

US00D691640S

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

(10) **Patent No.:** **US D691,640 S**

(45) **Date of Patent:** **** Oct. 15, 2013**

(54) **VACUUM PUMP**

(71) Applicant: **Shimadzu Corporation**, Kyoto (JP)

(72) Inventor: **Kohei Oue**, Kyoto (JP)

(73) Assignee: **Shimadzu Corporation**, Kyoto (JP)

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

(21) Appl. No.: **29/443,650**

(22) Filed: **Jan. 21, 2013**

(30) **Foreign Application Priority Data**

Nov. 30, 2012 (JP) 2012-029434

(51) **LOC (9) Cl.** **15-02**

(52) **U.S. Cl.**
USPC **D15/7**

(58) **Field of Classification Search**
USPC D15/7-9; D23/231, 232; 417/410.1,
417/359, 415-416, 234, 321, 265, 405, 1,
417/63, 53, 393; D24/107, 108, 111
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D370,916 S * 6/1996 Rozek et al. D15/9
D410,470 S * 6/1999 Filipek et al. D15/7

D498,241 S * 11/2004 Song et al. D15/7
D520,026 S * 5/2006 Hulks D15/9
D537,844 S * 3/2007 Chu D15/9
D541,815 S * 5/2007 Drummond, Jr. D15/7
D543,556 S * 5/2007 Bargiel D15/7
D552,139 S * 10/2007 Cho D15/199
D644,251 S * 8/2011 Serita D15/7

* cited by examiner

Primary Examiner — Ralf Seifert

(74) *Attorney, Agent, or Firm* — Jianq Chyun IP Office

(57) **CLAIM**

The ornamental design for a vacuum pump, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a vacuum pump showing my new design;

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

FIG. 4 is a left side view thereof;

FIG. 5 is a right side view thereof;

FIG. 6 is a top view thereof;

FIG. 7 is a bottom view thereof; and,

FIG. 8 is a cross-sectional view taken along line 8-8 in FIG. 6 with the internal parts omitted thereof.

The broken line portions of the vacuum pump in all views represent unclaimed portions of the claimed design and form no part thereof.

