



US00D490830S

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

(10) **Patent No.:** **US D490,830 S**
(45) **Date of Patent:** **** Jun. 1, 2004**

(54) **PROBE FOR A PORTABLE COORDINATE MEASUREMENT MACHINE**
(75) Inventors: **Simon Raab**, Maitland, FL (US); **Seyed Ali Sajedi**, Winter Park, FL (US); **Kenneth J. Hasloeher**, Deltona, FL (US); **Marc Barber**, Deltona, FL (US)

JP 56062783 5/1981
JP 57073602 5/1982
JP 2168303 6/1990
JP 2212085 8/1990
WO WO 94/15173 7/1994
WO WO 98/08050 2/1998
WO WO 01/63202 A1 2/2001

(73) Assignee: **Faro Technologies, Inc.**, Lake Mary, FL (US)

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

(21) Appl. No.: **29/175,922**

(22) Filed: **Feb. 13, 2003**

Related U.S. Application Data

(63) Continuation-in-part of application No. 29/166,332, filed on Aug. 26, 2002, now Pat. No. Des. 479,544, which is a continuation-in-part of application No. 29/155,790, filed on Feb. 14, 2002, now Pat. No. Des. 472,824.

(51) **LOC (7) Cl.** **15-99**

(52) **U.S. Cl.** **D15/199**

(58) **Field of Search** D10/46, 65; D15/199; 33/559, 561, 572, 556, 1 D, 503, 504, 702, 554, 551; 73/856.5

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,593,470 A 6/1986 Davies 33/1
4,676,002 A 6/1987 Slocum 33/1
4,937,759 A 6/1990 Vold 364/513

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

DE 42 31 040 A1 3/1994
DE 101 12 977 C1 2/2002
EP 0 155 084 A1 9/1985
FR 86 06186 4/1986
FR 2 634 379 7/1988
GB 2 264 601 A 1/1993
GB 2 264 602 A 1/1993

OTHER PUBLICATIONS

<http://scanworks.perceptron.com/products>.
<http://scanworks.perceptron.com>.
www.romer.com—1000i Series System Package.
www.romer.com—3000i Specifications.
www.romer.com—Seventh Axis Linear Rail.
www.romer.fr.

(List continued on next page.)

Primary Examiner—Antoine Duval Davis

(74) *Attorney, Agent, or Firm*—Cantor Colburn LLP

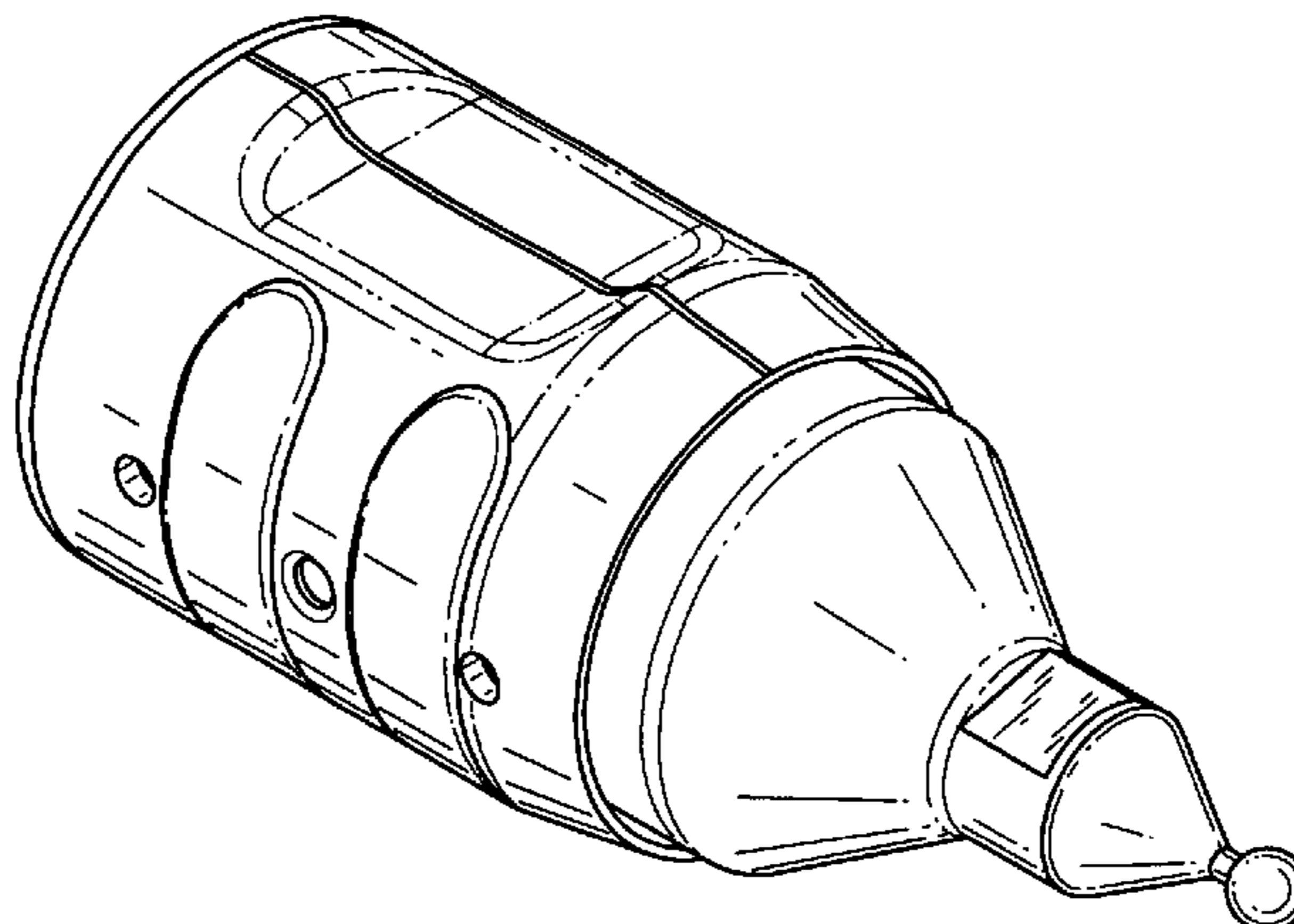
(57) **CLAIM**

The ornamental design for a probe for a portable coordinate measurement machine, as shown.

