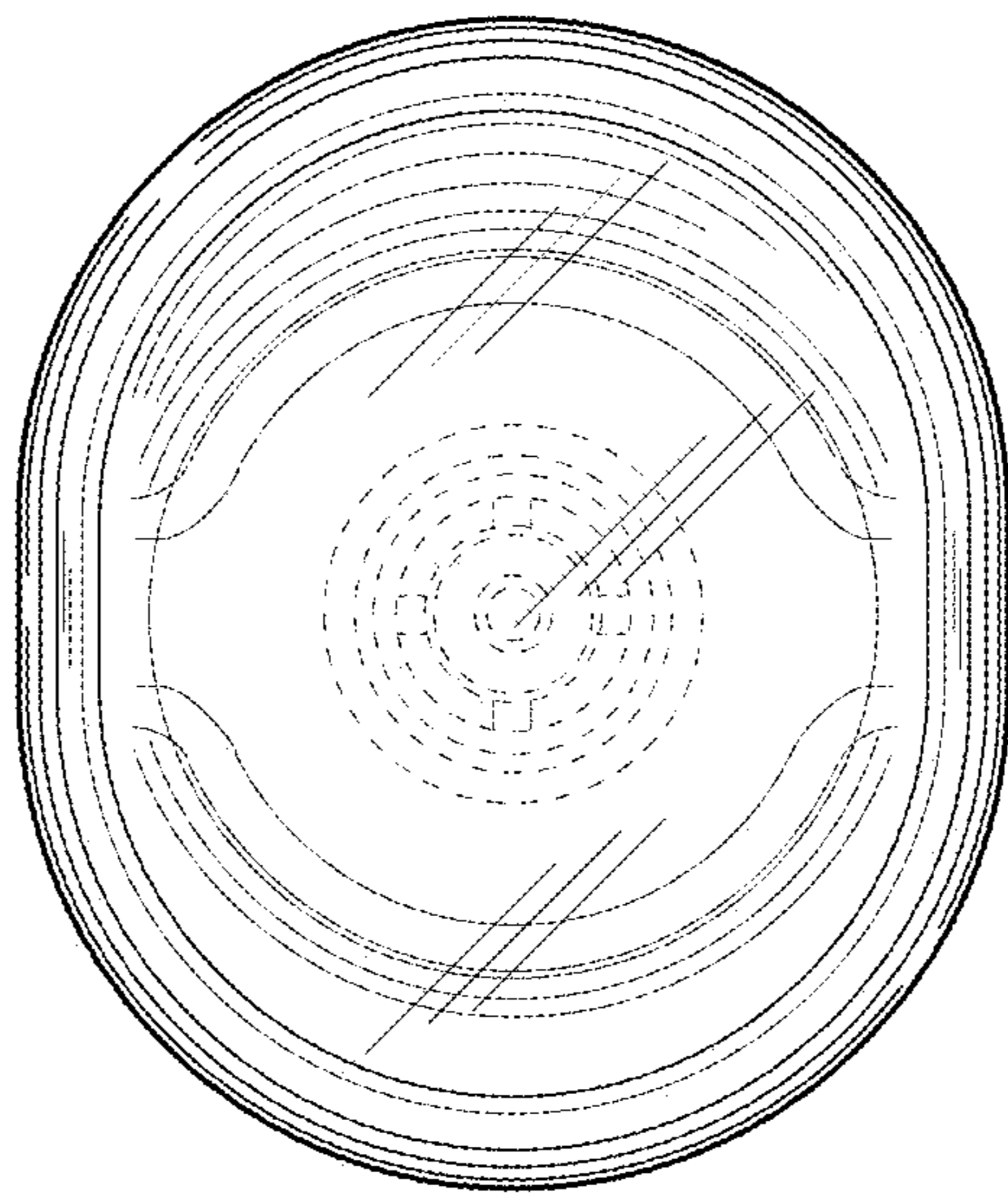


FIG. 23

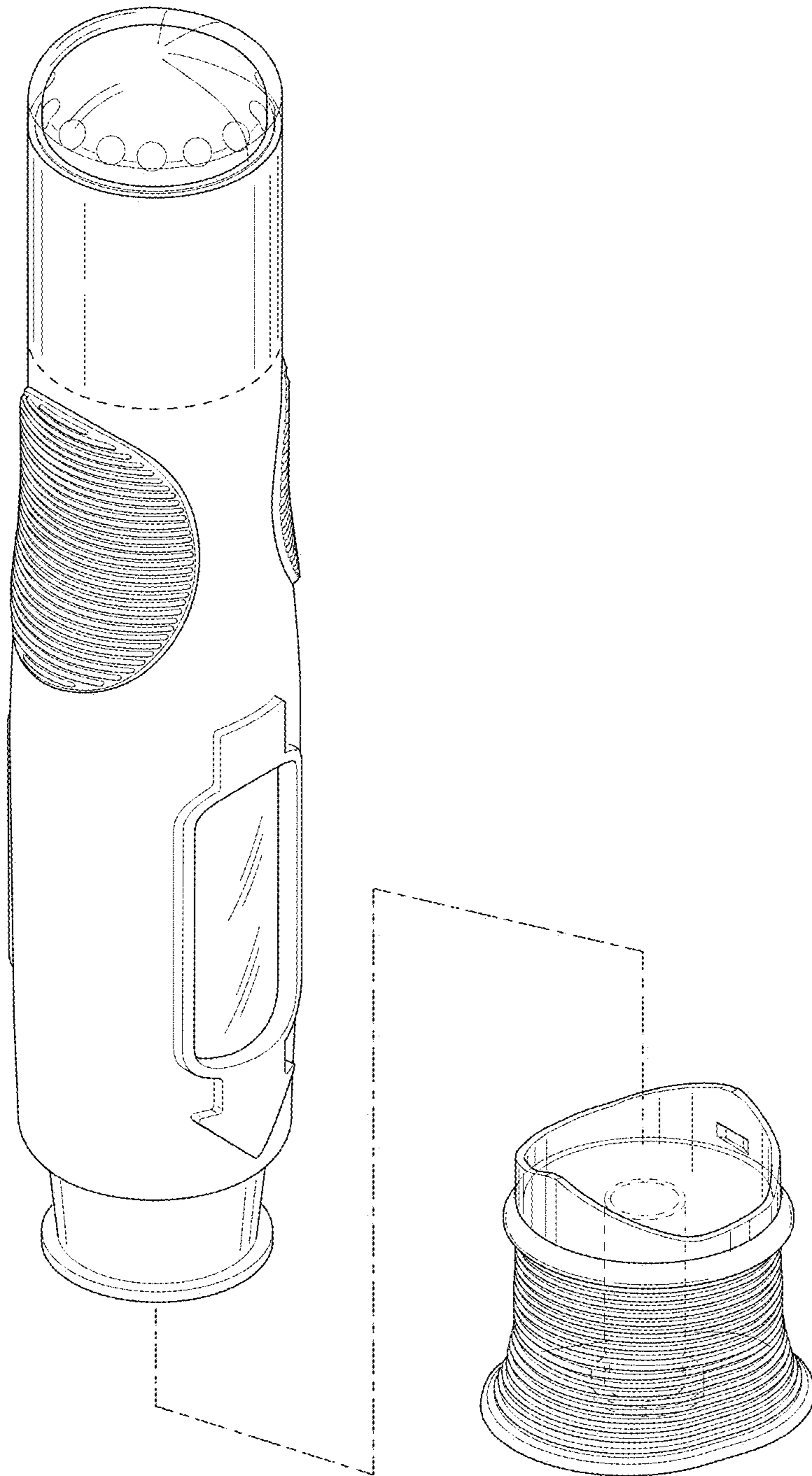


