



US00D518884S

(12) **United States Design Patent** (10) **Patent No.:** **US D518,884 S**
Haneishi (45) **Date of Patent:** **** Apr. 11, 2006**

(54) **HEATING TUBE FOR SEMICONDUCTOR-MAKING FURNACE**

(75) Inventor: **Tomoki Haneishi**, Esashi (JP)

(73) Assignee: **Tokyo Electron Limited**, Tokyo (JP)

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

(21) Appl. No.: **29/182,226**

(22) Filed: **May 22, 2003**

(30) **Foreign Application Priority Data**

Nov. 22, 2002 (JP) 2002-032298

(51) **LOC (8) Cl.** **23-03**

(52) **U.S. Cl.** **D23/386**

(58) **Field of Classification Search** 126/110,
126/106, 109, 102, 114; 34/247; 432/209;
D9/549, 575; D23/398, 386

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 1,468,536 A * 9/1923 Lawter et al. 110/302
D234,940 S * 4/1975 Mezquita D9/523
6,073,622 A * 6/2000 Steimer 126/19.5
6,568,277 B1 * 5/2003 Emin 73/729.2

* cited by examiner

Primary Examiner—Robert M. Spear
Assistant Examiner—Susan Bennett Hattan
(74) *Attorney, Agent, or Firm*—Ladas and Parry LLP

(57) **CLAIM**

I claim the ornamental design for heating tube for semiconductor-making furnace, as shown and described.

DESCRIPTION

FIG. 1 is a front elevational view of a first embodiment of a heating tube for semiconductor-making furnace showing my new design;

FIG. 2 is a rear elevational view thereof;

FIG. 3 is a left-side elevational view thereof;

FIG. 4 is a right-side elevational view thereof;

FIG. 5 is a top plan view thereof;

FIG. 6 is a bottom plan view thereof;

FIG. 7 is a sectional view on line 7—7 in FIG. 3;

FIG. 8 is a front elevational view of a second embodiment of the heating tube for semiconductor-making furnace;

FIG. 9 is a rear elevational view thereof;

FIG. 10 is a left-side elevational view thereof;

FIG. 11 is a right-side elevational view thereof;

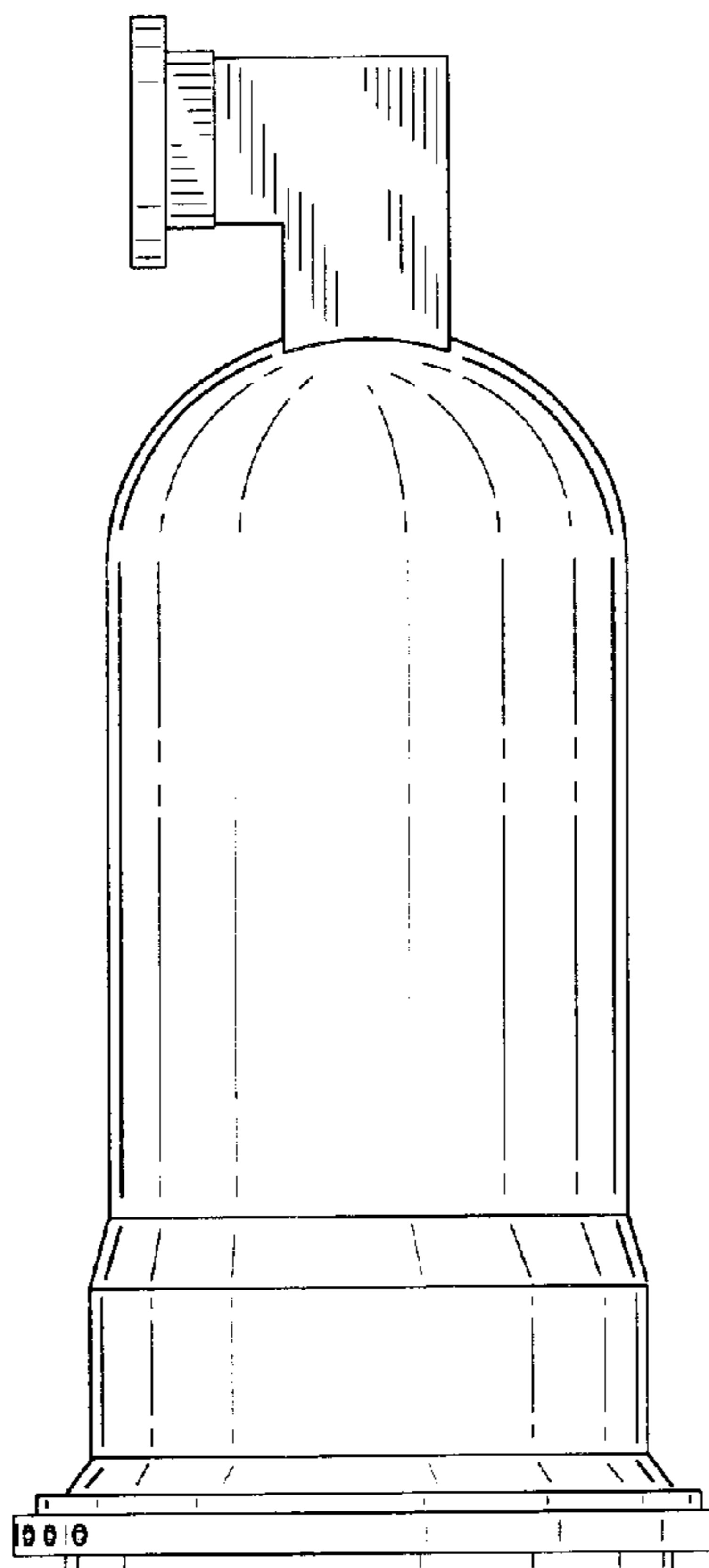
FIG. 12 is a top plan view thereof;

FIG. 13 is a bottom plan view thereof; and,

FIG. 14 is a sectional view on line 14—14 in FIG. 10.

The broken lines are for illustrative purposes only and form no part of the claimed design.