DESCRIPTION

FIG. 1 is a front perspective view of our new probe for a portable coordinate measurement machine;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a right side view thereof with the left side view being a mirror image thereof;
FIG. 5 is a top view thereof;
FIG. 6 is a bottom view thereof;
FIG. 7 is a front perspective view of a second embodiment of our new probe for a portable coordinate measurement machine;
FIG. 8 is a front view thereof;
FIG. 9 is a rear view thereof;
FIG. 10 is a right side view thereof with the left side view being a mirror image thereof;
FIG. 11 is a top view thereof; and,
FIG. 12 is a bottom view thereof.

1 Claim, 4 Drawing Sheets



US D490,830 S

Page 2

U.S. PATENT DOCUMENTS

5,050,608 A	9/1991	Watanabe et al.	128/653	D410,477 S	6/1999	Nihei et al.	D15/199
5,084,981 A *	2/1992	McMurtry et al.	33/556	5,978,748 A	11/1999	Raab 702/150	
5,086,401 A	2/1992	Glassman et al.	395/94	D423,534 S	4/2000	Raab et al.	D15/199
5,088,337 A *	2/1992	Bennett 73/866.5		6,131,299 A	10/2000	Raab et al.	33/503
5,189,797 A	3/1993	Granger 33/1		6,151,789 A	11/2000	Raab et al.	33/503
D344,279 S	2/1994	Koyama et al.	D15/199	D479,544 S *	9/2003	Raab et al.	D15/199
5,299,361 A *	4/1994	Fiedler 33/559					
5,412,880 A	5/1995	Raab 33/503					
D377,932 S	2/1997	Schena et al.	D14/114				
5,611,147 A	3/1997	Raab 33/503					
5,675,902 A *	10/1997	Chase 33/559					
5,724,264 A	3/1998	Rosenberg et al.	364/559				
5,768,792 A	6/1998	Raab 33/503					
5,778,551 A *	7/1998	Herklotz et al.	33/554				
5,807,449 A	9/1998	Hooker et al.	156/64				
5,829,148 A	11/1998	Eaton 33/503					

OTHER PUBLICATIONS

Takehis Komino, "Three Dimensional Coordinate Measuring System," Vectoron, Model VSC-07, VSC-14, vol. 30, No. 12, pp. 52-59.

<http://www.kreon3d.com>.

<http://www.3dscanners.com/1999/htm>—pp. 1, 4, & 8.

<http://www.optimet.com/Sensors.htm>.

