



US00D829261S

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

(10) **Patent No.:** **US D829,261 S**

(45) **Date of Patent:** **** Sep. 25, 2018**

(54) **VARIABLE FOCAL LENGTH LENS**

(71) Applicant: **MITUTOYO CORPORATION**,
Kawasaki, Kanagawa (JP)

(72) Inventors: **Sadayuki Matsumiya**, Sagamihara
(JP); **Kenji Okabe**, Yokohama (JP);
Tatsuya Nagahama, Kawasaki (JP);
Masaki Okayasu, Tokyo (JP); **Shigeru**
Ohtani, Kawasaki (JP); **Yu Sugai**,
Hadano (JP); **Yoshiro Asano**, Tokyo
(JP)

(73) Assignee: **MITUTOYO CORPORATION**,
Kawasaki (JP)

(**) Term: **15 Years**

(21) Appl. No.: **29/593,541**

(22) Filed: **Feb. 9, 2017**

(30) **Foreign Application Priority Data**

Sep. 21, 2016 (JP) 2016-020355

(51) **LOC (11) Cl.** **16-05**

(52) **U.S. Cl.**
USPC **D16/219**; D16/131

(58) **Field of Classification Search**
USPC D16/200–220, 131
CPC ... G02B 7/02; G02B 7/04; G02B 7/14; G02B
3/14; G03B 17/00; G03B 17/02; G03B
17/56; G03B 17/04; G03B 17/14; G03B
15/03; G03B 9/08; H04N 5/2251; H04N
5/2252; H04N 5/2253; H04N 5/2254;
H04N 7/00; H04N 2101/00; F16M 13/00
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D428,618 S * 7/2000 McBride D16/203
D430,888 S * 9/2000 Adachi D16/203

D493,186 S * 7/2004 Moore D16/202
D541,326 S * 4/2007 Ford D16/203
D695,809 S * 12/2013 Katori D16/203
8,717,413 B2 * 5/2014 Wilson G02B 13/06
348/36
9,256,009 B2 2/2016 Theriault et al.
9,389,343 B2 7/2016 Arnold et al.
D810,169 S * 2/2018 Bhattacharya D16/203
2002/0159146 A1 * 10/2002 Leimbach G02B 21/002
359/388
2013/0321927 A1 12/2013 Arnold et al.
2014/0168752 A1 6/2014 Arnold et al.

(Continued)

OTHER PUBLICATIONS

<http://www.tag-optics.com/index.php>.
<http://www.tag-optics.com/TL2ProductLine.php>.
<http://www.tag-optics.com/Custom.php>.

Primary Examiner — Barbara Fox
Assistant Examiner — Mary C Ramirez
(74) *Attorney, Agent, or Firm* — Oliff PLC