1 Claim, 8 Drawing Sheets



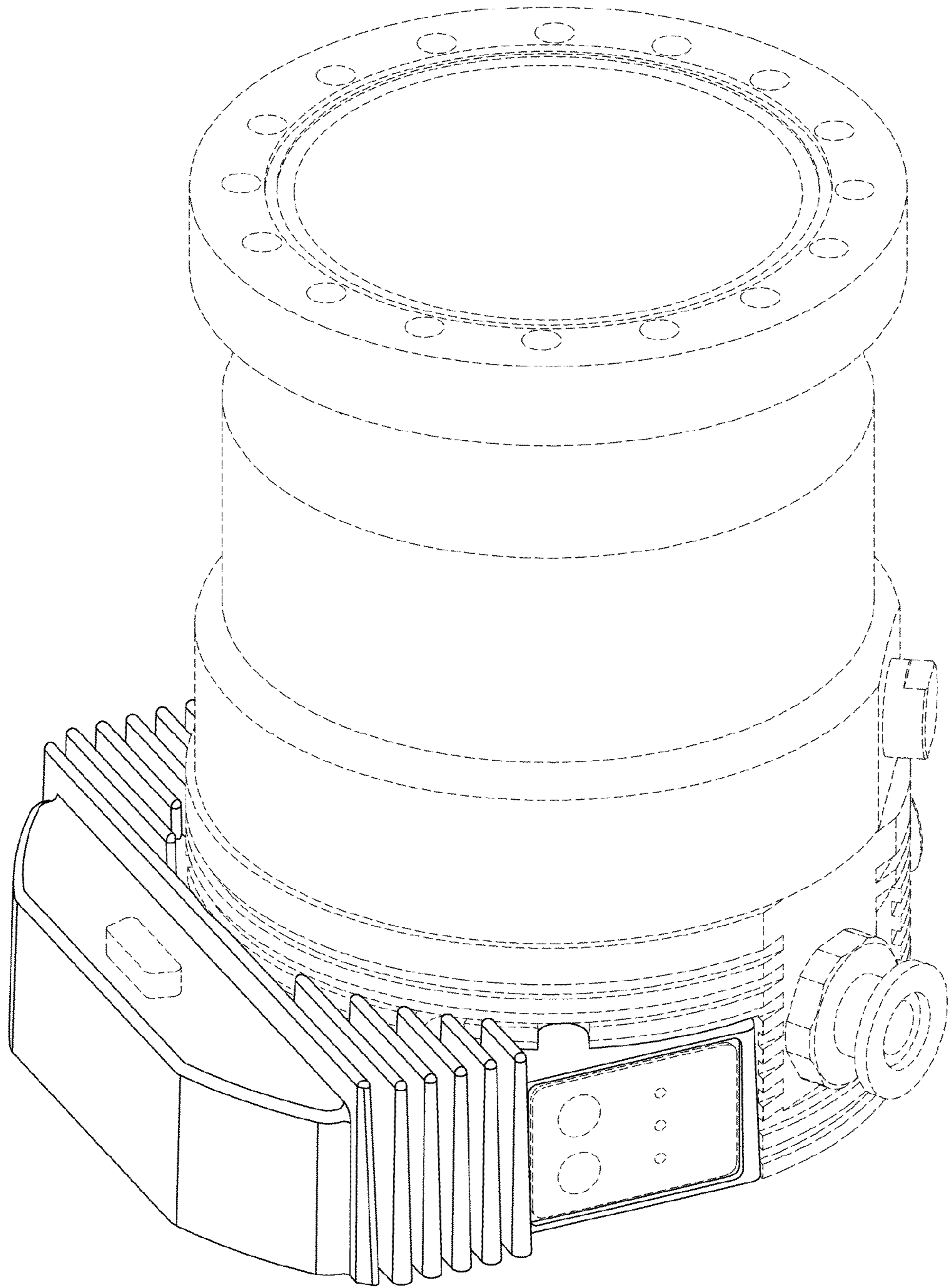


