



US00D750677S

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

(10) **Patent No.:** **US D750,677 S**  
(45) **Date of Patent:** **\*\* Mar. 1, 2016**

- (54) **FUNNEL STRUCTURE OF AN OIL CASE**
- (71) Applicant: **LIH YANN INDUSTRIAL CO., LTD.**,  
Taichung (TW)
- (72) Inventor: **Po Lin Liao**, Taichung (TW)
- (73) Assignee: **LIH YANN INDUSTRIAL CO., LTD.**,  
Taichung (TW)
- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/507,117**
- (22) Filed: **Oct. 24, 2014**  
**Related U.S. Application Data**
- (62) Division of application No. 13/211,772, filed on Aug.  
17, 2011, now abandoned.
- (51) **LOC (10) Cl.** ..... **15-99**
- (52) **U.S. Cl.**  
USPC ..... **D15/150**
- (58) **Field of Classification Search**  
USPC ..... D7/400, 700; D15/150, 151, 152  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 4,600,125 A \* 7/1986 Maynard, Jr. .... B67B 7/28  
141/330
- 4,789,017 A \* 12/1988 Panasewicz ..... B67C 11/02  
141/311 R
- 5,168,908 A \* 12/1992 Boyum ..... B67C 11/02  
141/331
- D340,731 S \* 10/1993 Pollak ..... D15/150
- 5,259,426 A \* 11/1993 Burleigh ..... B25B 27/0042  
141/331
- 5,634,502 A \* 6/1997 Pierce ..... F01M 11/04  
141/331
- D422,674 S \* 4/2000 Chrisco ..... D23/200
- 6,083,392 A \* 7/2000 Rigney ..... A47J 37/1271  
210/451
- 6,142,193 A \* 11/2000 Sanders ..... B65B 39/04  
141/300
- 6,340,038 B1 \* 1/2002 Ingram ..... B67C 11/02  
141/333
- 6,397,907 B1 \* 6/2002 Heintz ..... B67C 11/02  
141/331
- 6,719,021 B1 \* 4/2004 Jwu ..... B67C 11/02  
141/199
- 6,837,283 B1 \* 1/2005 Wegner ..... B65B 39/02  
141/338

- D541,116 S \* 4/2007 Upham ..... D7/700
- 7,237,582 B1 \* 7/2007 Harvey ..... B65B 39/02  
141/330
- 7,270,159 B2 \* 9/2007 Burns ..... B67C 11/02  
116/227
- D555,439 S \* 11/2007 Fletcher ..... D15/150
- 7,519,263 B2 \* 4/2009 Richards ..... B67C 11/02  
385/147
- 7,874,326 B1 \* 1/2011 Harvey ..... B65B 39/001  
141/330
- D670,141 S \* 11/2012 Cetera ..... D7/691
- D690,340 S \* 9/2013 Levy ..... D15/150
- D690,752 S \* 10/2013 Levy ..... D15/150
- D697,540 S \* 1/2014 Nkwantabisa ..... D15/150
- 8,631,841 B1 \* 1/2014 Levy ..... B67C 11/02  
141/333
- 8,726,949 B1 \* 5/2014 Poire ..... B67C 11/02  
141/338
- D708,919 S \* 7/2014 Lin ..... D7/700
- 8,875,754 B2 \* 11/2014 Eyre ..... B67C 11/00  
141/338
- D719,414 S \* 12/2014 Hester ..... D7/700
- 8,973,625 B2 \* 3/2015 Liao ..... B65B 39/02  
141/332
- D728,326 S \* 5/2015 Wirth ..... D7/700
- 9,027,610 B1 \* 5/2015 Padovan ..... B67C 11/02  
141/340

\* cited by examiner

*Primary Examiner* — Patricia Palasik

(74) *Attorney, Agent, or Firm* — Andrew C. Cheng

(57) **CLAIM**

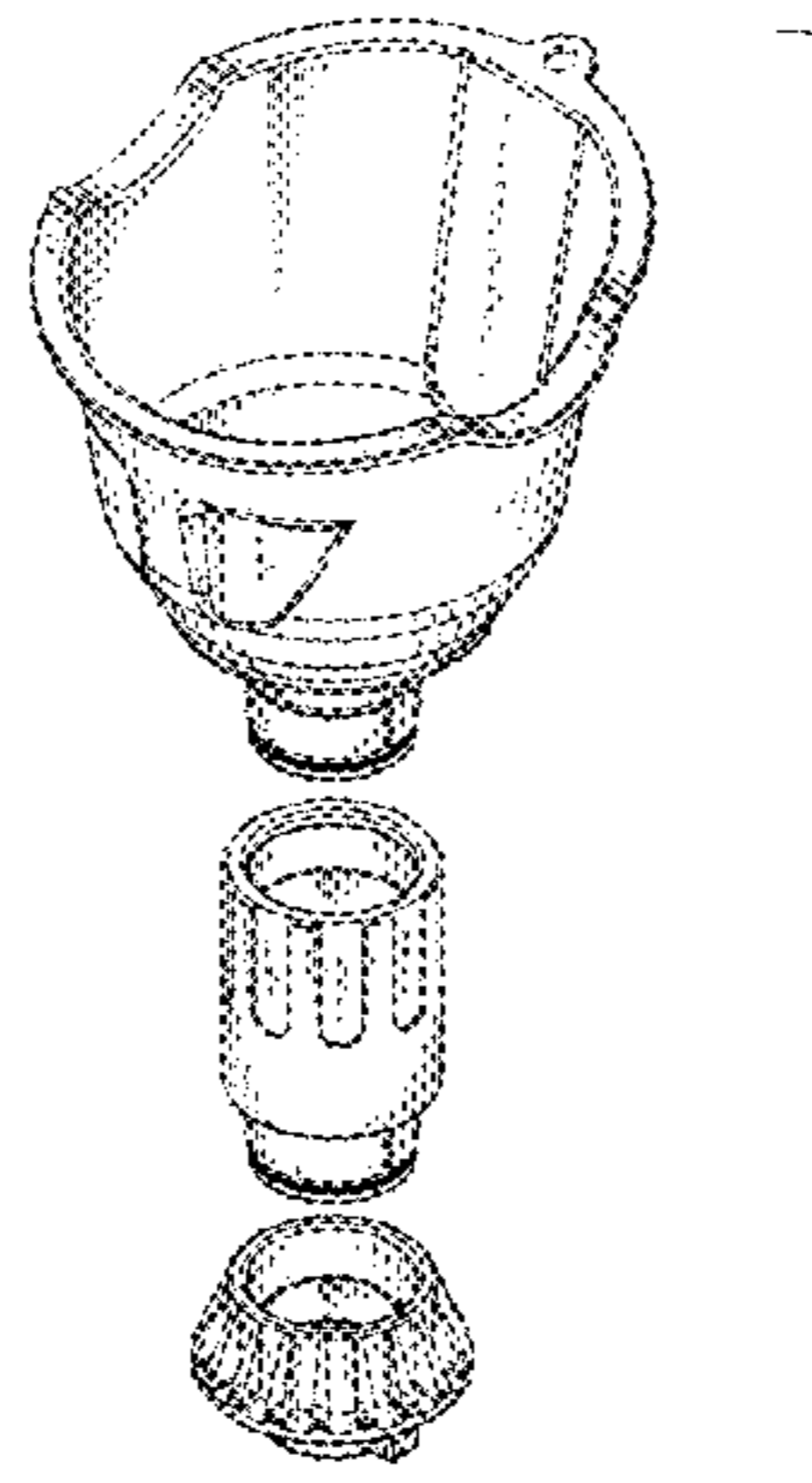
The ornamental design for a funnel structure of an oil case, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a funnel structure of an oil case showing my new design;  
 FIG. 2 is an exploded front elevational view thereof;  
 FIG. 3 is a rear elevational view thereof;  
 FIG. 4 is a left side elevational view thereof;  
 FIG. 5 is a right side elevational view thereof;  
 FIG. 6 is a top plan view of thereof;  
 FIG. 7 is a bottom plan view thereof;  
 FIG. 8 is a bottom perspective view thereof;  
 FIG. 9 is a perspective view thereof and showing the funnel structure of an oil case mounted onto the engine block;  
 FIG. 10 is an exploded view of a second embodiment thereof and showing an additional tube connected; and,  
 FIG. 11 is a perspective view of the second embodiment shown in FIG. 10.

