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

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(54) **GYRATORY CRUSHER CRUSHING HEAD**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

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**Gustav Bern**, Kalmar (SE); **Axel Bergman**, Malmo (SE); **Mikael Larsson**, Eslov (SE)

3,788,569	A	1/1974	Kemnitz	
4,467,971	A	8/1984	Schuman	
2005/0133647	A1 *	6/2005	Evertsson	241/207
2006/0169811	A1 *	8/2006	Kim	241/260.1
2010/0193621	A1 *	8/2010	Kaja	241/209
2010/0270409	A1 *	10/2010	Eriksson et al.	241/207
2011/0284675	A1 *	11/2011	Amburgey	241/277
2013/0026271	A1 *	1/2013	Trembley et al.	241/188.1
2014/0076113	A1 *	3/2014	Berthier	81/462
2014/0110514	A1 *	4/2014	Belotserkovskiy et al.	241/259

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FOREIGN PATENT DOCUMENTS

(\*\*) Term: **14 Years**

GB 1130248 7/1967

(21) Appl. No.: **29/441,705**

\* cited by examiner

(22) Filed: **Jan. 9, 2013**

*Primary Examiner* — Patricia Palasik

(30) **Foreign Application Priority Data**

(74) *Attorney, Agent, or Firm* — Corinne R. Gorski

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(51) **LOC (10) Cl.** ..... **15-09**

(57) **CLAIM**

(52) **U.S. Cl.**  
USPC ..... **D15/123**

The ornamental design for a gyratory crusher crushing head, as shown and described.

