

US00D767112S

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

(10) **Patent No.:** **US D767,112 S**  
(45) **Date of Patent:** **\*\* Sep. 20, 2016**

- (54) **VENT BREATHER**
- (71) Applicant: **K&N Engineering, Inc.**, Riverside, CA (US)
- (72) Inventors: **Steve Williams**, Beaumont, CA (US);  
**Jere James Wall**, Helendale, CA (US)
- (73) Assignee: **K&N Engineering, Inc.**, Riverside, CA (US)
- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/523,931**
- (22) Filed: **Apr. 15, 2015**
- (51) **LOC (10) Cl.** ..... **23-04**
- (52) **U.S. Cl.**  
USPC ..... **D23/386**
- (58) **Field of Classification Search**  
USPC ..... D14/356; D10/93, 104.1, 108, 114;  
D8/4, 25, 52; D17/20, 22, 23;  
D23/323, 328, 333, 335, 336, 337, 341,  
D23/352, 357, 370, 385, 386, 397, 399, 400,  
D23/406, 411, 413, 499; D11/143, 144;  
D13/182  
CPC ..... H01R 13/5213; B60Q 1/04; B60Q 1/26;  
G10D 3/006; G10D 13/023; G10D 13/027;  
B25B 15/001; G10H 3/143; G10H 3/181;  
G10G 5/005; A42B 1/04; B64C 11/04;  
B64C 11/16; B64C 11/18; B64C 11/20;  
B64C 2001/009; F03D 3/062; F03D 11/04;  
F04D 19/002; F04D 25/068; F04D 25/088;  
F04D 19/00; F24F 1/0018; B64D 13/02;  
E04C 2/427; E06B 3/5892; B24B 37/04;  
B01D 46/00  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 1,437,360 A \* 11/1922 Reusch ..... B01D 46/00  
55/478
- 2,829,733 A \* 4/1958 Bartels ..... B01D 23/005  
29/4.52

- 3,721,069 A \* 3/1973 Walker ..... F01M 11/08  
210/DIG. 5
- 3,789,582 A \* 2/1974 Graybill ..... F02M 35/02  
261/79.2
- 4,102,473 A \* 7/1978 Draxler ..... B01D 46/00  
220/295
- 4,133,763 A \* 1/1979 Cooper ..... B01D 29/21  
210/232
- 4,401,093 A \* 8/1983 Gates, Jr. .... F01M 11/04  
123/572
- 4,444,543 A \* 4/1984 Wilks ..... F03D 1/0608  
416/170 R
- D289,693 S \* 5/1987 Shumate ..... D26/22
- 4,936,879 A \* 6/1990 Priestley, Jr. .... B01D 46/00  
261/79.2
- D328,640 S \* 8/1992 Conger, IV ..... D23/383
- 5,140,957 A \* 8/1992 Walker ..... F01M 13/04  
123/198 E
- D344,390 S \* 2/1994 May ..... D99/5
- D346,020 S \* 4/1994 Kellogg ..... D23/387

(Continued)

**OTHER PUBLICATIONS**

Crankcase Breathers from 2012 Parts for Harley Catalog, p. 906, image post date 2012, site visited May 3, 2016, (online), <<http://www.jpcycles.com/catalog/2012harley?entrypage=906>>.\*

(Continued)

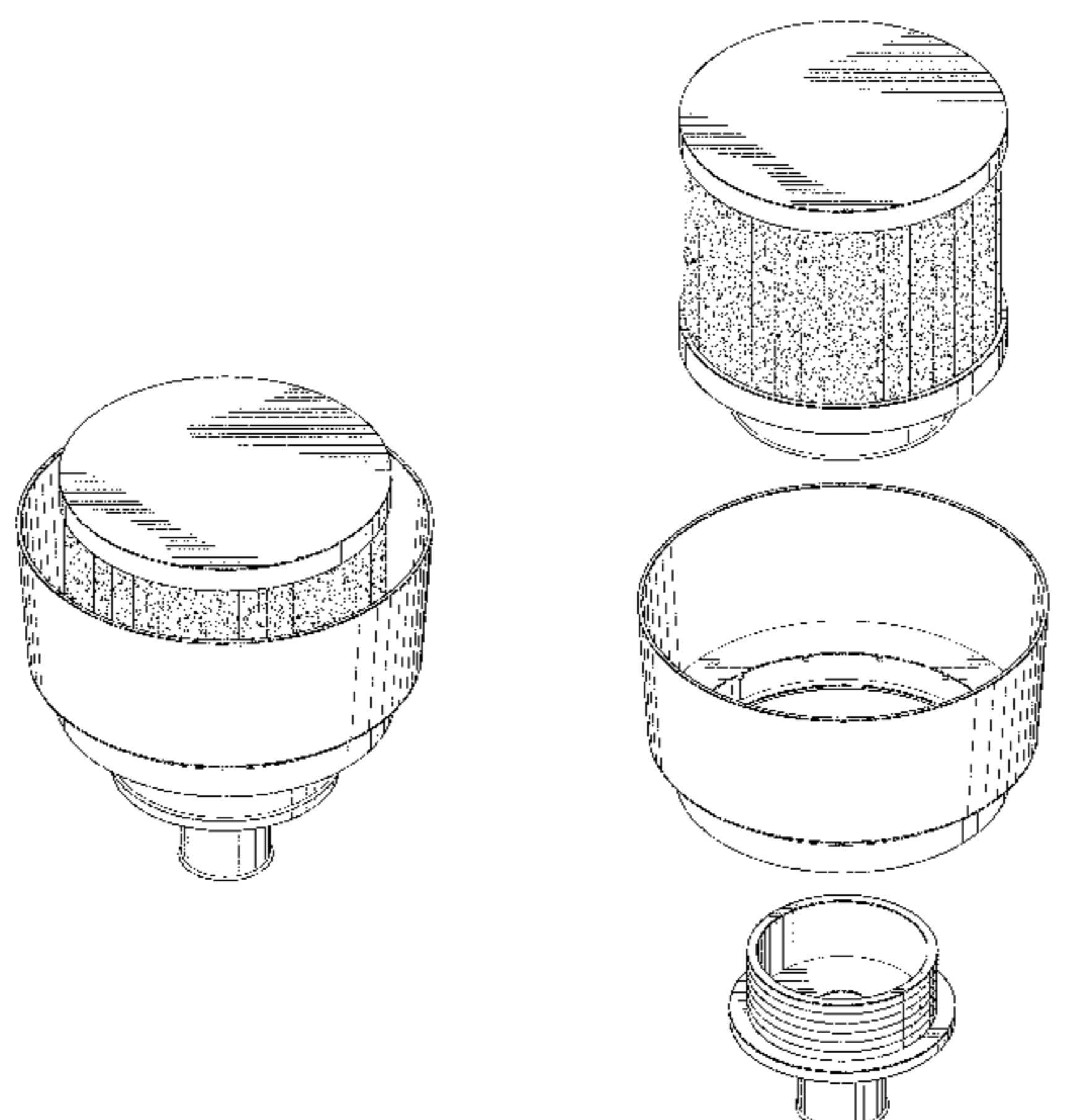
*Primary Examiner* — Kevin Rudzinski  
*Assistant Examiner* — Sean D Lough  
(74) *Attorney, Agent, or Firm* — Rutan & Tucker LLP; Hani Z. Sayed

(57) **CLAIM**  
The ornamental design for the vent breather, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, front, left side perspective view of the vent breather;  
FIG. 2 is a bottom, rear, right side perspective view;  
FIG. 3 is a front elevation view, the device being rotationally symmetric, and all elevation views being identical;  
FIG. 4 is a top plan view;  
FIG. 5 is a bottom plan view; and,  
FIG. 6 is a top, front, left side exploded perspective view.