1 Claim, 4 Drawing Sheets



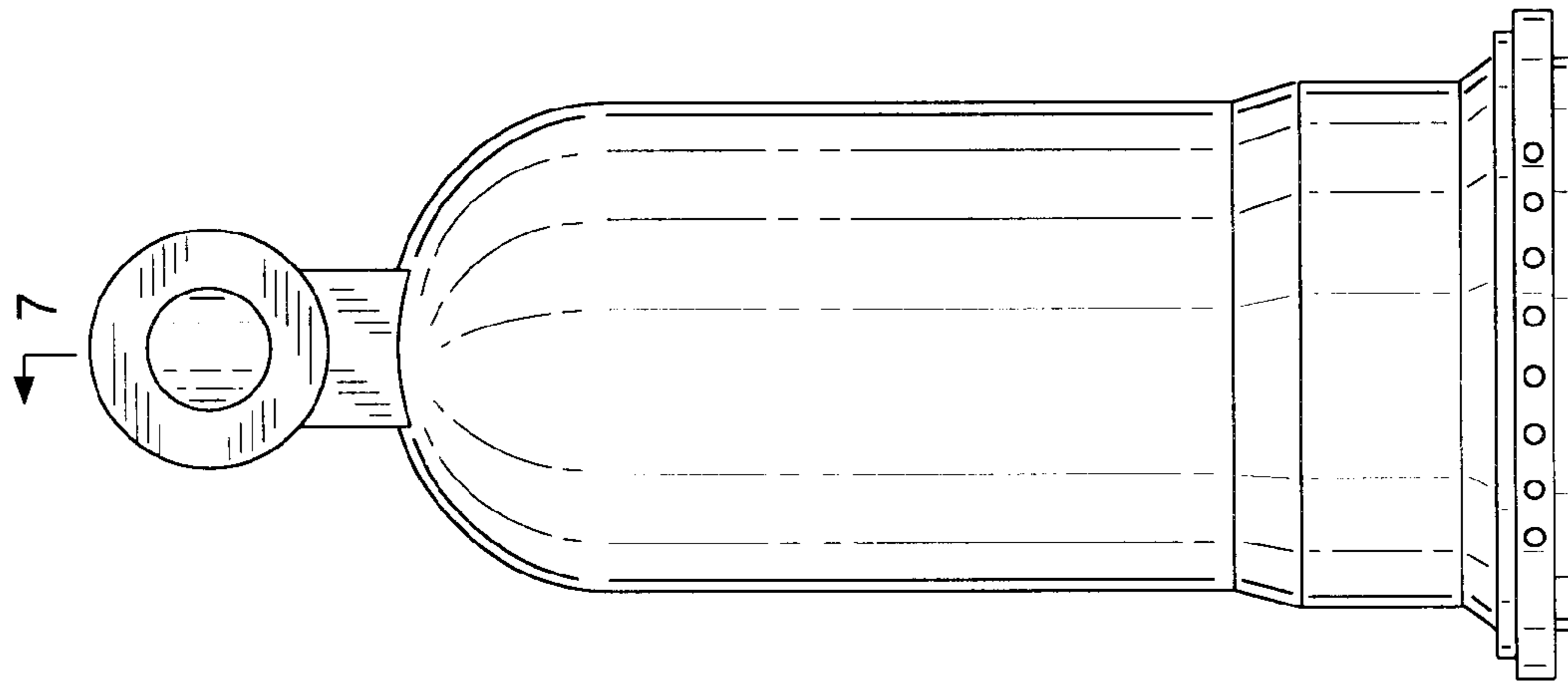


FIG. 3

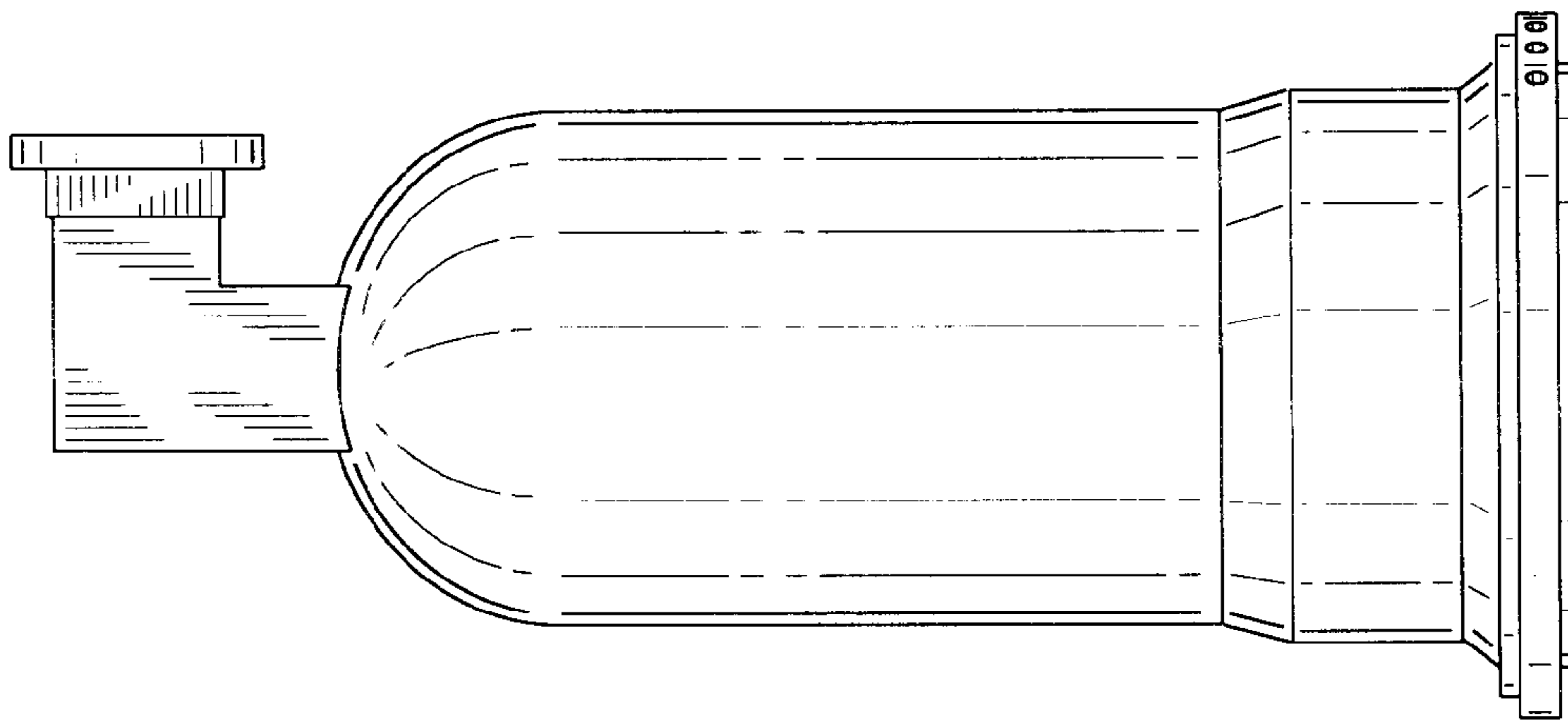