FIG. 24

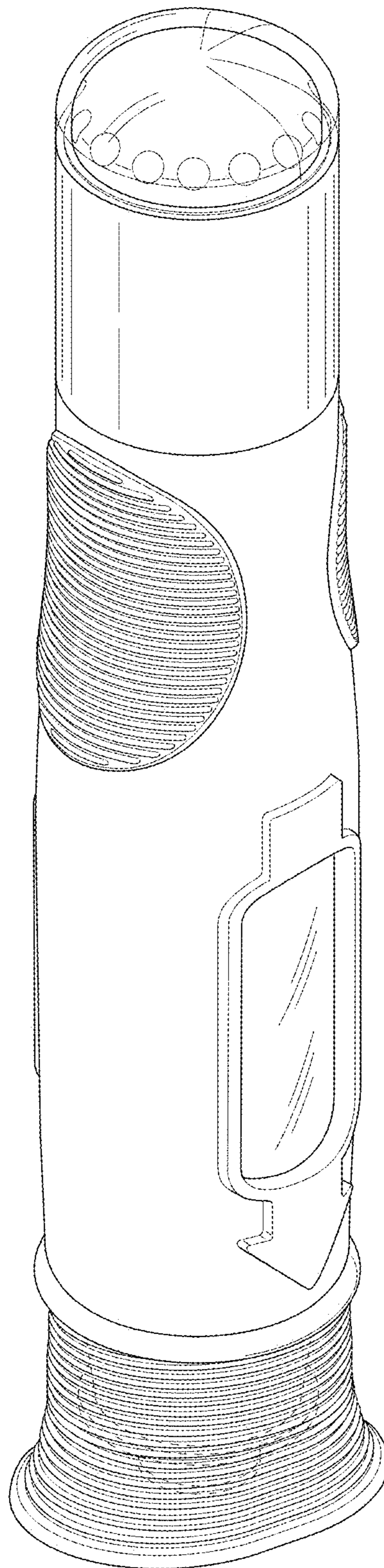