**1 Claim, 5 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

5,479,907 A \* 1/1996 Walker, Jr. .... F01M 13/023  
123/198 E  
D366,935 S \* 2/1996 Arthun ..... D12/214  
D375,657 S \* 11/1996 Jarvis ..... D7/523  
5,695,636 A \* 12/1997 Gullett ..... B01D 29/21  
210/232  
5,823,466 A \* 10/1998 Jamieson ..... B64C 11/20  
244/65  
D401,684 S \* 11/1998 Shelton ..... D23/365  
D412,963 S \* 8/1999 Nelsen ..... D23/207  
D417,497 S \* 12/1999 Schroeter ..... D23/393  
6,187,073 B1 \* 2/2001 Gieseke ..... B01D 46/0024  
123/198 E  
6,355,076 B2 \* 3/2002 Gieseke ..... B01D 46/001  
55/330  
6,394,757 B1 \* 5/2002 Lackey ..... F04D 25/088  
416/210 R  
6,422,224 B1 \* 7/2002 Walker, Jr. .... F01M 13/04  
123/572  
6,455,775 B1 \* 9/2002 Wu ..... F21V 21/02  
174/480  
6,514,054 B1 \* 2/2003 Liu ..... F04D 29/601  
416/244 R  
D488,741 S \* 4/2004 Moya ..... D11/143  
6,726,738 B1 \* 4/2004 Walker, Jr. .... B01D 46/0086  
123/198 E  
D490,510 S \* 5/2004 Cohen ..... D23/379  
6,787,033 B2 \* 9/2004 Beard ..... B01D 27/02  
210/323.2  
D533,265 S \* 12/2006 Fiello ..... D23/365  
D552,228 S \* 10/2007 Ertze ..... D23/411  
7,311,092 B1 \* 12/2007 Ling ..... F02D 9/02  
123/587  
7,319,279 B2 \* 1/2008 Korner ..... F03D 3/005  
290/44  
7,524,416 B1 \* 4/2009 Bergmen ..... B01D 27/08  
123/196 A  
D607,555 S \* 1/2010 Nishizawa ..... D23/393  
D668,177 S \* 10/2012 Friesen ..... D11/152  
8,342,160 B2 \* 1/2013 Heckel ..... F02M 25/06  
123/572  
8,491,720 B2 \* 7/2013 Ishikawa ..... C23C 16/34  
118/50  
D690,407 S \* 9/2013 Williams ..... D23/365  
8,534,907 B2 \* 9/2013 Yum ..... B01F 1/00  
366/165.3  
D705,970 S \* 5/2014 Ertze ..... D26/59  
D707,564 S \* 6/2014 Rosenbaum ..... D9/547  
D709,996 S \* 7/2014 Yu ..... D23/262  
8,779,638 B2 \* 7/2014 Burton ..... H02K 1/2753  
29/596  
D714,372 S \* 9/2014 Savill, Jr. .... D15/144  
8,920,650 B2 \* 12/2014 Stifel ..... B01D 27/106  
210/248  
D721,101 S \* 1/2015 Swanson ..... D15/5

8,939,738 B2 \* 1/2015 Beers ..... F04D 25/08  
384/107  
D728,758 S \* 5/2015 Coronado ..... D23/269  
D729,926 S \* 5/2015 Tomasiak ..... D23/388  
D731,634 S \* 6/2015 Page ..... D23/365  
D735,255 S \* 7/2015 Sickinger ..... D15/144.2  
D735,296 S \* 7/2015 Bamber ..... D23/233  
9,089,634 B2 \* 7/2015 Schumacher ..... A61M 1/101  
D739,513 S \* 9/2015 Williams ..... D23/365  
D741,985 S \* 10/2015 Ma ..... D23/365  
D742,059 S \* 10/2015 Gettings ..... D26/120  
D743,016 S \* 11/2015 Arnold ..... D23/317  
D743,522 S \* 11/2015 Pan ..... D23/411  
D744,626 S \* 12/2015 Leatzow ..... D23/365  
D744,633 S \* 12/2015 Wang ..... D23/411  
D745,959 S \* 12/2015 Ertze ..... D23/411  
D746,632 S \* 1/2016 Ploss ..... D7/397  
D749,505 S \* 2/2016 Verleur ..... D13/108  
D752,281 S \* 3/2016 Alima ..... D27/167  
D752,727 S \* 3/2016 Tracey ..... D23/360  
D754,412 S \* 4/2016 Thomason ..... D34/4  
9,308,481 B2 \* 4/2016 Slaughter ..... B01D 46/0005  
9,310,038 B2 \* 4/2016 Athalye ..... F21V 21/00  
2001/0022937 A1 \* 9/2001 Bucher ..... F04D 25/088  
416/244 R  
2001/0037971 A1 \* 11/2001 Bergeron ..... B01D 35/306  
210/443  
2003/0116157 A1 \* 6/2003 Braithwaite ..... A61M 15/0065  
128/203.15  
2005/0150569 A1 \* 7/2005 Garvin ..... B01D 37/025  
141/100  
2006/0086073 A1 \* 4/2006 Fiello ..... B01D 46/0024  
55/385.3  
2007/0080106 A1 \* 4/2007 Gilles ..... B01D 27/00  
210/450  
2008/0286111 A1 \* 11/2008 Richardson ..... F04D 25/088  
416/244 R  
2011/0041308 A1 \* 2/2011 Swanson ..... B27B 5/34  
29/428  
2012/0273050 A1 \* 11/2012 Metzger ..... F16K 17/40  
137/2  
2013/0156582 A1 \* 6/2013 Wang ..... F04D 25/105  
416/170 R  
2014/0212323 A1 \* 7/2014 Honma ..... B23K 9/04  
420/91  
2014/0248178 A1 \* 9/2014 Giovanniello ... F02M 35/02458  
422/4  
2014/0260144 A1 \* 9/2014 Williams ..... B01D 46/0005  
55/502  
2014/0260982 A1 \* 9/2014 Williams ..... B01D 46/2414  
95/273

OTHER PUBLICATIONS

300 Series gearbox, image post date Nov. 23, 2011, site visited May 3, 2016, (online), <[http://web.archive.org/web/20111123023406/http://www.tecnicaindustriale.it/pdf/man300ind\\_bonfiglioli.pdf](http://web.archive.org/web/20111123023406/http://www.tecnicaindustriale.it/pdf/man300ind_bonfiglioli.pdf)>.\*