(58) **Field of Classification Search**

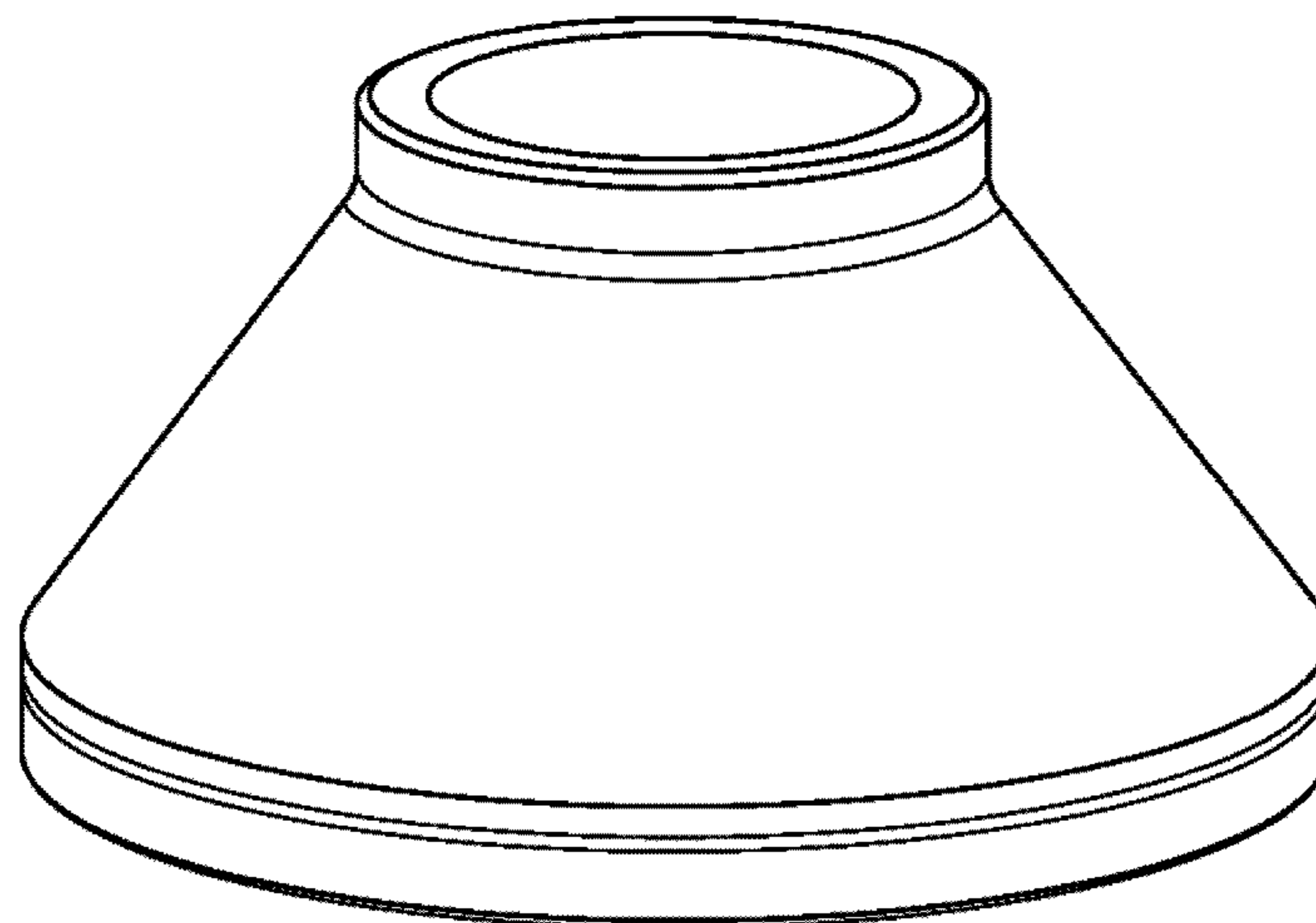
**DESCRIPTION**

CPC ..... B01D 41/04; B02C 1/00; B02C 1/02;  
B02C 1/04; B02C 1/005; B02C 1/025; B02C  
1/043; B02C 2/04; B02C 13/00; B02C  
13/282; B02C 13/1828; B02C 13/2804;  
B02C 18/14; B02C 18/142; B02C 18/145;  
B02C 18/2233; B02C 19/22; B02C 2018/147;  
B30B 9/321; B30B 9/3039  
USPC ..... D15/122, 123; 72/448, 455, 465;  
100/207, 208, 214, 268, 282, 292;  
241/31, 58, 159, 179, 186, 236, 285;  
435/86, 135, 347, 348.5, 349, 350,  
435/353, 355, 358, 360

FIG. 1 is a perspective view of an embodiment of a crushing head;  
FIG. 2 is a top view thereof;  
FIG. 3 is a bottom view thereof;  
FIG. 4 is a front view thereof, wherein the rear view corresponds thereto; and,  
FIG. 5 is one side view thereof, wherein the other side corresponds thereto.

See application file for complete search history.

