



US00D862403S

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

(10) **Patent No.:** **US D862,403 S**

(45) **Date of Patent:** **** Oct. 8, 2019**

(54) **LIGHT EMITTING DIODE**

(71) Applicants: **CITIZEN ELECTRONICS CO., LTD.**, Fujiyoshida-shi, Yamanashi (JP); **CITIZEN WATCH CO., LTD.**, Tokyo (JP)

(72) Inventor: **Yasuo Nakanishi**, Yamanashi (JP)

(73) Assignees: **CITIZEN ELECTRONICS CO., LTD.**, Yamanashi (JP); **CITIZEN WATCH CO., LTD.**, Tokyo (JP)

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

(21) Appl. No.: **29/607,727**

(22) Filed: **Jun. 15, 2017**

(30) **Foreign Application Priority Data**

Dec. 15, 2016 (JP) 2016-027188

(51) **LOC (12) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/180**

(58) **Field of Classification Search**
USPC D13/180; D26/1
CPC ... H01L 25/167; H01L 25/0753; H01L 27/15;
H01L 27/156; H01L 31/02; H01L 33/00;
H01L 33/04; H01L 33/08; H01L 33/10;
H01L 33/20; H01L 33/38; H01L 33/42;
H01L 33/48; H01L 33/6062; H01L
33/483; H01L 33/486; F21K 9/00; F21K
9/30; F21K 9/54

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,483,623 B1 11/2002 Maruyama
7,425,083 B2 9/2008 Kim et al.
D578,673 S 10/2008 Takada et al.
D622,679 S 8/2010 Hsieh

7,815,343 B2 10/2010 Nii et al.
D634,716 S 3/2011 Suzuki
D643,821 S 8/2011 Yun
D649,943 S * 12/2011 Kuwaharada D13/180
(Continued)

OTHER PUBLICATIONS

Office Action issued on Jan. 4, 2018, for related Design U.S. Appl. No. 29/581,299; 7 pages.

(Continued)

Primary Examiner — Selina Sikder

(74) *Attorney, Agent, or Firm* — Procopio, Cory, Hargreaves & Savitch LLP

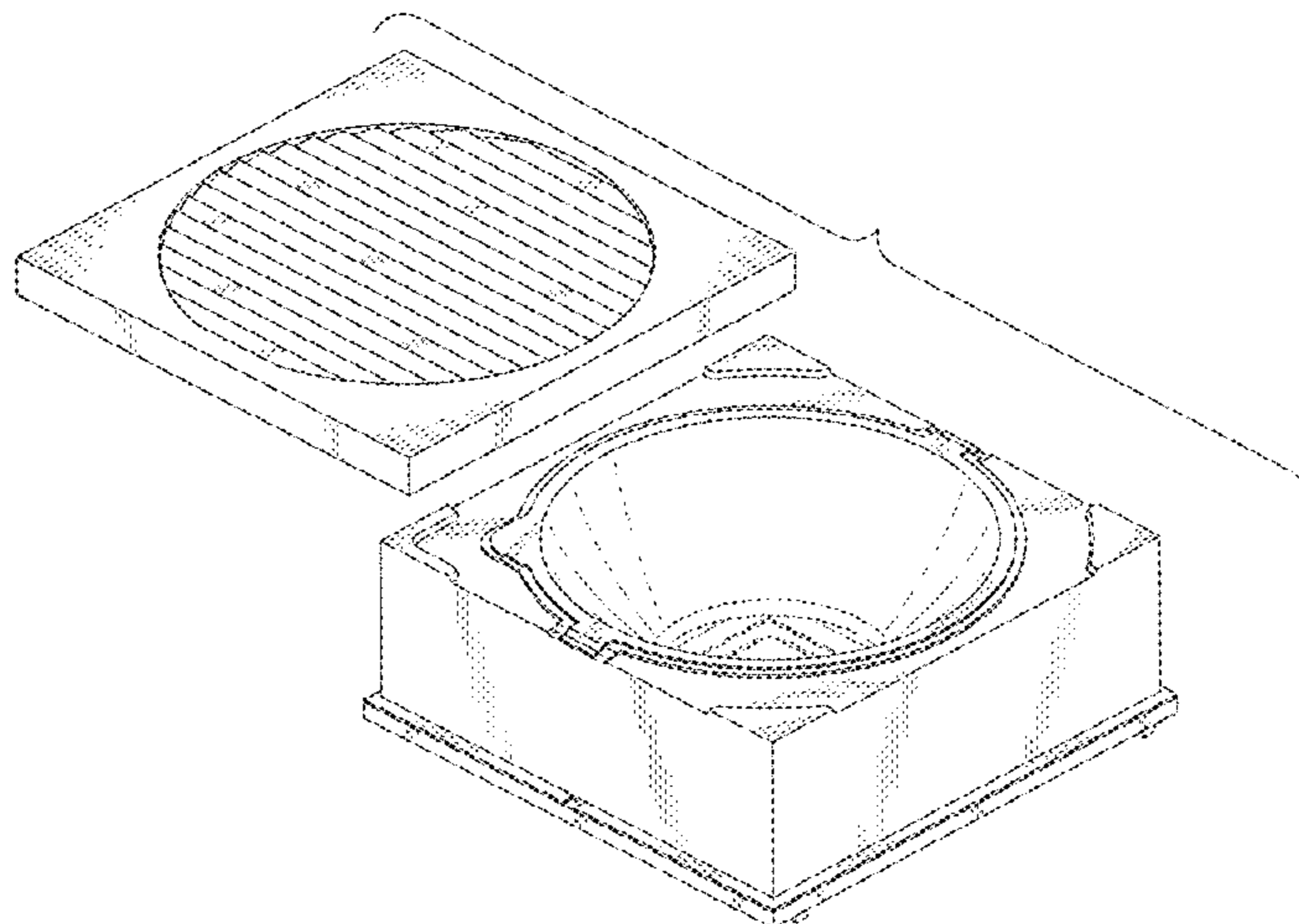
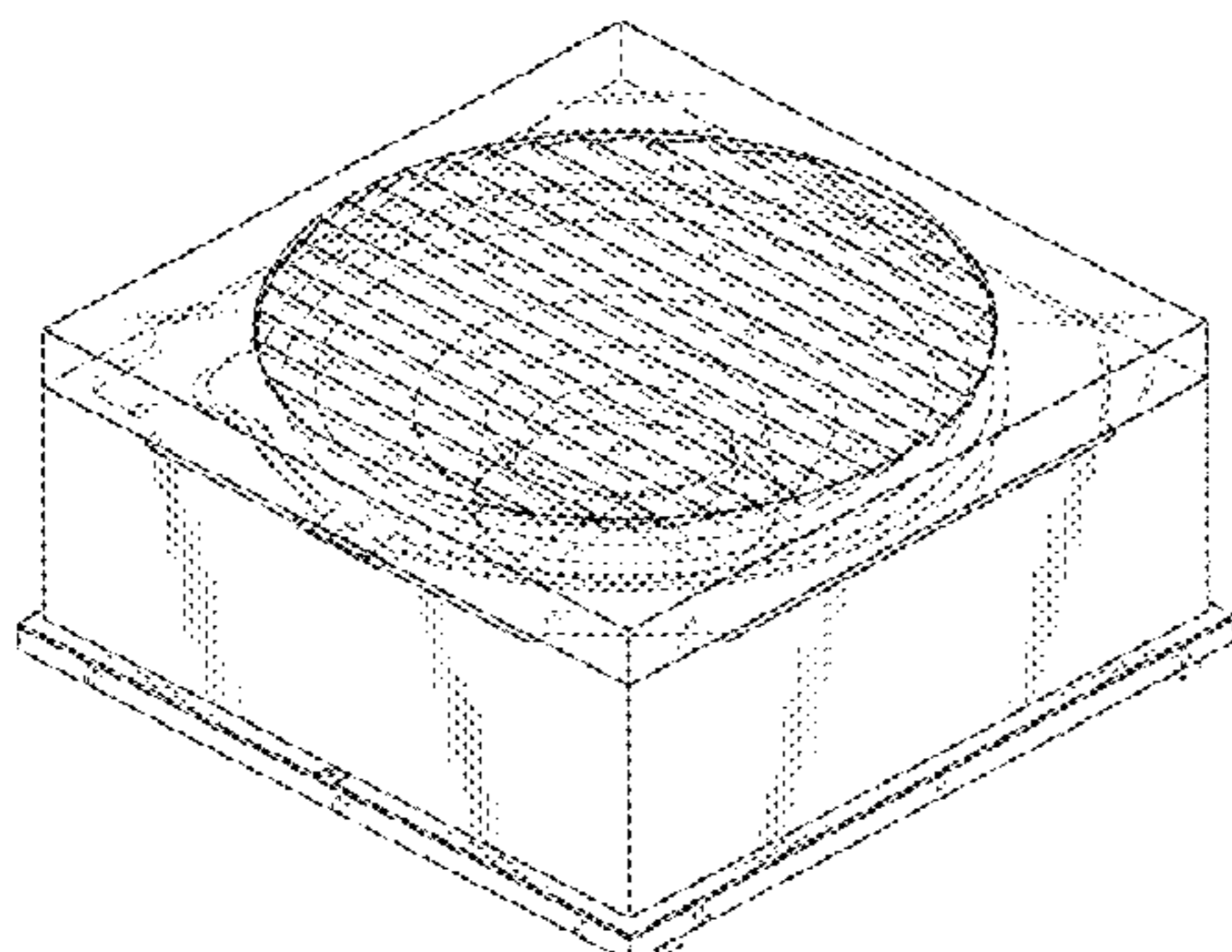
(57) **CLAIM**