\* cited by examiner

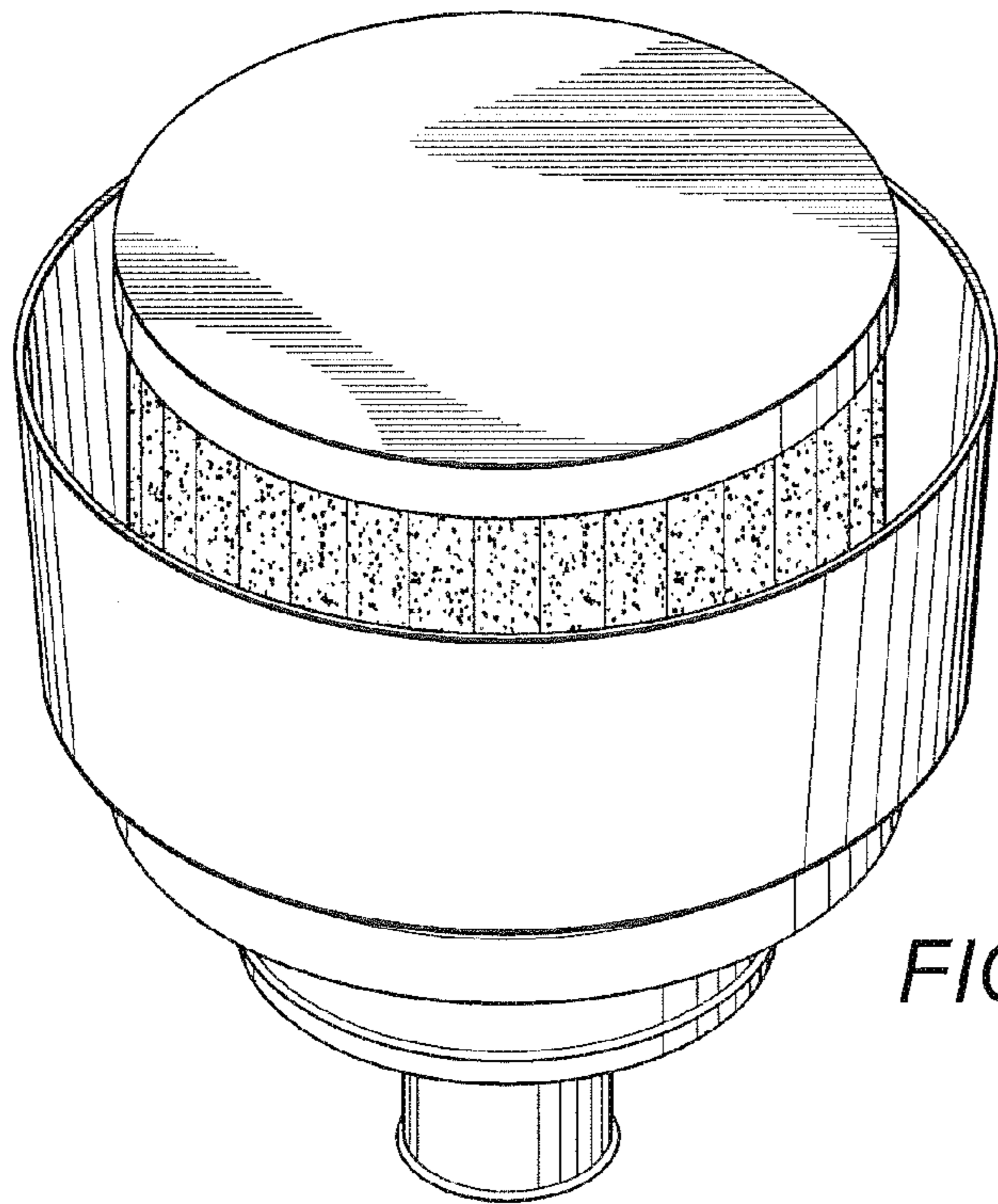


FIG. 1