* cited by examiner

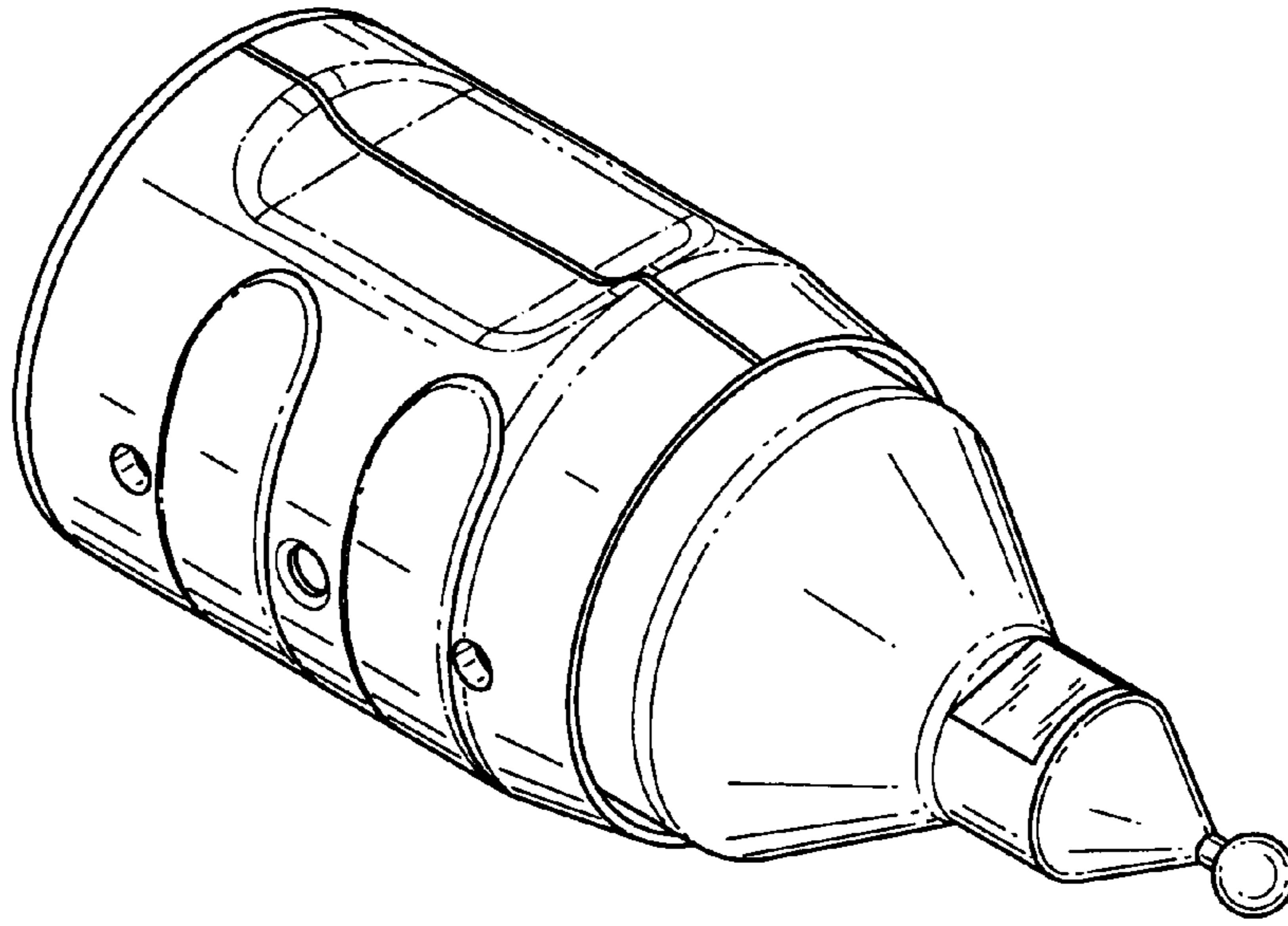


FIG. 1

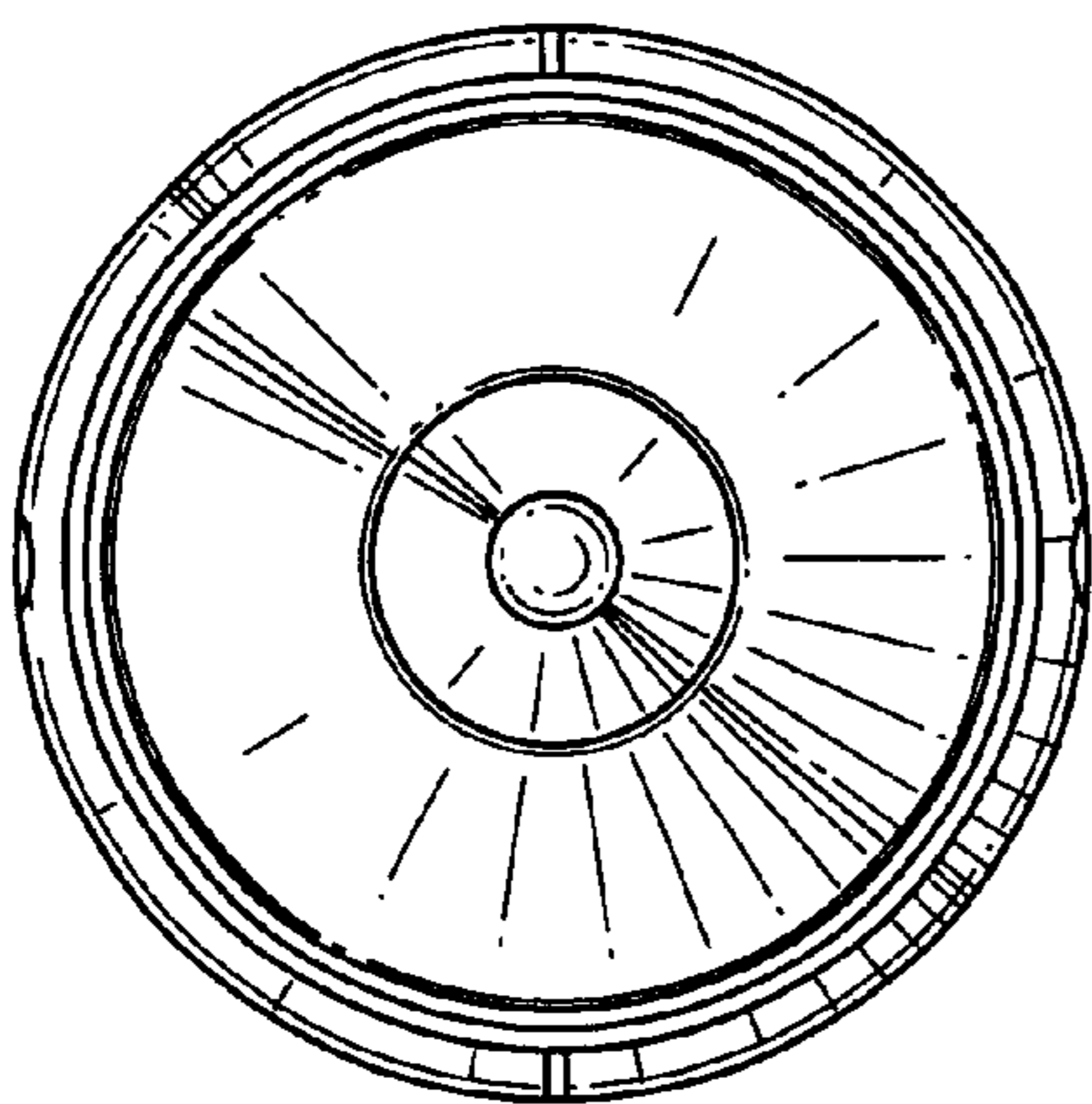