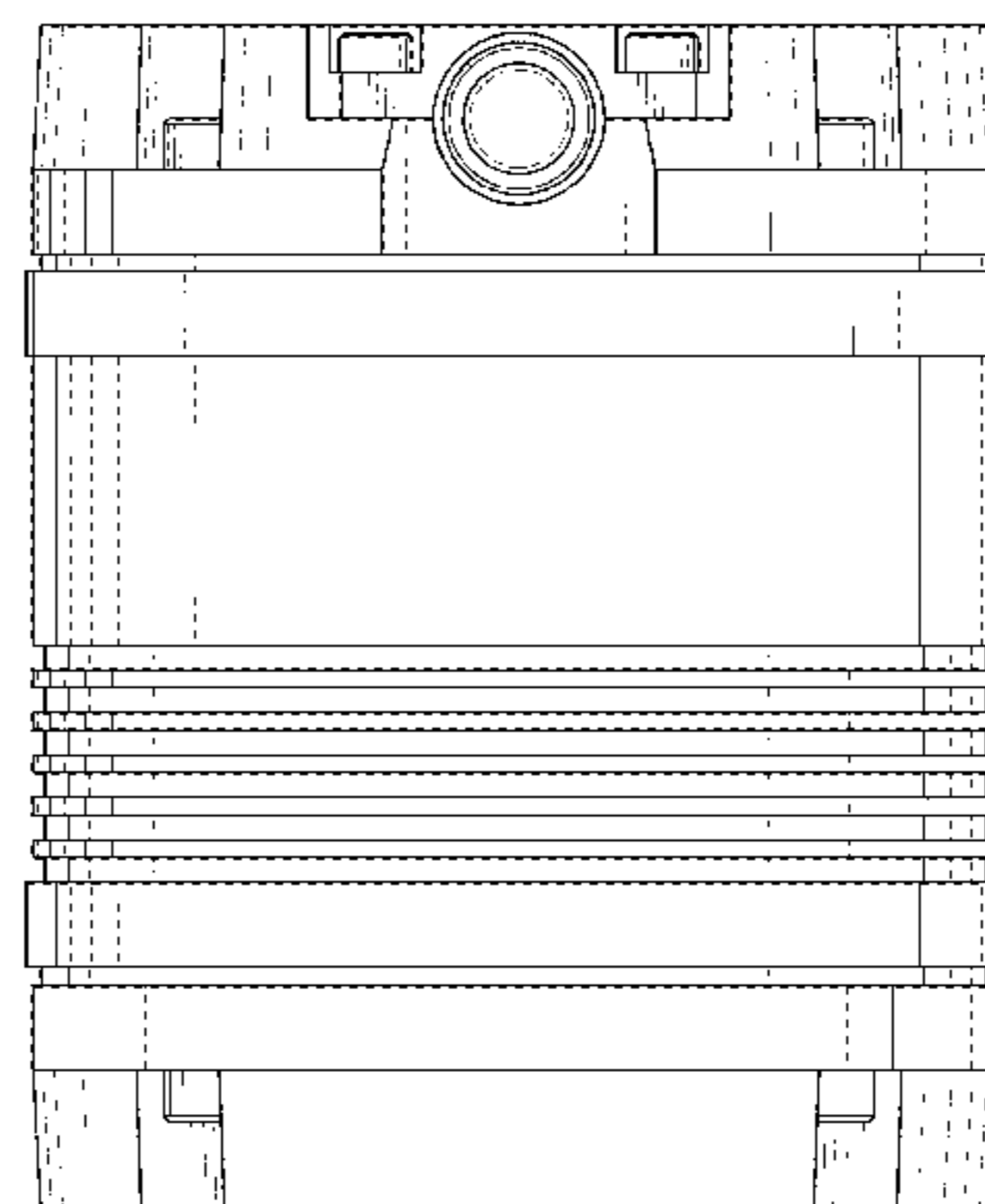
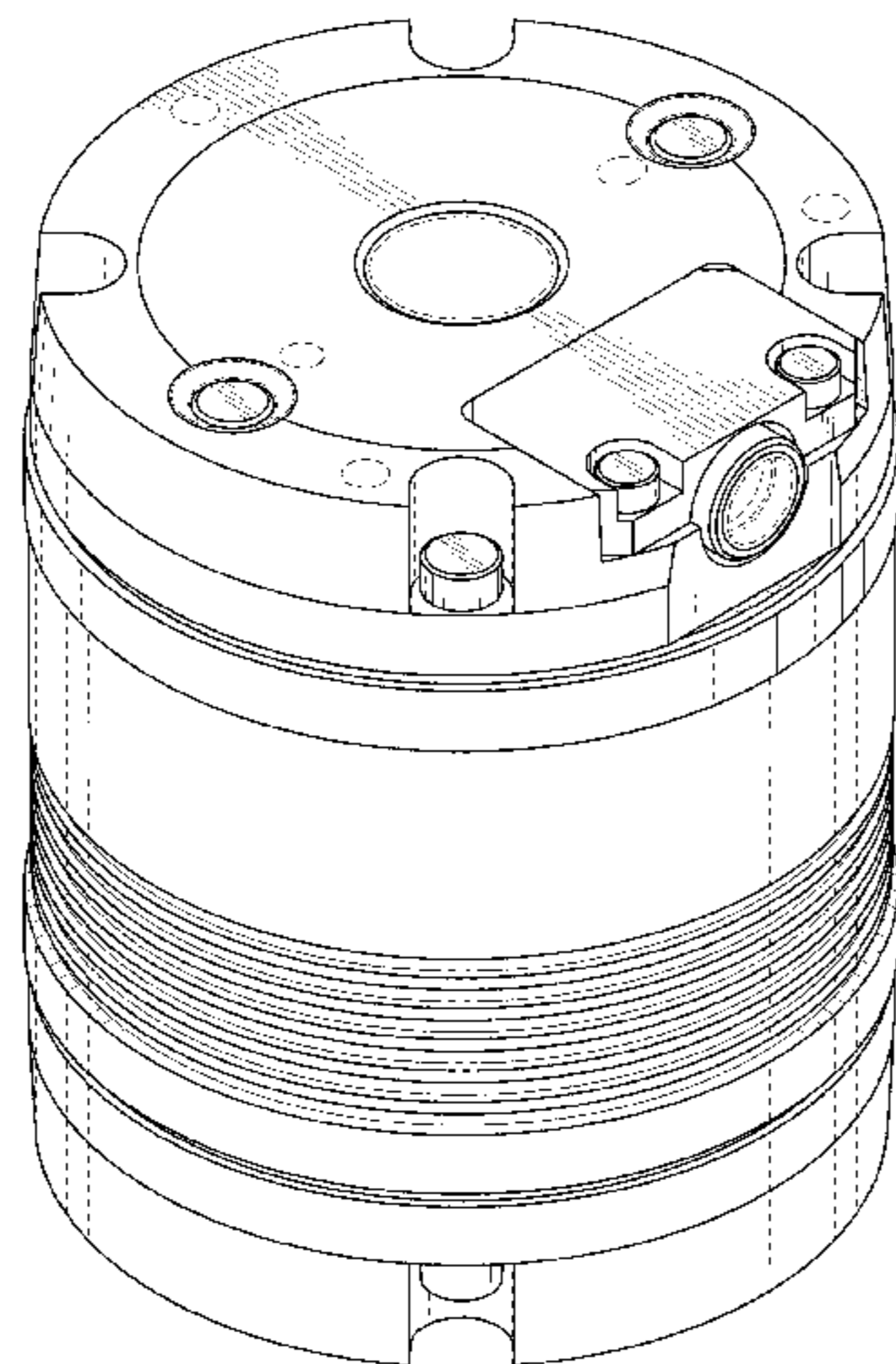
(57) **CLAIM**