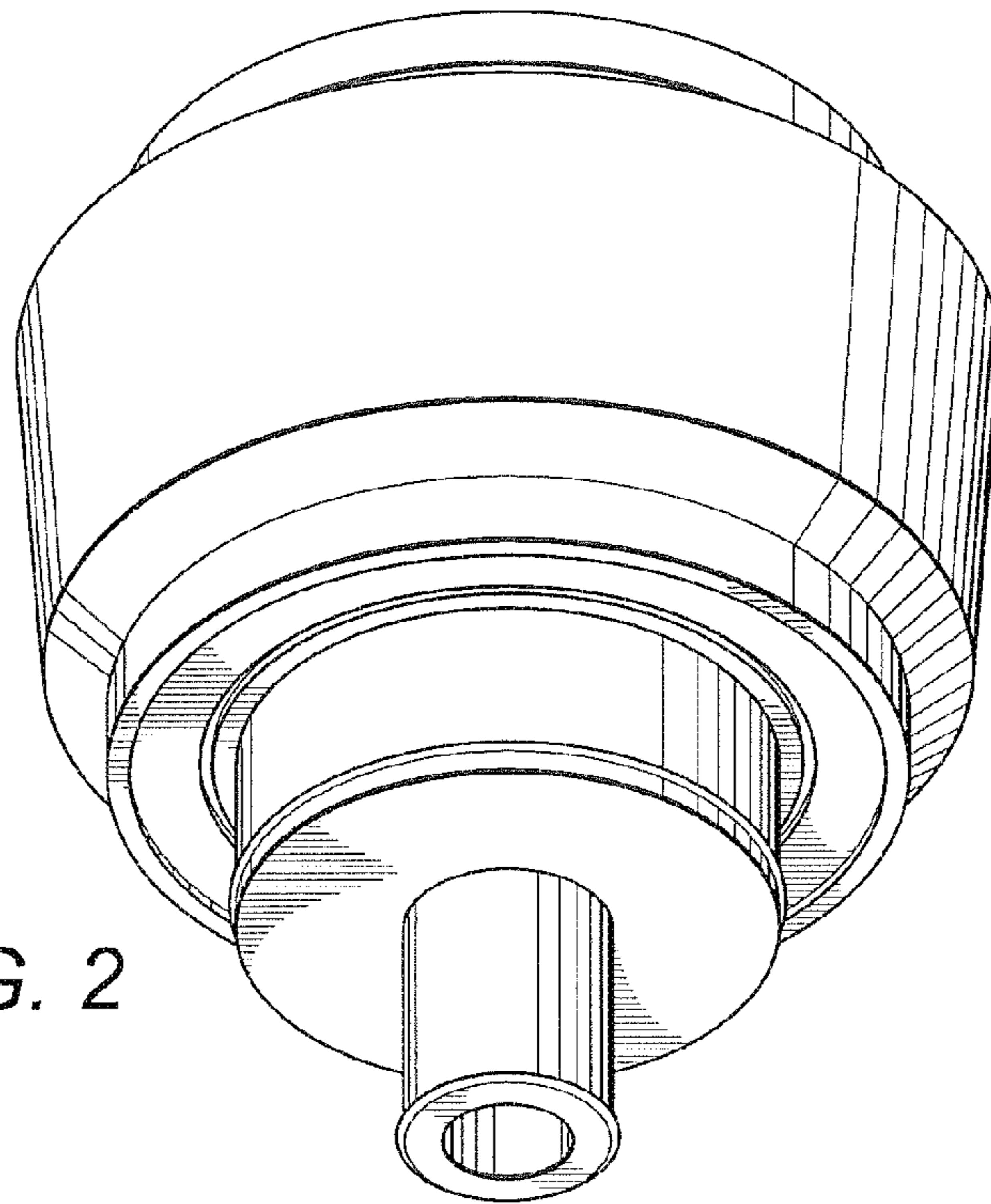


FIG. 2

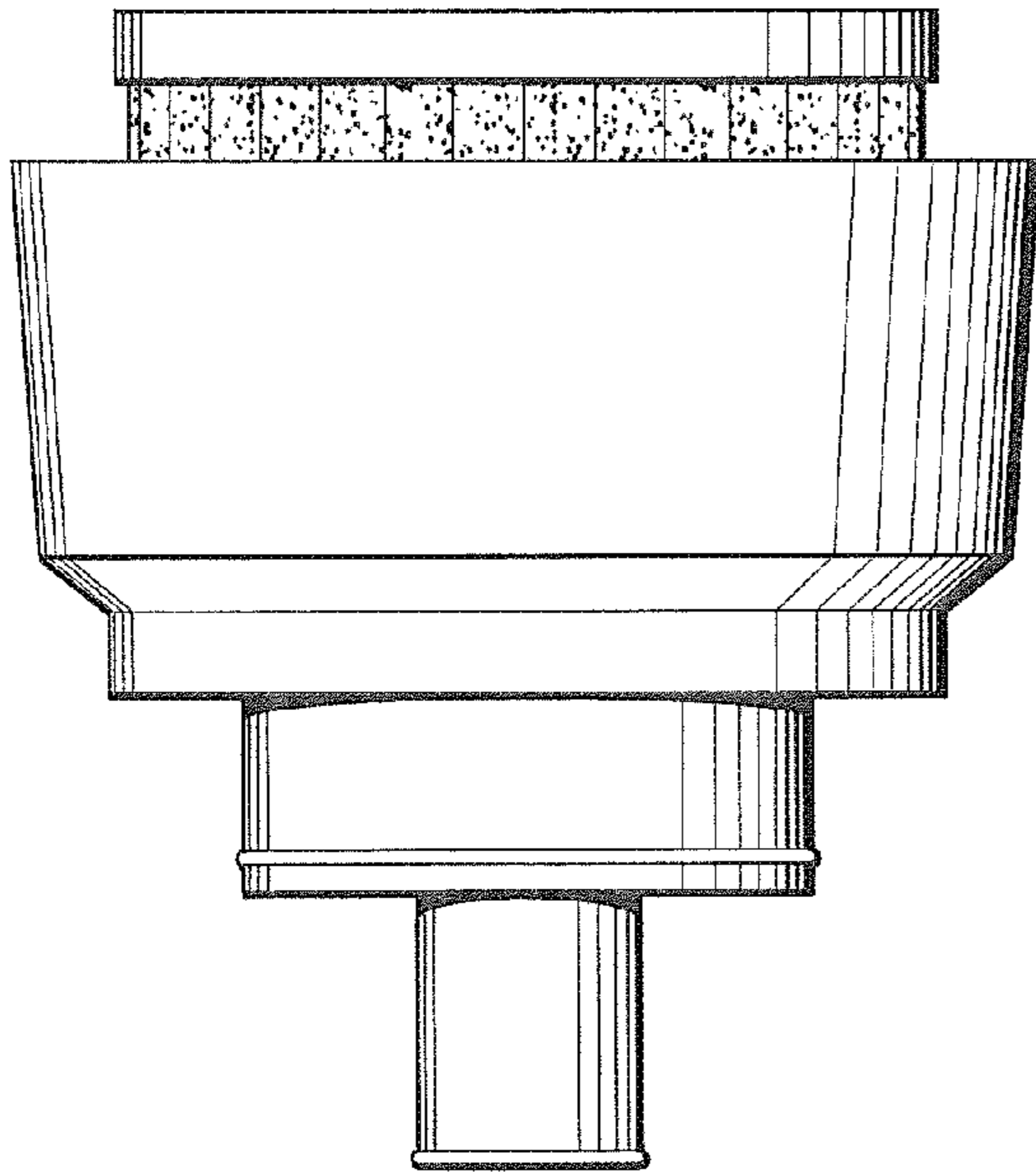


FIG. 3

