



US00D744155S

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

(10) **Patent No.:** **US D744,155 S**  
(45) **Date of Patent:** **\*\* Nov. 24, 2015**

- (54) **LENS**
- (71) Applicants: **Bruce Radl**, Stow, MA (US); **Zhuo Wang**, Middleton, MA (US); **Yvetta Pols Sandhu**, Winchester, MA (US)
- (72) Inventors: **Bruce Radl**, Stow, MA (US); **Zhuo Wang**, Middleton, MA (US); **Yvetta Pols Sandhu**, Winchester, MA (US)
- (73) Assignee: **OSRAM SYLVANIA Inc.**, Wilmington, MA (US)
- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/492,041**
- (22) Filed: **May 28, 2014**
- (51) **LOC (10) Cl.** ..... **26-99**
- (52) **U.S. Cl.**  
USPC ..... **D26/120**
- (58) **Field of Classification Search**  
USPC ..... D26/9, 10, 12, 13, 15, 16, 24, 51, 61,  
D26/72, 76, 80, 81, 85, 86, 88, 90, 113, 118,  
D26/119, 120, 122, 128, 129, 138, 143,  
D26/144; D13/180  
CPC ..... F21V 21/02; F21V 29/004; F21V 21/04;  
F21V 29/2212; F21S 8/026; F21S 8/04;  
F21Y 2101/02  
See application file for complete search history.

- (56) **References Cited**  
**U.S. PATENT DOCUMENTS**  
1,357,034 A \* 10/1920 D'Humy ..... 362/290  
1,555,397 A \* 9/1925 Dean et al. .... 362/354  
(Continued)

- FOREIGN PATENT DOCUMENTS**  
FR 2812071 A1 \* 1/2002 ..... F21S 8/10
- OTHER PUBLICATIONS**

Fresnel lens, image post date 1823, site visited Jan. 20, 2015, (online), <<http://www.adena.co.nz/theatre/tech-reference/how-things-work/luminaire-fresnel/fresnel-spots.htm>>.\*

(Continued)

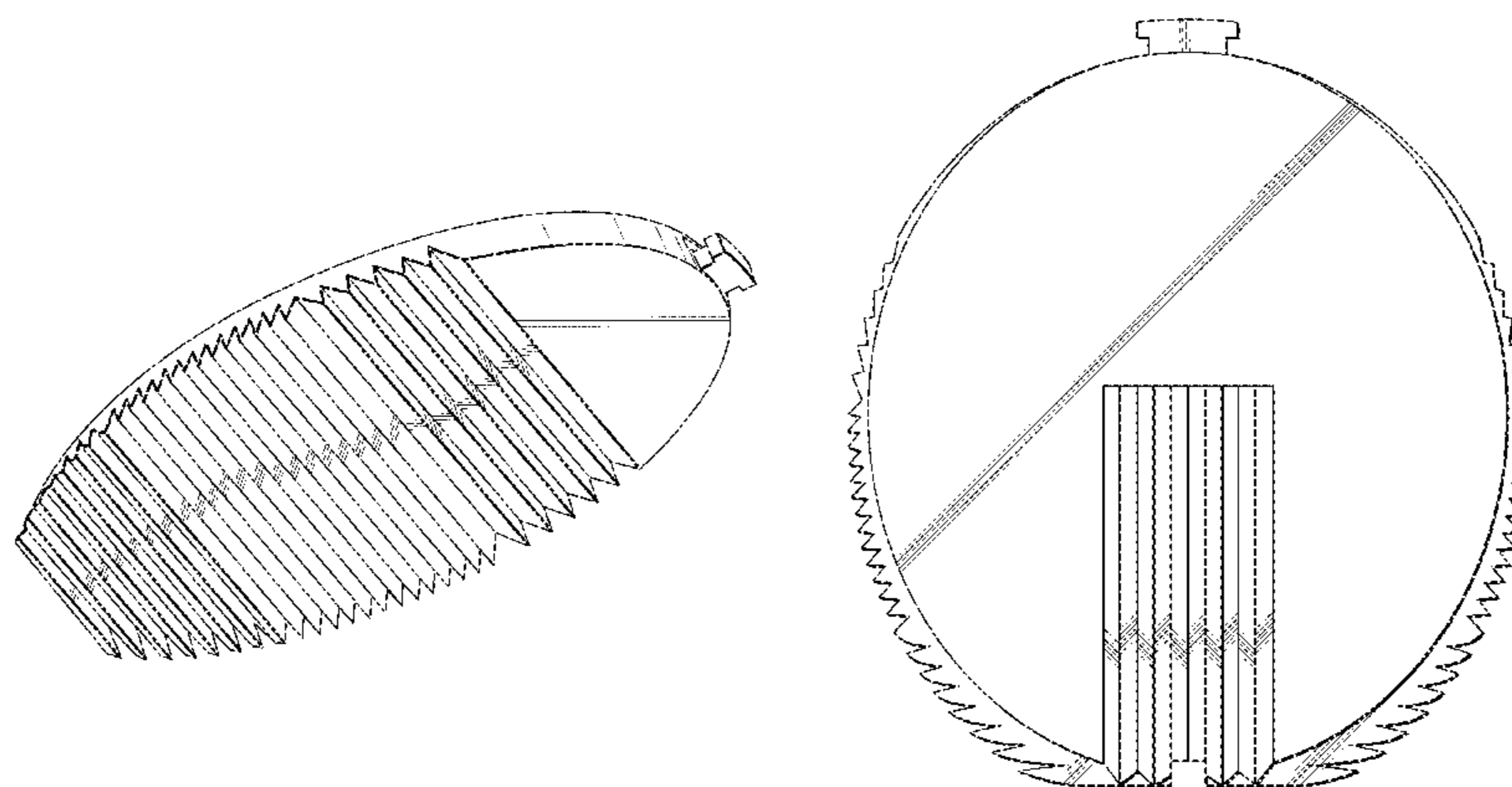
*Primary Examiner* — Kevin Rudzinski  
*Assistant Examiner* — Sean D Lough  
(74) *Attorney, Agent, or Firm* — Shaun P. Montana