**1 Claim, 4 Drawing Sheets**



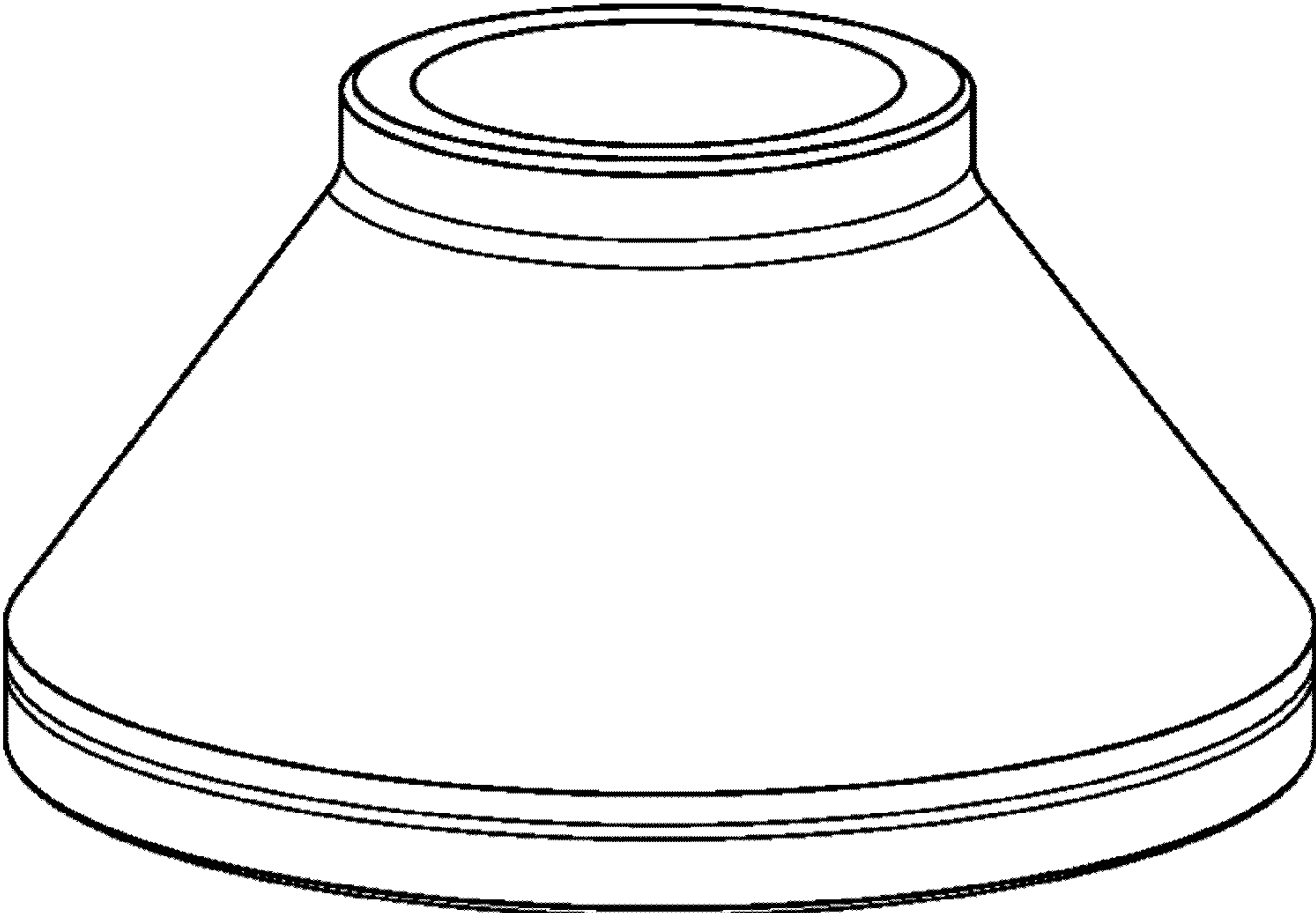