FIG. 4

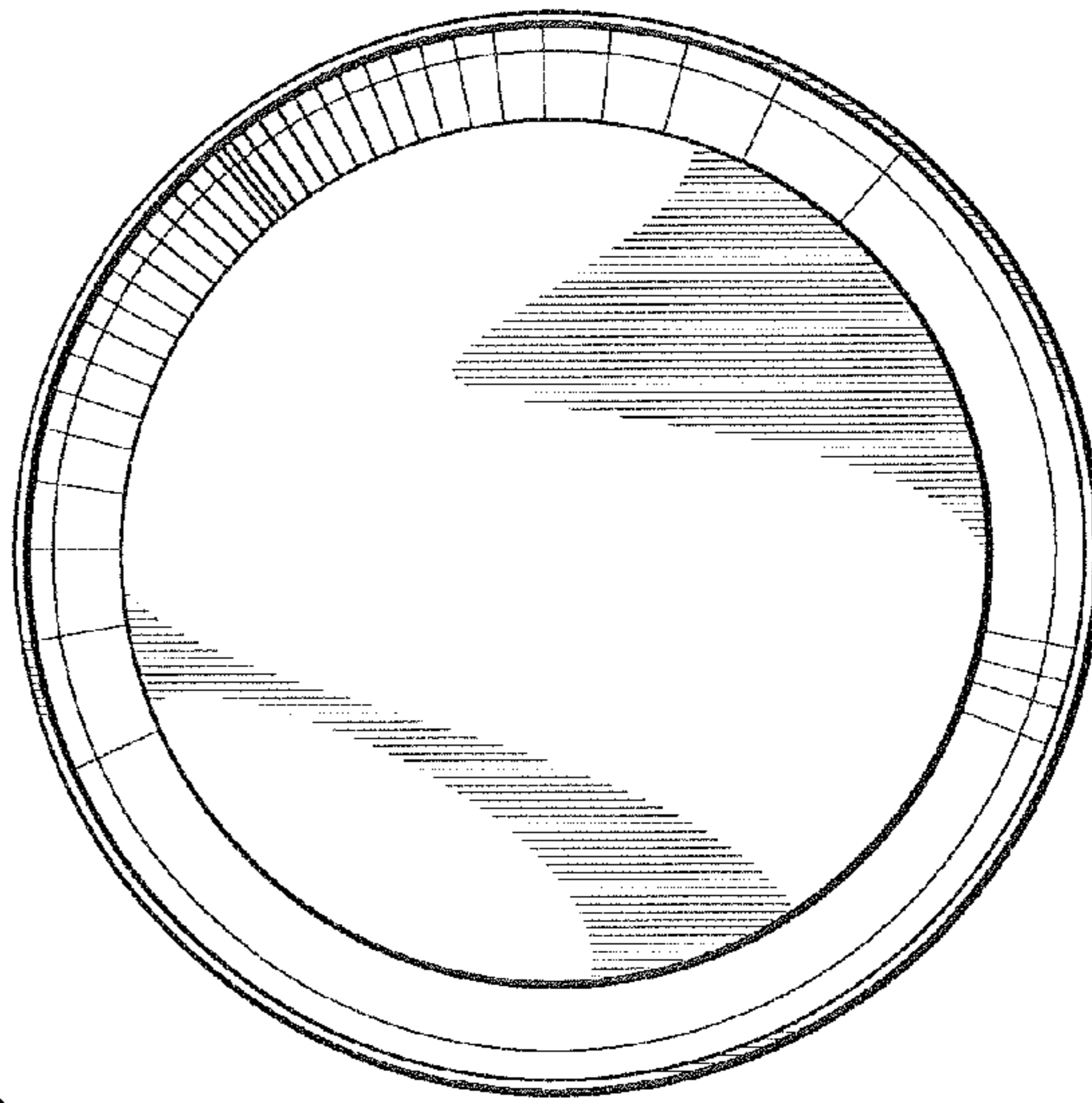
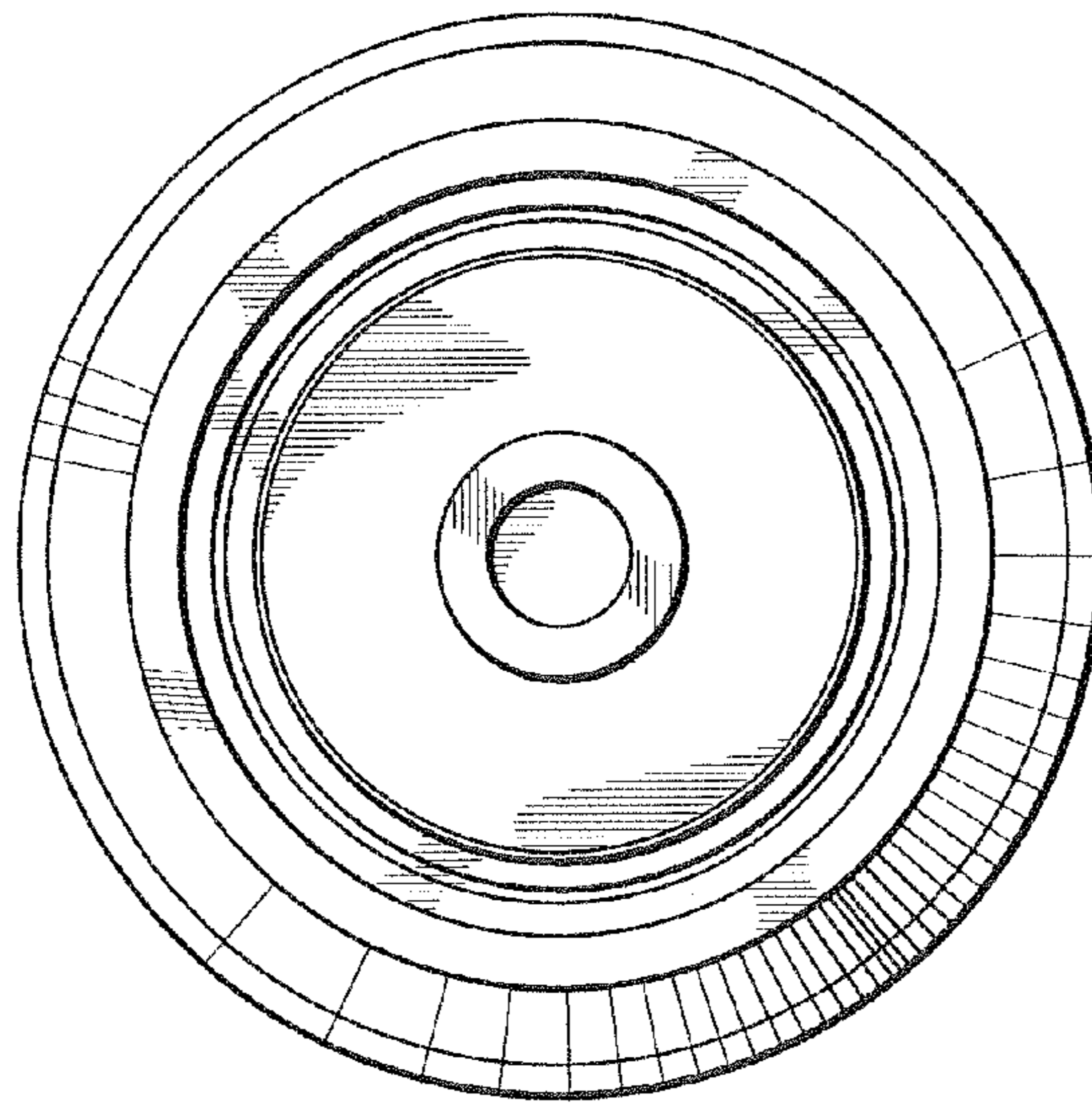