FIG. 1

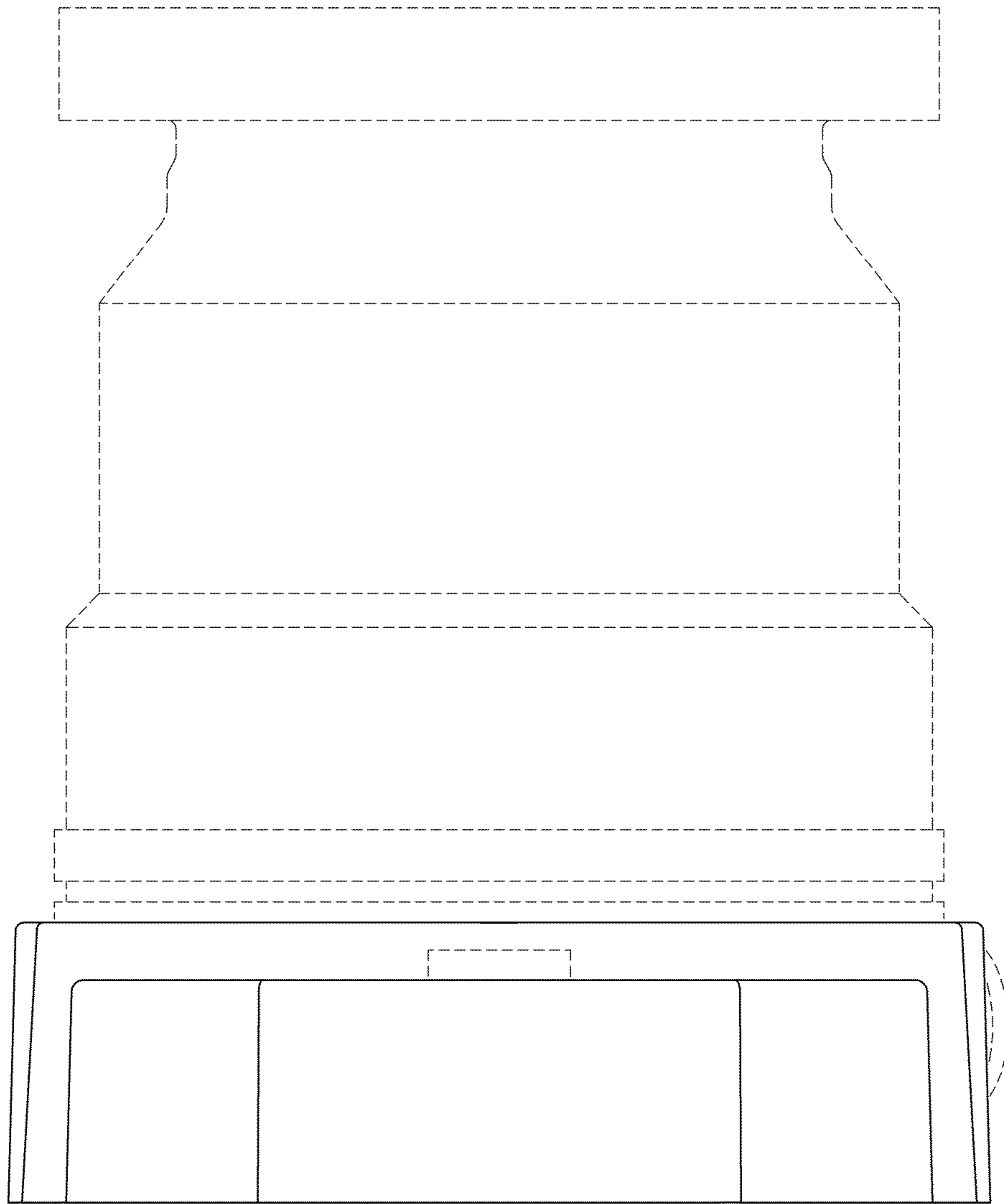