FIG. 2

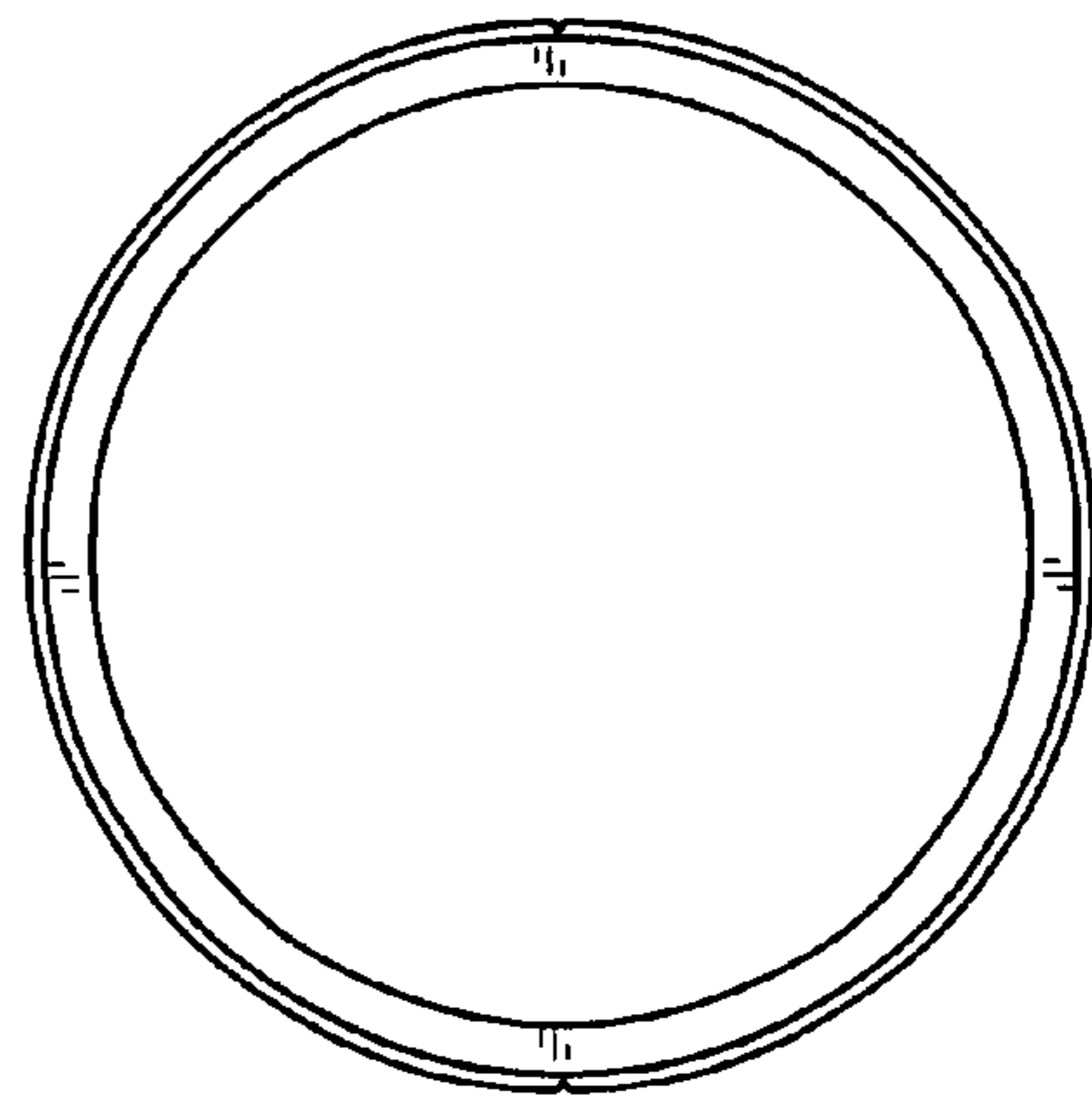


FIG. 3

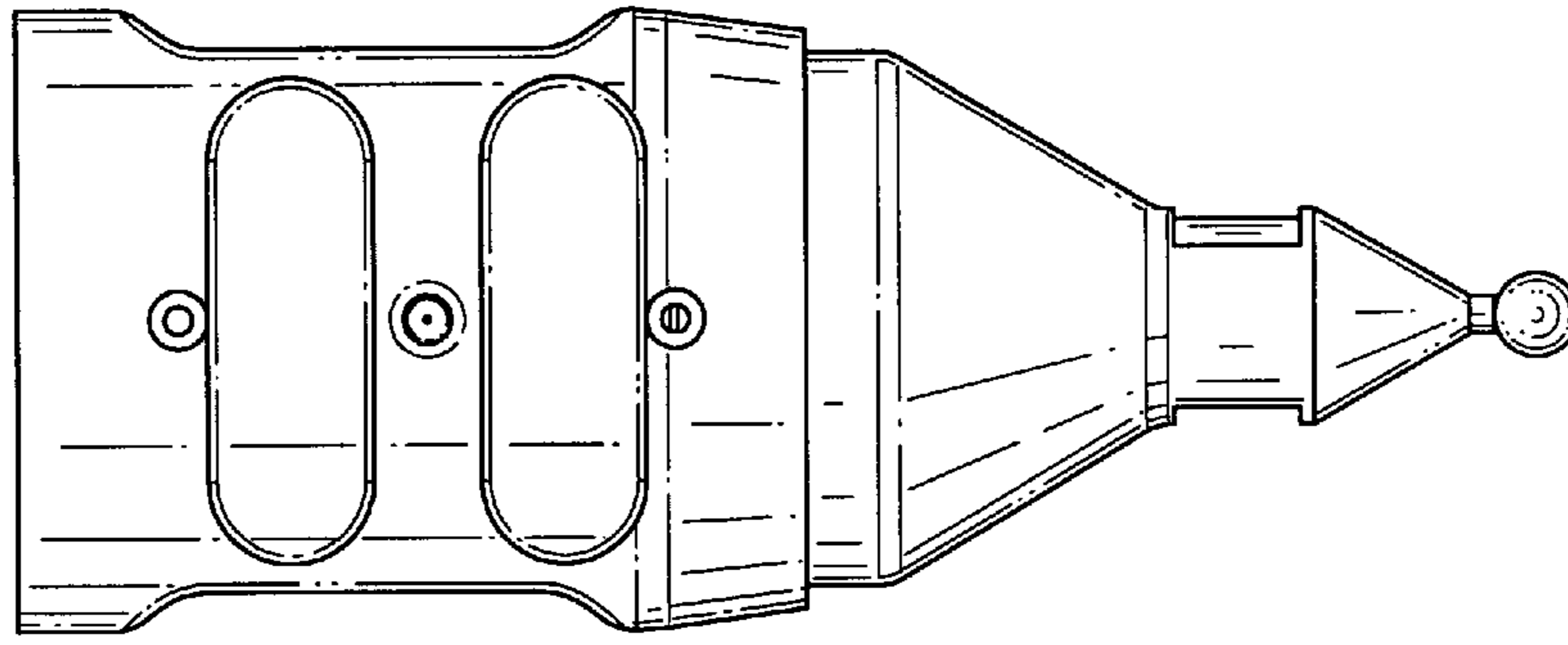