FIG. 2

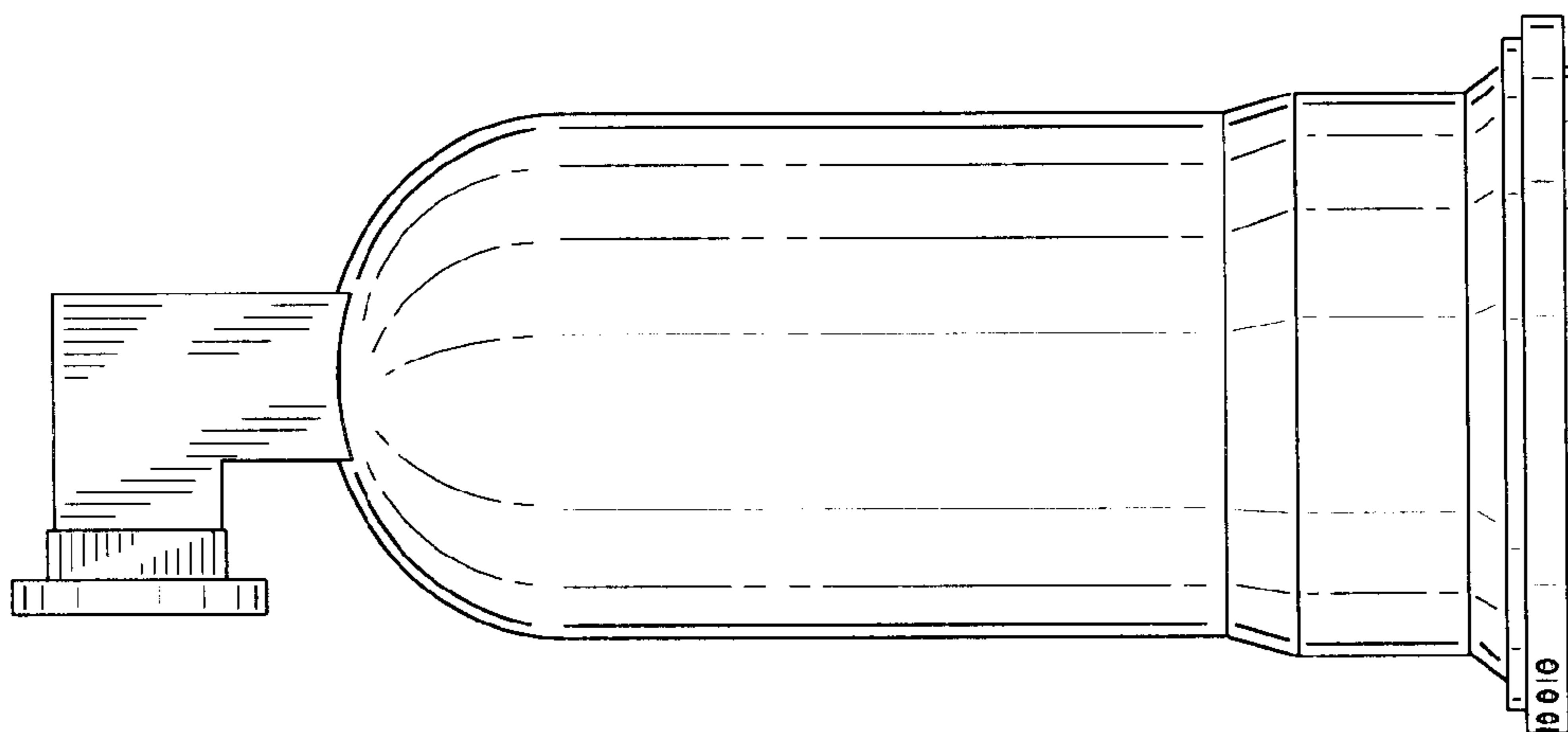


FIG. 1

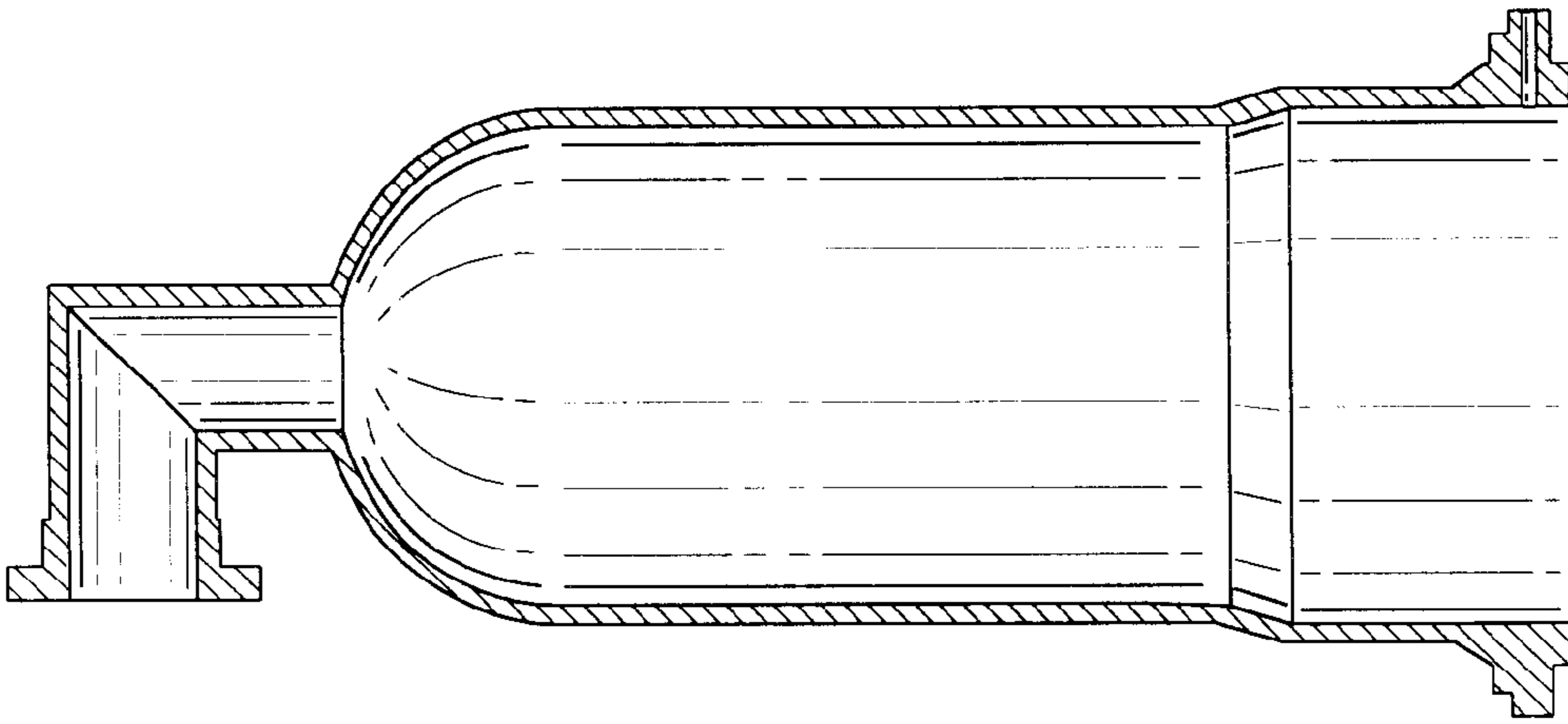