FIG. 2

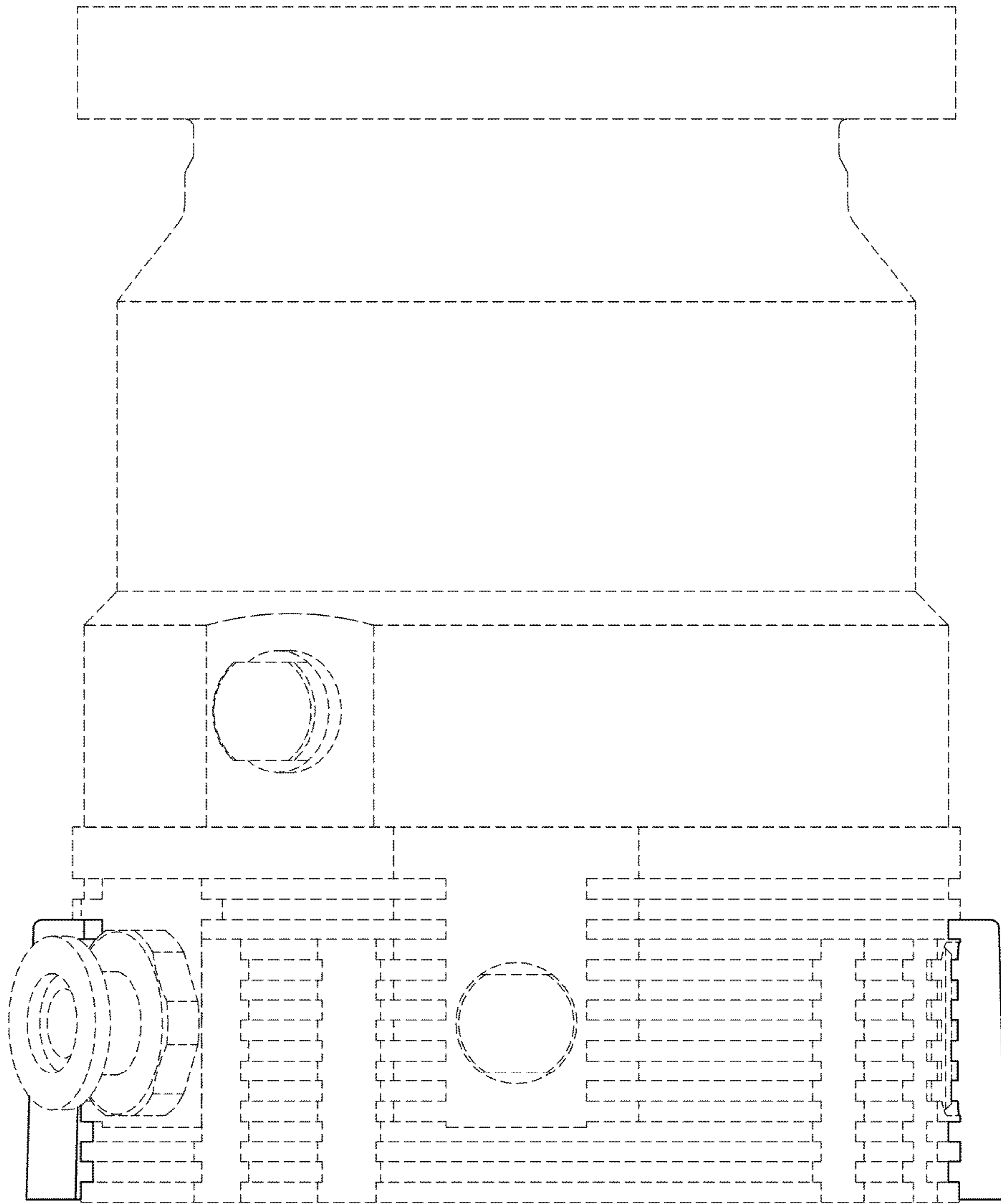


FIG. 3