(57) **CLAIM**  
The ornamental design for a lens, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a first embodiment of the ornamental design for the lens.  
 FIG. 2 is a top view of the first embodiment of the ornamental design for the lens.  
 FIG. 3 is a bottom view of the first embodiment of the ornamental design for the lens.  
 FIG. 4 is a left side view of the first embodiment of the ornamental design for the lens.  
 FIG. 5 is a right side view of the first embodiment of the ornamental design for the lens.  
 FIG. 6 is a front view of the first embodiment of the ornamental design for the lens.  
 FIG. 7 is a back view of the first embodiment of the ornamental design for the lens.  
 FIG. 8 is another perspective view of the first embodiment of the ornamental design for the lens.  
 FIG. 9 is a perspective view of a second embodiment of the ornamental design for the lens.  
 FIG. 10 is a top view of the second embodiment of the ornamental design for the lens.  
 FIG. 11 is a bottom view of the second embodiment of the ornamental design for the lens.  
 FIG. 12 is a left side view of the second embodiment of the ornamental design for the lens.  
 FIG. 13 is a right side view of the second embodiment of the ornamental design for the lens.  
 FIG. 14 is a front view of the second embodiment of the ornamental design for the lens; and,  
 FIG. 15 is a back view of the second embodiment of the ornamental design for the lens.  
 The broken-line disclosure in the views is understood to represent portions of the article in which the claimed design is embodied, but which form no part of the claimed design.

**1 Claim, 9 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

2,748,263 A \* 5/1956 Franck et al. .... 362/333  
 2,929,631 A \* 3/1960 Gillon ..... 473/240  
 3,522,863 A \* 8/1970 Ignoffo ..... 181/252  
 3,708,222 A \* 1/1973 Stern ..... 359/851  
 3,720,432 A \* 3/1973 Chudler ..... 292/220  
 3,797,915 A \* 3/1974 Land et al. .... 359/742  
 3,883,733 A \* 5/1975 Nagel ..... 362/334  
 4,307,711 A \* 12/1981 Doundoulakis ..... 126/677  
 4,488,208 A \* 12/1984 Miller ..... 362/339  
 D297,267 S \* 8/1988 Scowen ..... D26/122  
 5,247,390 A \* 9/1993 Hed ..... 359/599  
 5,296,882 A \* 3/1994 Nelson et al. .... 353/63  
 5,317,349 A \* 5/1994 Vanderwerf ..... 353/38  
 6,290,374 B1 \* 9/2001 Shieh et al. .... 362/333  
 6,994,456 B1 2/2006 Russo et al.  
 7,529,461 B1 \* 5/2009 Chen et al. .... 385/146  
 8,068,288 B1 \* 11/2011 Pitou ..... 359/743  
 8,167,462 B2 \* 5/2012 Kim et al. .... 362/311.02  
 D666,940 S \* 9/2012 Dunn ..... D11/184  
 2004/0028503 A1 \* 2/2004 Charles ..... 411/510  
 2004/0068262 A1 \* 4/2004 Lemos et al. .... 606/72  
 2005/0194579 A1 \* 9/2005 Hakim ..... 254/209  
 2006/0291243 A1 \* 12/2006 Niioka et al. .... 362/607  
 2007/0076435 A1 \* 4/2007 Chang ..... 362/626  
 2007/0147041 A1 \* 6/2007 Shiratsuchi et al. .... 362/268  
 2008/0130309 A1 \* 6/2008 Condon et al. .... 362/520  
 2008/0310159 A1 \* 12/2008 Chinniah et al. .... 362/244  
 2009/0040769 A1 \* 2/2009 Parkyn et al. .... 362/310  
 2009/0116217 A1 \* 5/2009 Teng et al. .... 362/84