FIG. 5



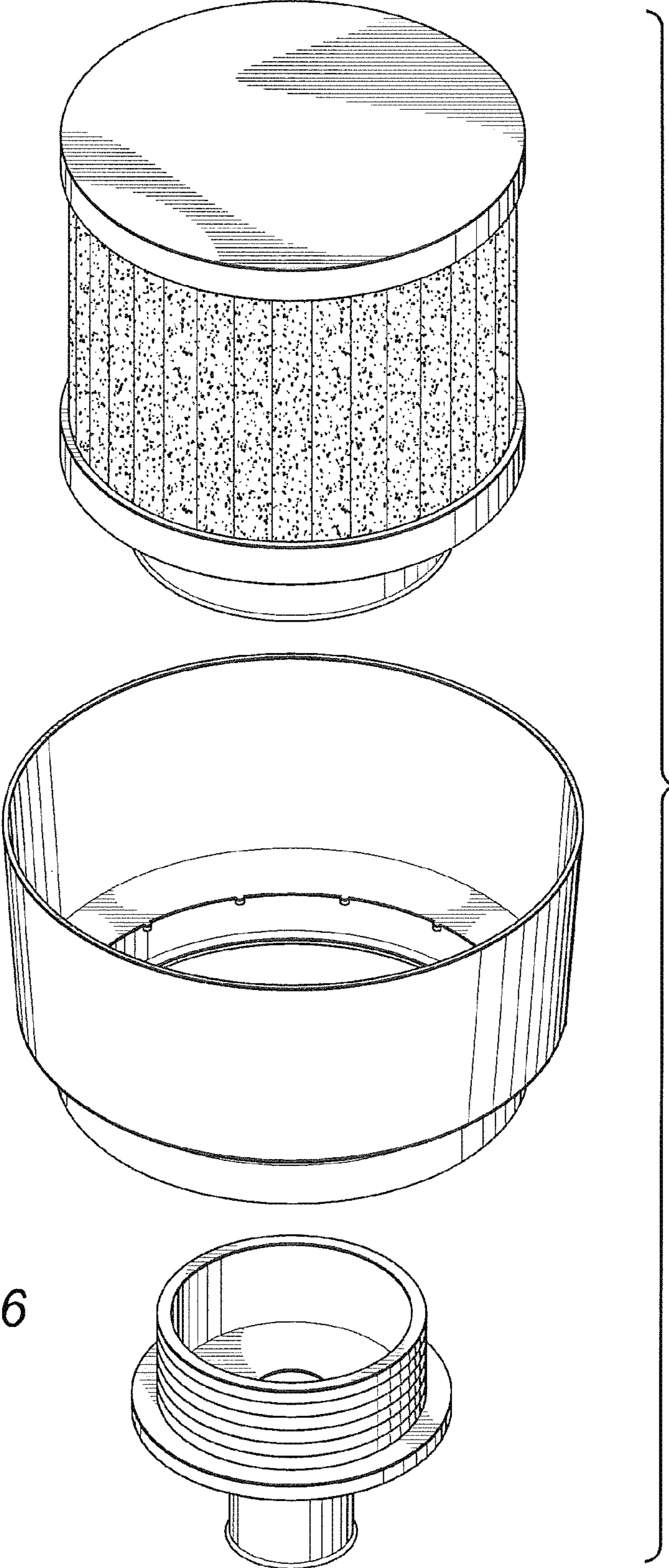


FIG. 6

FIG. 7

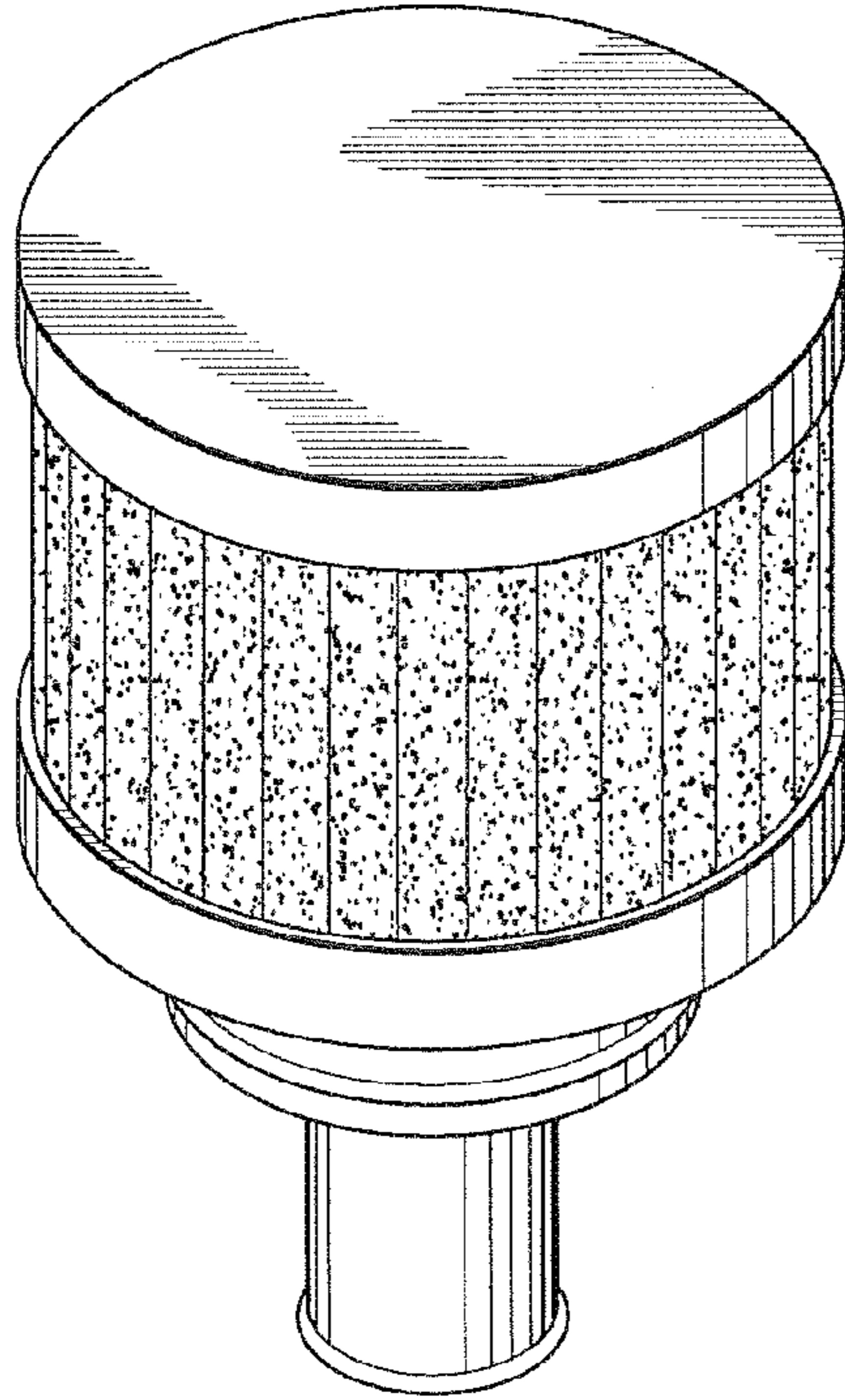