The ornamental design for a light emitting diode, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a light emitting diode showing my new design;
FIG. 2 is a top plan view thereof;
FIG. 3 is a bottom plan view thereof;
FIG. 4 is a front elevational view thereof;
FIG. 5 is a rear elevational view thereof;
FIG. 6 is a left side elevational view thereof;
FIG. 7 is a right side elevational view thereof;
FIG. 8 is a perspective view of the second embodiment of a light emitting diode showing my new design;
FIG. 9 is a top plan view thereof;
FIG. 10 is a bottom plan view thereof;
FIG. 11 is a front elevational view thereof;
FIG. 12 is a rear elevational view thereof;
FIG. 13 is a left side elevational view thereof; and,
FIG. 14 is a right side elevational view thereof.
The broken lines shown in the FIGS. 1 to 18 are for illustrative purposes only and form no part of the claimed design.

1 Claim, 11 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D660,813 S * 5/2012 Otaki D13/180
9,285,102 B2 * 3/2016 Streppel F21V 13/12
D777,694 S 1/2017 Watanabe
D782,989 S 4/2017 Watanabe
9,806,239 B2 10/2017 Watanabe
2008/0185605 A1 8/2008 Wada et al.
2010/0140638 A1 6/2010 Kotani et al.
2011/0062473 A1 3/2011 Tanuma et al.
2011/0255281 A1 10/2011 Takei et al.
2013/0026502 A1 1/2013 Park
2013/0037842 A1 2/2013 Yamada et al.
2015/0014710 A1 1/2015 Yagi et al.
2016/0293813 A1 * 10/2016 Aruga H01L 33/58
2016/0356643 A1 12/2016 Foucal et al.
2017/0084803 A1 * 3/2017 Iwaki H01L 33/58
2017/0200878 A1 7/2017 Fukuda

OTHER PUBLICATIONS

OSRAM, Opto Semiconductors, SFH 4780S, Version 1.0, Jun. 12, 2015, 13 pgs.

OSRAM, Opto Semiconductors, SFH 4786S, Draft Version a.0, Aug. 7, 2015, 15 pgs.

Unpublished Design U.S. Appl. No. 29/581,301, filed Oct. 18, 2016, 36 pgs.

Unpublished Design U.S. Appl. No. 29/581,299, filed Oct. 18, 2016, 36 pgs.

Unpublished Design U.S. Appl. No. 29/581,304, filed Oct. 18, 2016, 29 pgs.