The ornamental design for a variable focal length lens, as shown and described.

DESCRIPTION

FIG. 1 is a front, right-side, top, perspective view of the variable focal length lens;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a top plan view thereof;
FIG. 4 is a right-side elevational view thereof;
FIG. 5 is a left-side elevational view thereof;
FIG. 6 is a rear elevational view thereof; and,
FIG. 7 is a bottom plan view thereof.
The broken lines shown in the drawings depict portions of the variable focal length lens that form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2014/0268361 A1* 9/2014 Nunnink G02B 7/08
359/665
2015/0301303 A1* 10/2015 Kim G02B 7/021
348/373

* cited by examiner

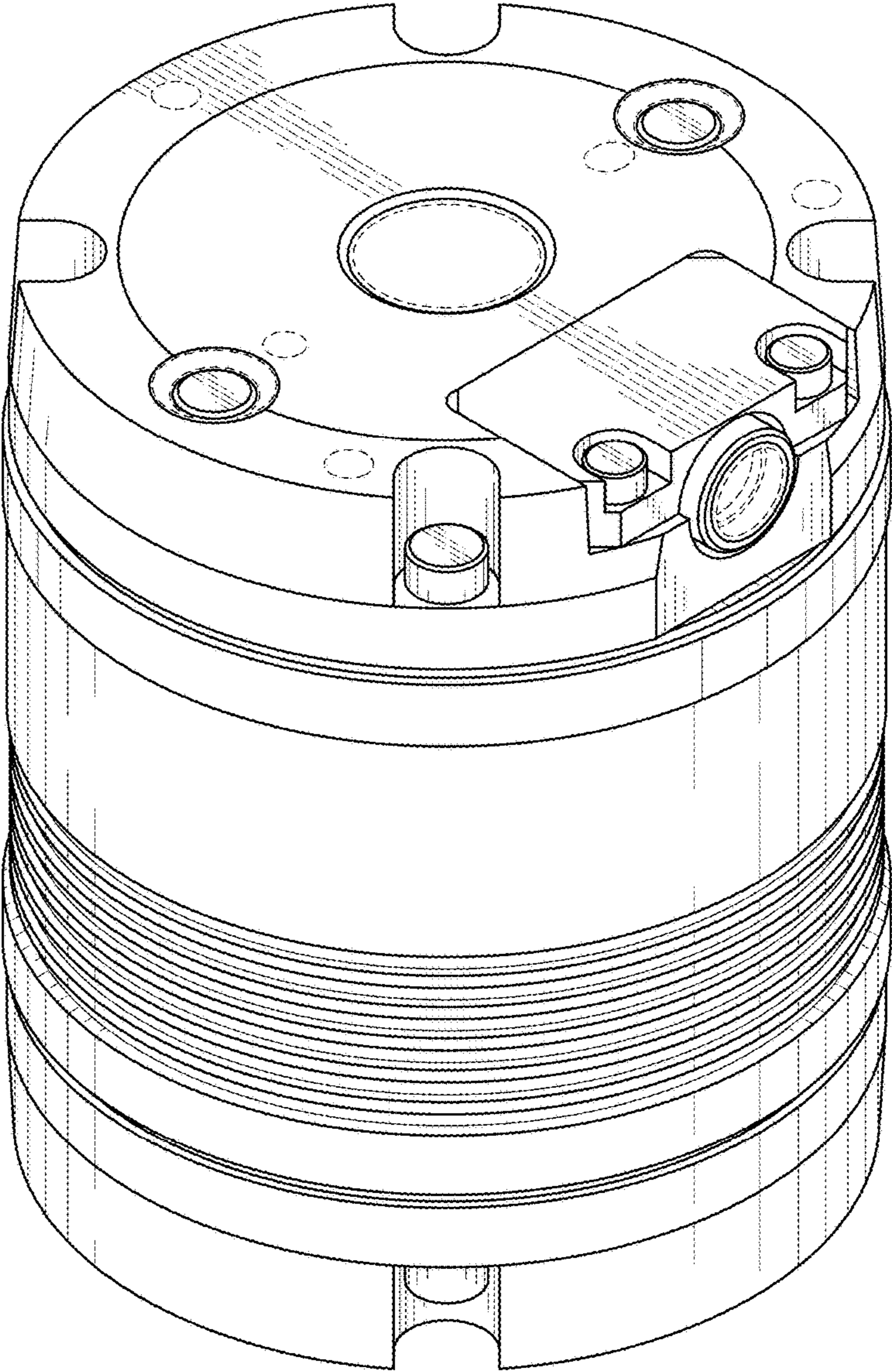


FIG. 1

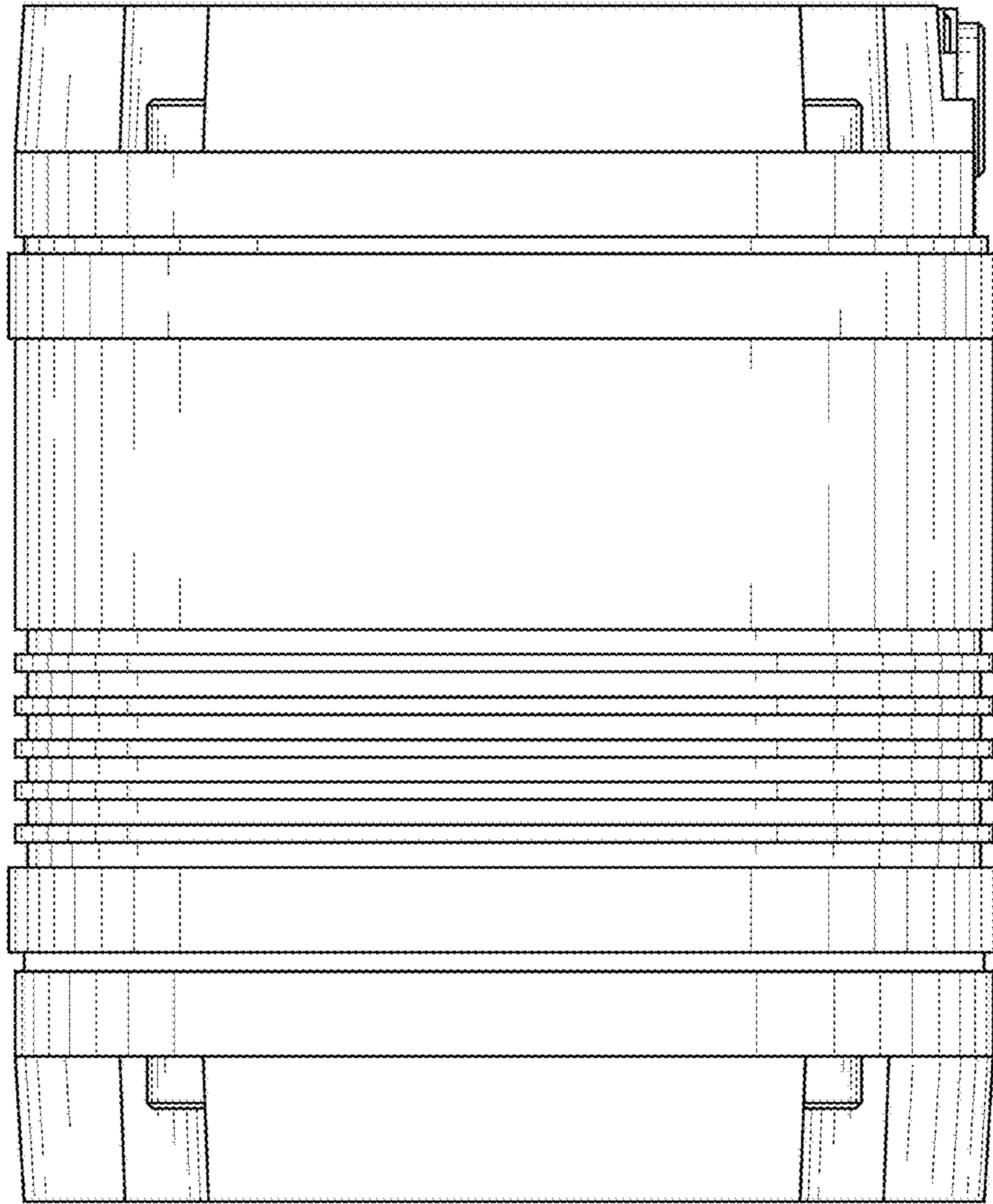


FIG. 2

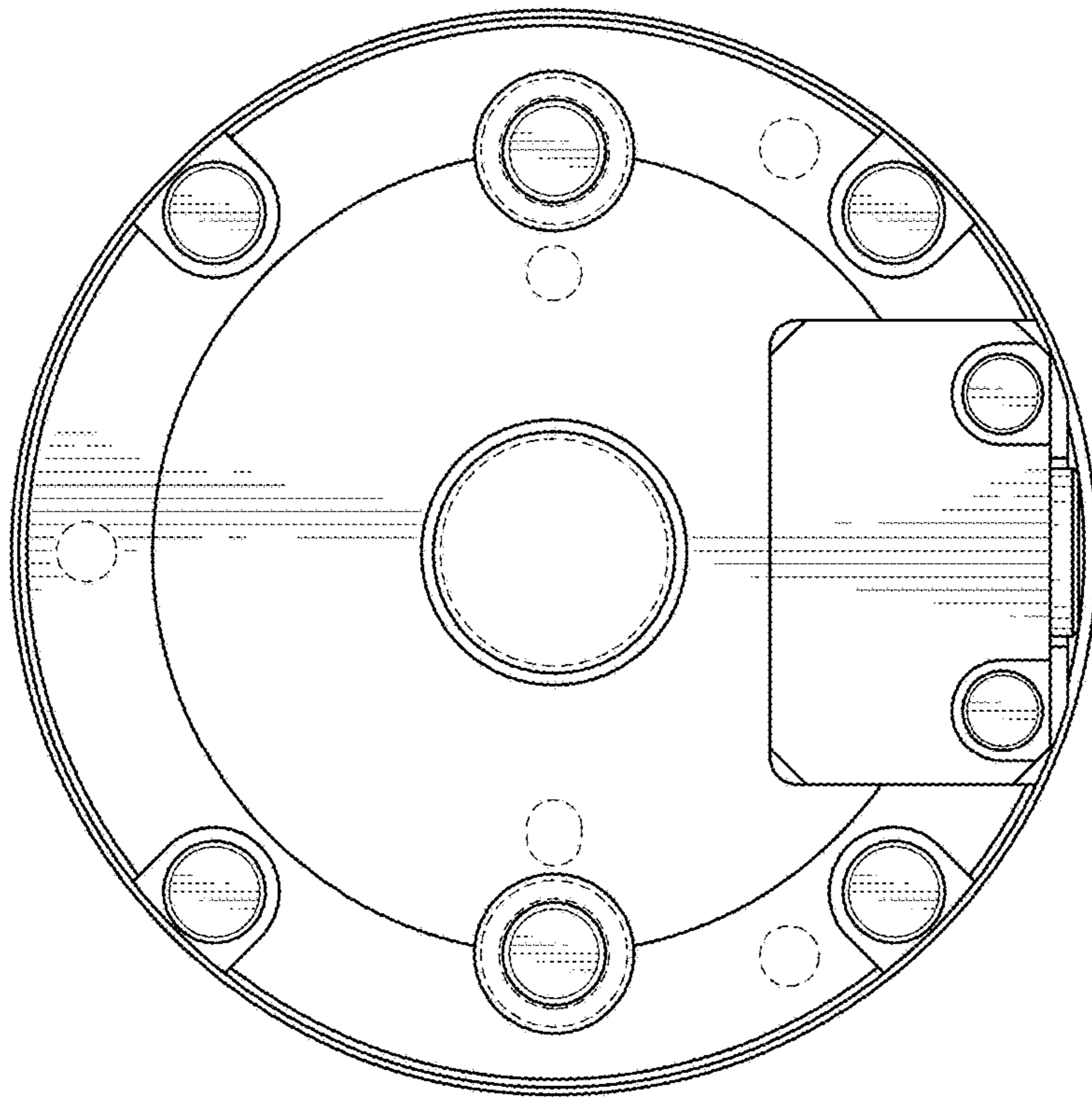


FIG. 3

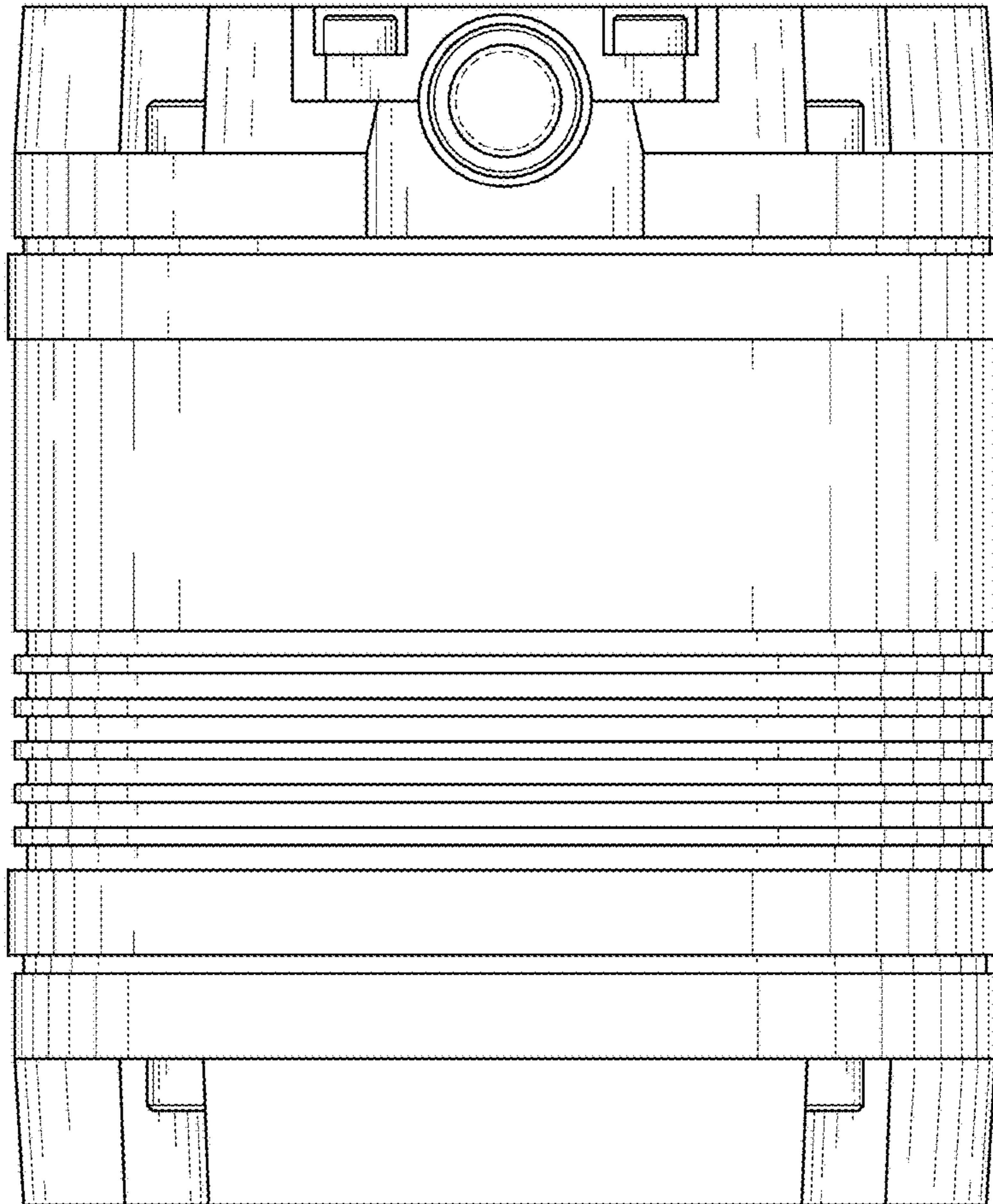