FIG. 7

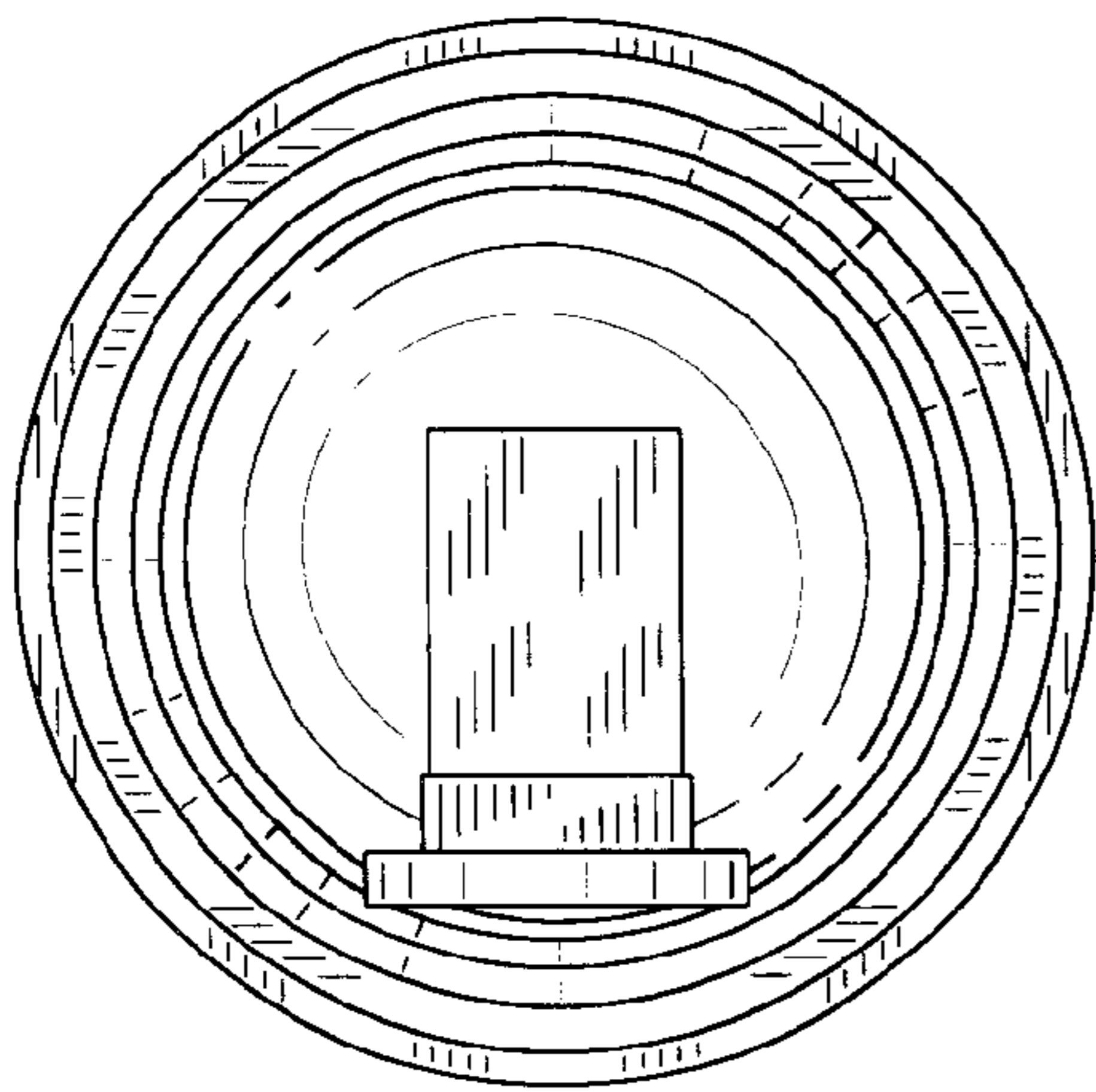


FIG. 5

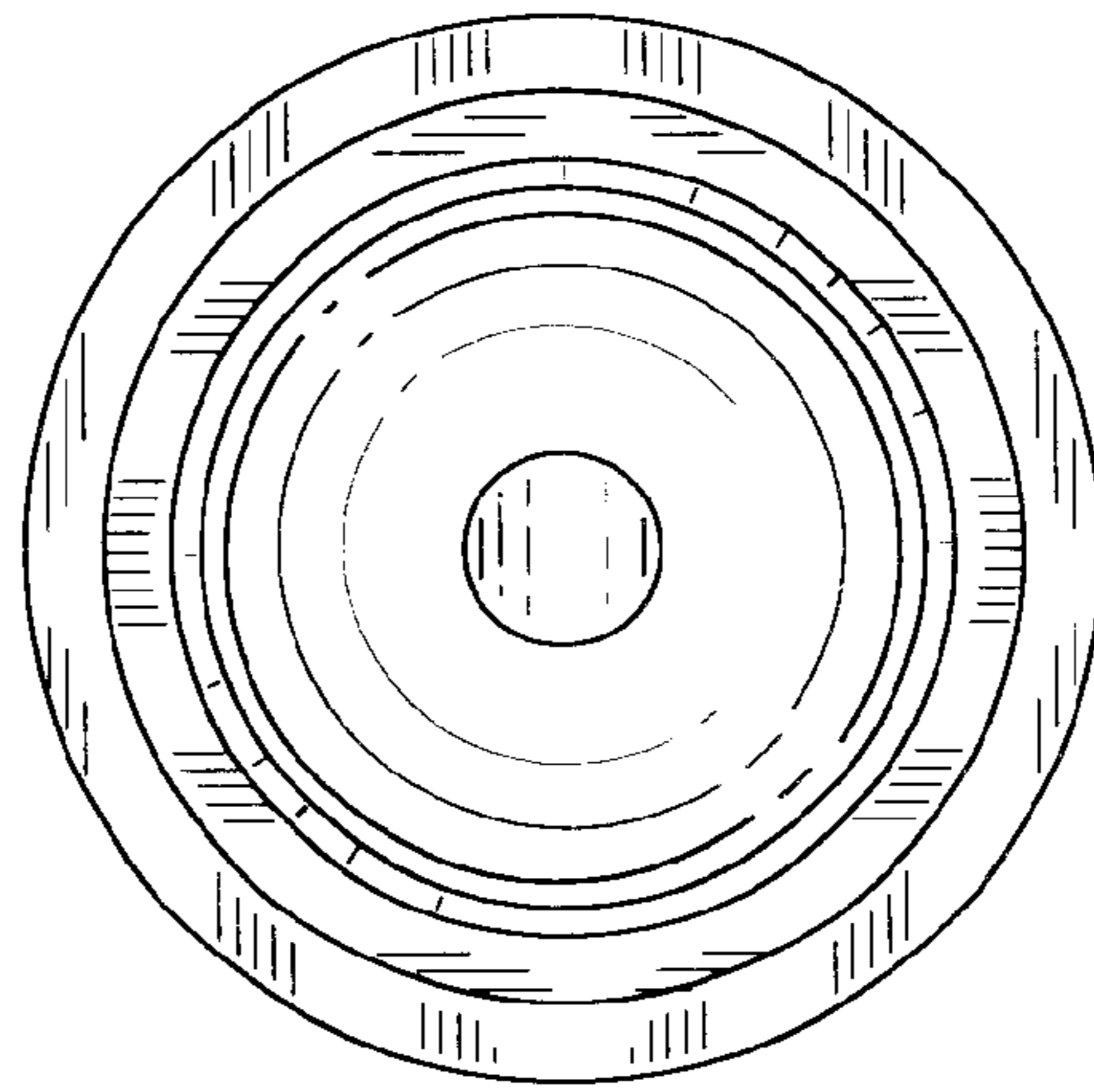