* cited by examiner

FIG. 1

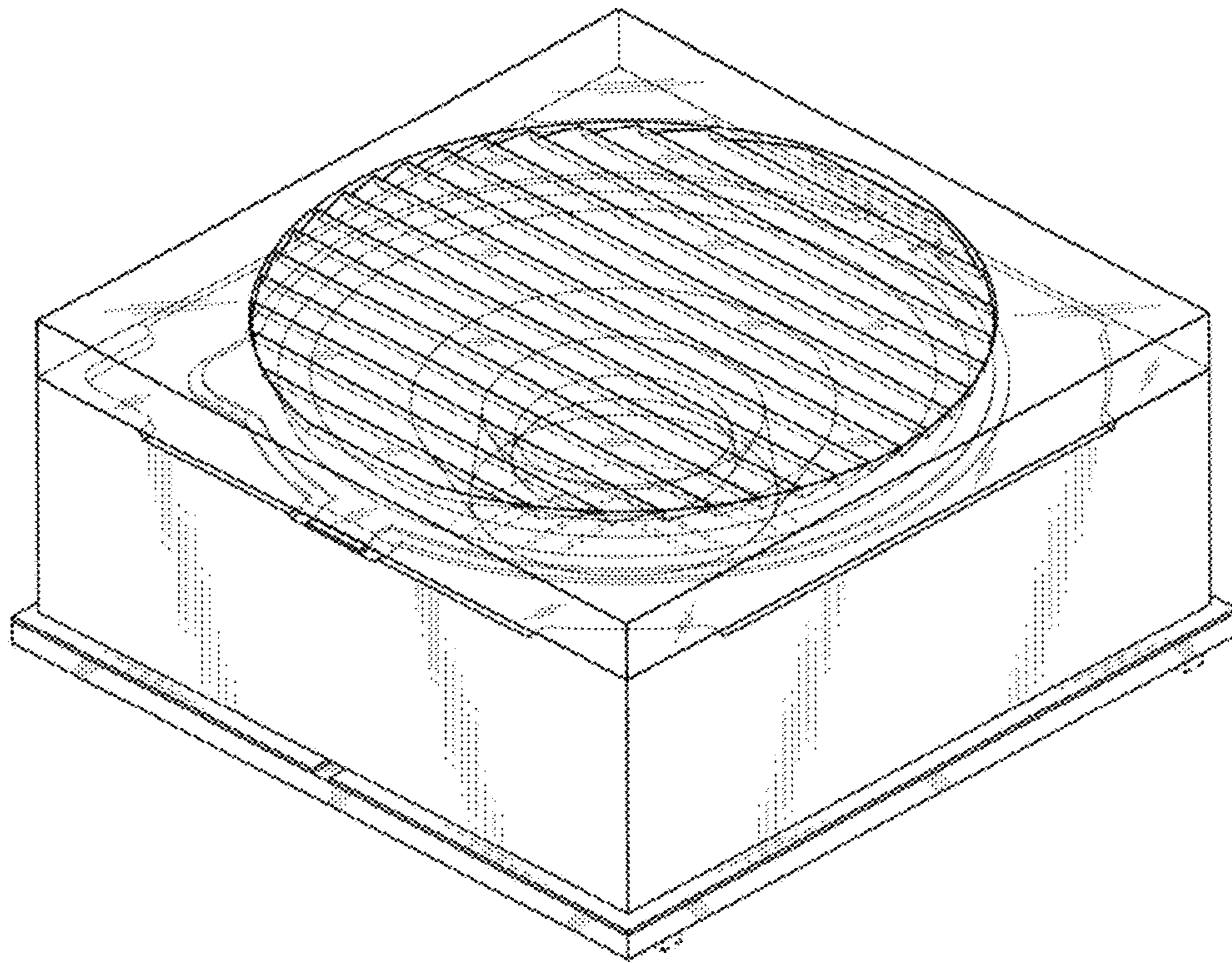


FIG. 2

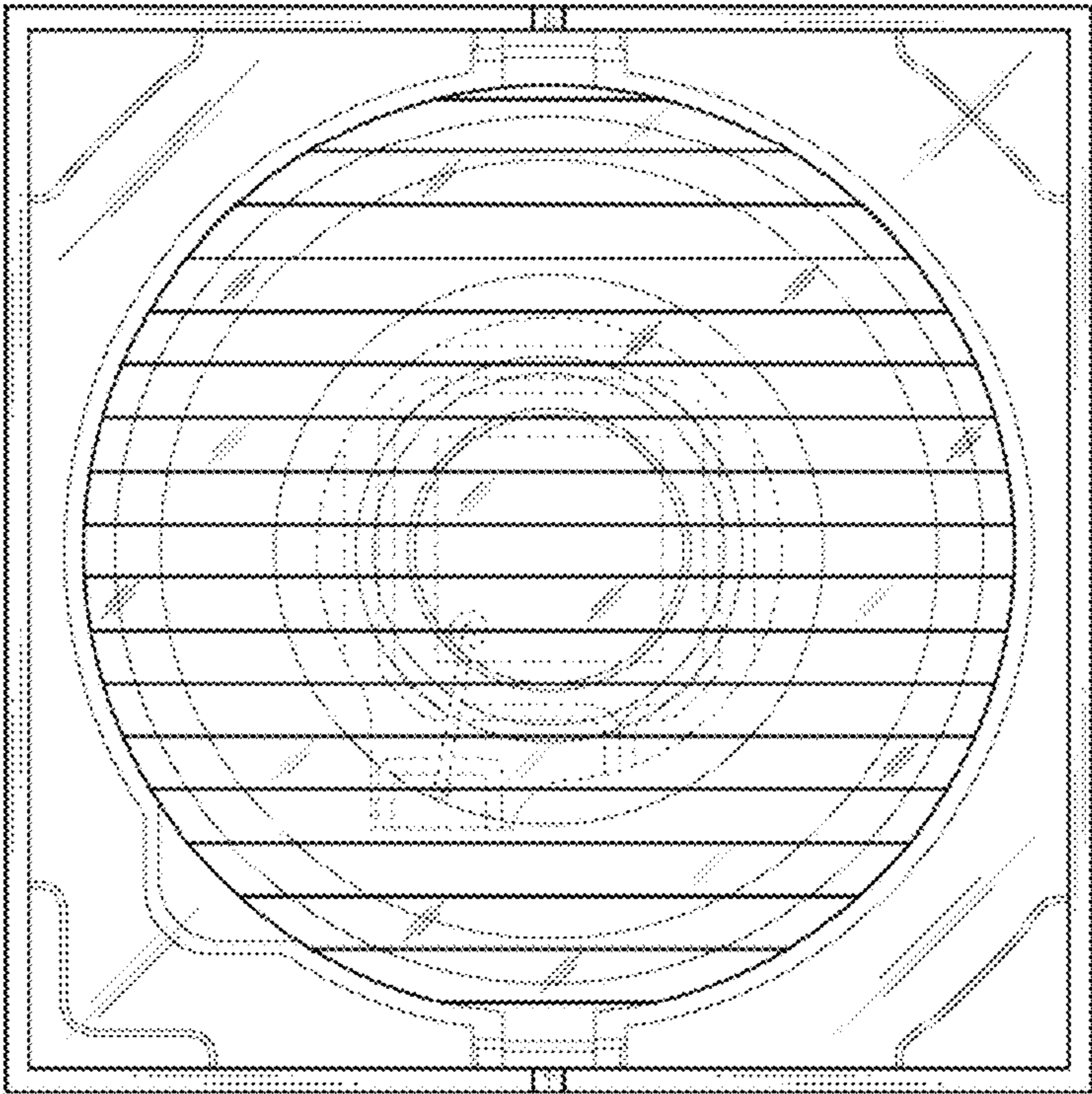