FIG. 1

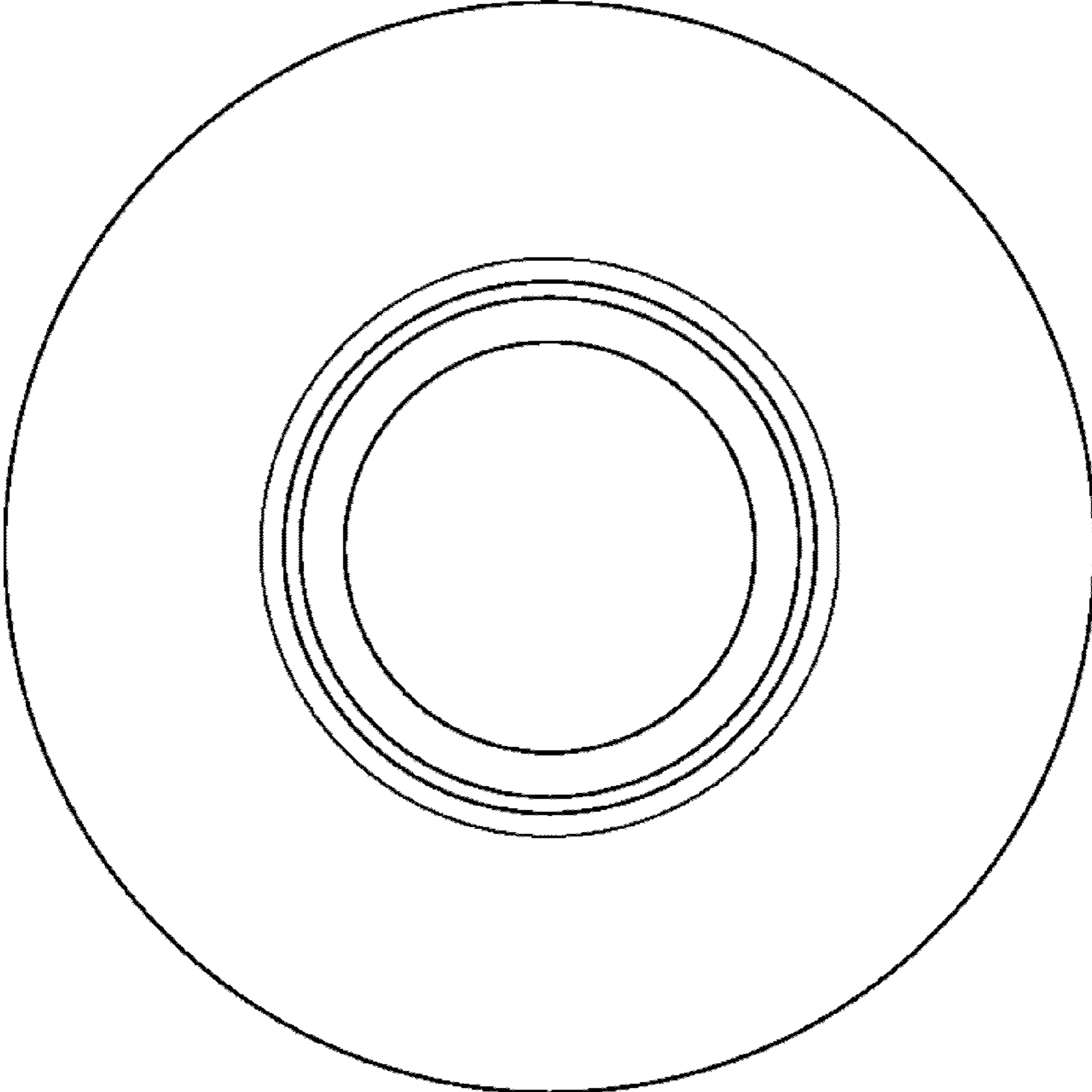


FIG. 2