FIG. 6

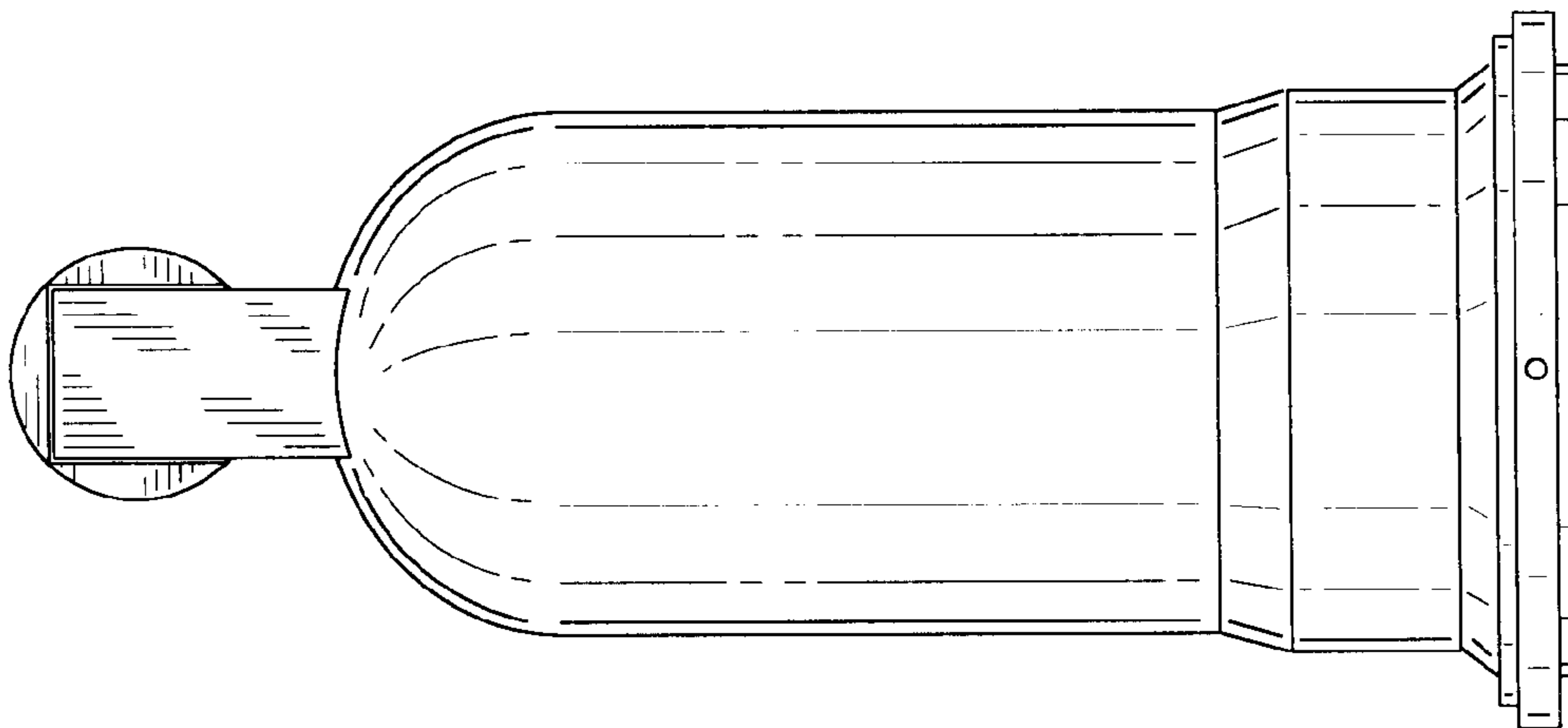


FIG. 4

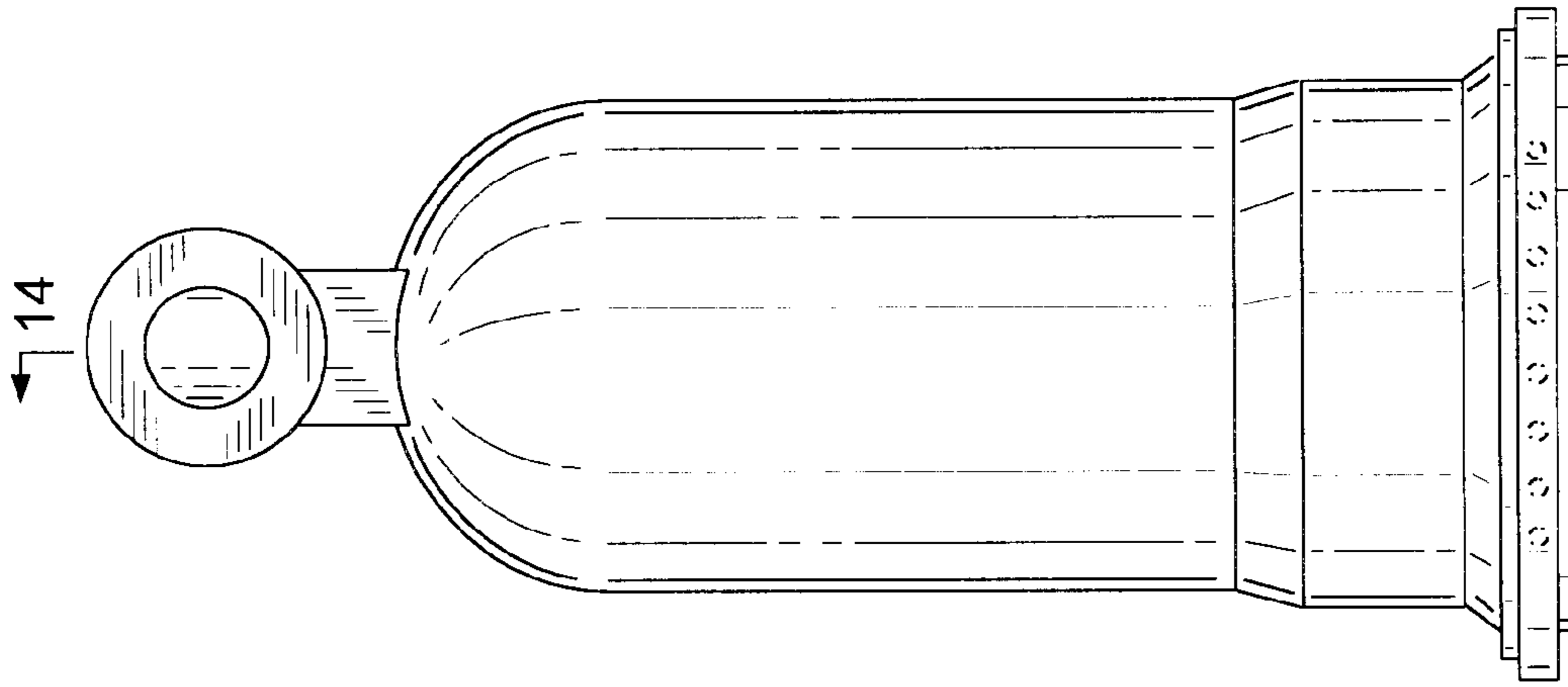