FIG. 3

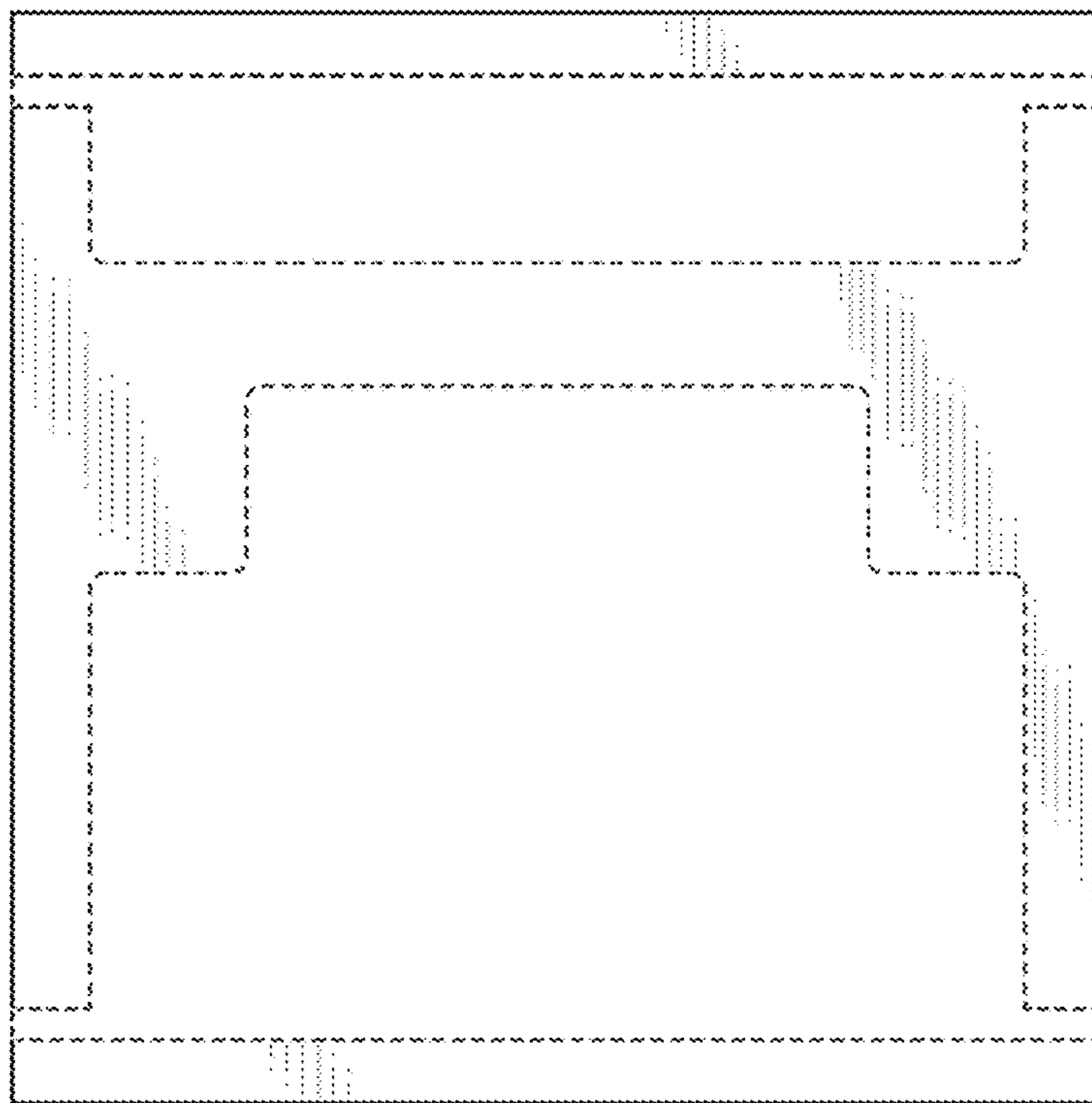


FIG. 4

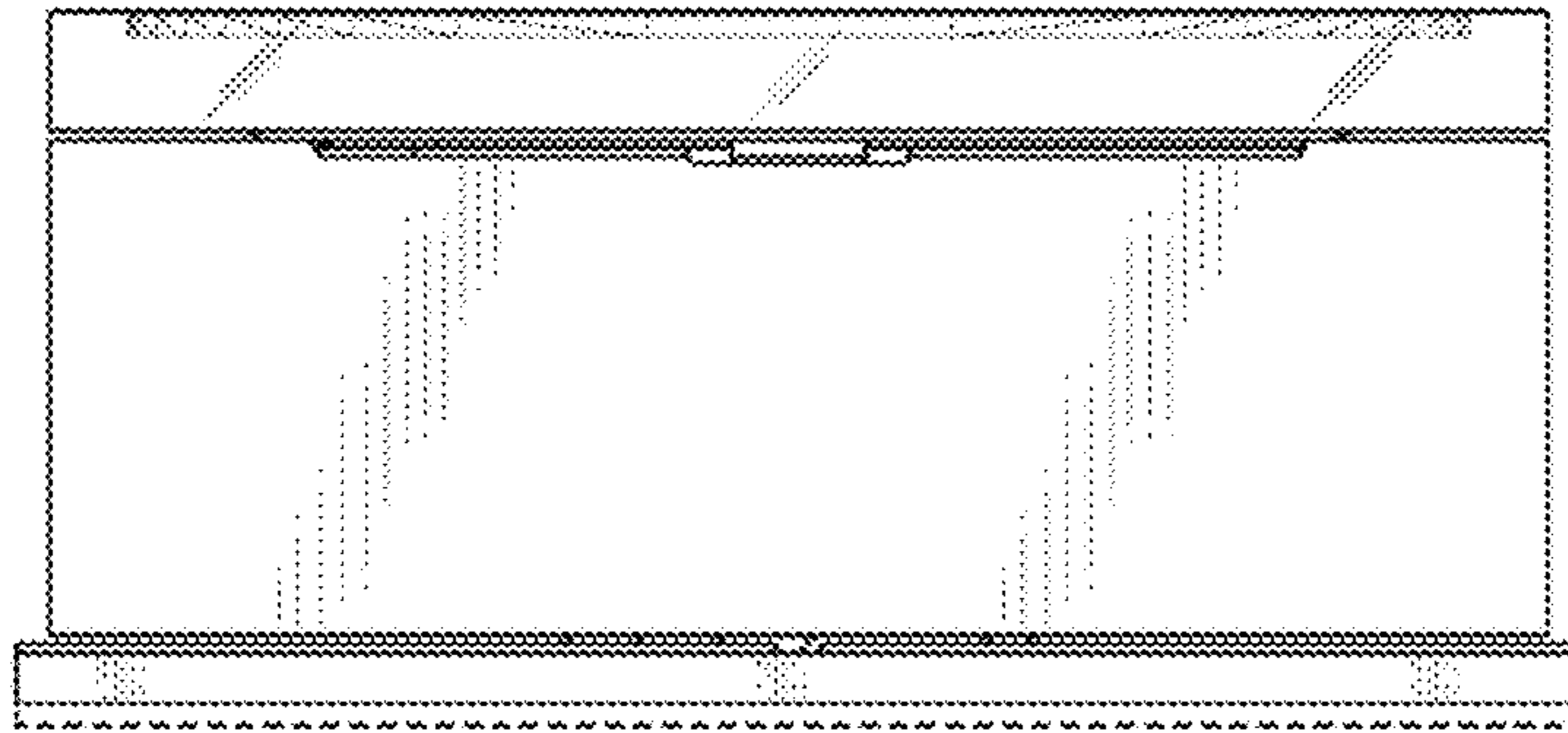


FIG. 5