2009/0161372 A1 \* 6/2009 Fay et al. .... 362/382  
 2009/0273933 A1 \* 11/2009 Woodward et al. .... 362/297  
 2009/0279306 A1 \* 11/2009 Wang et al. .... 362/307  
 2009/0279311 A1 \* 11/2009 Yu et al. .... 362/310  
 2010/0061090 A1 \* 3/2010 Bergman et al. .... 362/231  
 2010/0061105 A1 \* 3/2010 Shyu et al. .... 362/311.02  
 2010/0178046 A1 \* 7/2010 Moon et al. .... 396/155  
 2011/0031864 A1 \* 2/2011 Rebergen ..... 313/11  
 2011/0228403 A1 \* 9/2011 Masuda et al. .... 359/630  
 2012/0051058 A1 \* 3/2012 Sharma et al. .... 362/294  
 2012/0119638 A1 \* 5/2012 Sato et al. .... 313/46  
 2012/0126268 A1 \* 5/2012 Seo et al. .... 257/98  
 2012/0140483 A1 \* 6/2012 Chang ..... 362/309  
 2012/0217897 A1 \* 8/2012 Gordin et al. .... 315/294  
 2013/0060337 A1 \* 3/2013 Petersheim et al. .... 623/17.16  
 2013/0176722 A1 \* 7/2013 Lay et al. .... 362/231  
 2013/0242568 A1 \* 9/2013 Asai ..... 362/311.06  
 2014/0043846 A1 \* 2/2014 Yang et al. .... 362/606  
 2014/0049939 A1 \* 2/2014 Kuenzler et al. .... 362/84  
 2014/0204592 A1 \* 7/2014 Miyashita et al. .... 362/311.06  
 2014/0247331 A1 \* 9/2014 Hofmann et al. .... 348/62  
 2014/0369031 A1 \* 12/2014 Livesay et al. .... 362/147

OTHER PUBLICATIONS

Moiré Diffractive Optical Element, image post date Jun. 25, 2012, site visited Jan. 20, 2015, (online), <<https://www.i-med.ac.at/dpmp/bmp/research/patents/MDOEs.html>>.\*  
 1937 Pontiac 6 lenses, image post date 1937, site visited Jan. 20, 2015, (online), <[http://www.caroholic.com/37\\_pontiac.htm](http://www.caroholic.com/37_pontiac.htm)>.\*