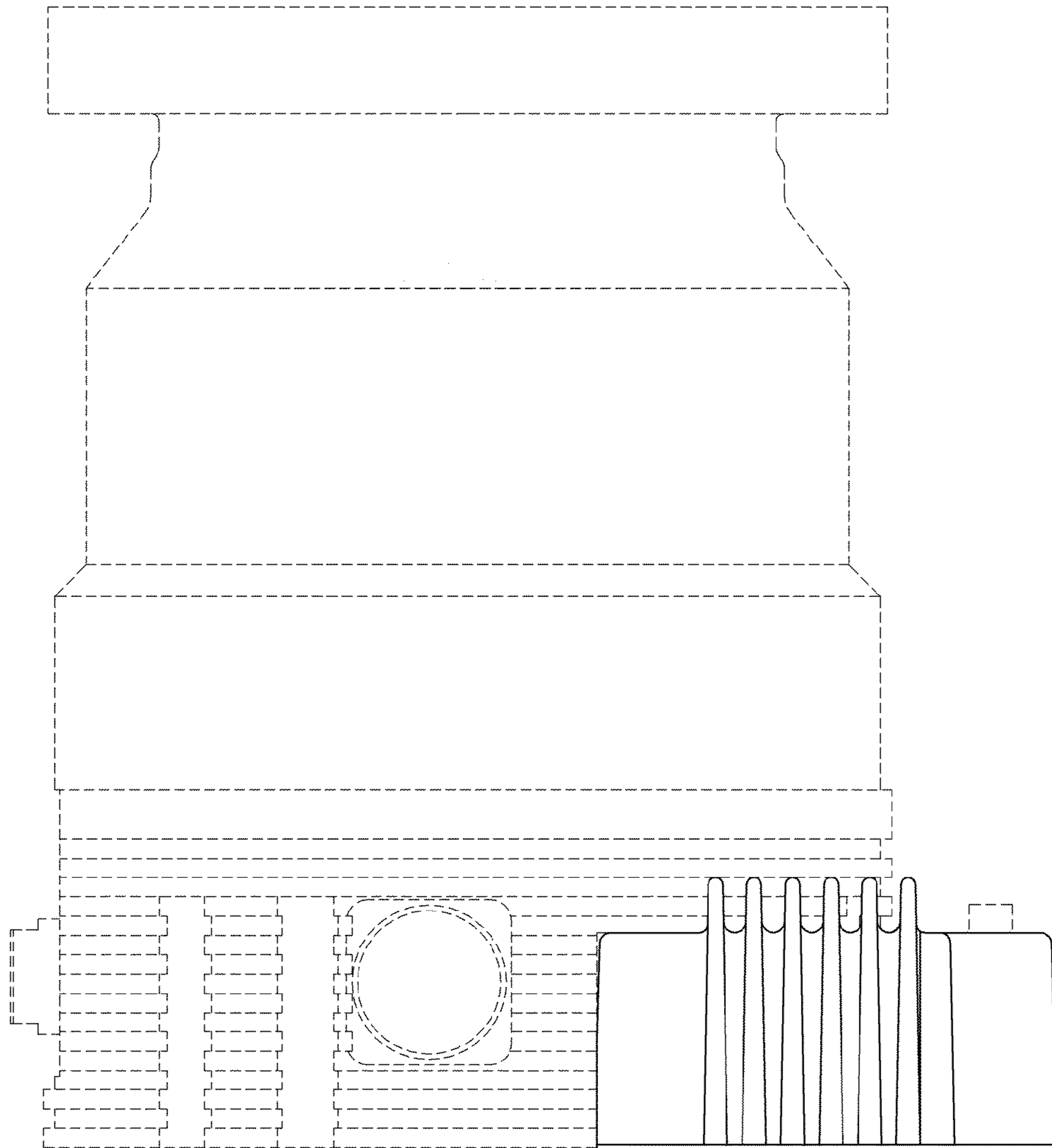


FIG. 4