FIG. 4

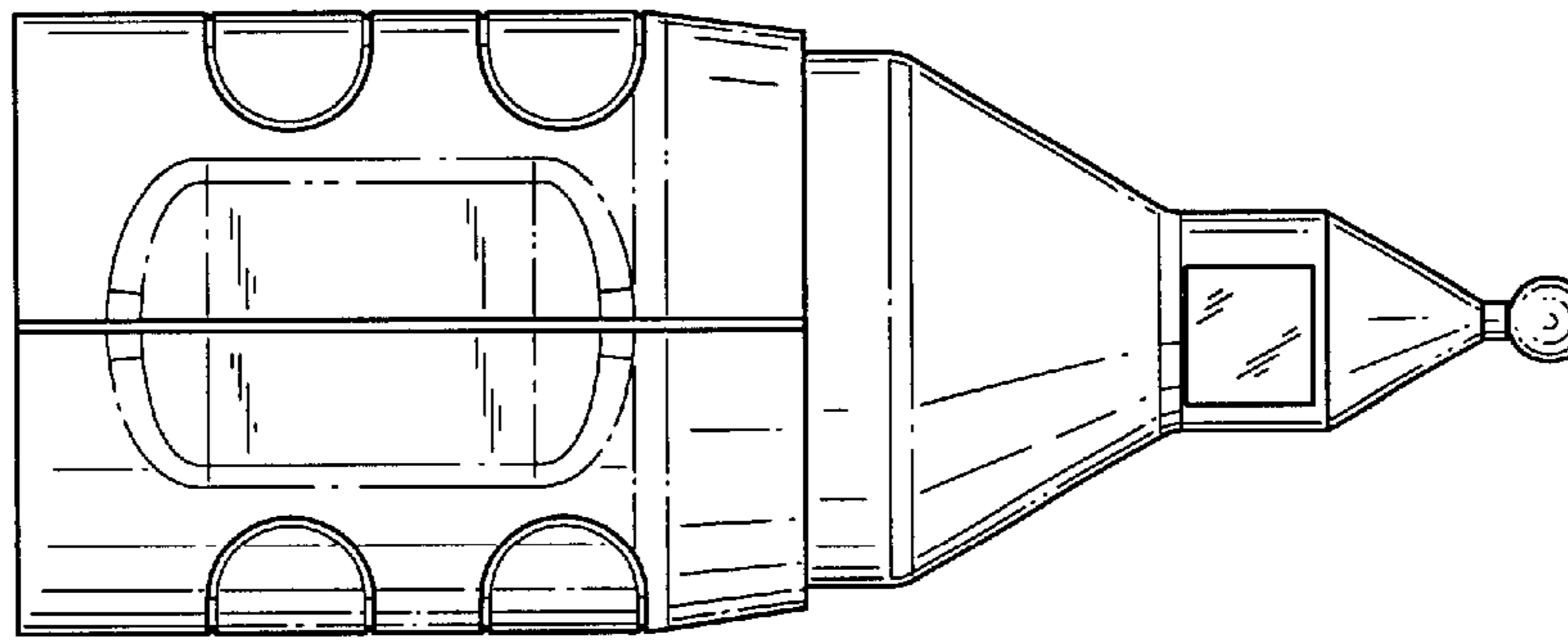


FIG. 5

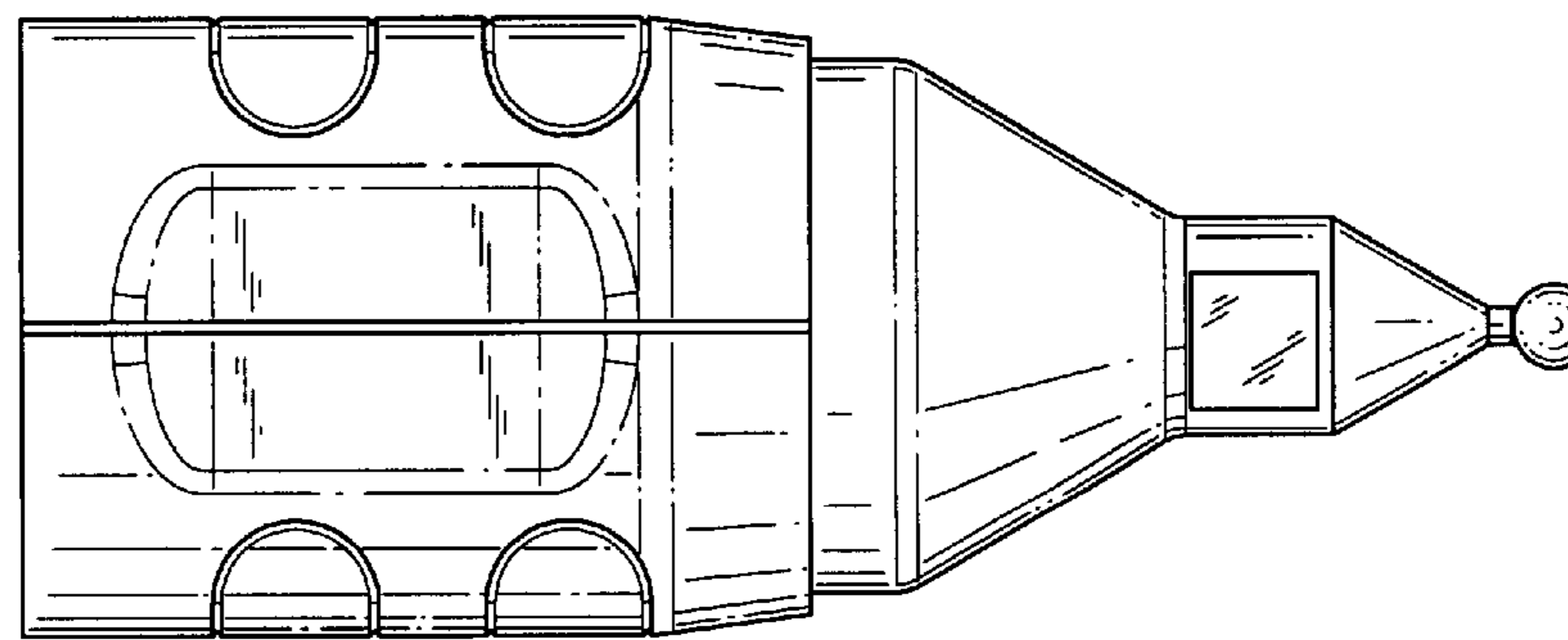