\* cited by examiner

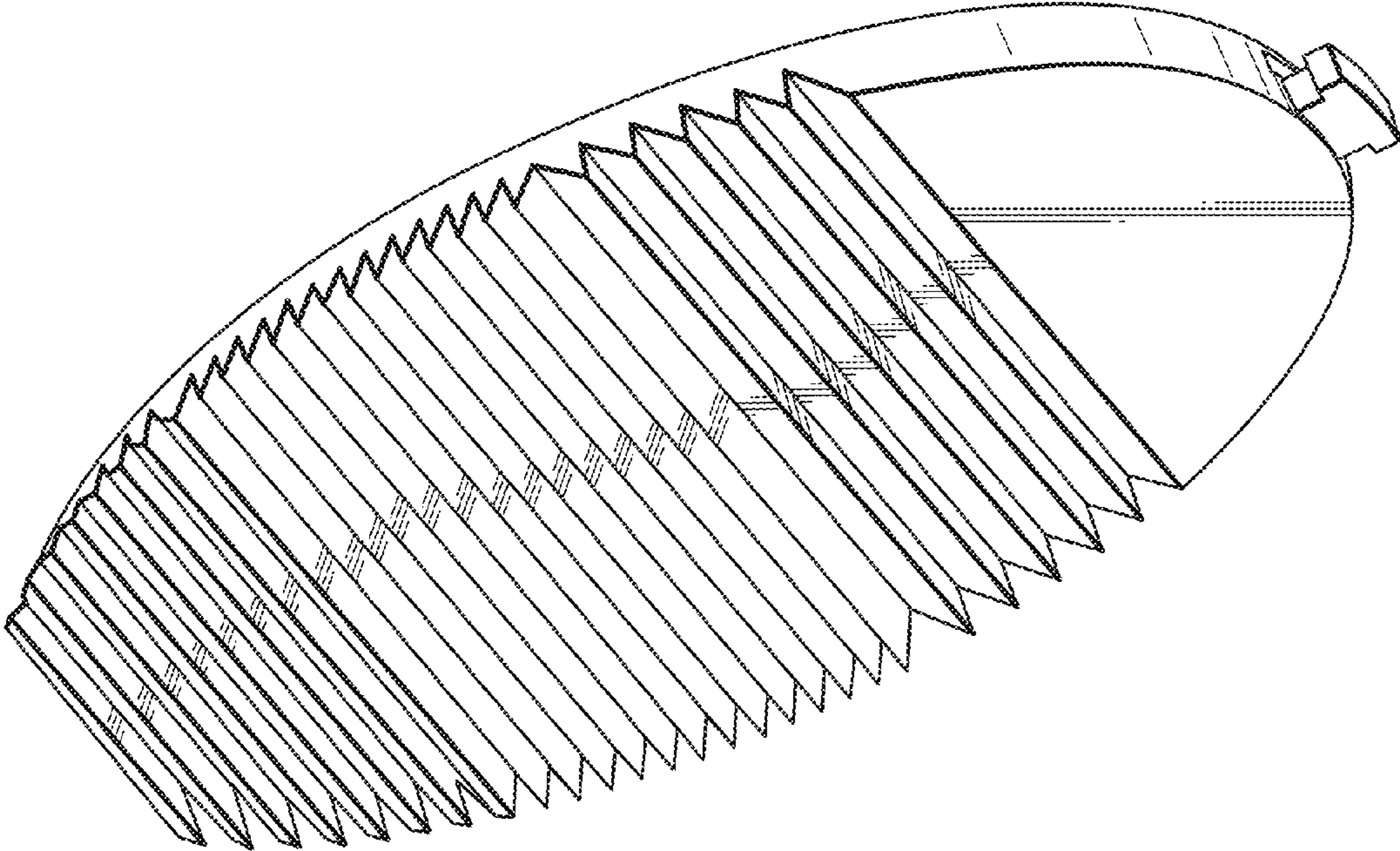


FIG. 1

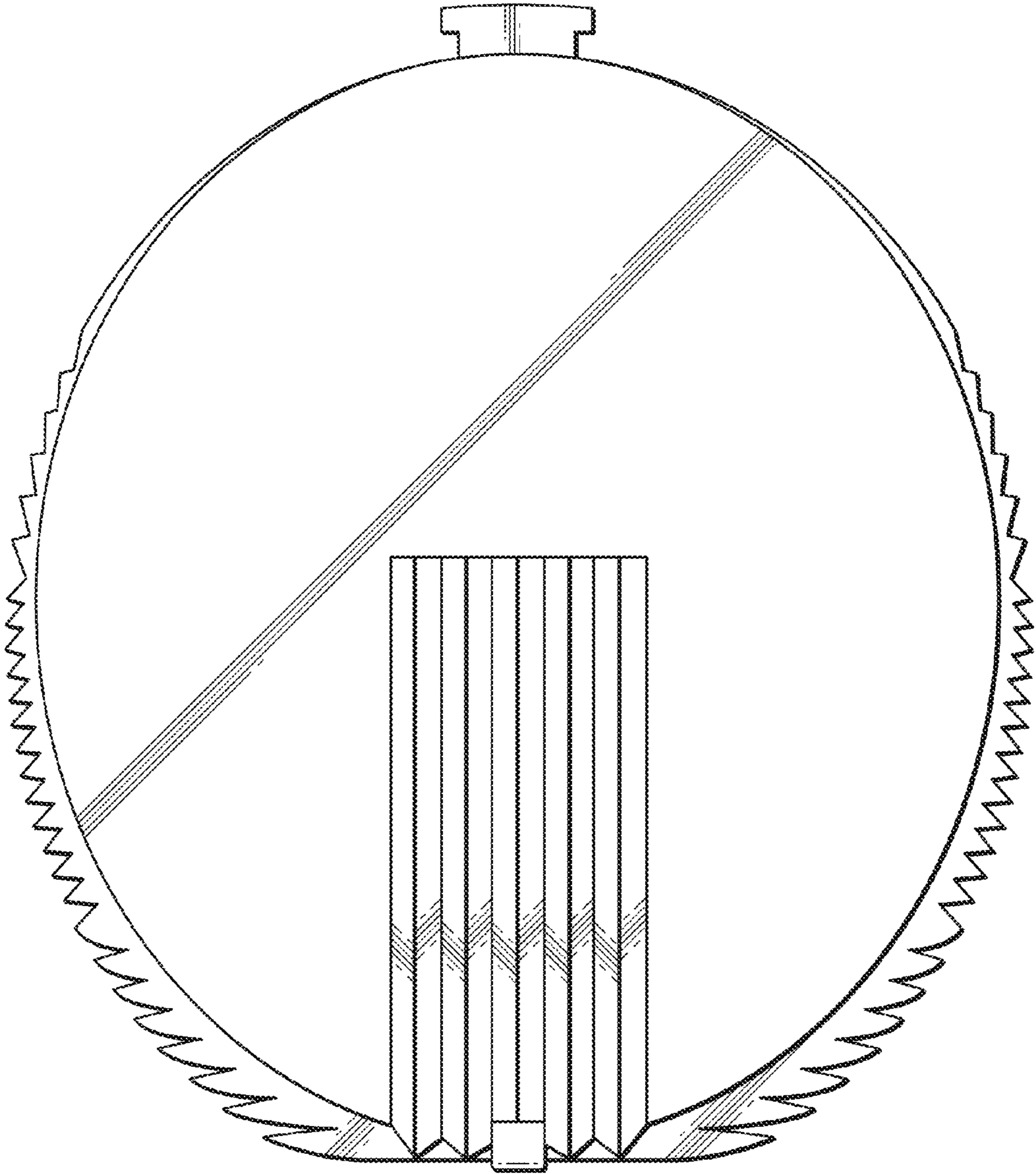