The broken lines in the drawings depict unclaimed environmental subject matter.

**1 Claim, 11 Drawing Sheets**



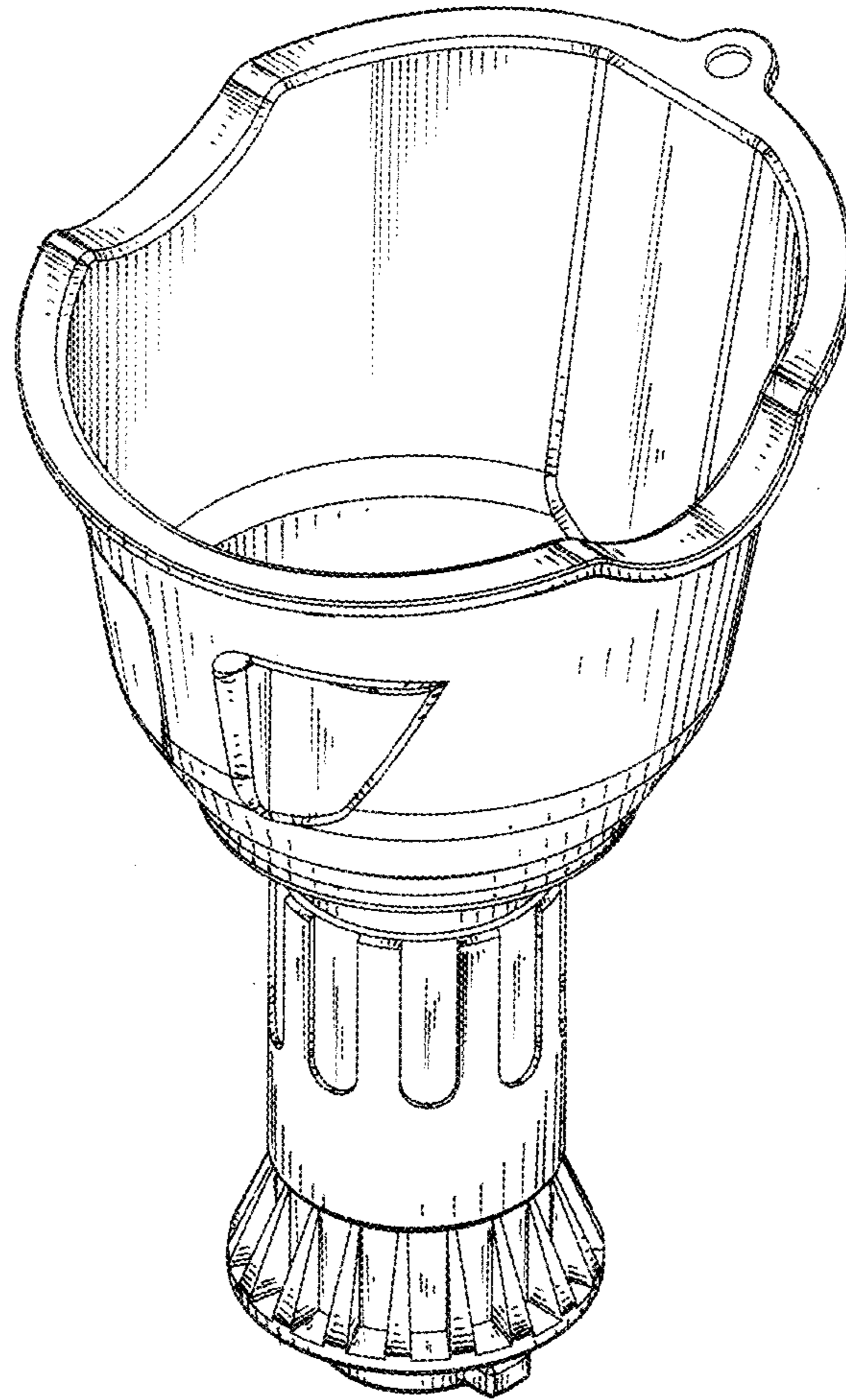


Fig 1

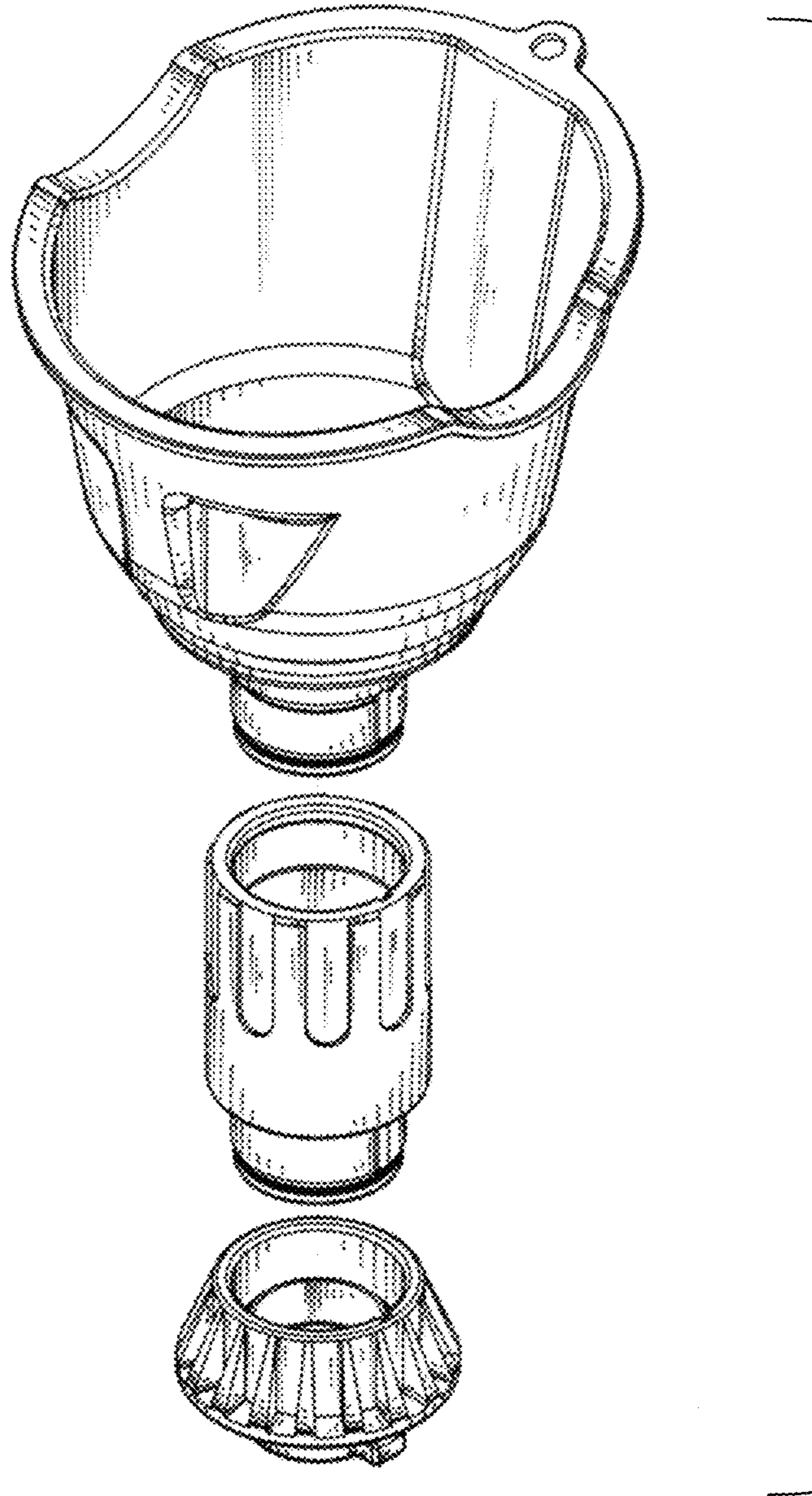