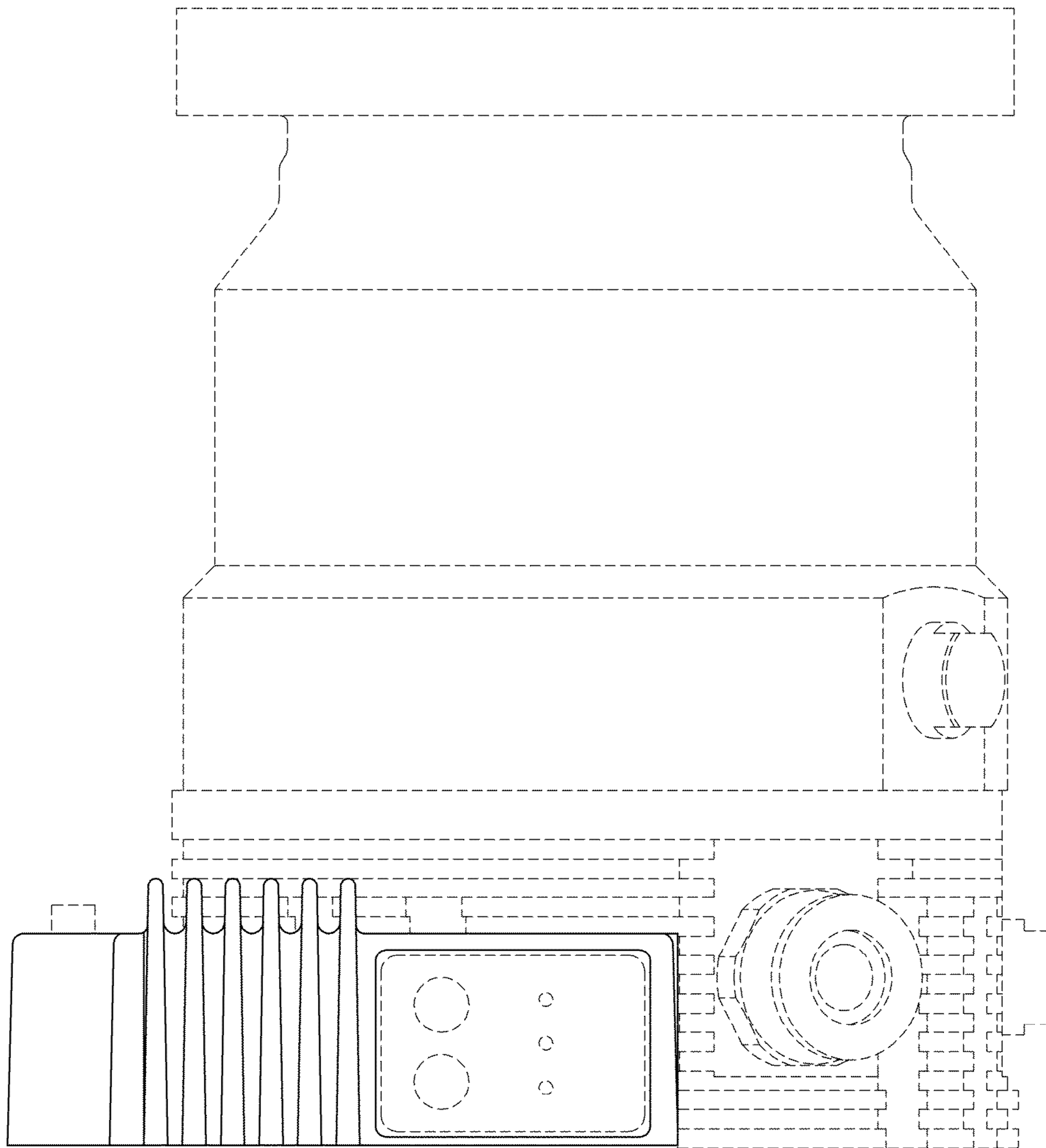


FIG. 5

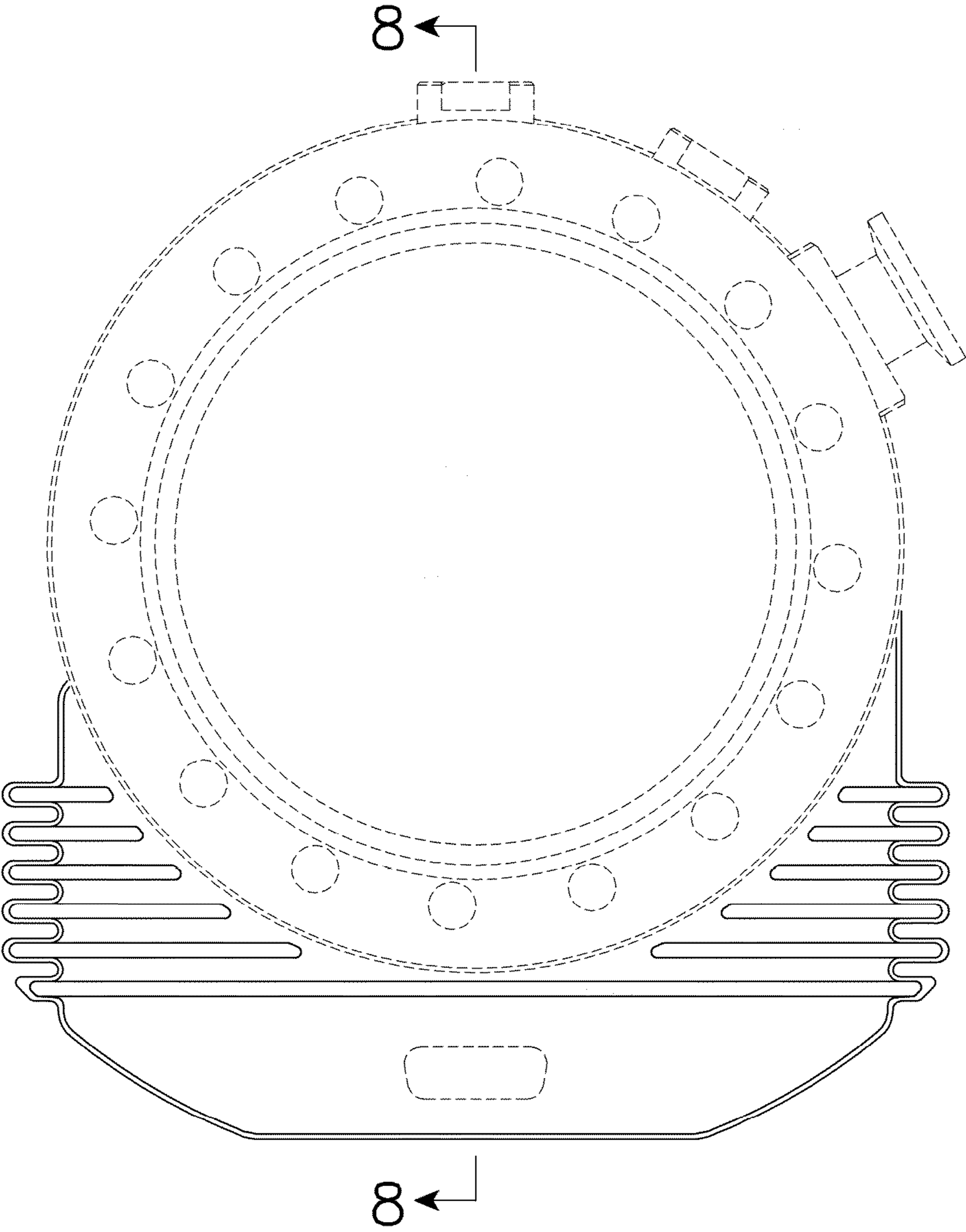