FIG. 2

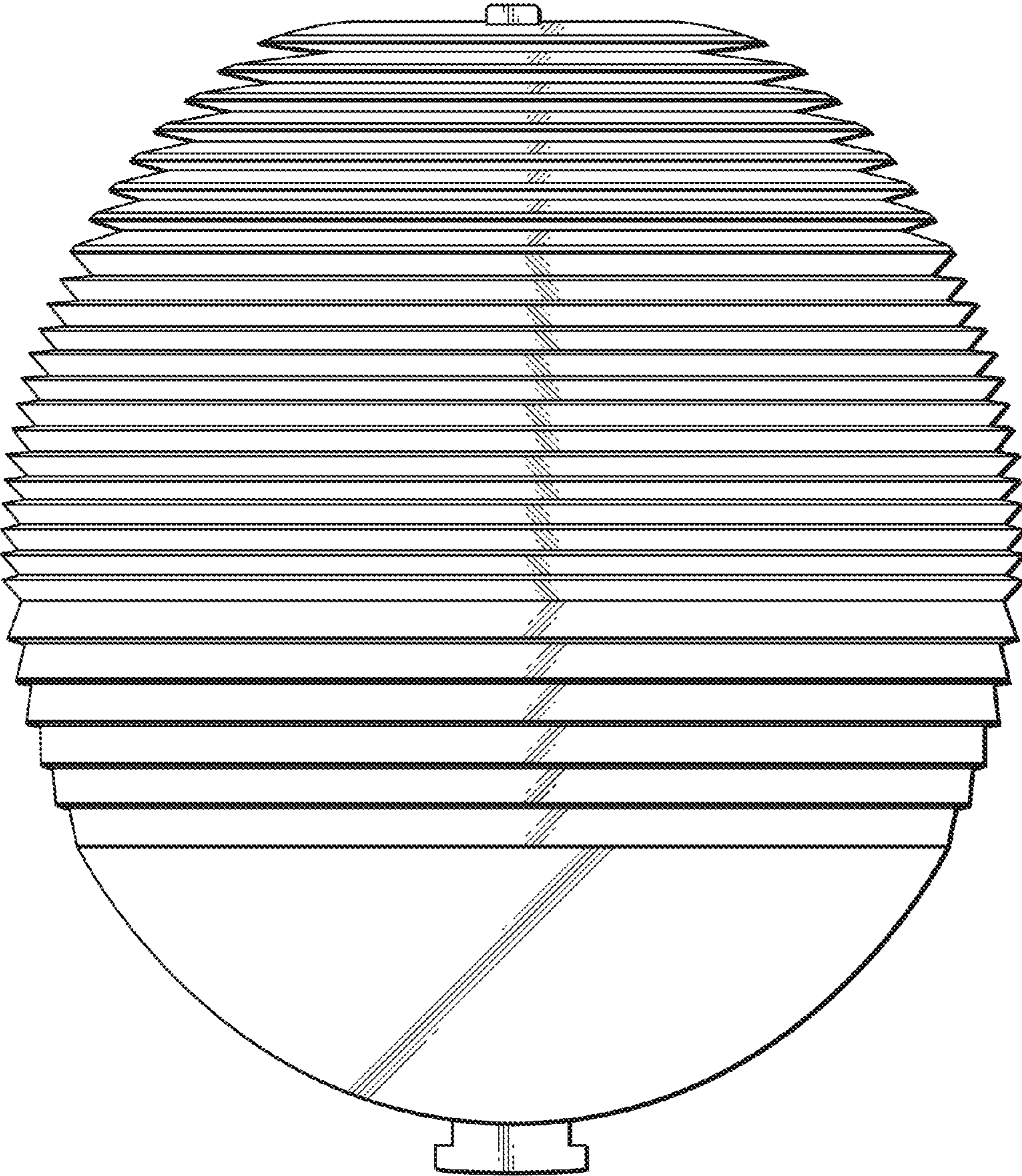


FIG. 3



FIG. 4



FIG. 5