FIG. 25

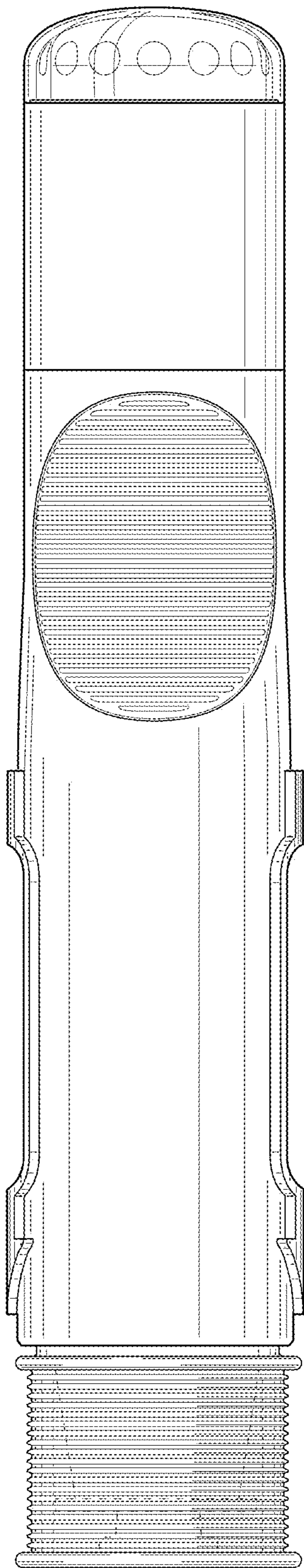


FIG. 26