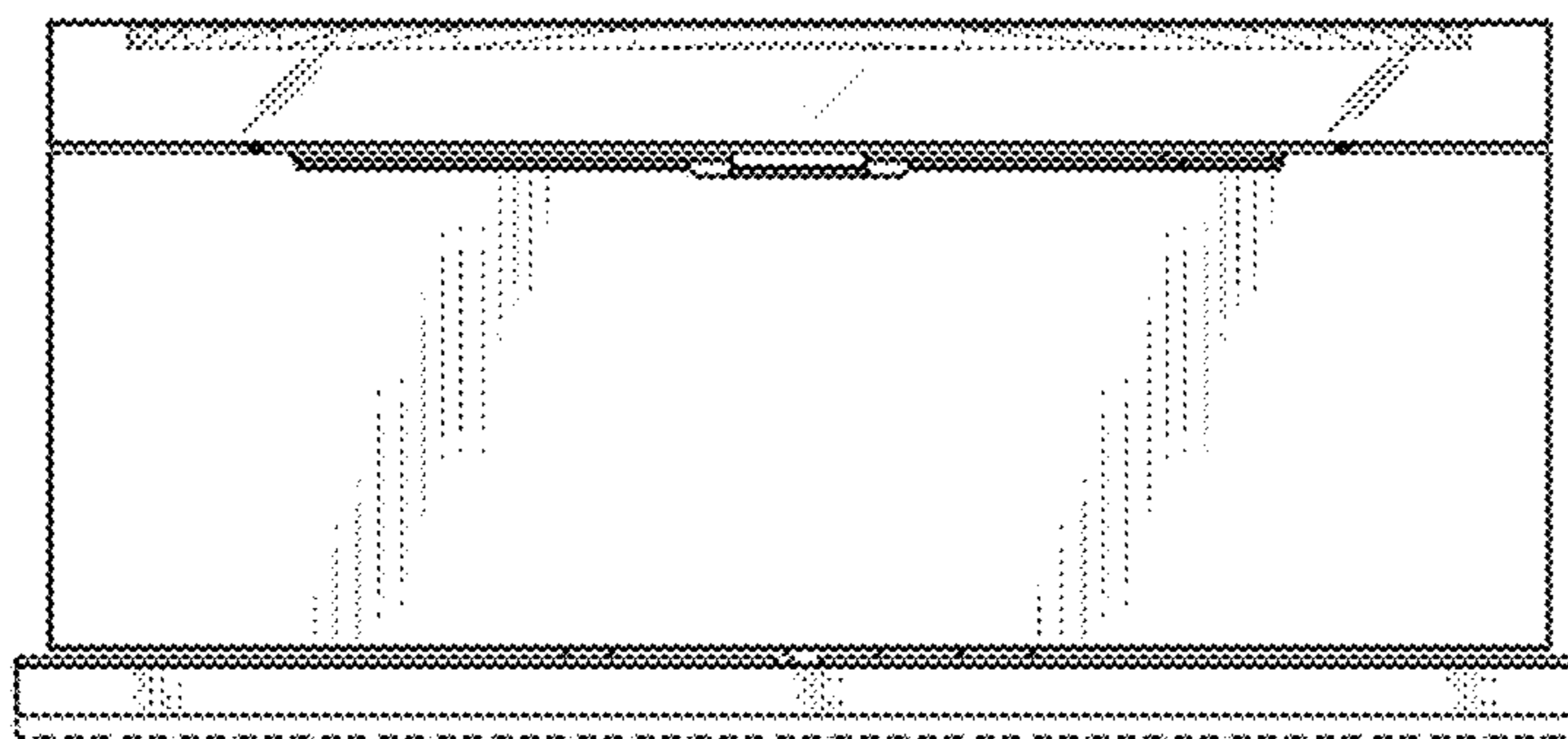


FIG. 6

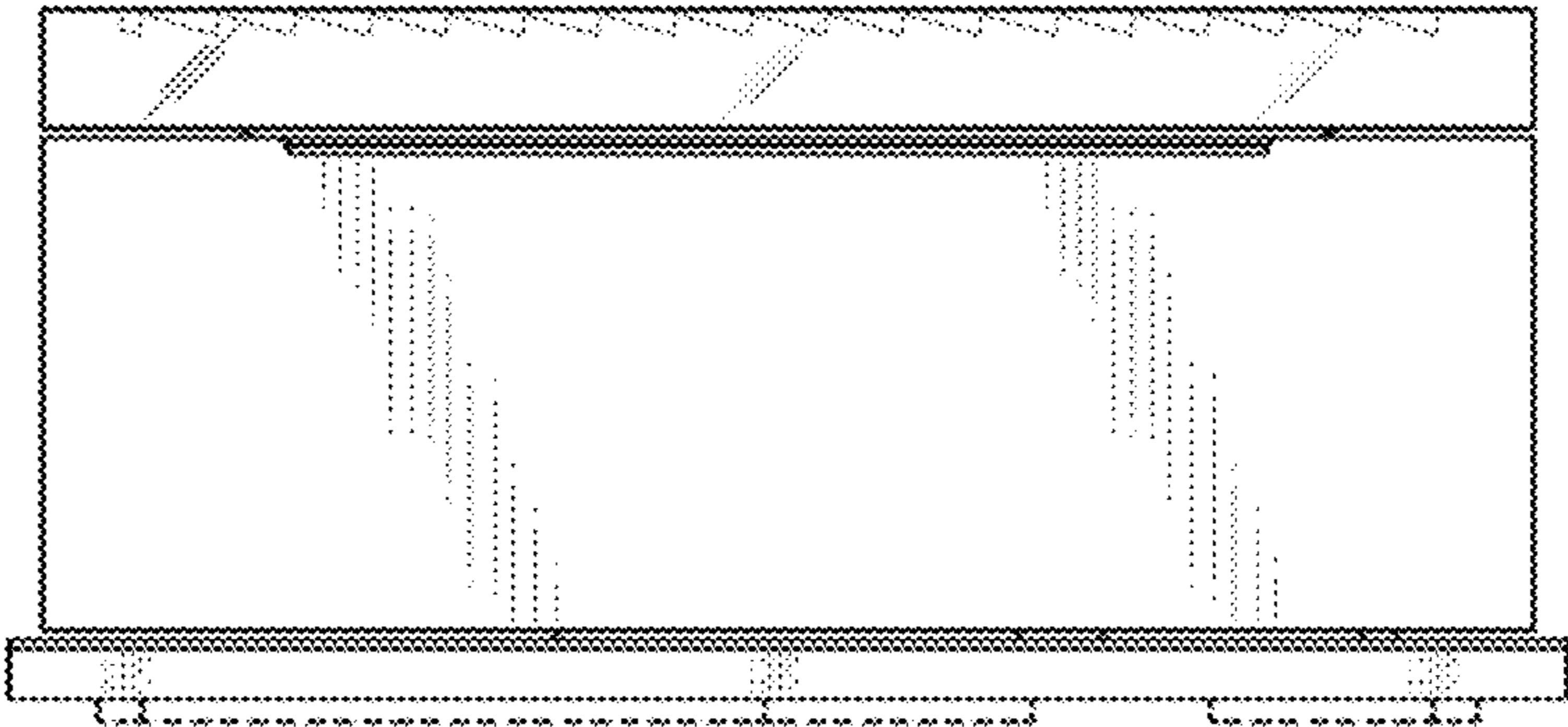


FIG. 7