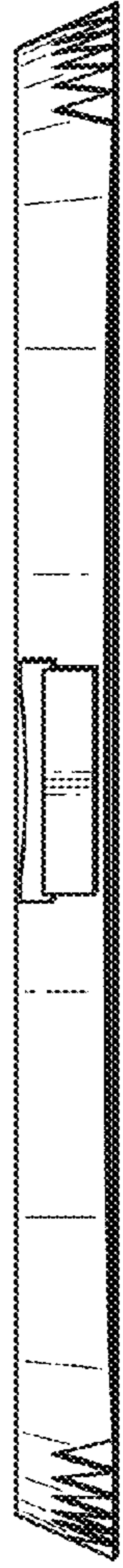


FIG. 6



FIG. 7

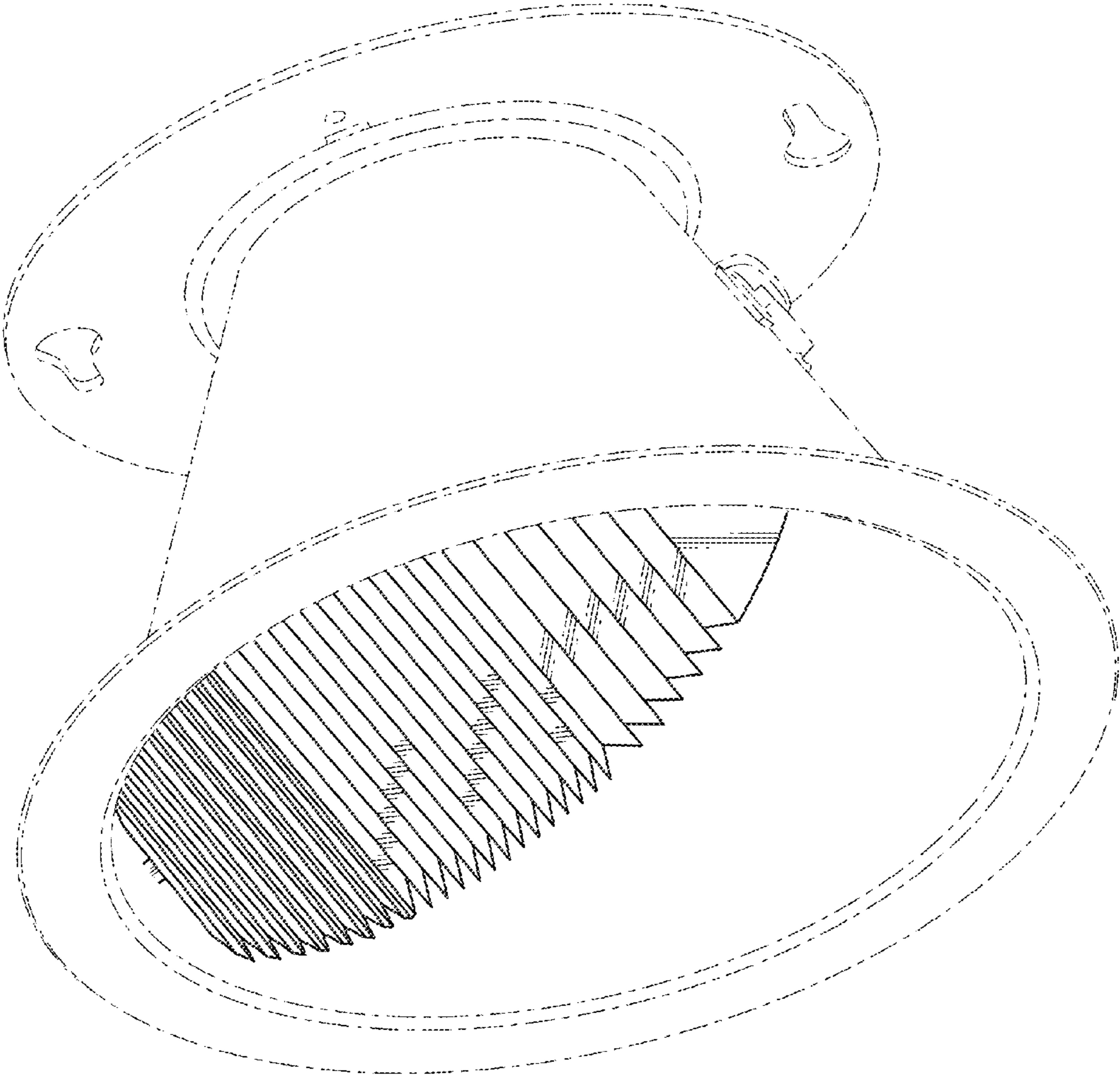


FIG. 8