FIG. 10

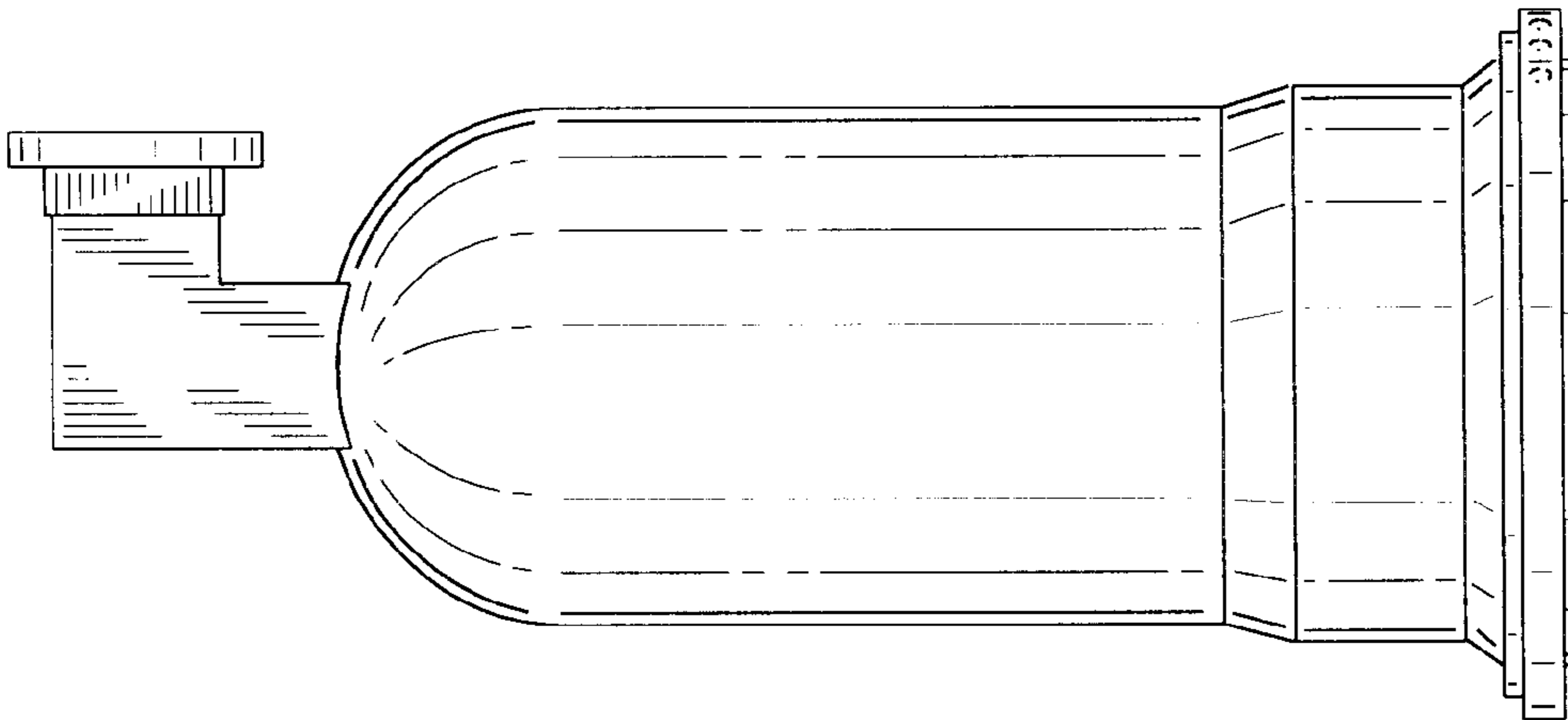


FIG. 9

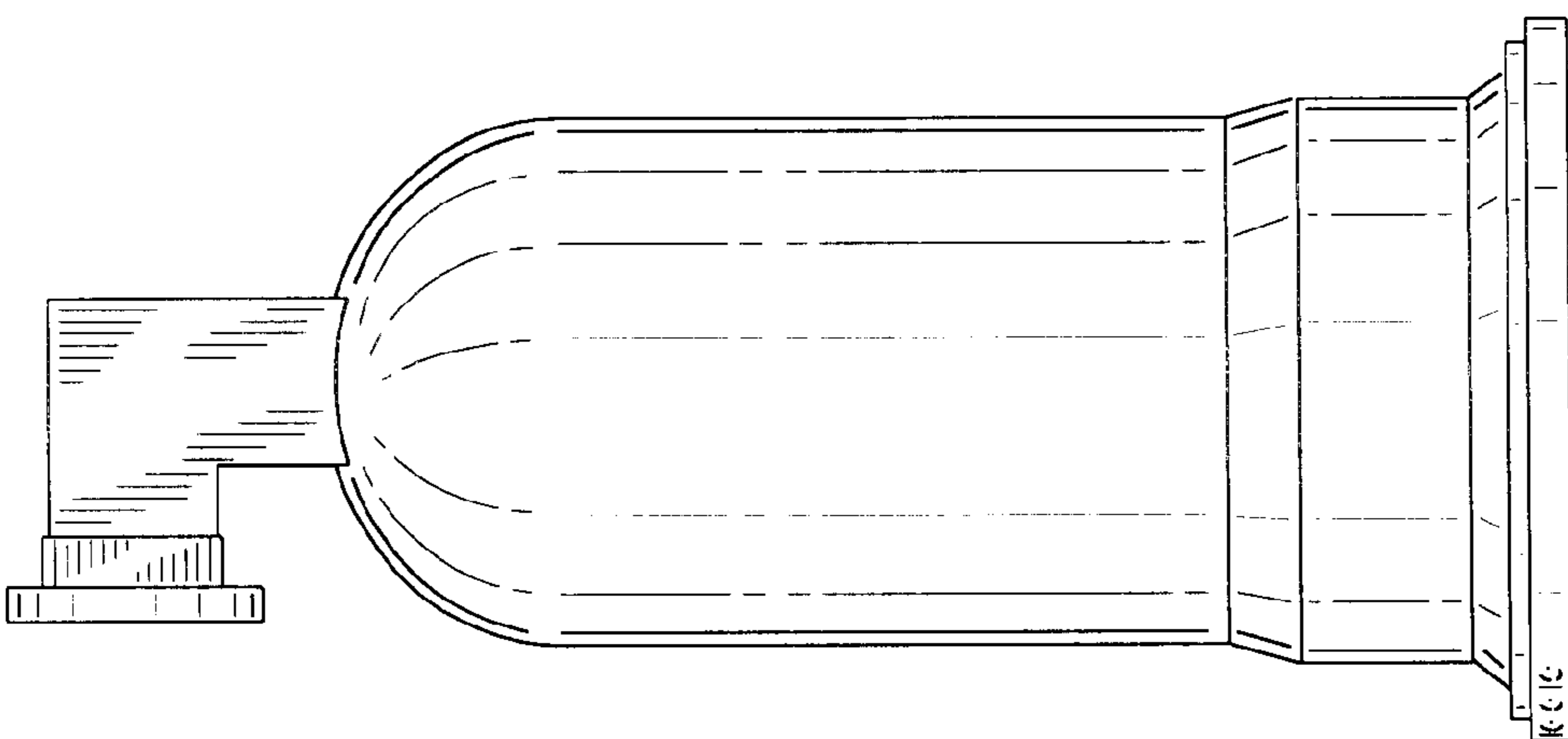