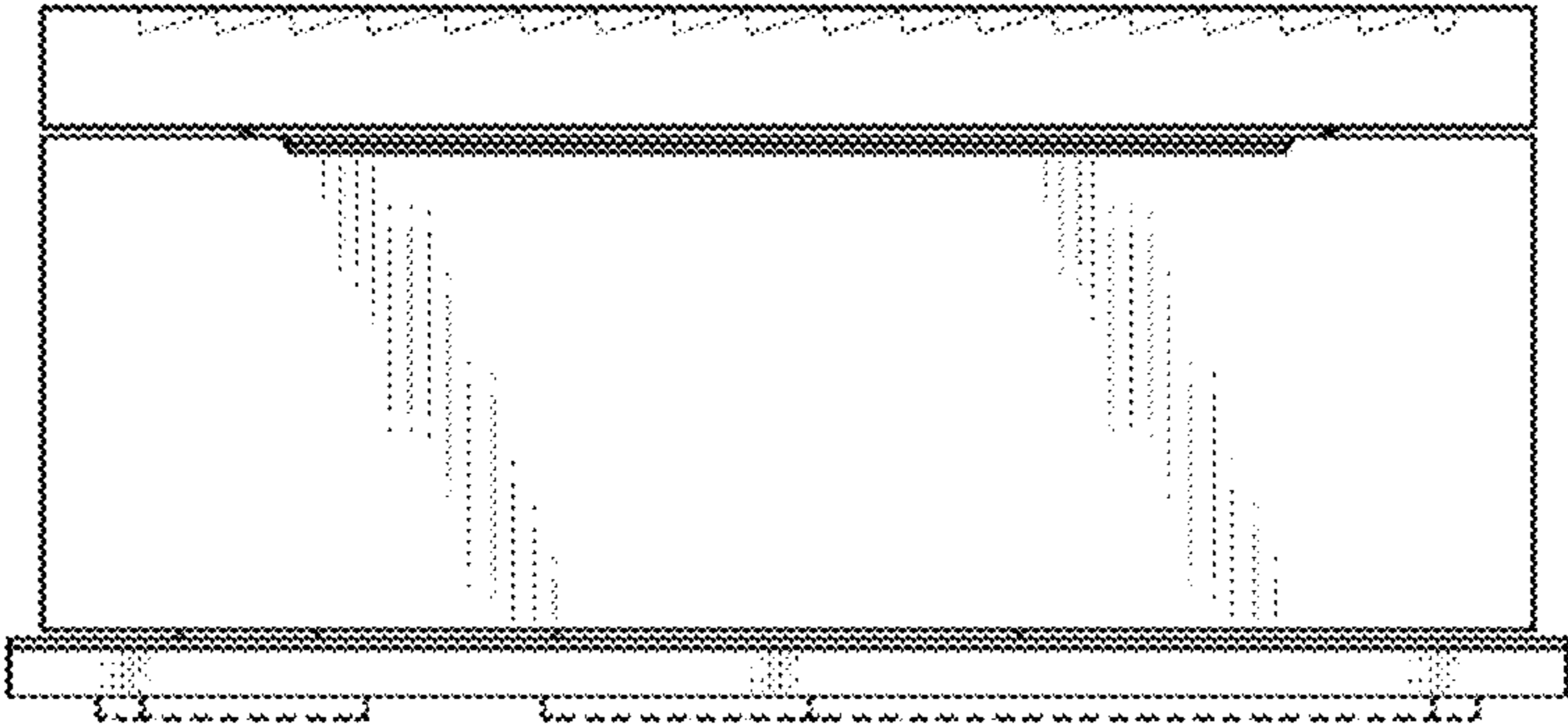


FIG. 8

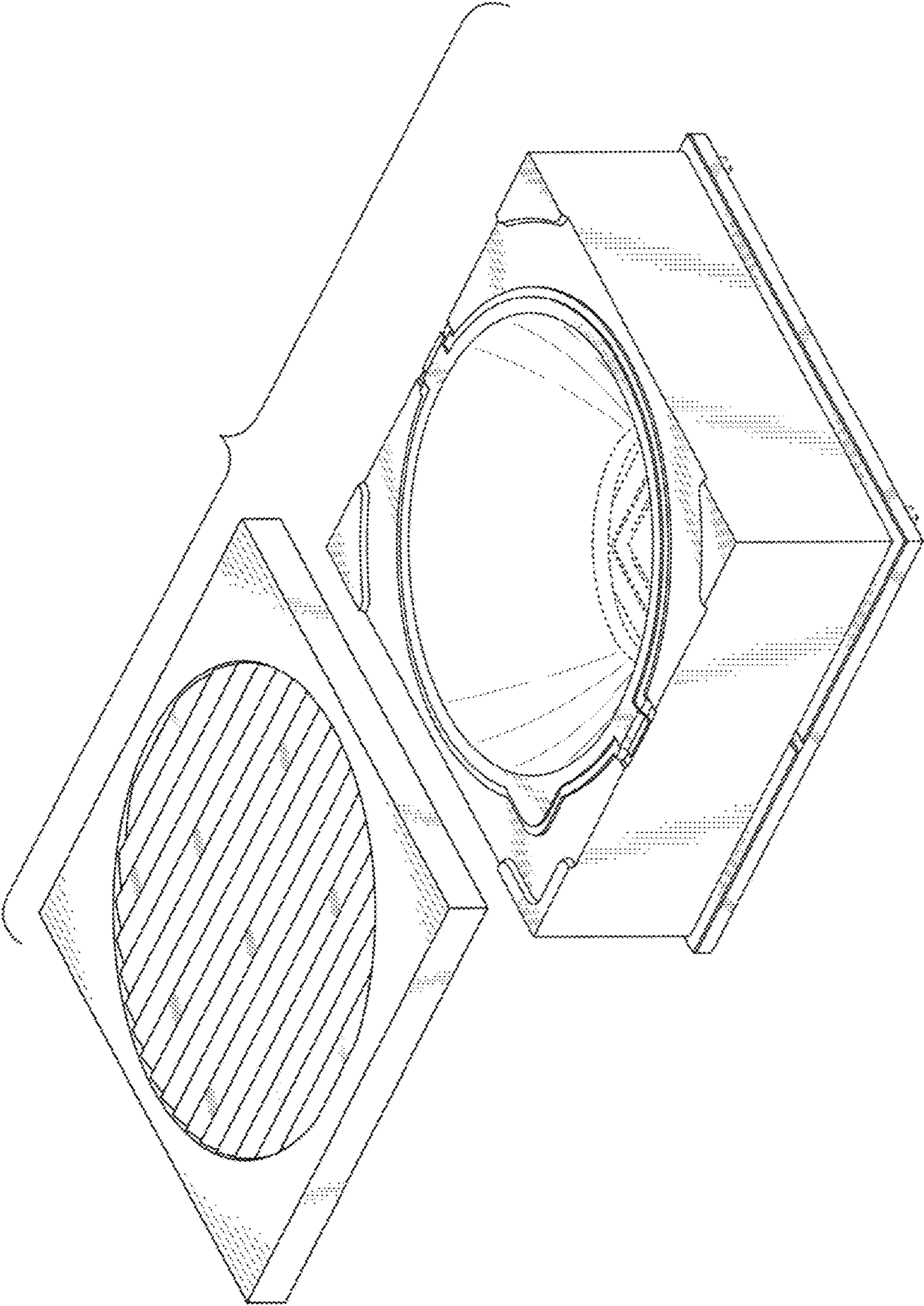


FIG. 9

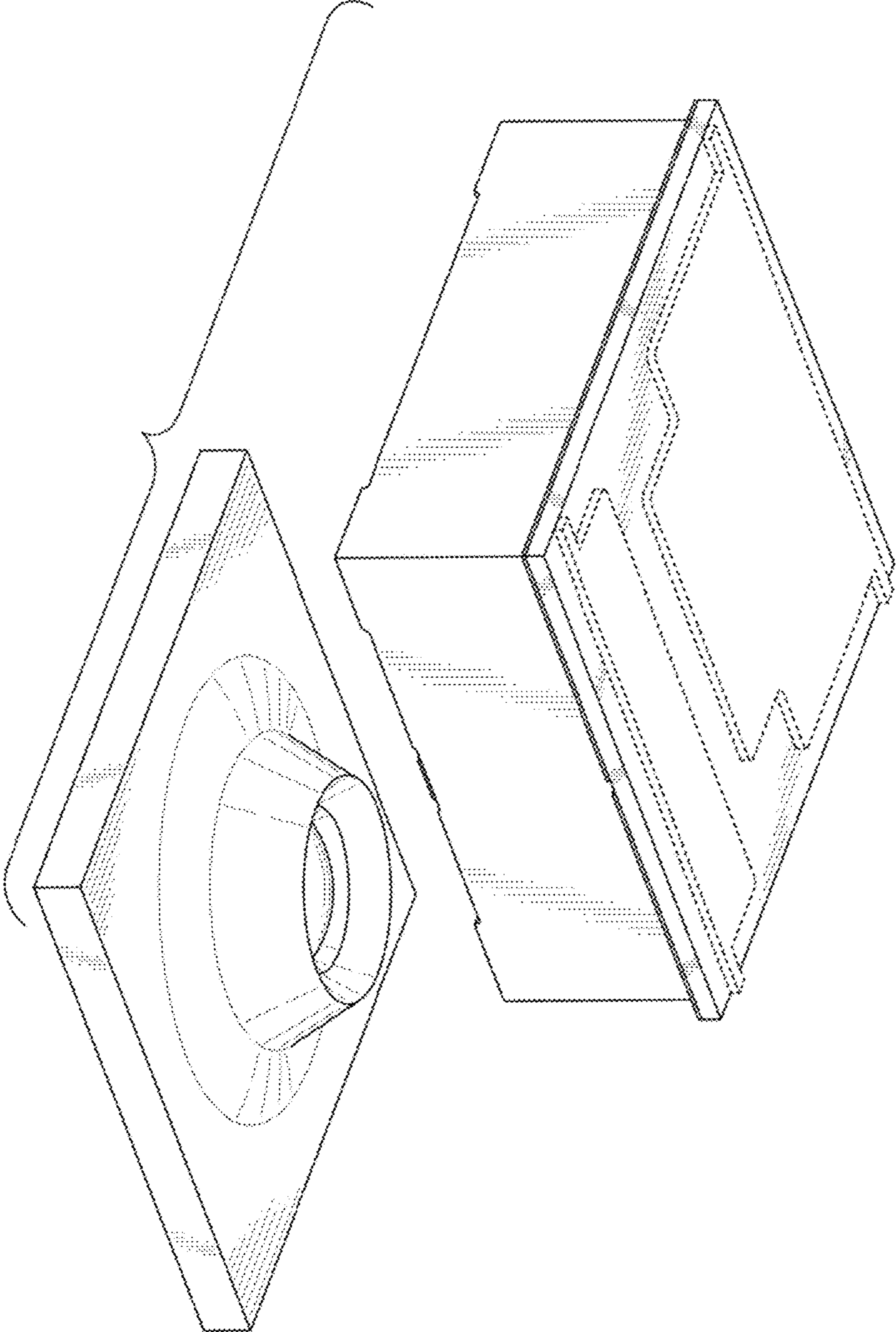