Fig 2



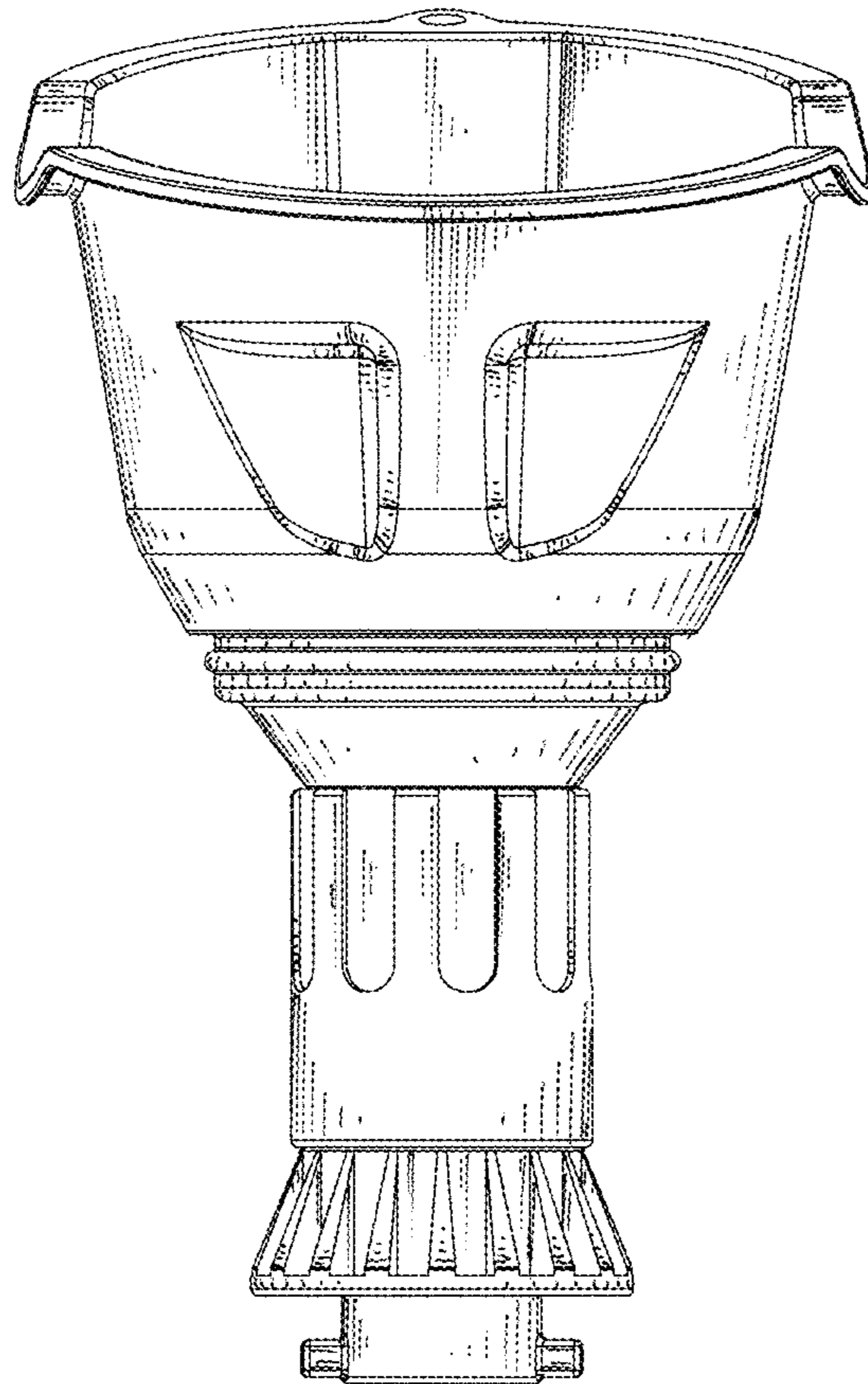


Fig 3