FIG. 6

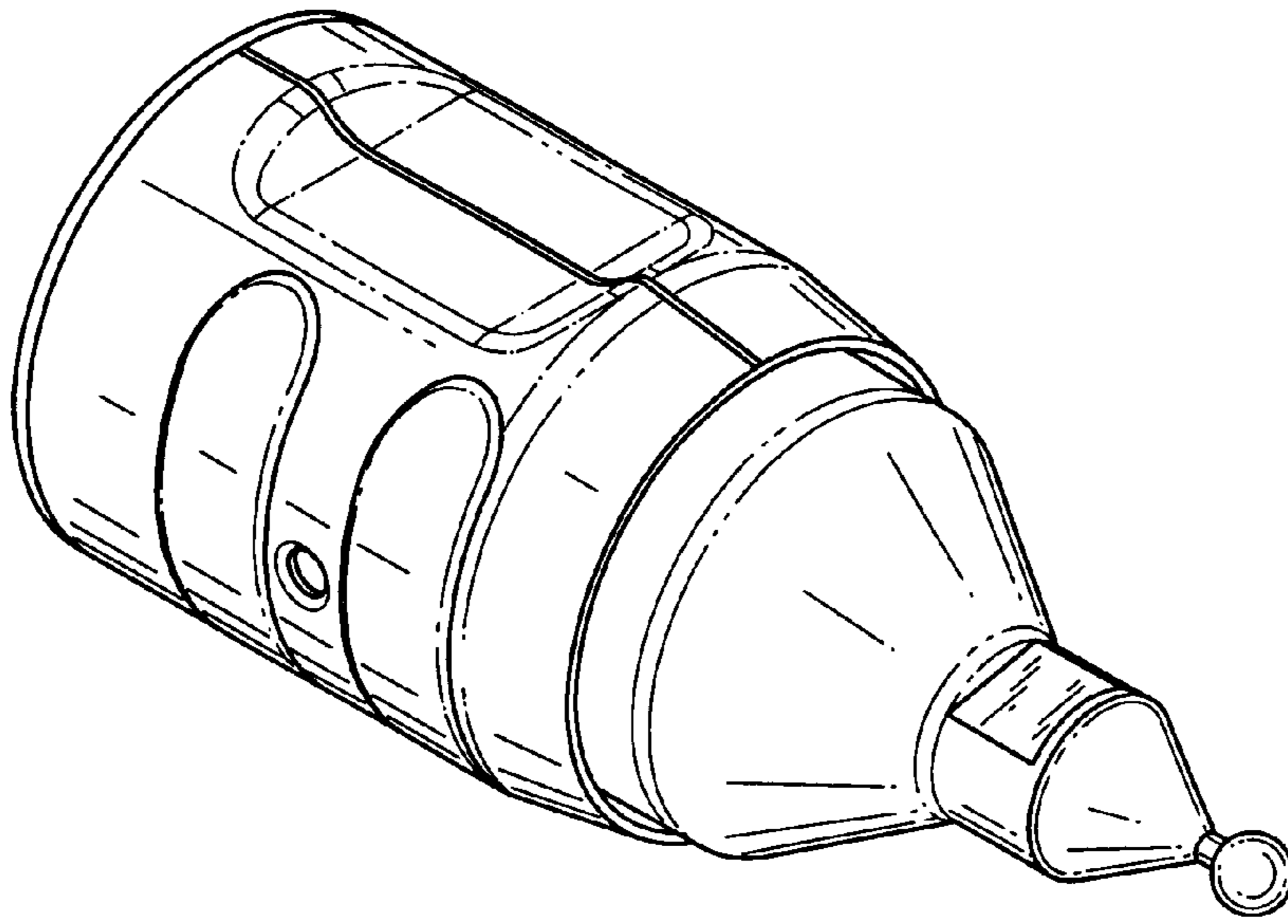


FIG. 7

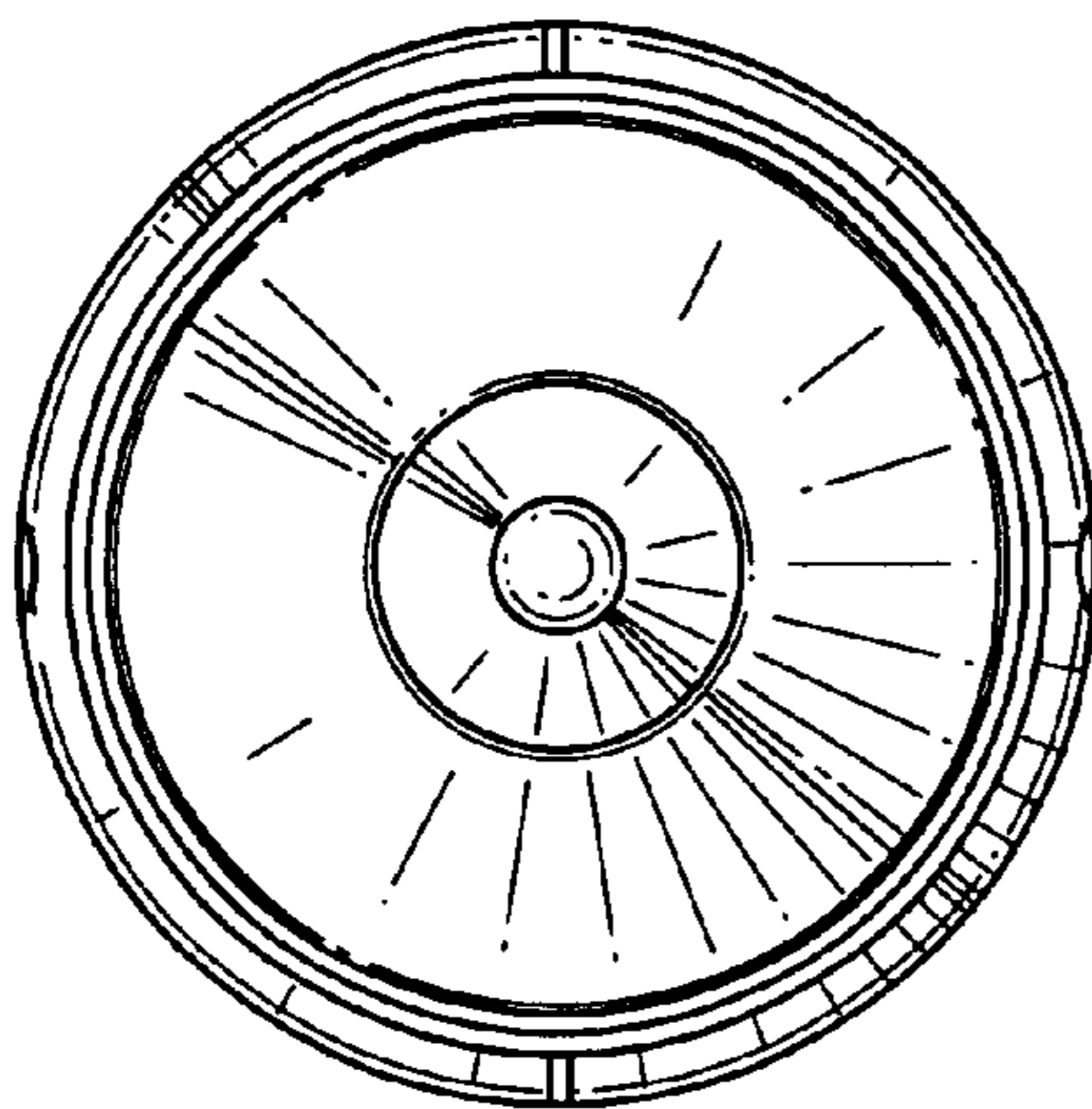