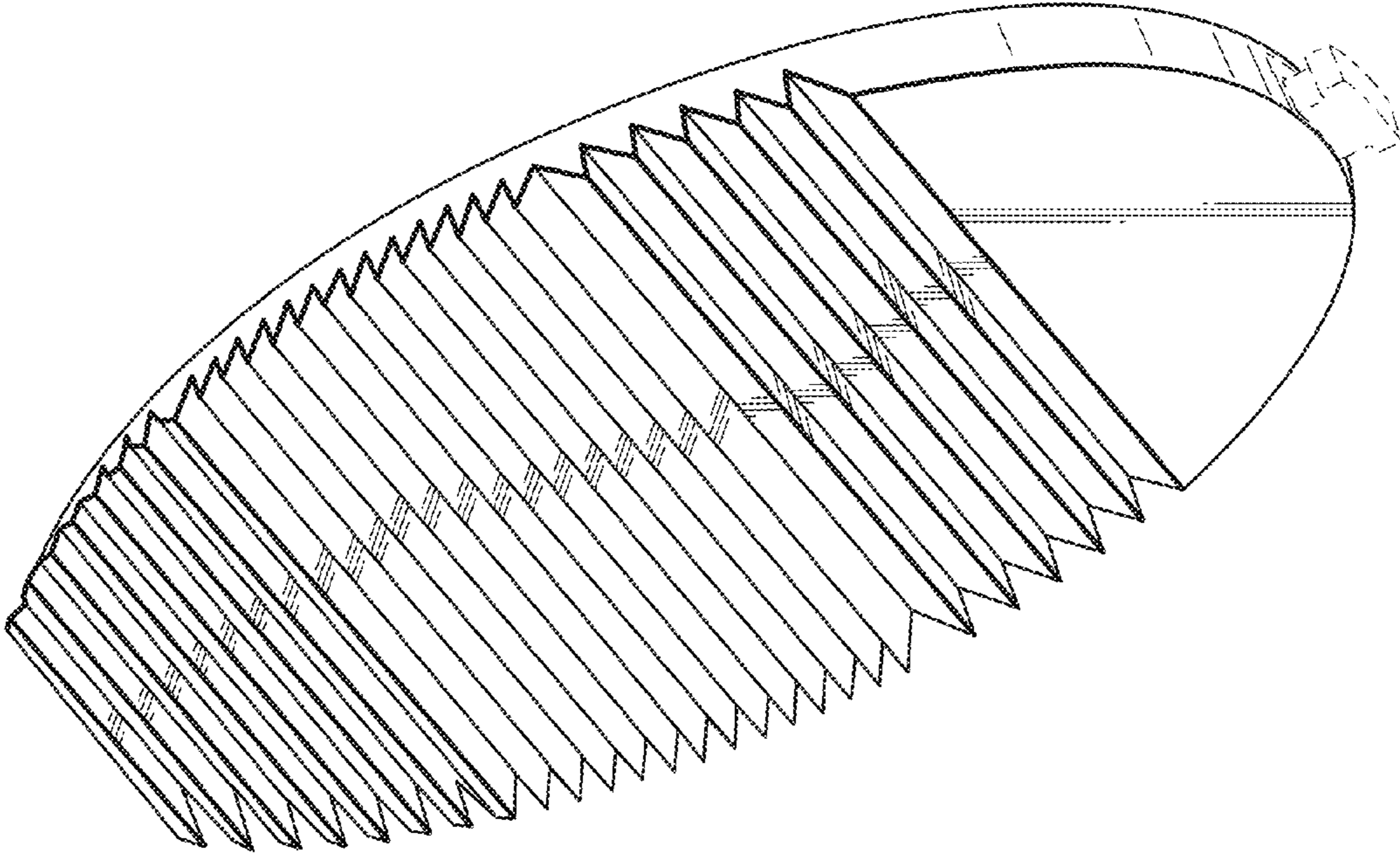


FIG. 9



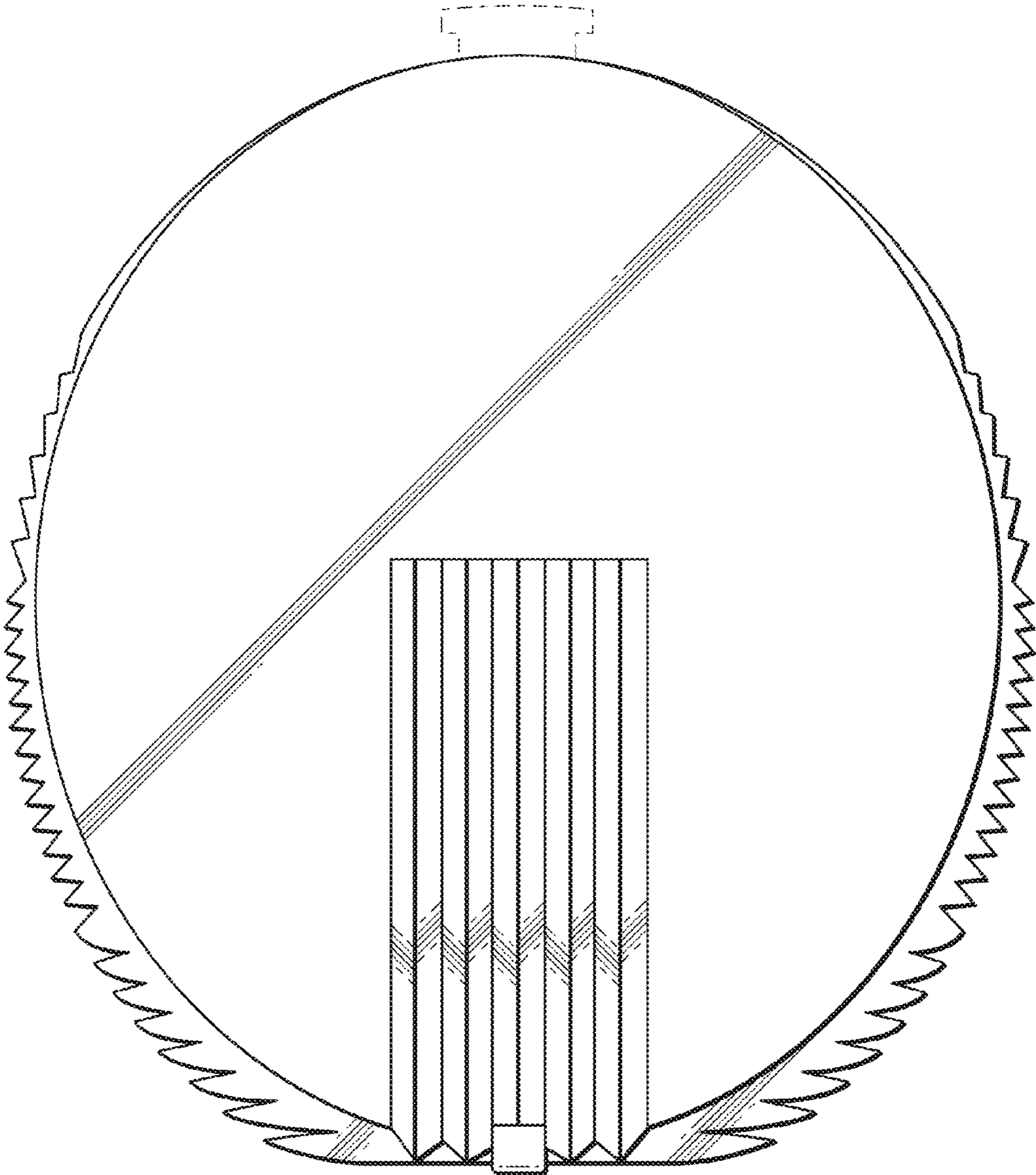