FIG. 8

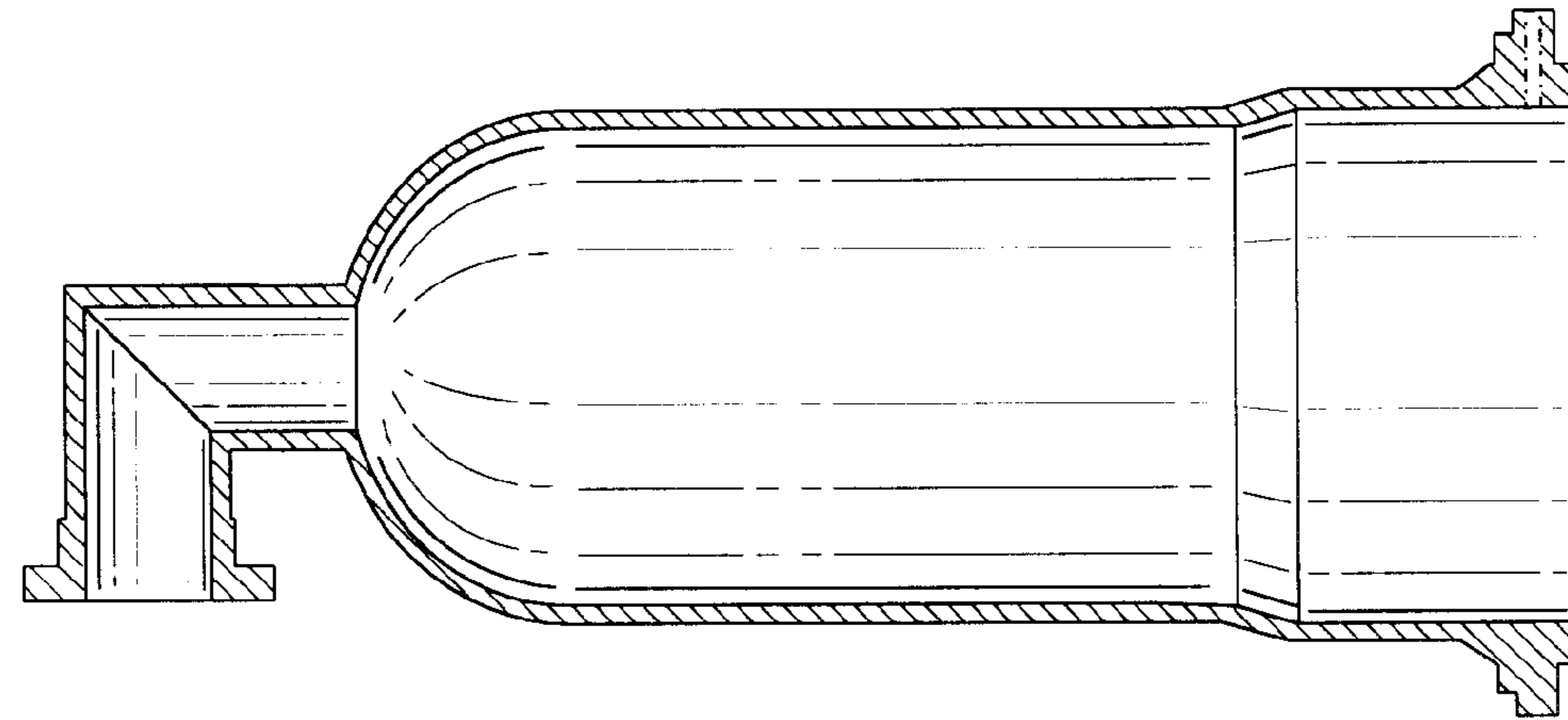


FIG. 14

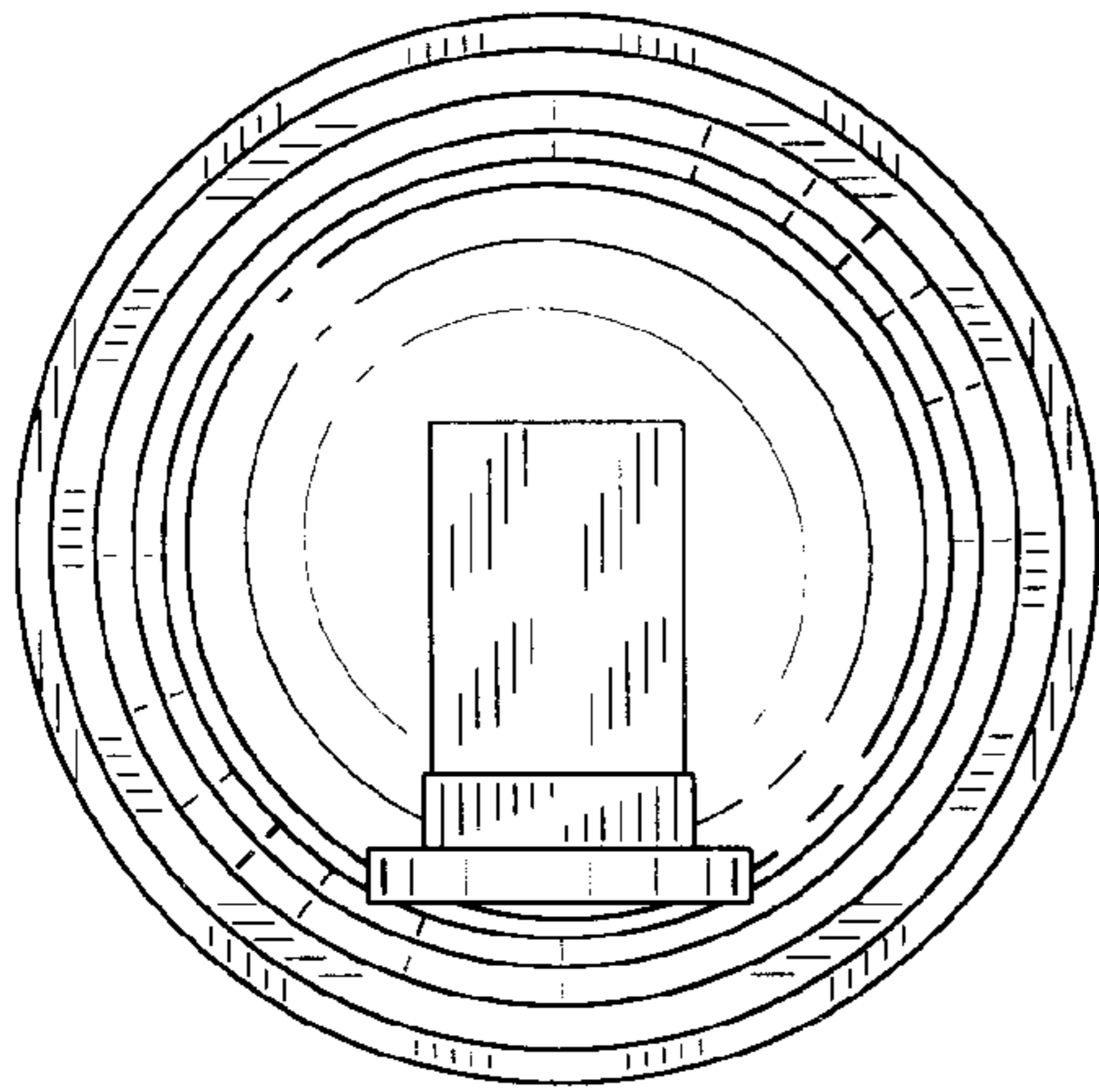