FIG. 8

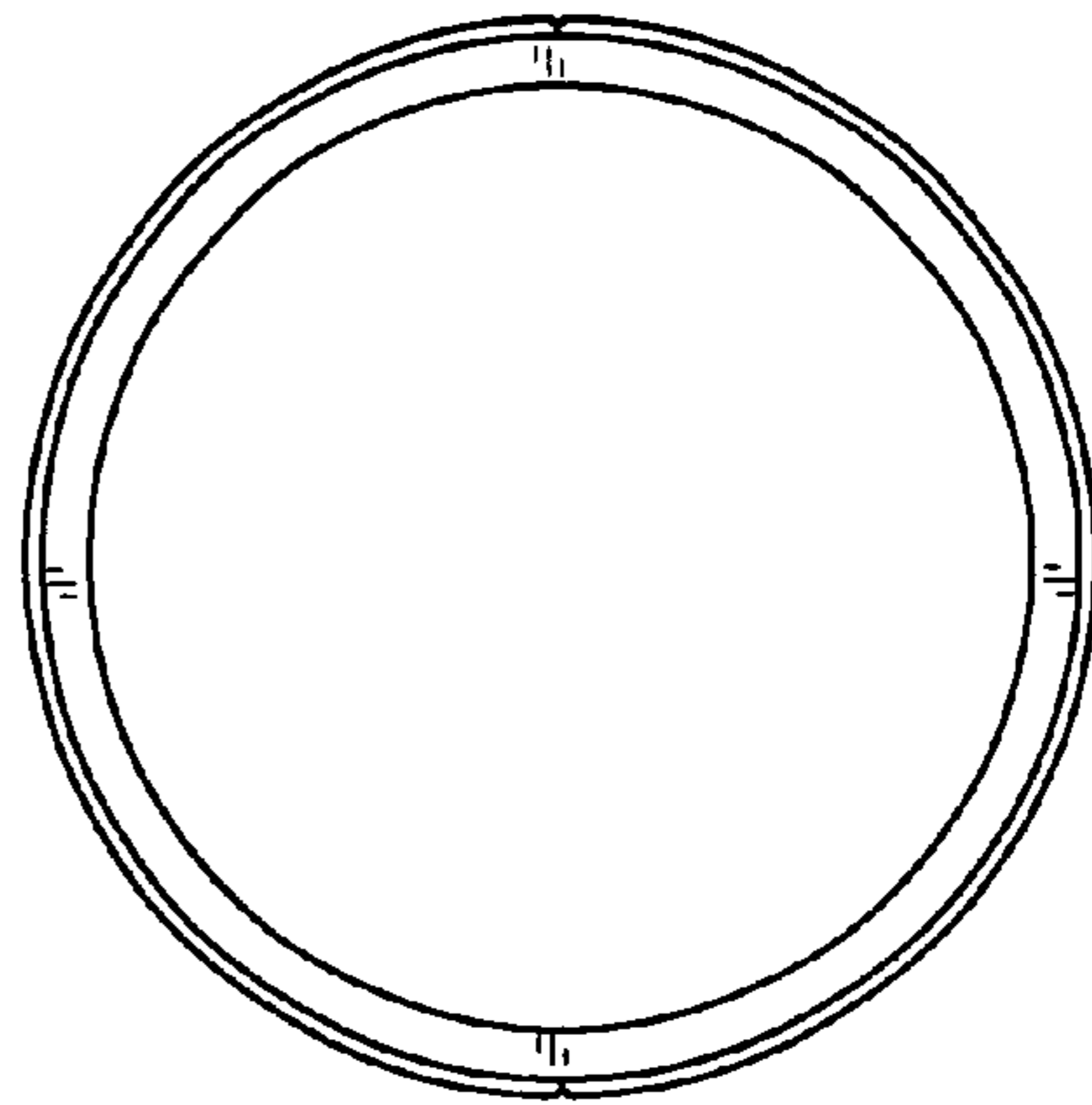


FIG. 9

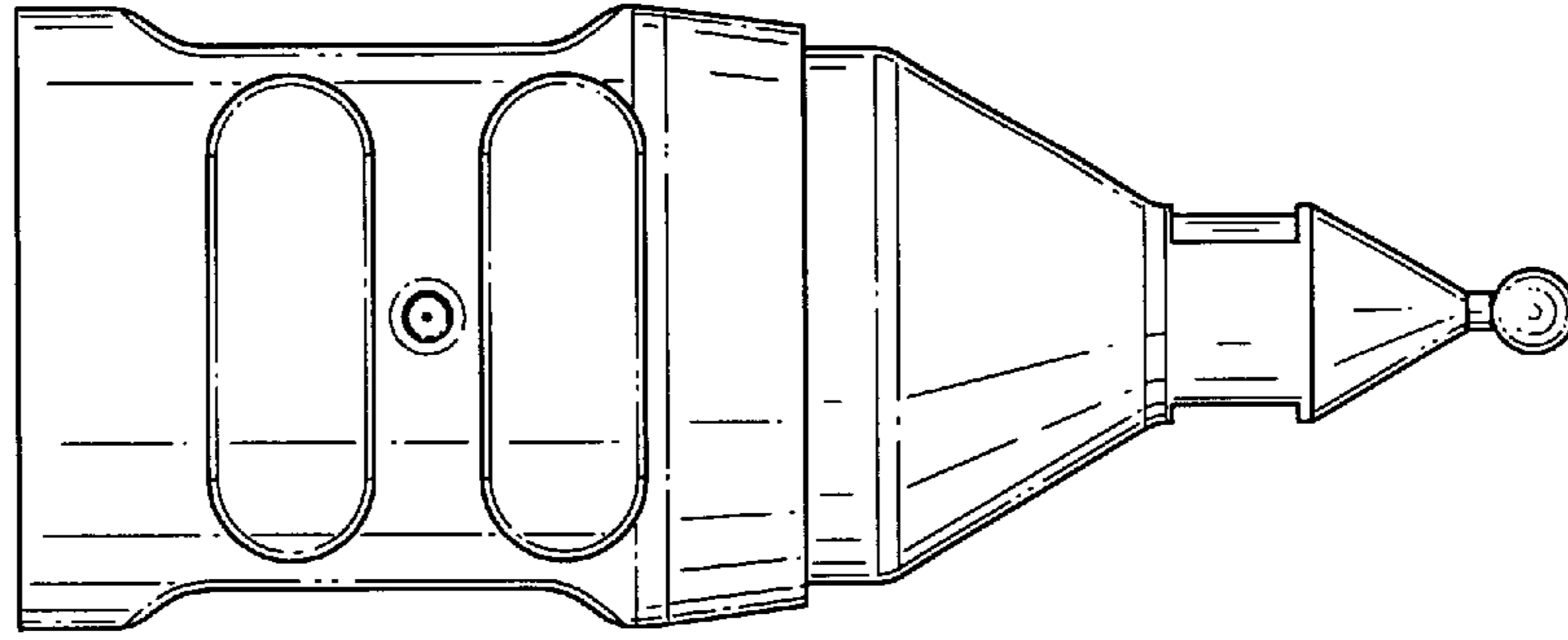


FIG. 10