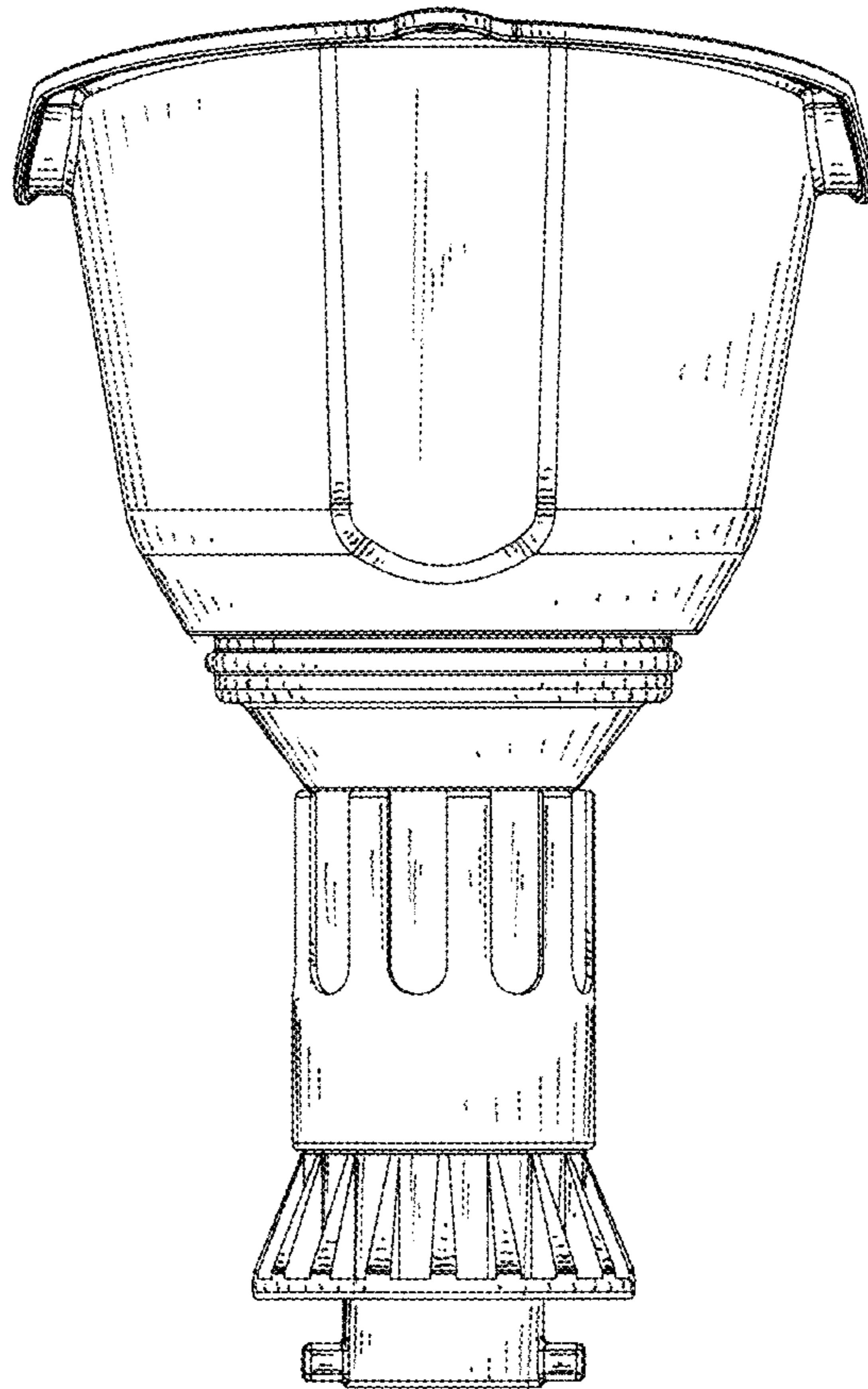


Fig 4

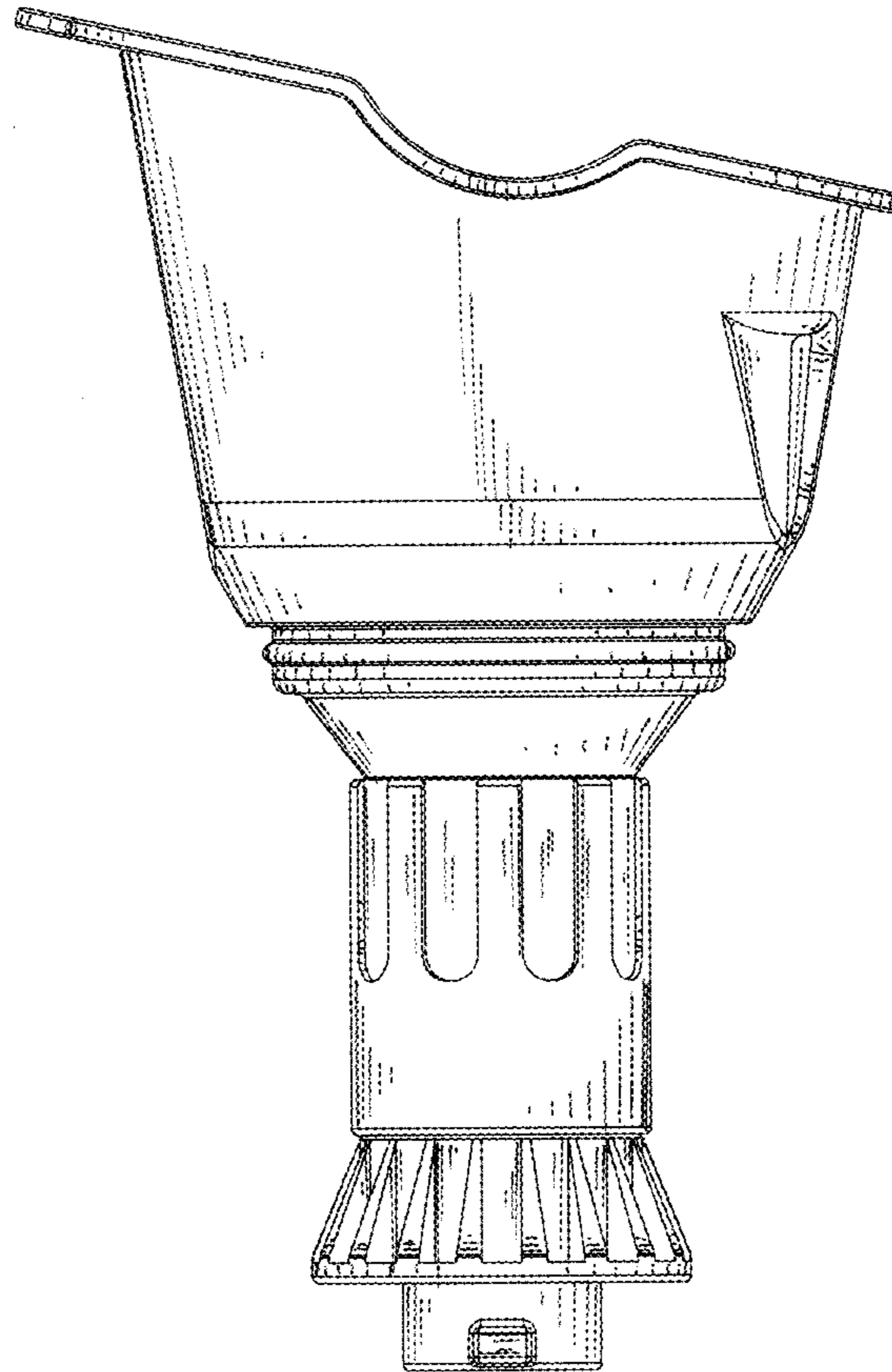


Fig 5