FIG. 6

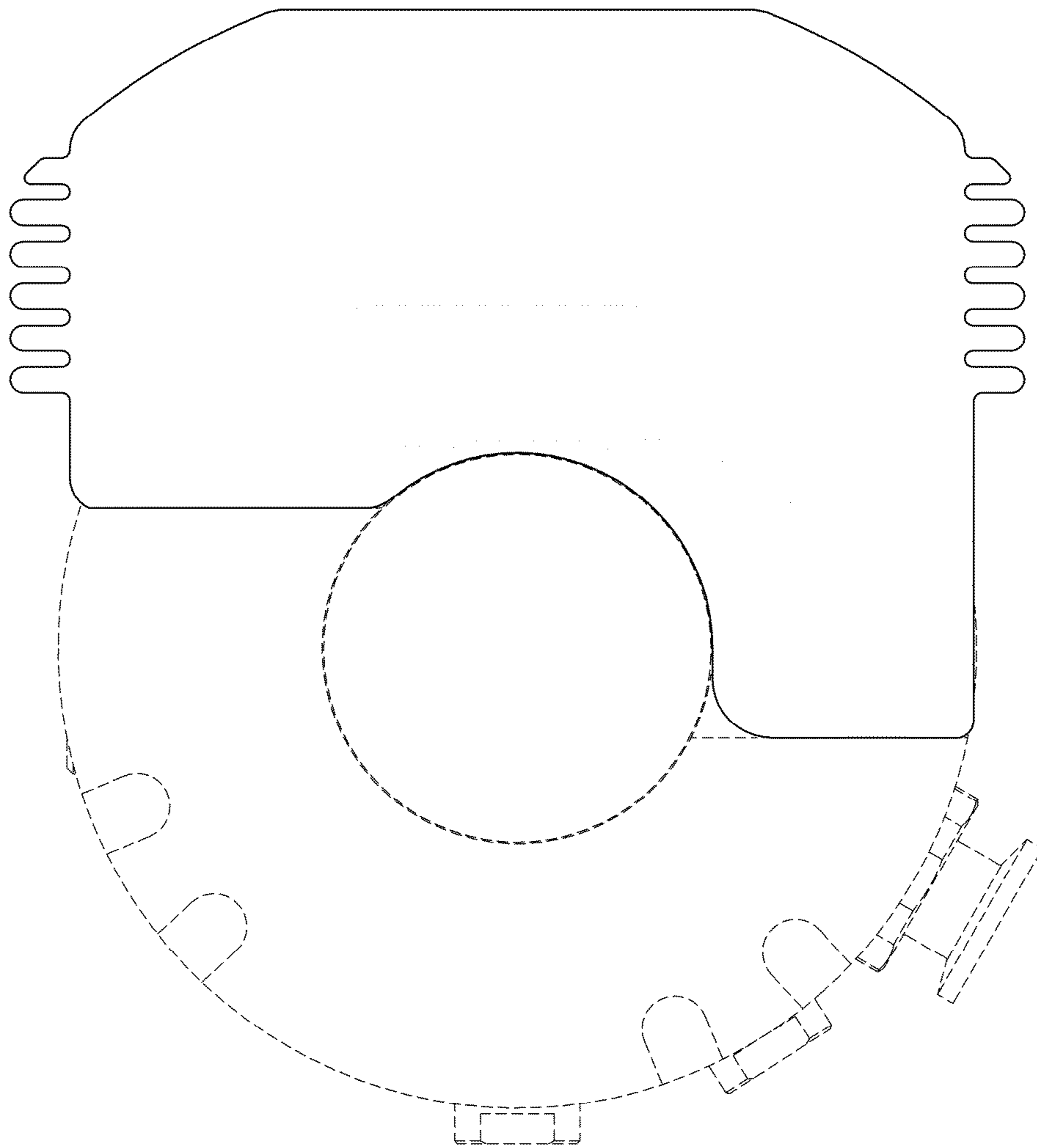