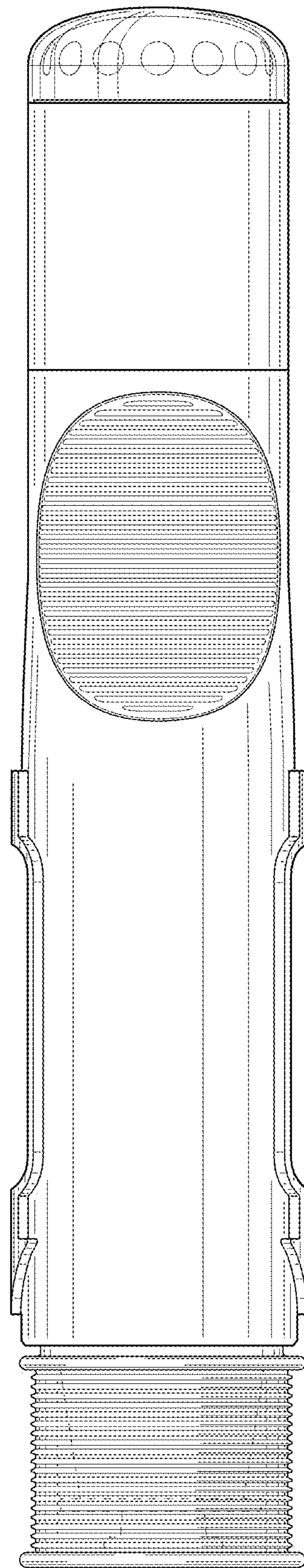


FIG. 27

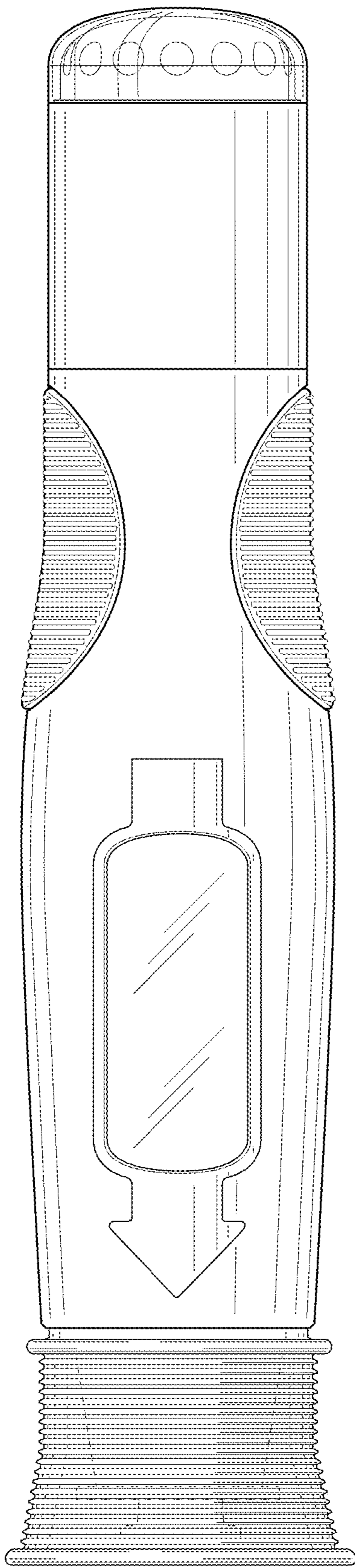