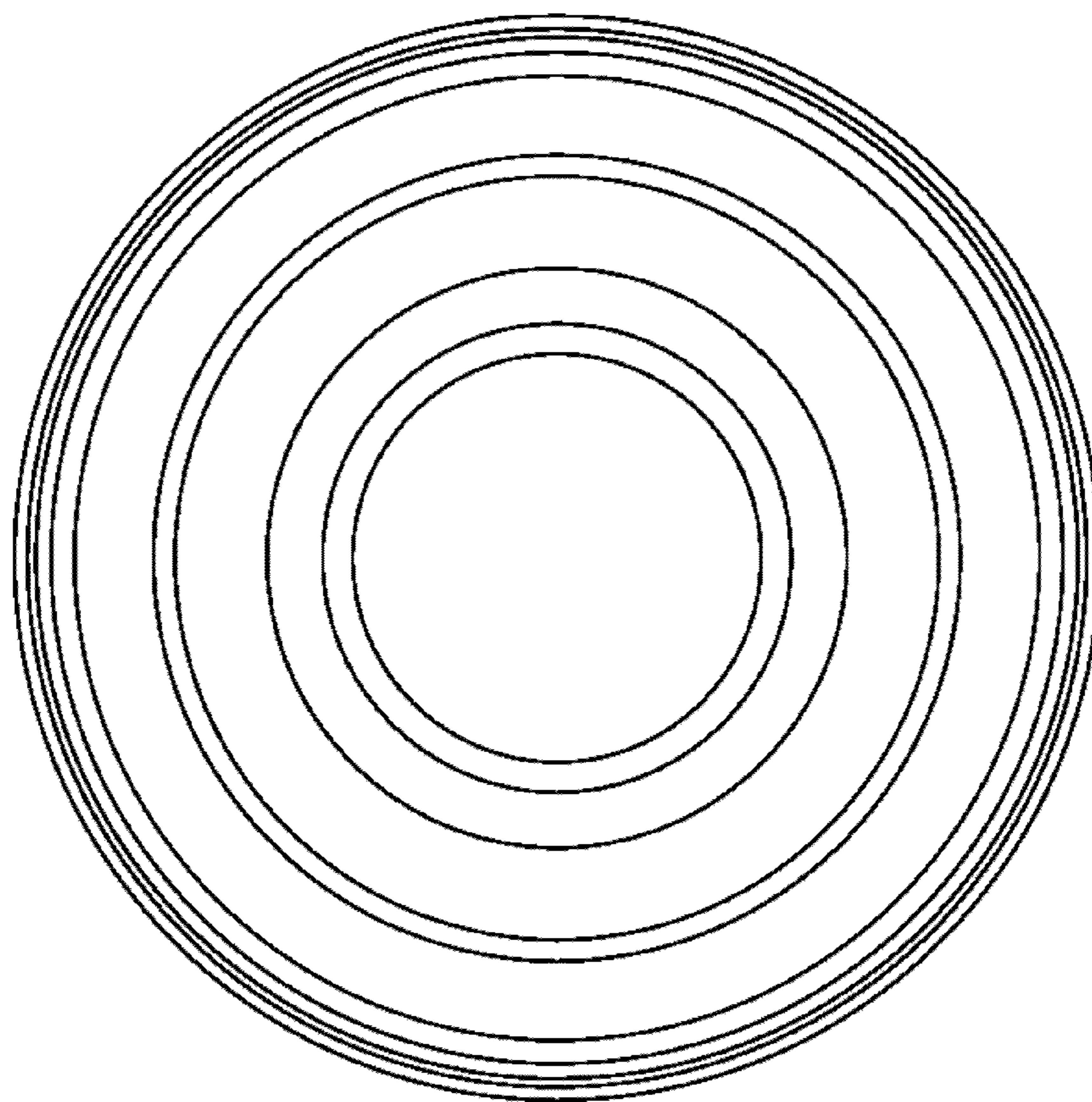


FIG. 3

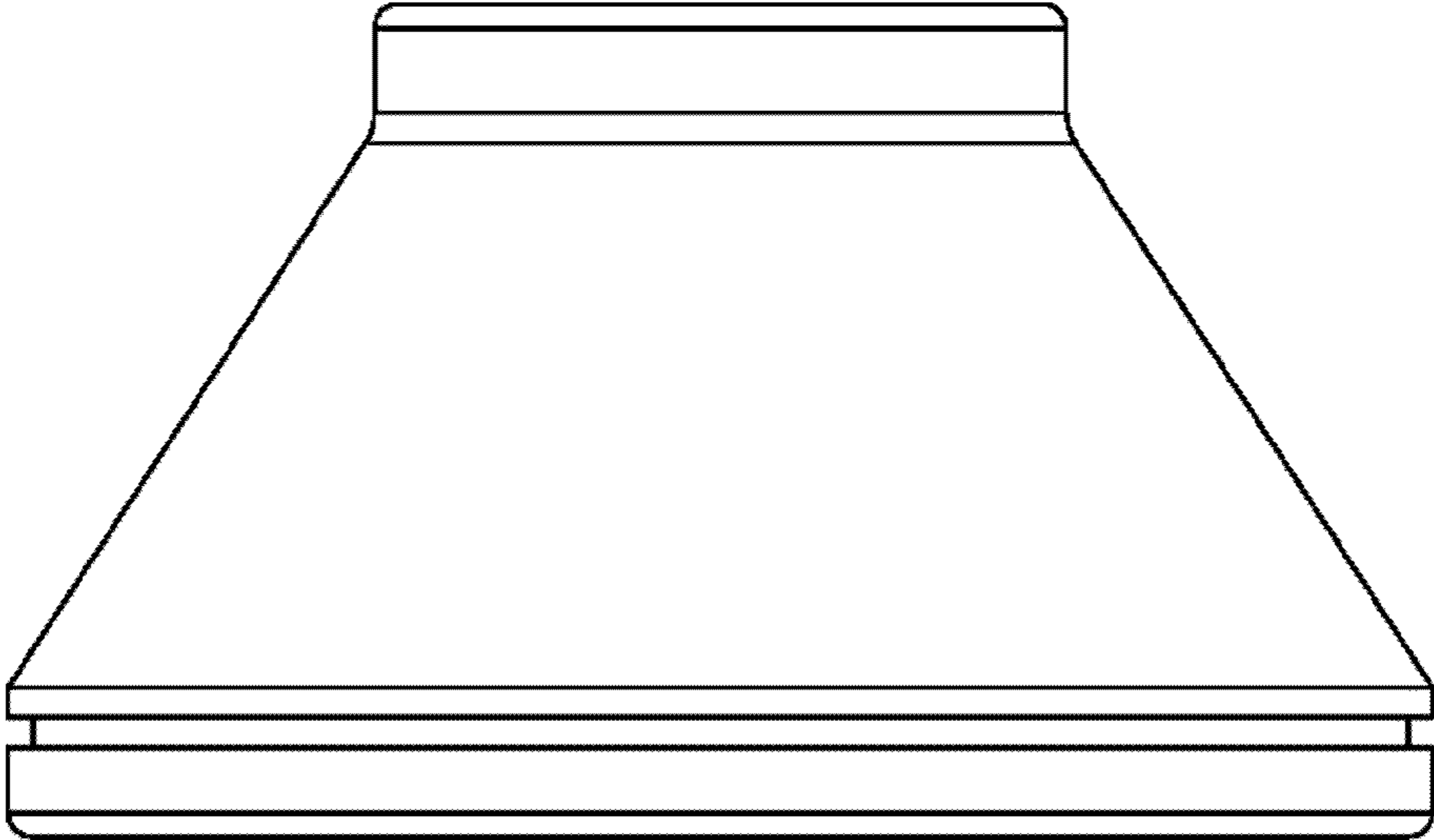