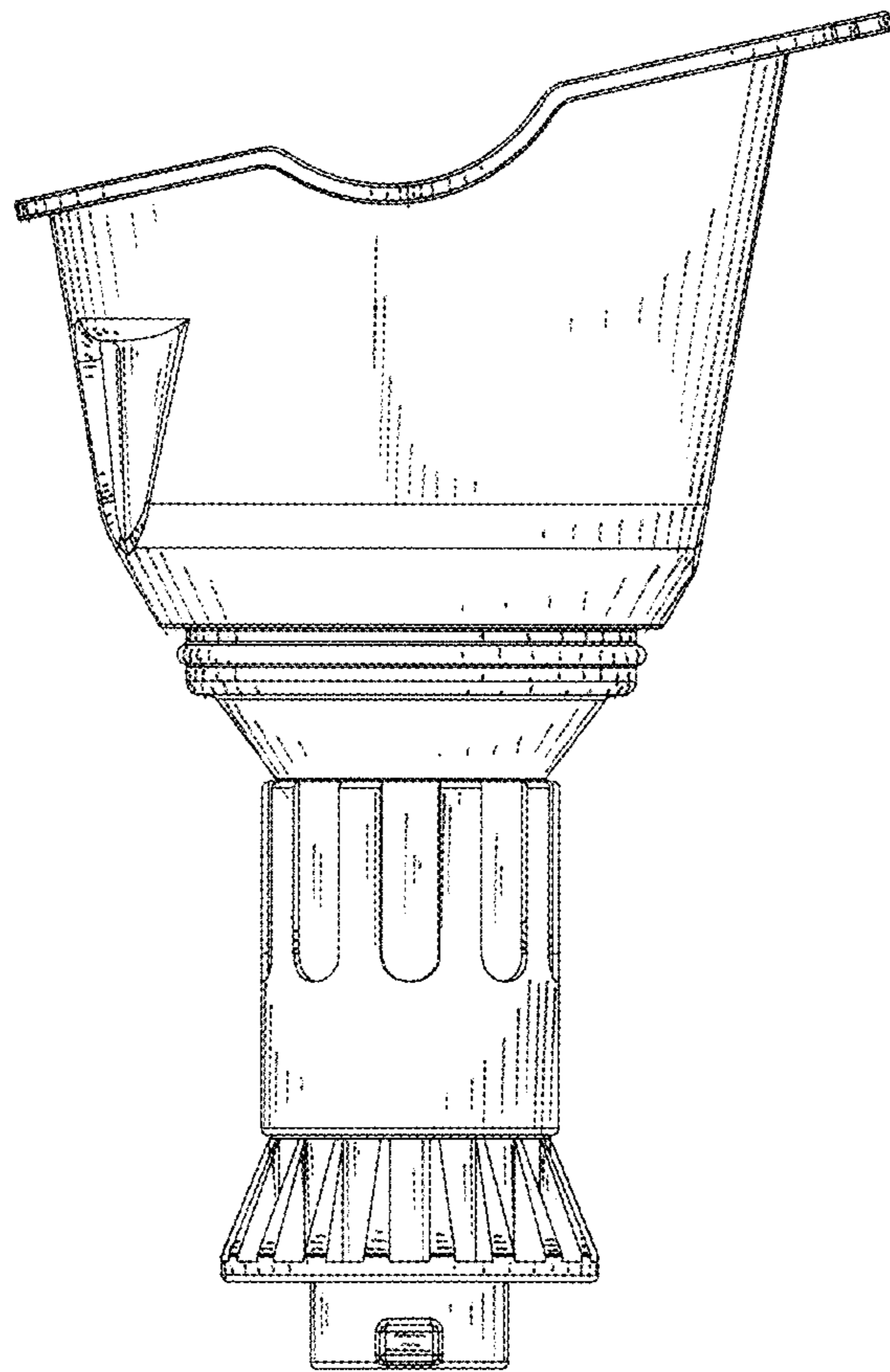


Fig 6

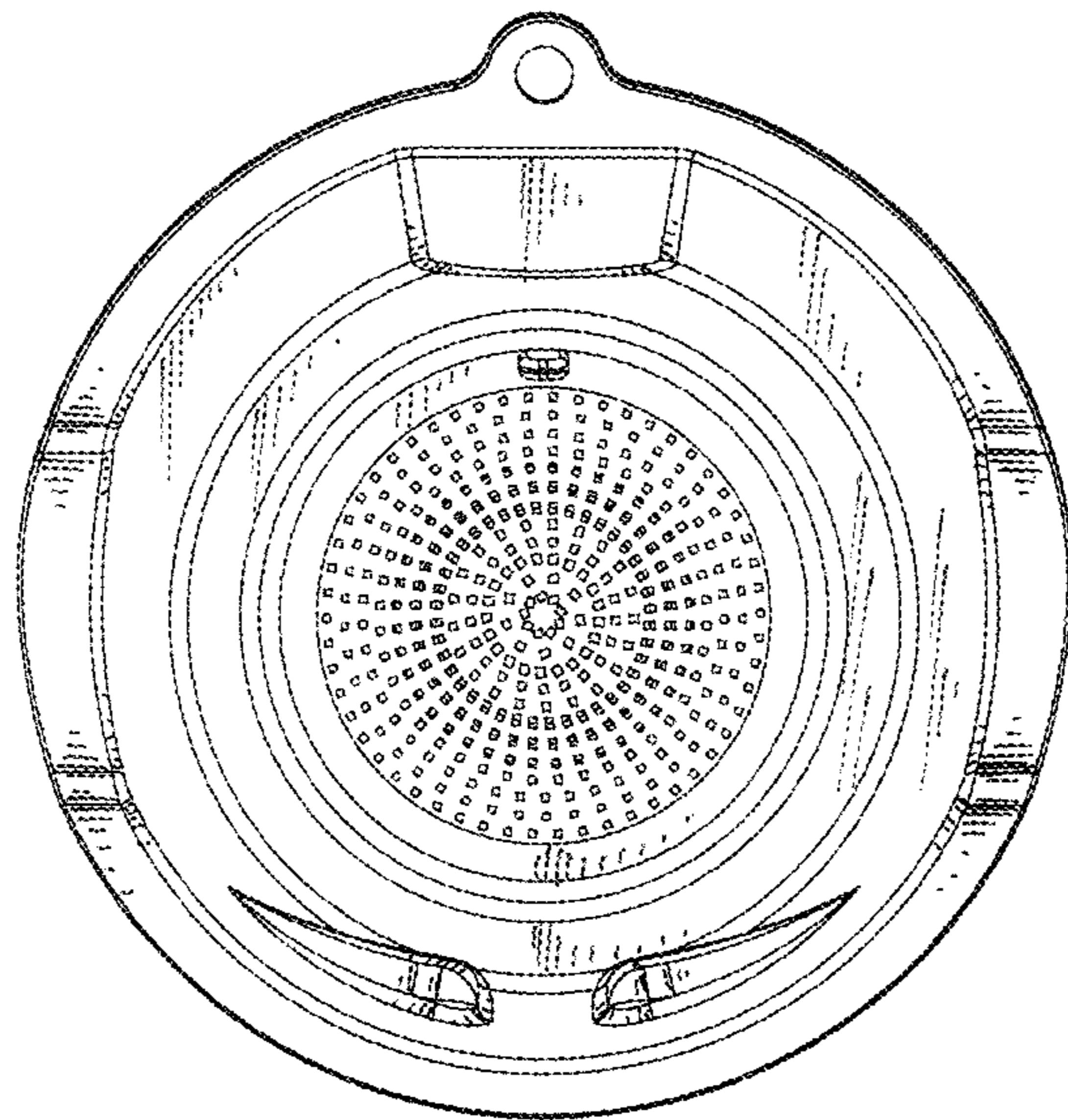


Fig 7