FIG. 28

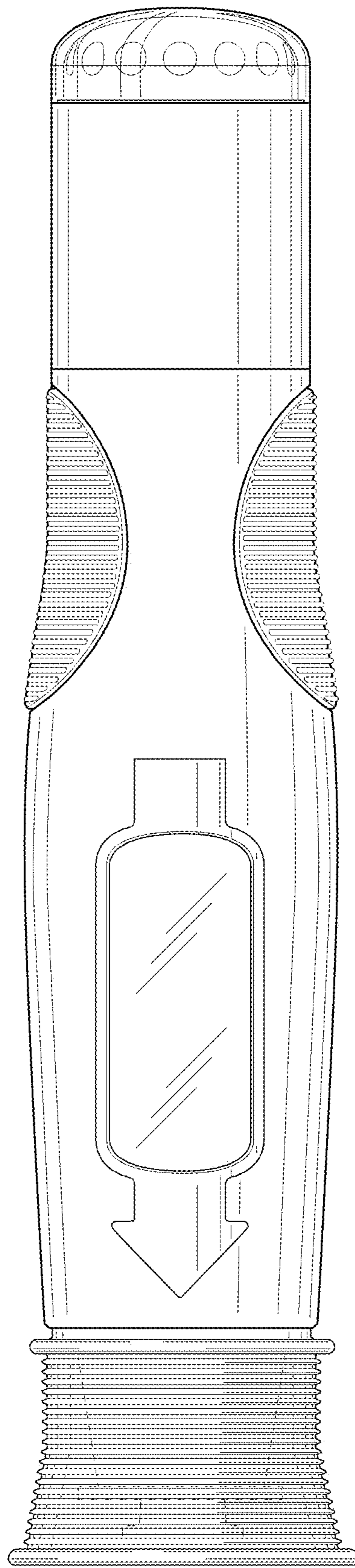


FIG. 29