FIG. 4

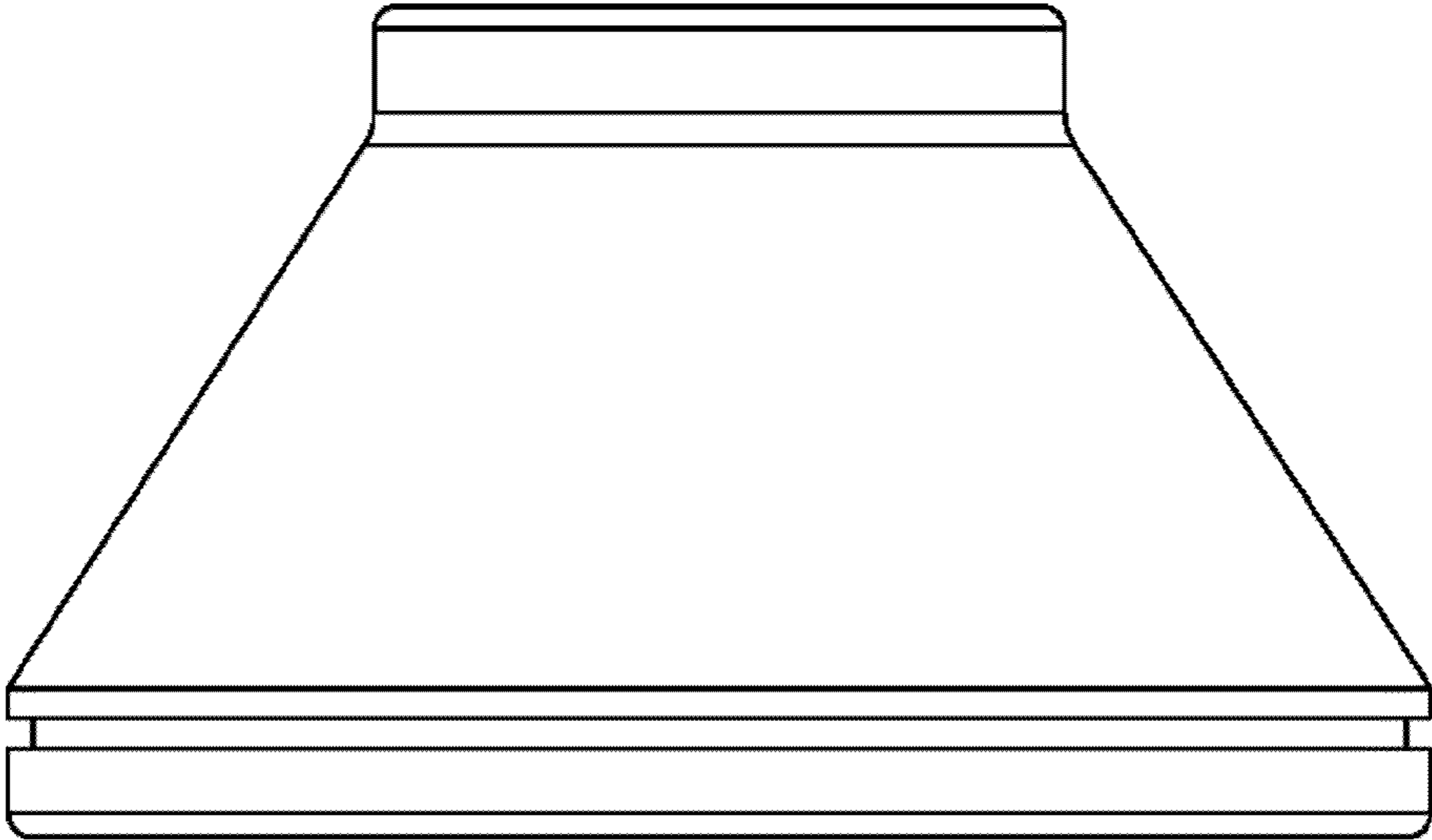


FIG. 5