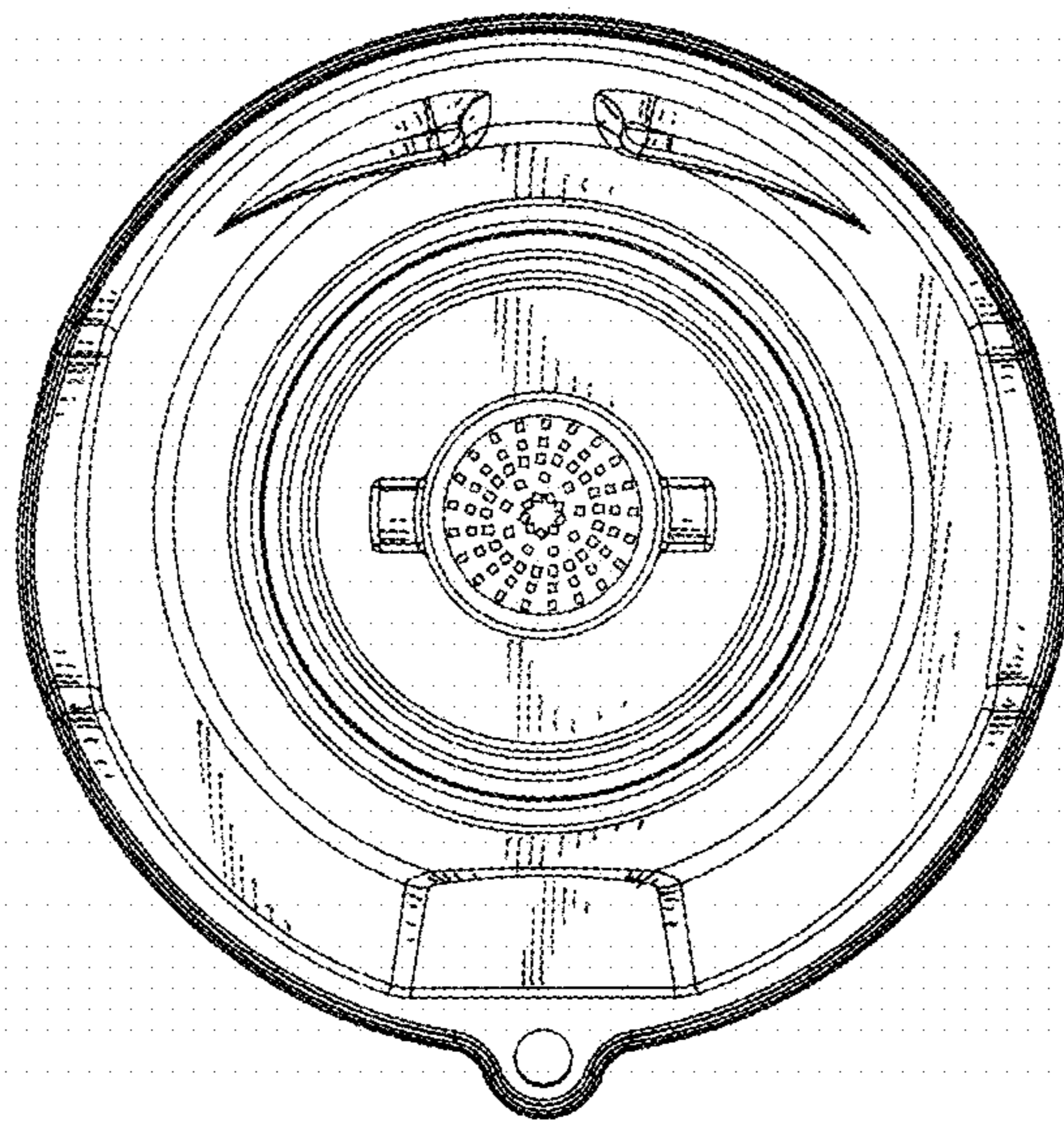


Fig 8

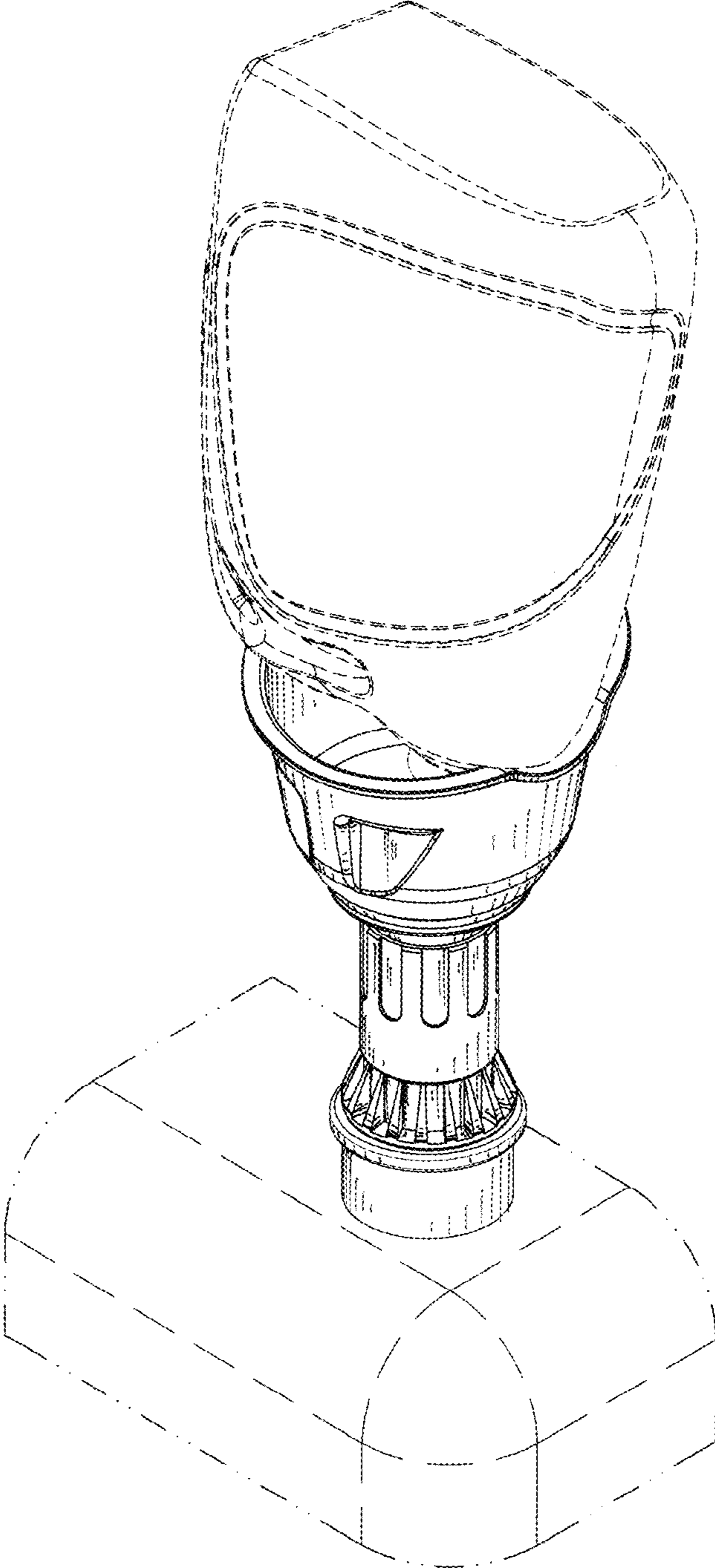


Fig 9