FIG. 10

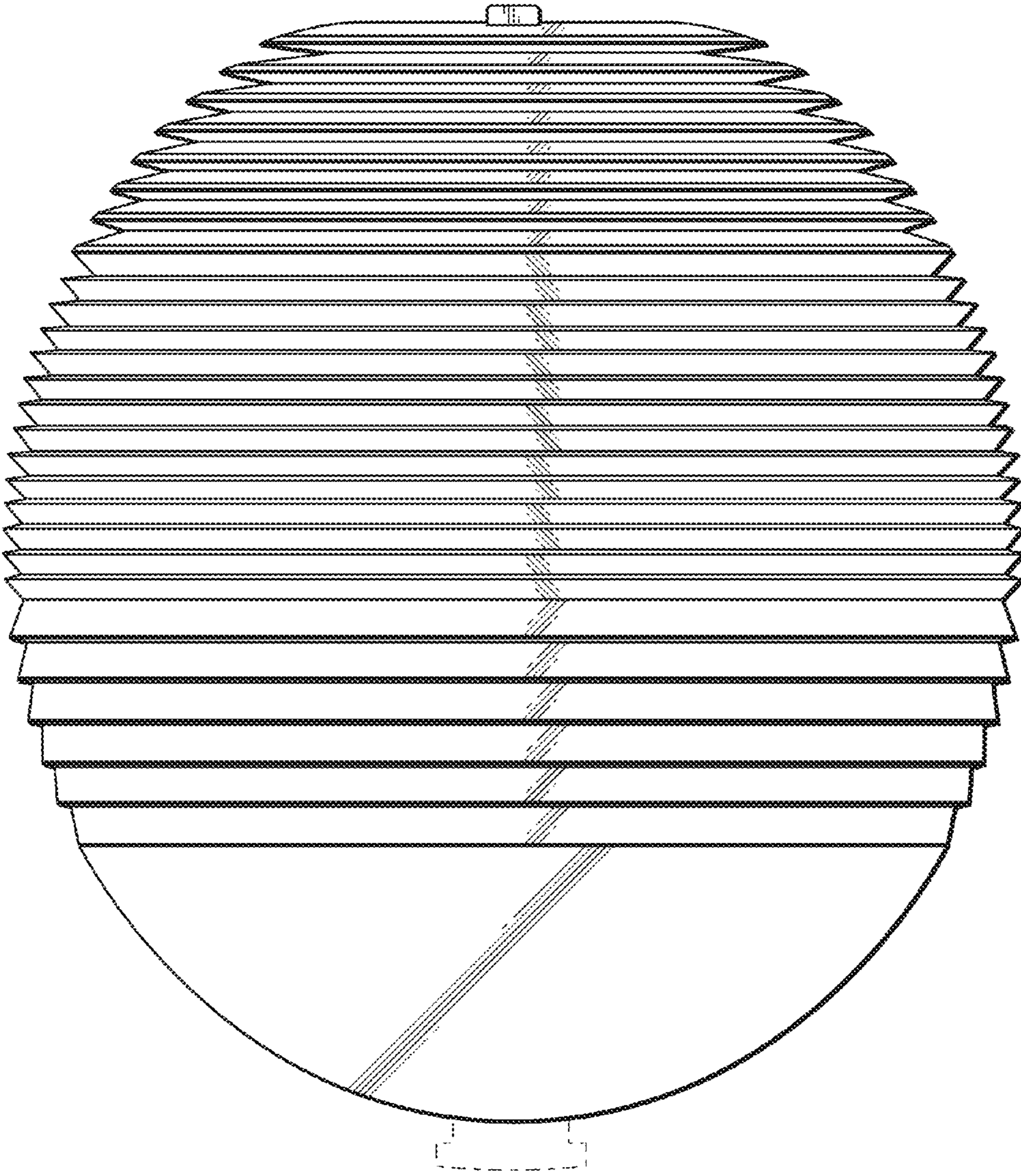


FIG. 11



FIG. 12



FIG. 13



FIG. 14



FIG. 15