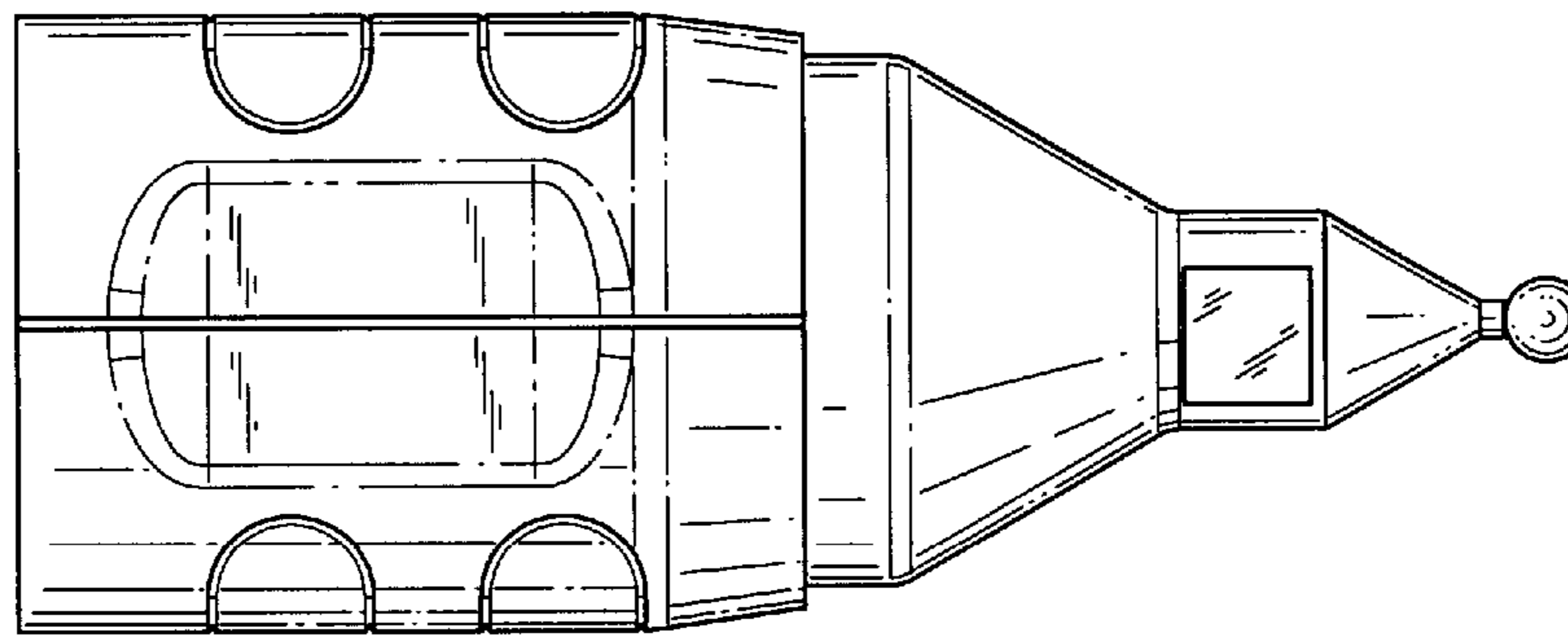


FIG. 11

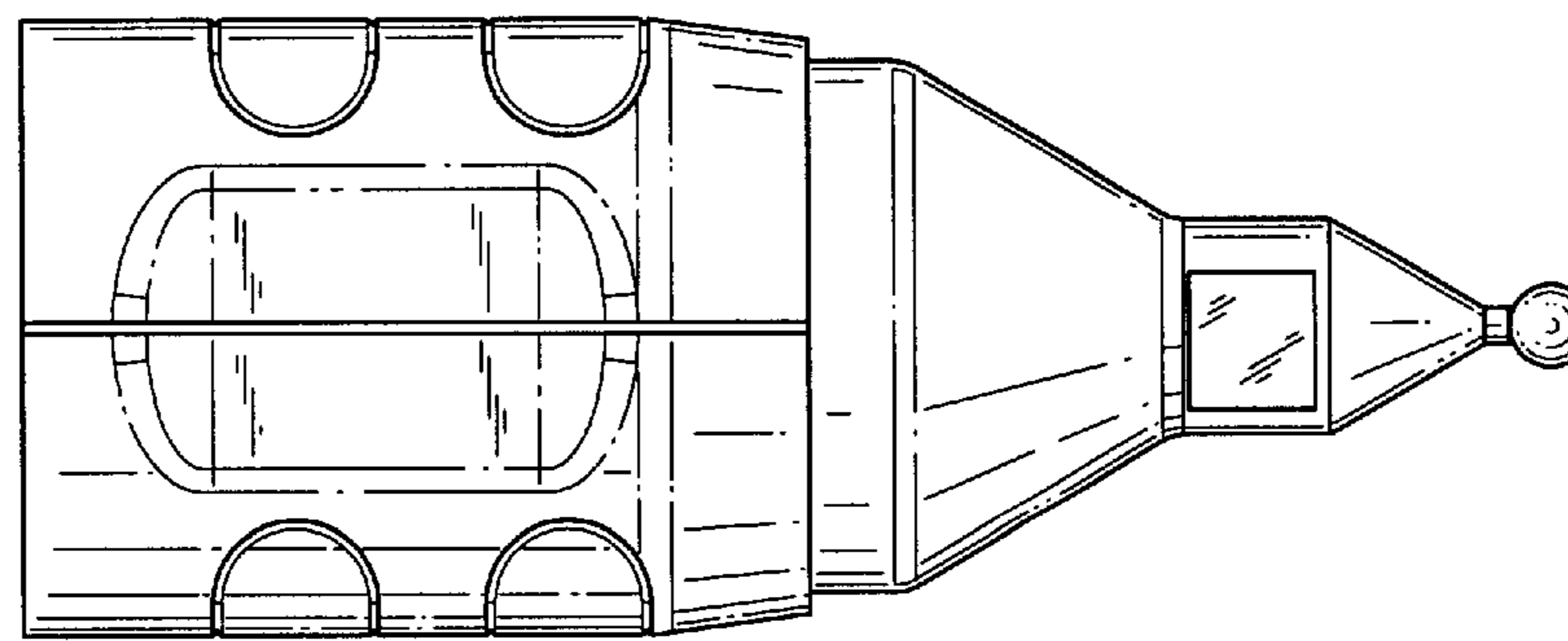


FIG. 12