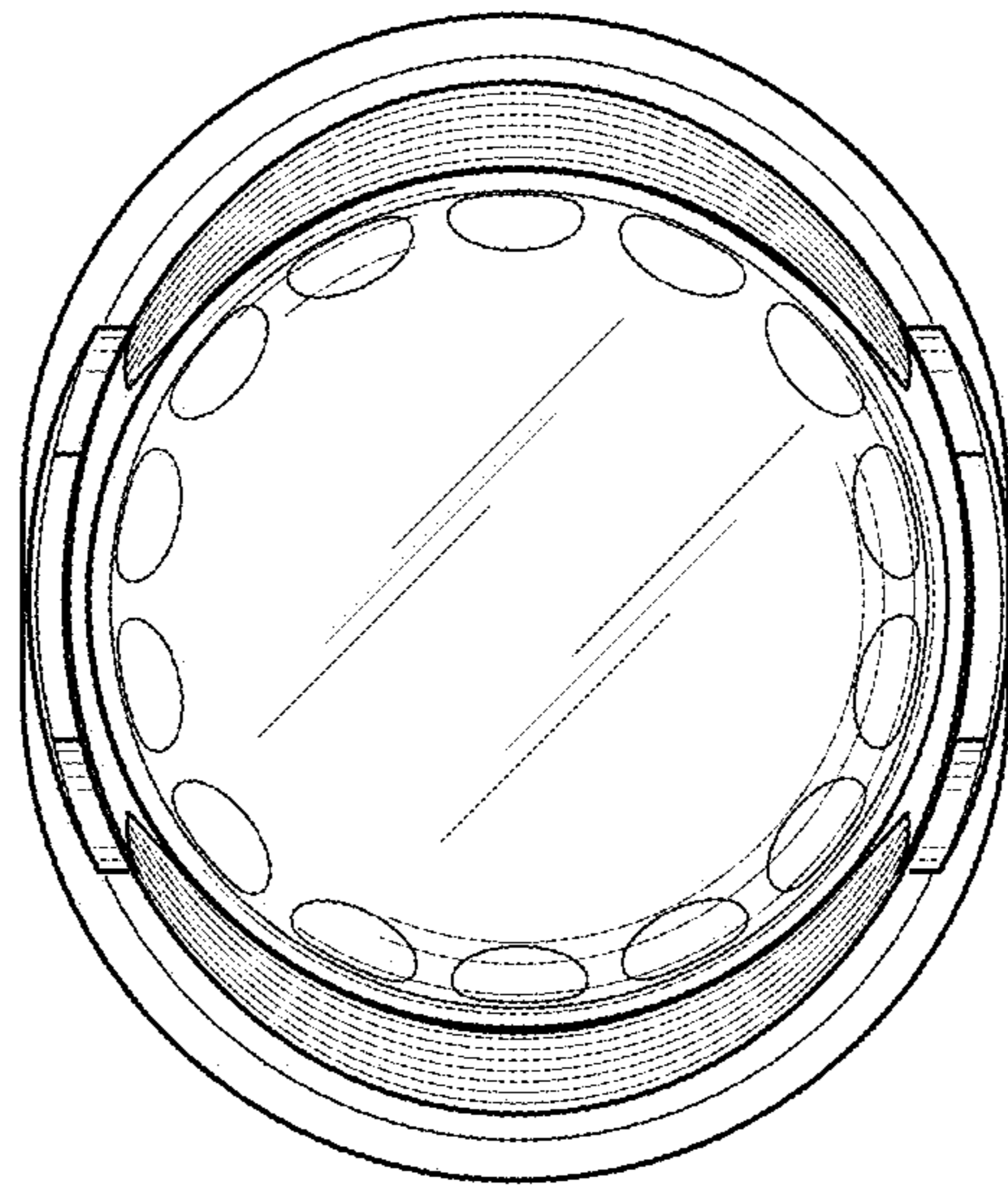


FIG. 30

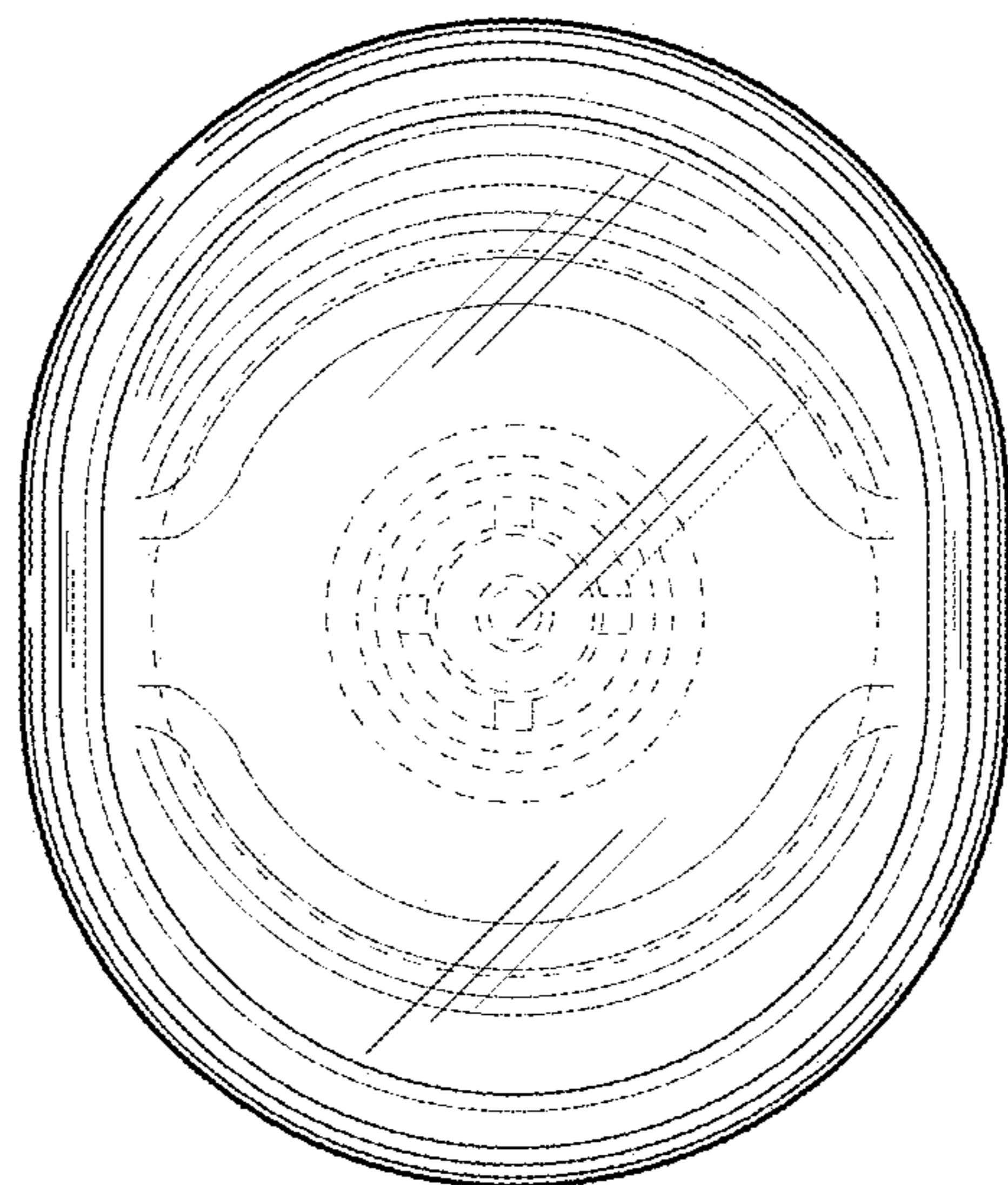