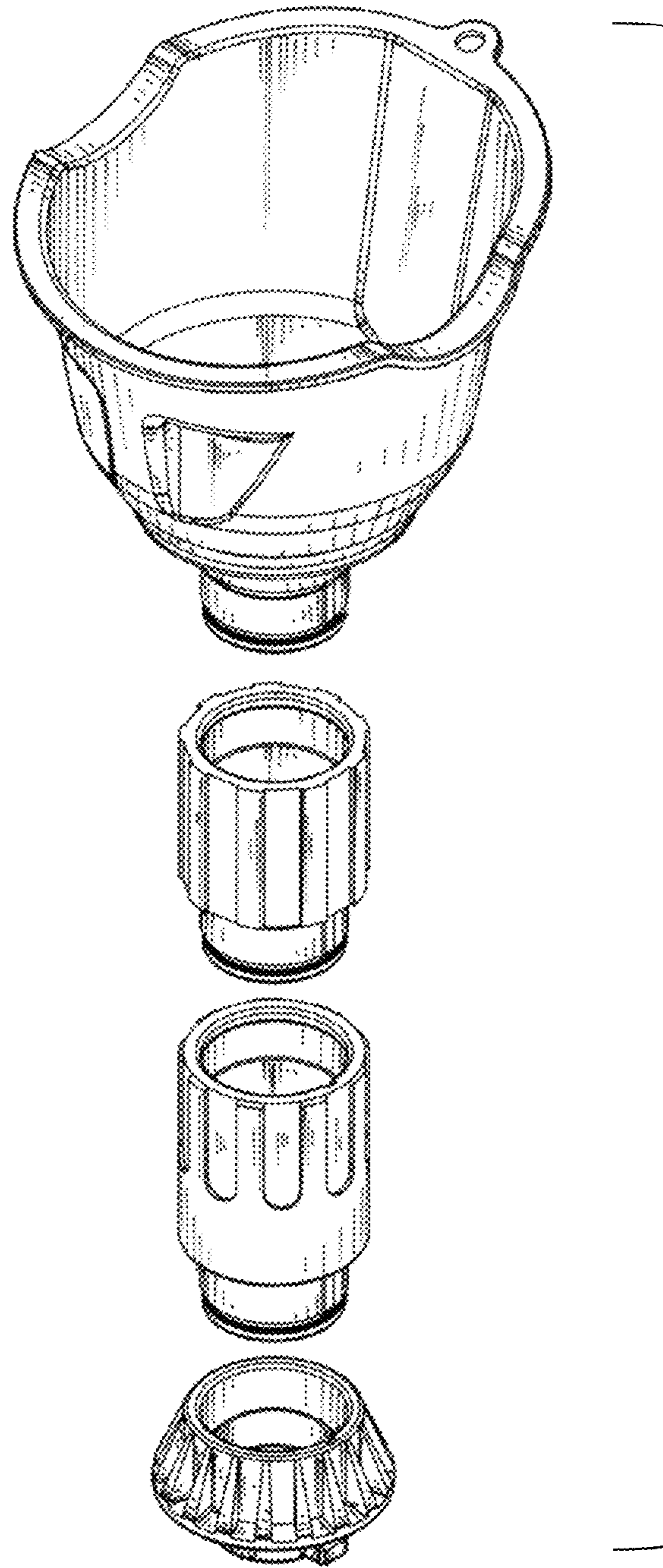


Fig 10

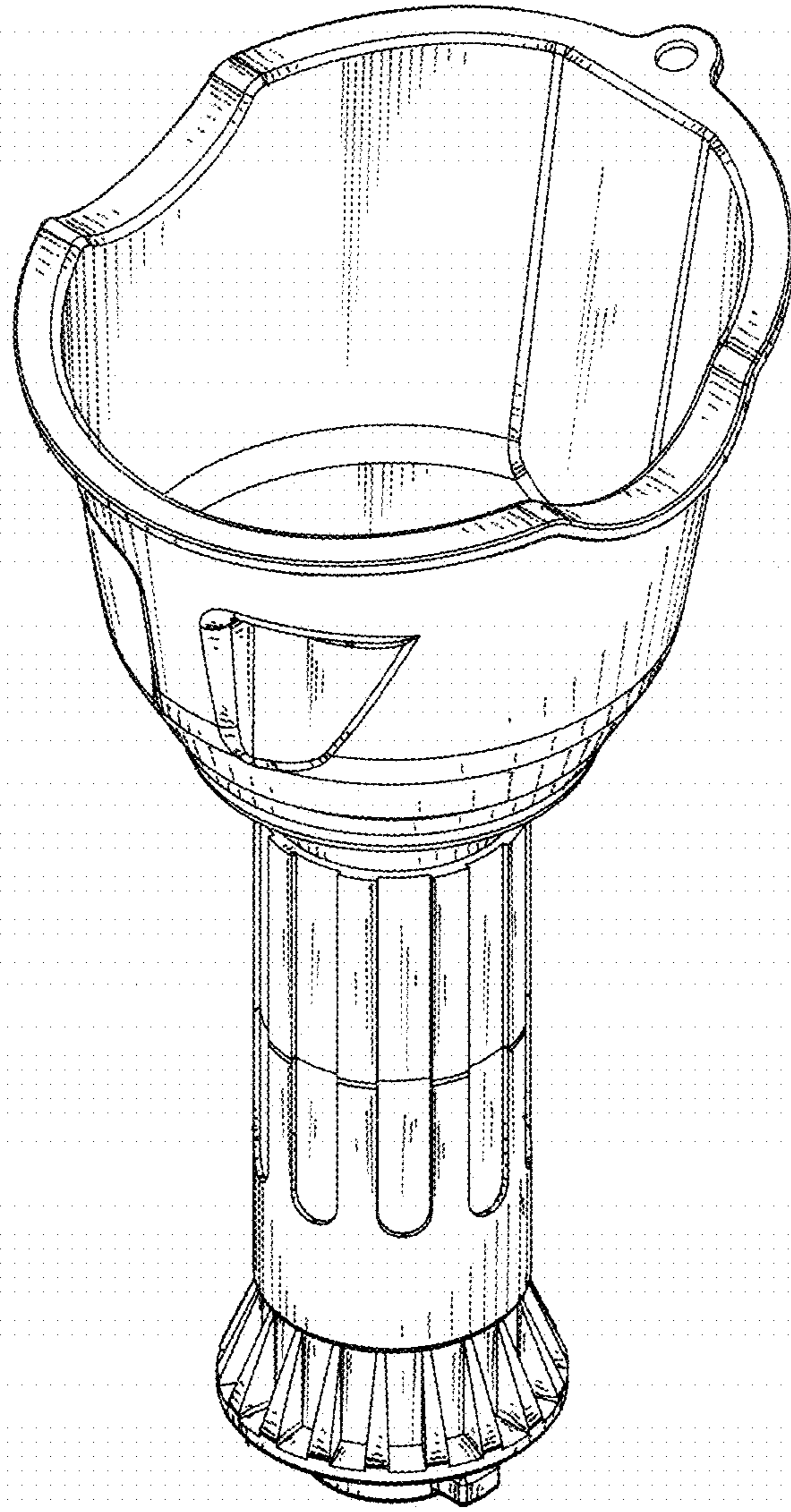


Fig 11