FIG. 7

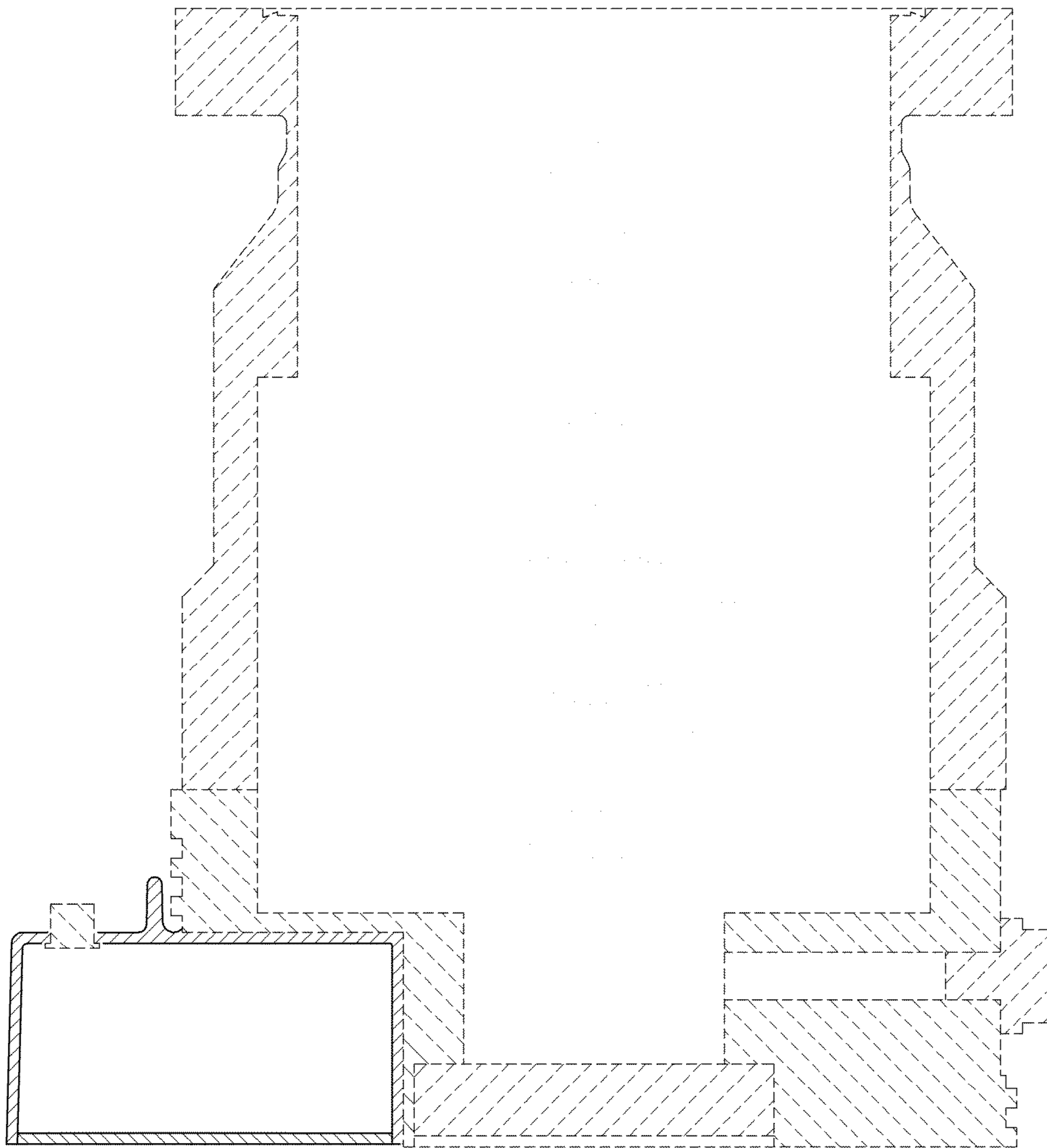


FIG. 8