FIG. 4

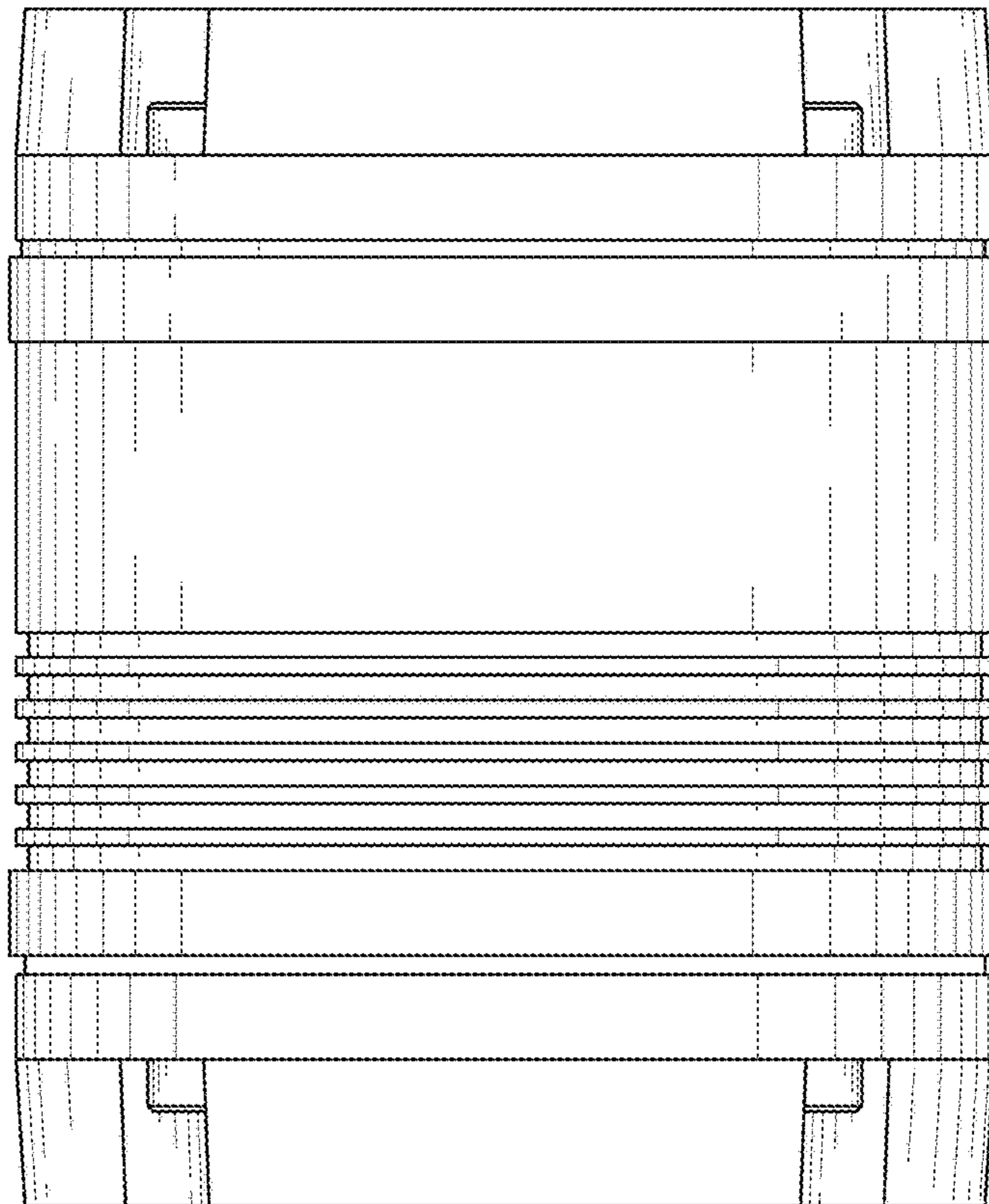


FIG. 5

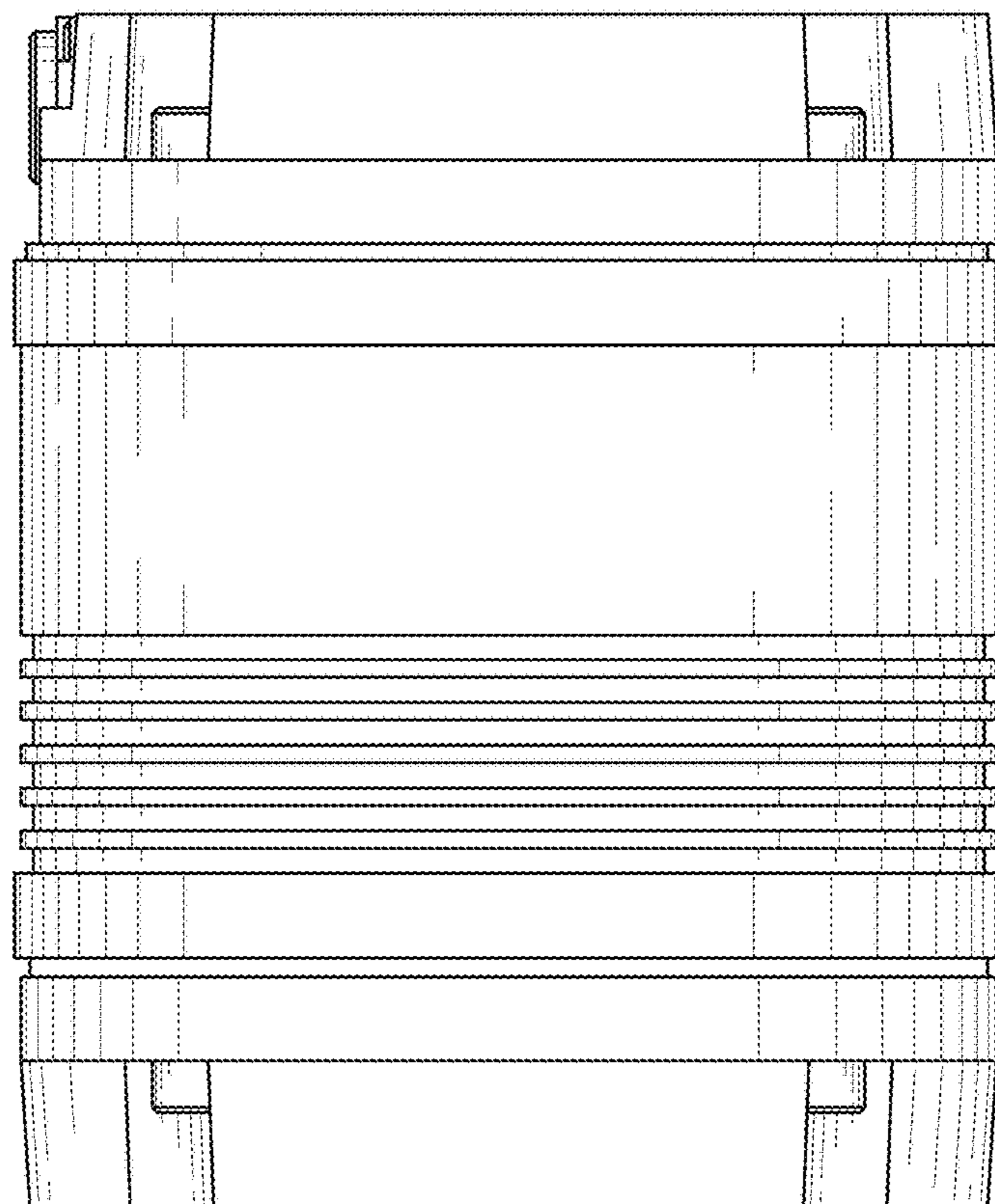


FIG. 6

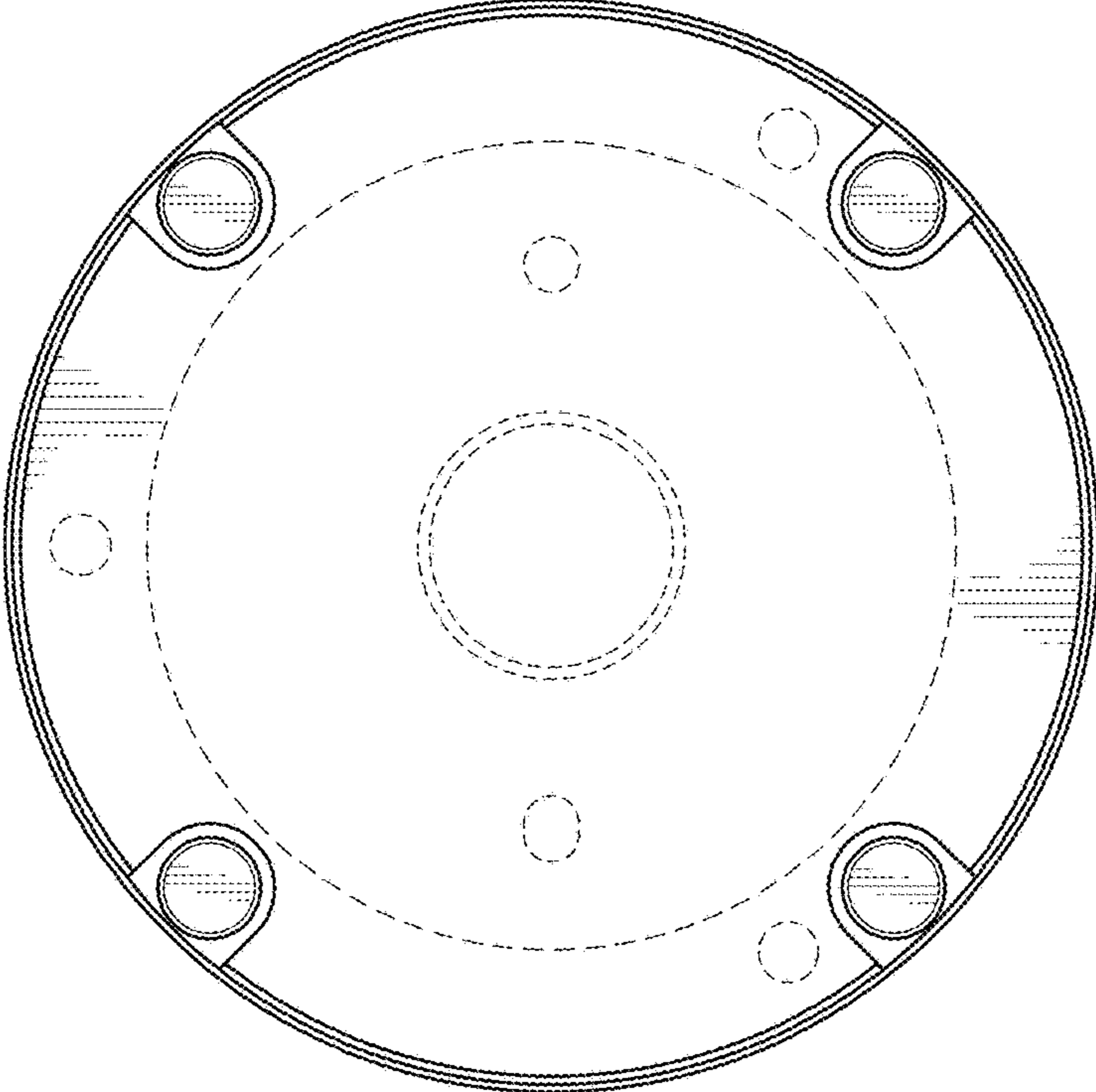


FIG. 7