FIG. 12

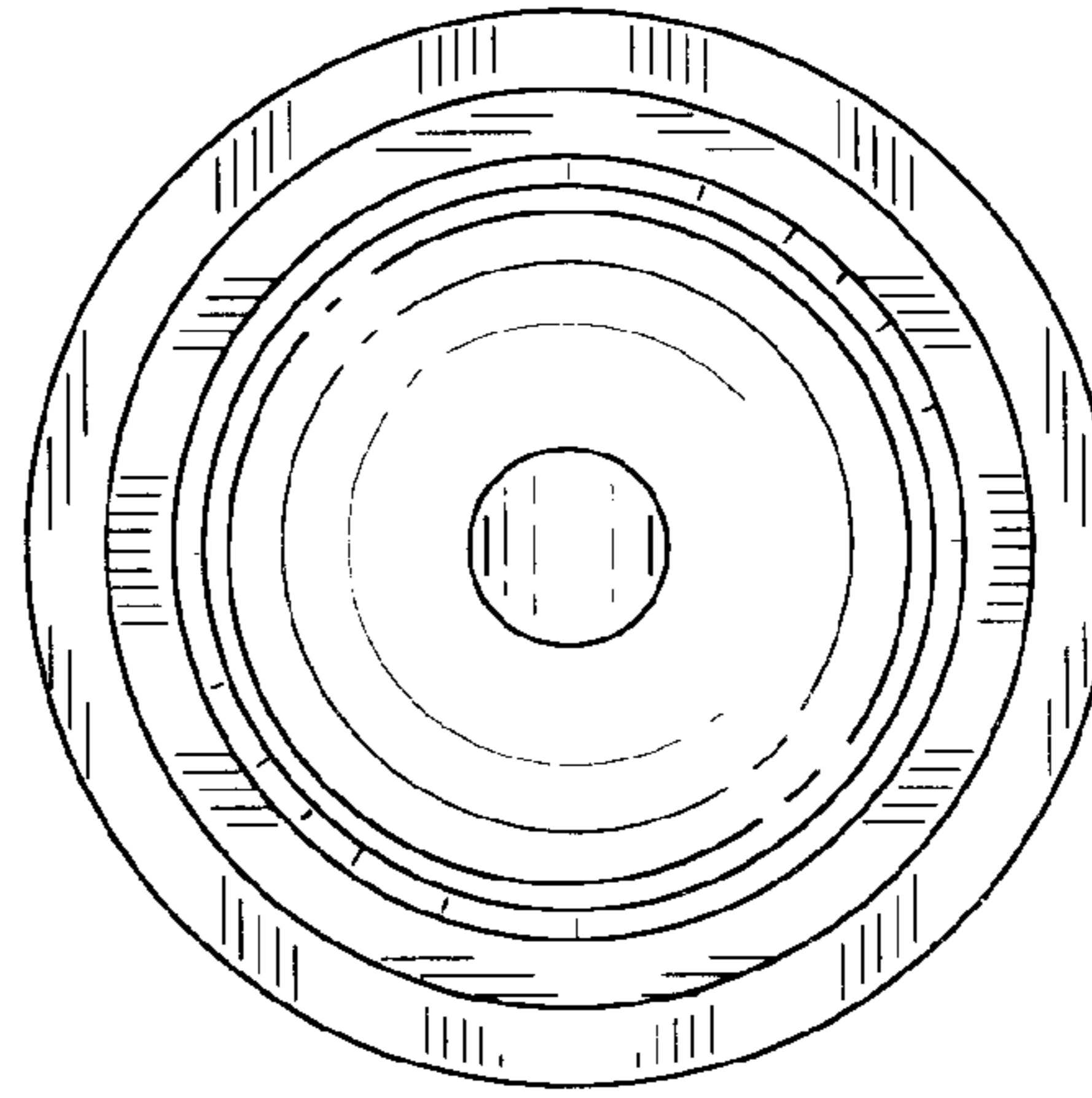


FIG. 13

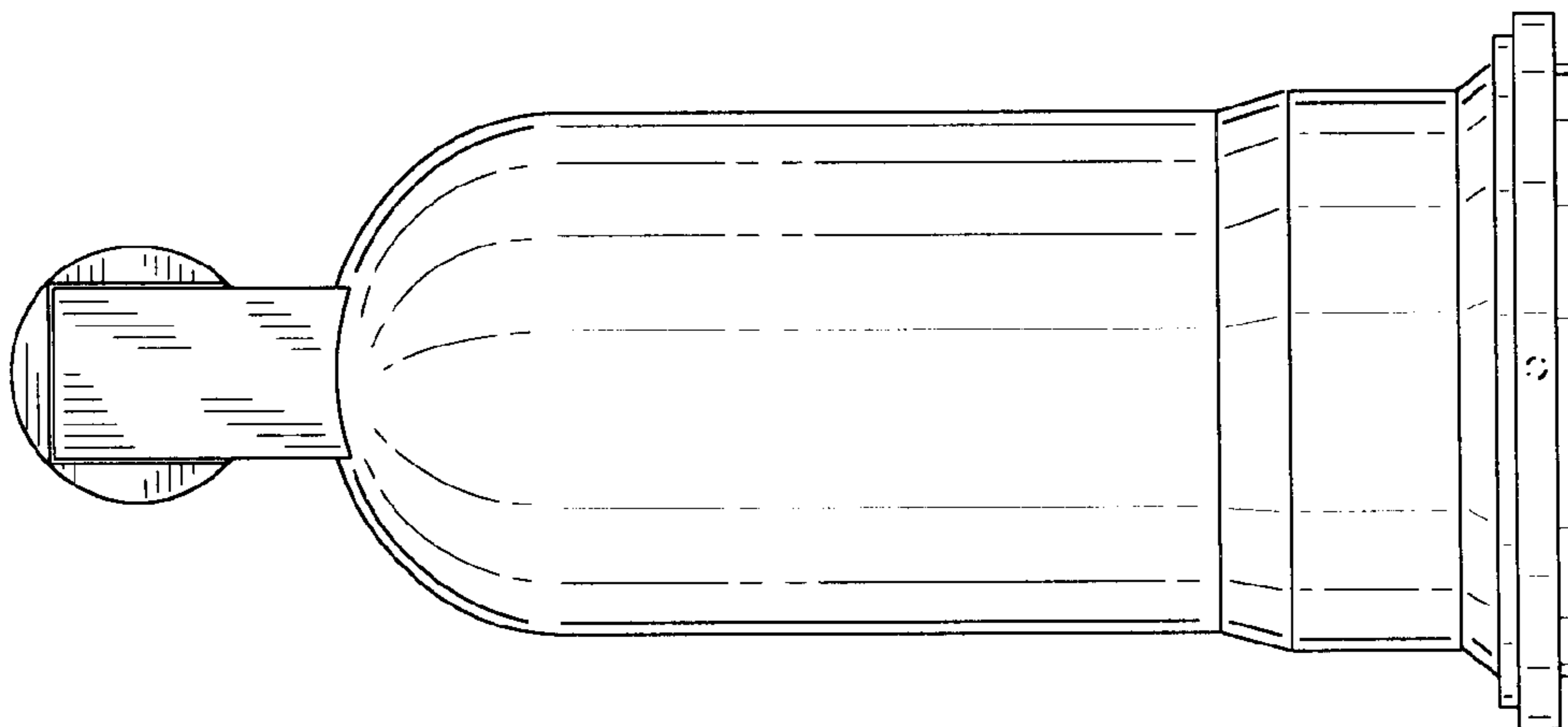


FIG. 11