FIG. 10

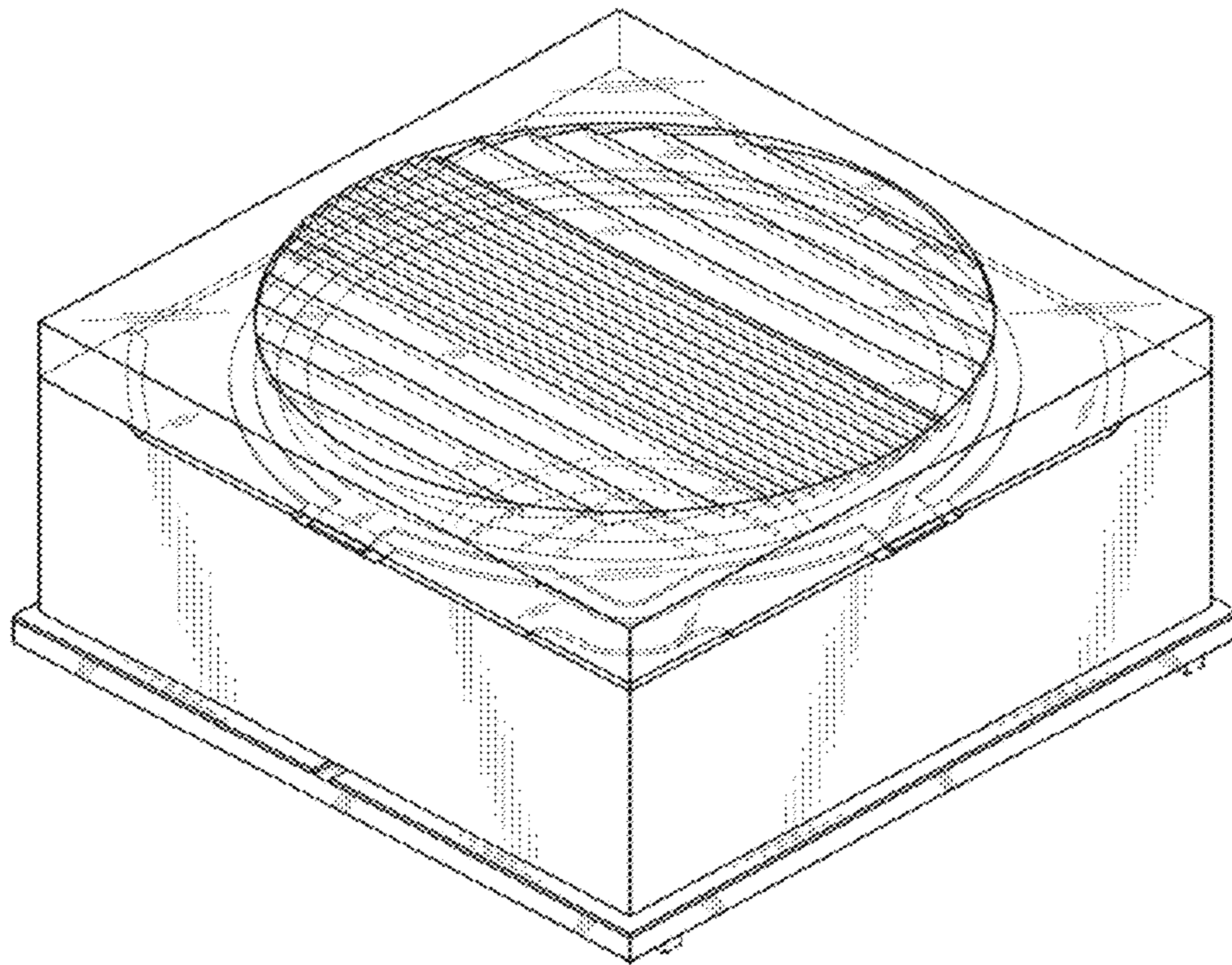


FIG. 11

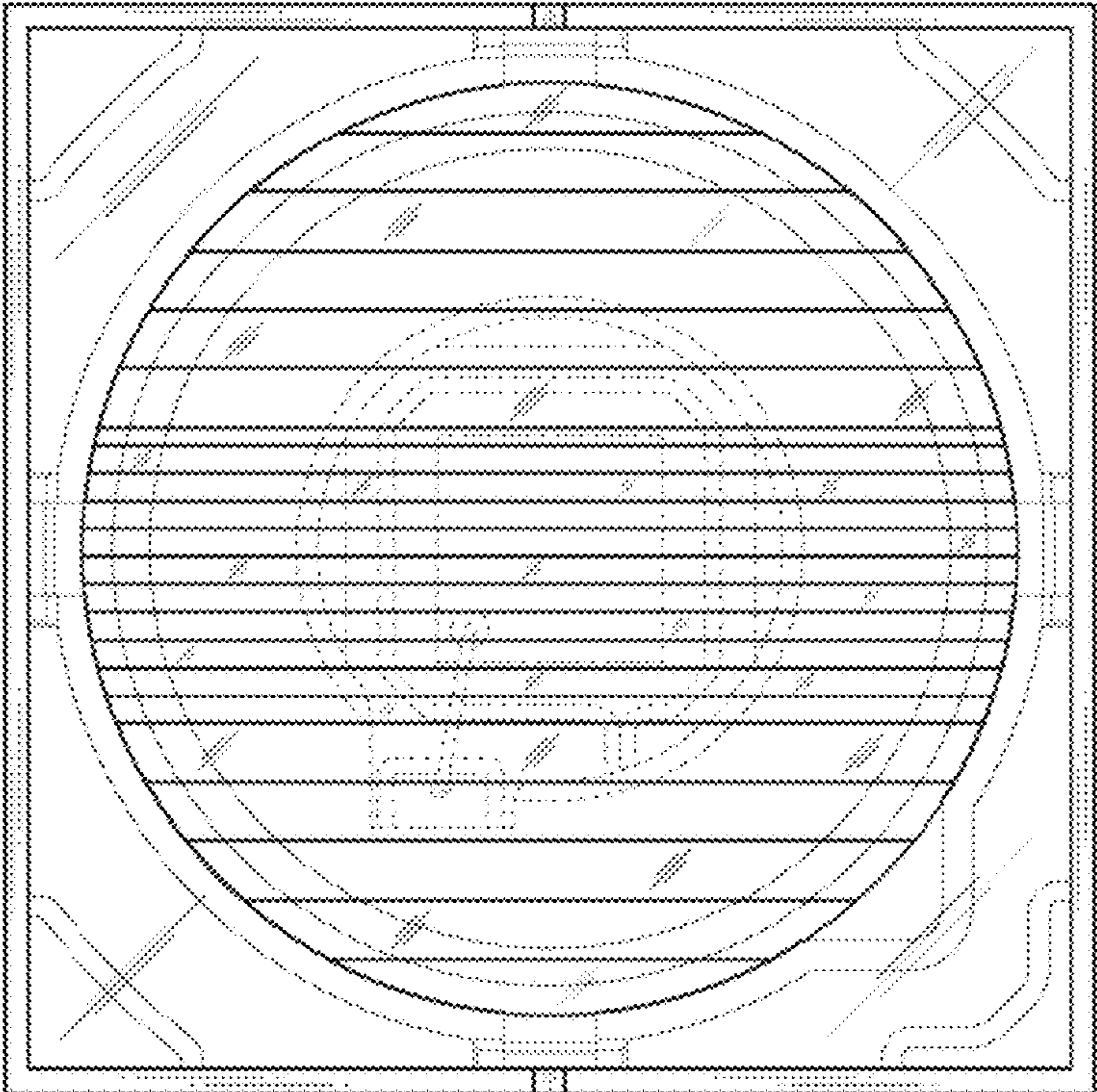