FIG. 8

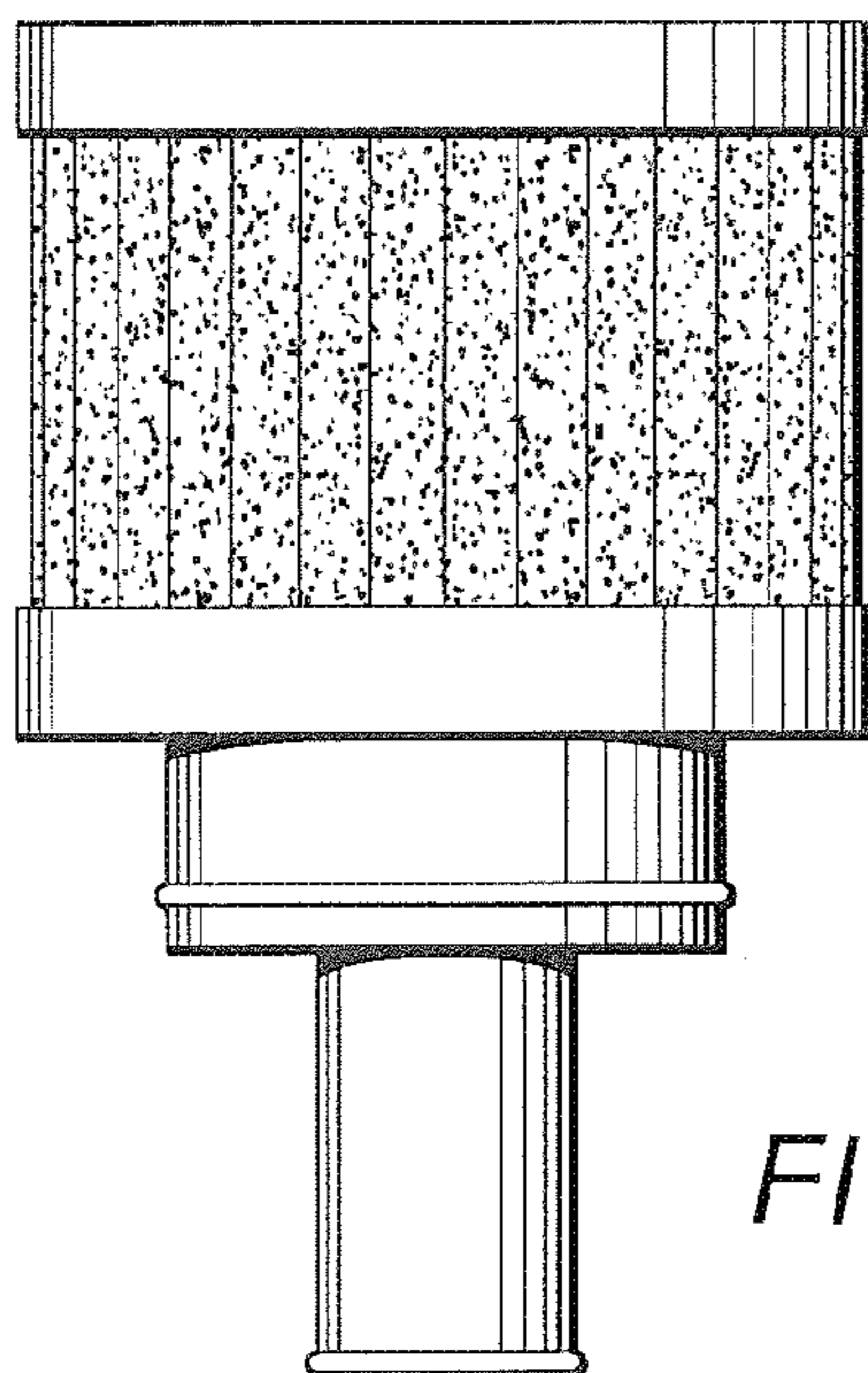
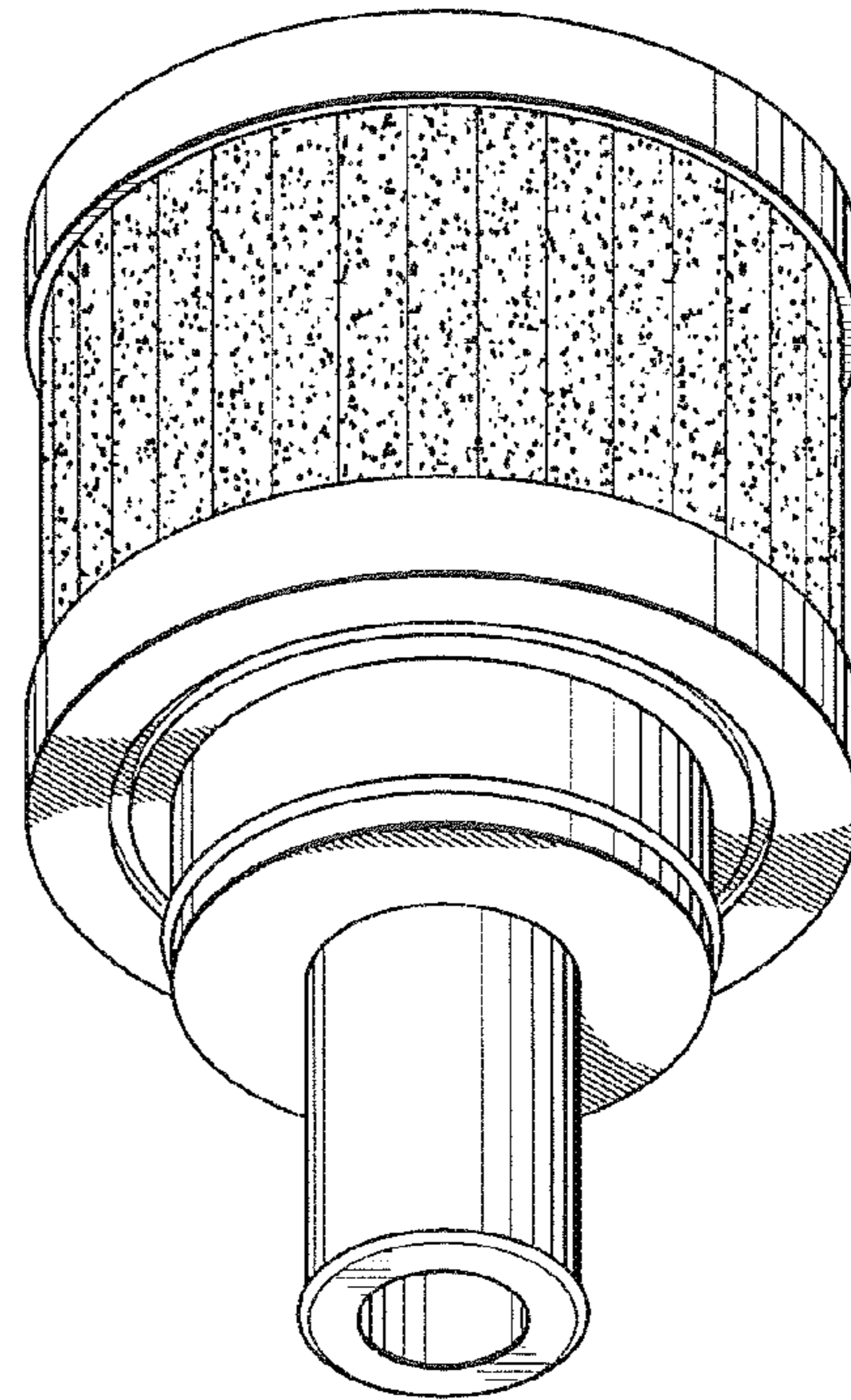