FIG. 31

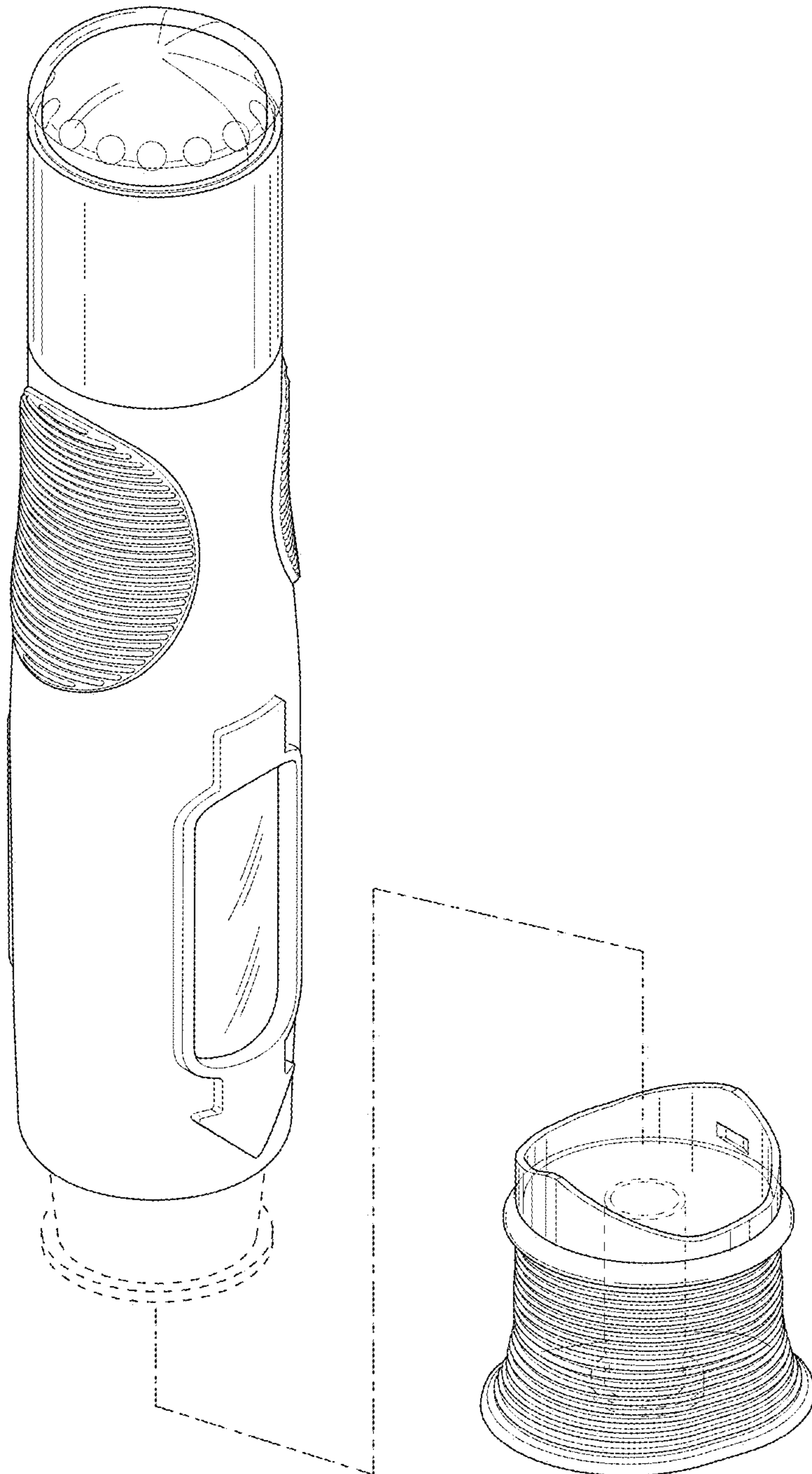


FIG. 32