FIG. 12

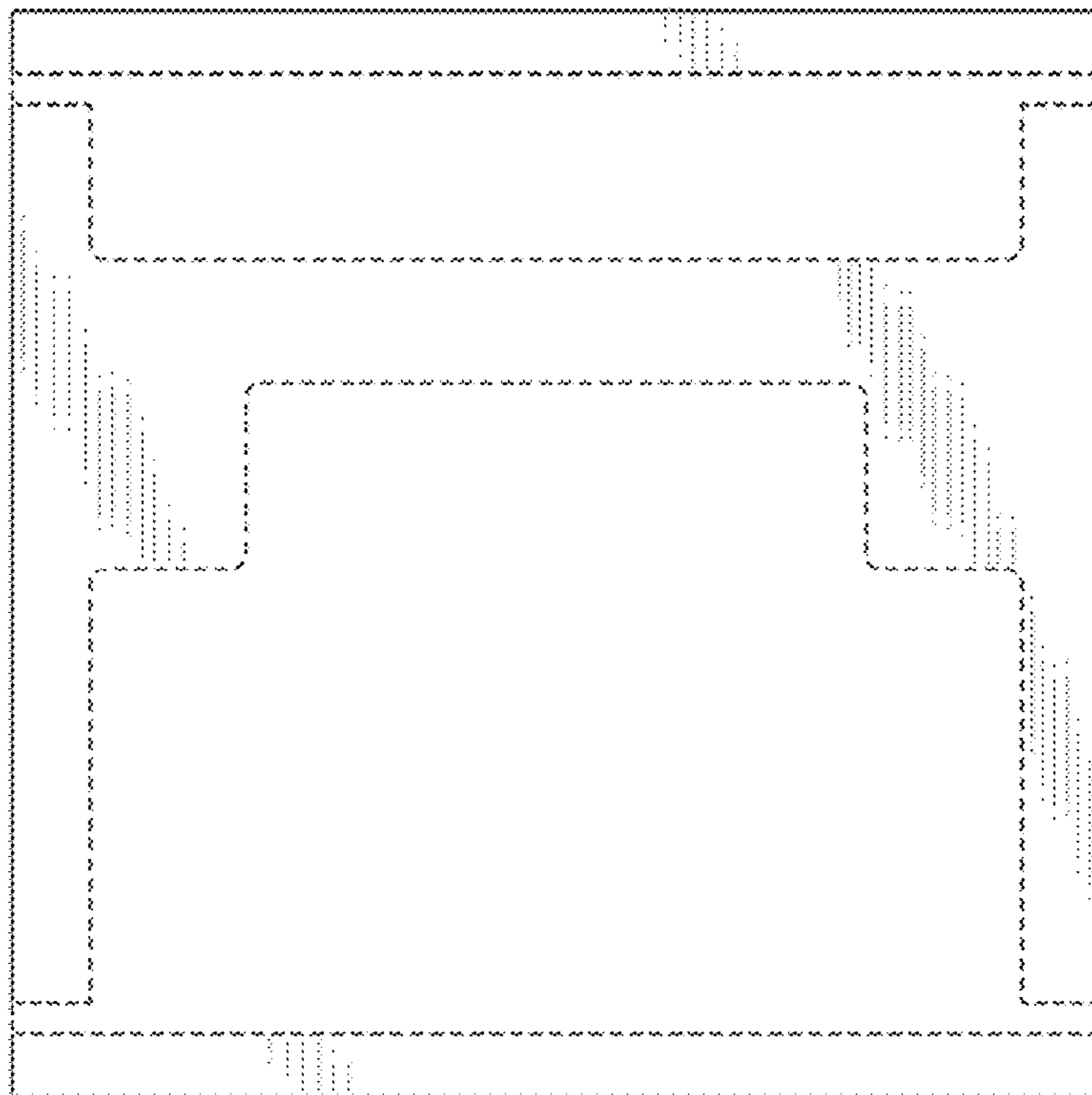


FIG. 13

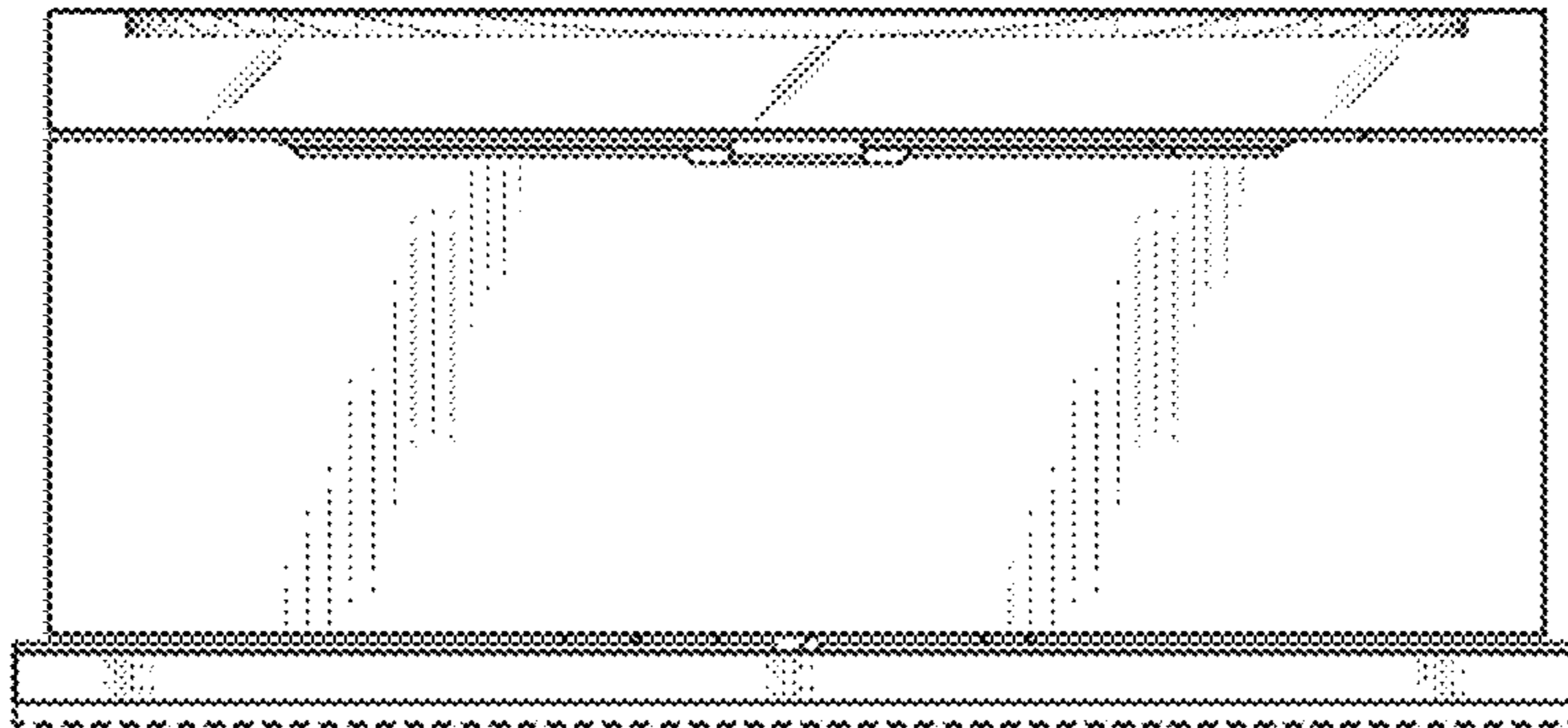


FIG. 14