FIG. 9

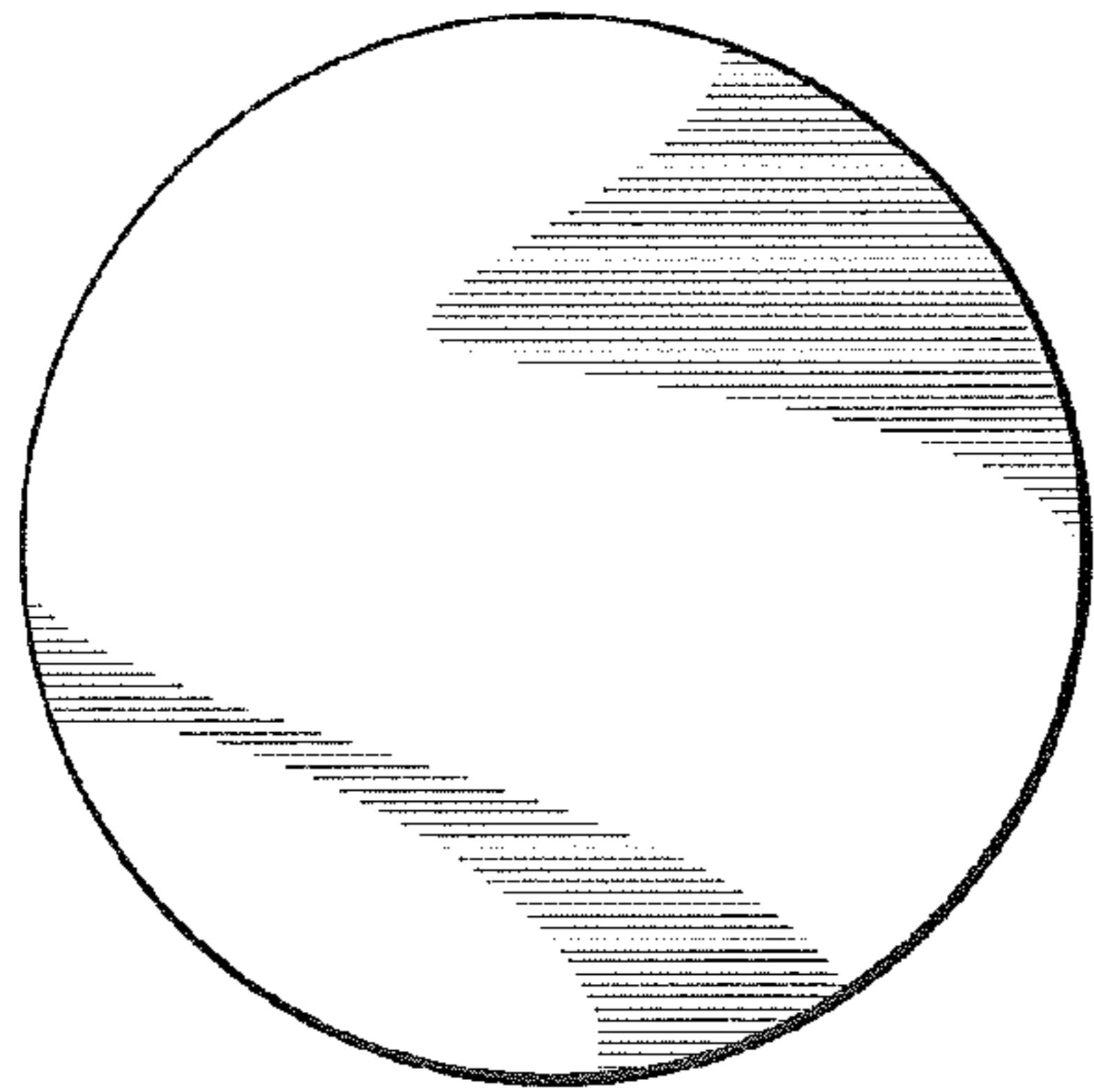


FIG. 10

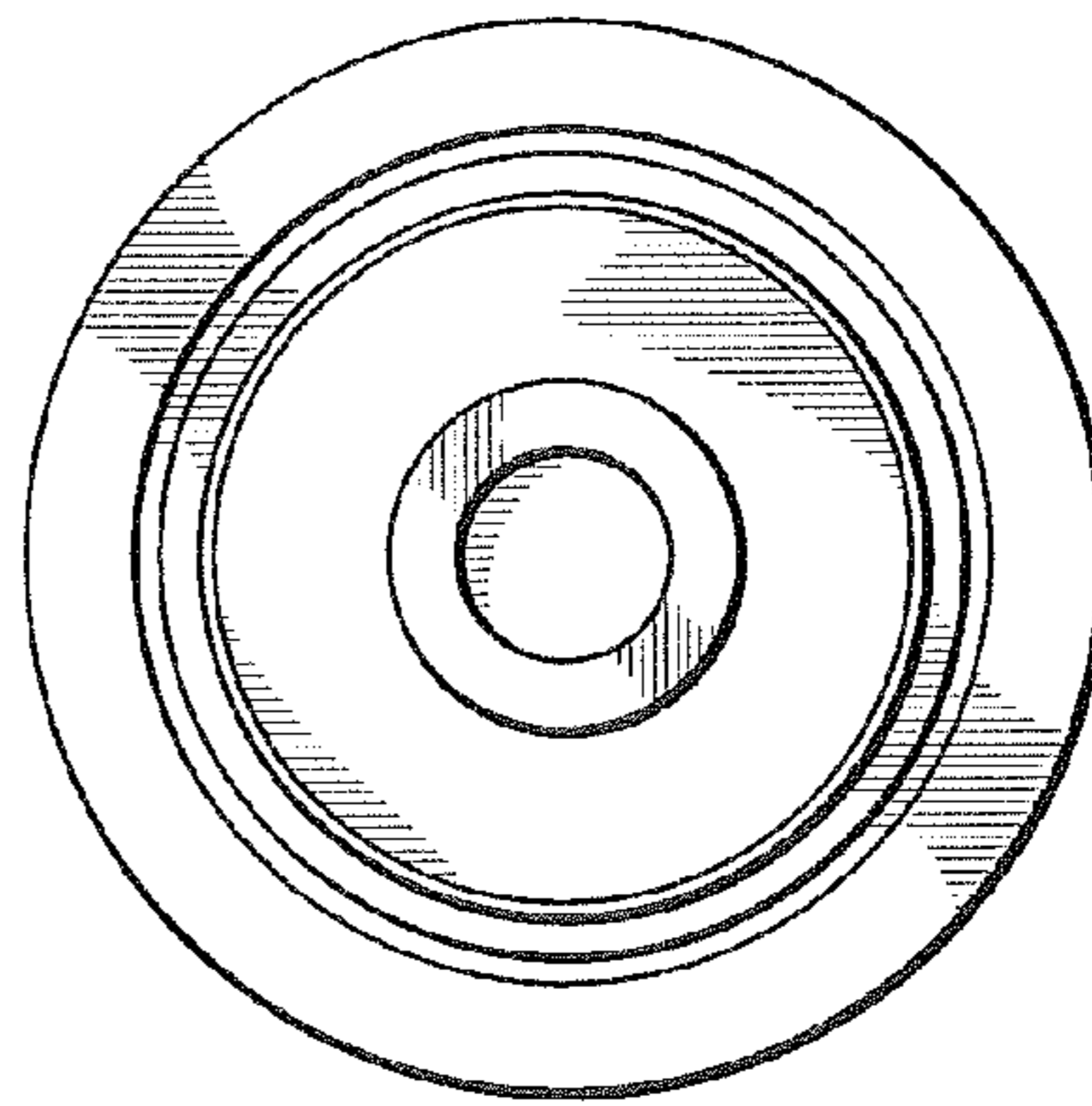


FIG. 11

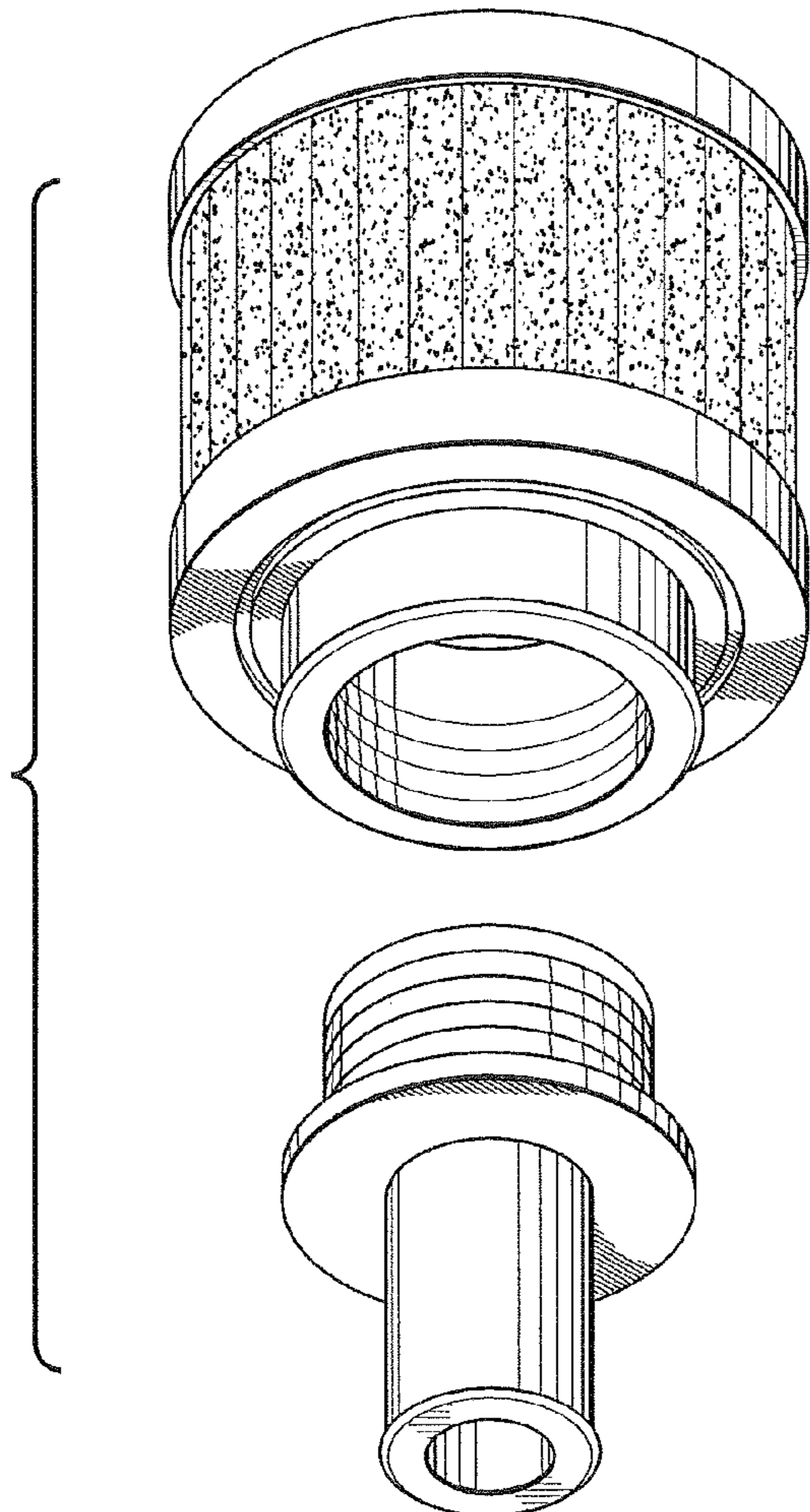


FIG. 12