



US00D977420S

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

(10) **Patent No.:** **US D977,420 S**

(45) **Date of Patent:** **** Feb. 7, 2023**

(54) **CHARGING STATION FOR ROBOT**

(71) Applicant: **Soichiro Nakamura**, Tokyo (JP)

(72) Inventors: **Soichiro Nakamura**, Tokyo (JP);
Hiroki Aono, Tokyo (JP)

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

(21) Appl. No.: **29/743,407**

(22) Filed: **Jul. 21, 2020**

(30) **Foreign Application Priority Data**

May 28, 2020 (JP) 2020-010507

(51) **LOC (14) Cl.** **13-02**

(52) **U.S. Cl.**
USPC **D13/108**

(58) **Field of Classification Search**
USPC D13/103, 106, 107, 108, 109, 110, 112,
D13/116, 118, 119, 184, 199; D15/199;
D32/25, 30, 31; D34/7
CPC A47L 11/4013; A47L 11/33; F02B 63/04;
F02N 11/12
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D331,906 S *	12/1992	Mohri	.....	D13/103
D507,546 S *	7/2005	Fairfull	.....	D13/184
D534,119 S *	12/2006	Miller	.....	D13/107
D703,133 S *	4/2014	Ireland	.....	D13/108
D774,453 S *	12/2016	Yoneta	.....	D13/108
D810,678 S *	2/2018	Choi	.....	D13/107
D897,949 S *	10/2020	Pearce	.....	D13/108
D908,083 S *	1/2021	Kuang	.....	D13/107
10,952,578 B2 *	3/2021	Gill	.....	A47L 9/0054
D924,522 S *	7/2021	Jang	.....	D34/7

2016/0183752 A1 *	6/2016	Morin	.....	A47L 9/1683 134/18
2016/0374526 A1 *	12/2016	Yang	.....	A47L 11/4011 701/23
2019/0155296 A1 *	5/2019	Moore	.....	B60L 53/36

OTHER PUBLICATIONS

“Roomba i7”. Found online Jan. 10, 2022 at slashgear.com. Reference dated Sep. 6, 2018. Retrieved from <https://www.slashgear.com/irobots-self-emptying-roomba-i7-fixes-robot-vacuums-big-headache-06544635/>. (Year: 2018).*

(Continued)

Primary Examiner — Kendra Leslie Hamilton
Assistant Examiner — Amanda Christensen
(74) *Attorney, Agent, or Firm* — Fitch, Even, Tabin & Flannery LLP

(57) **CLAIM**

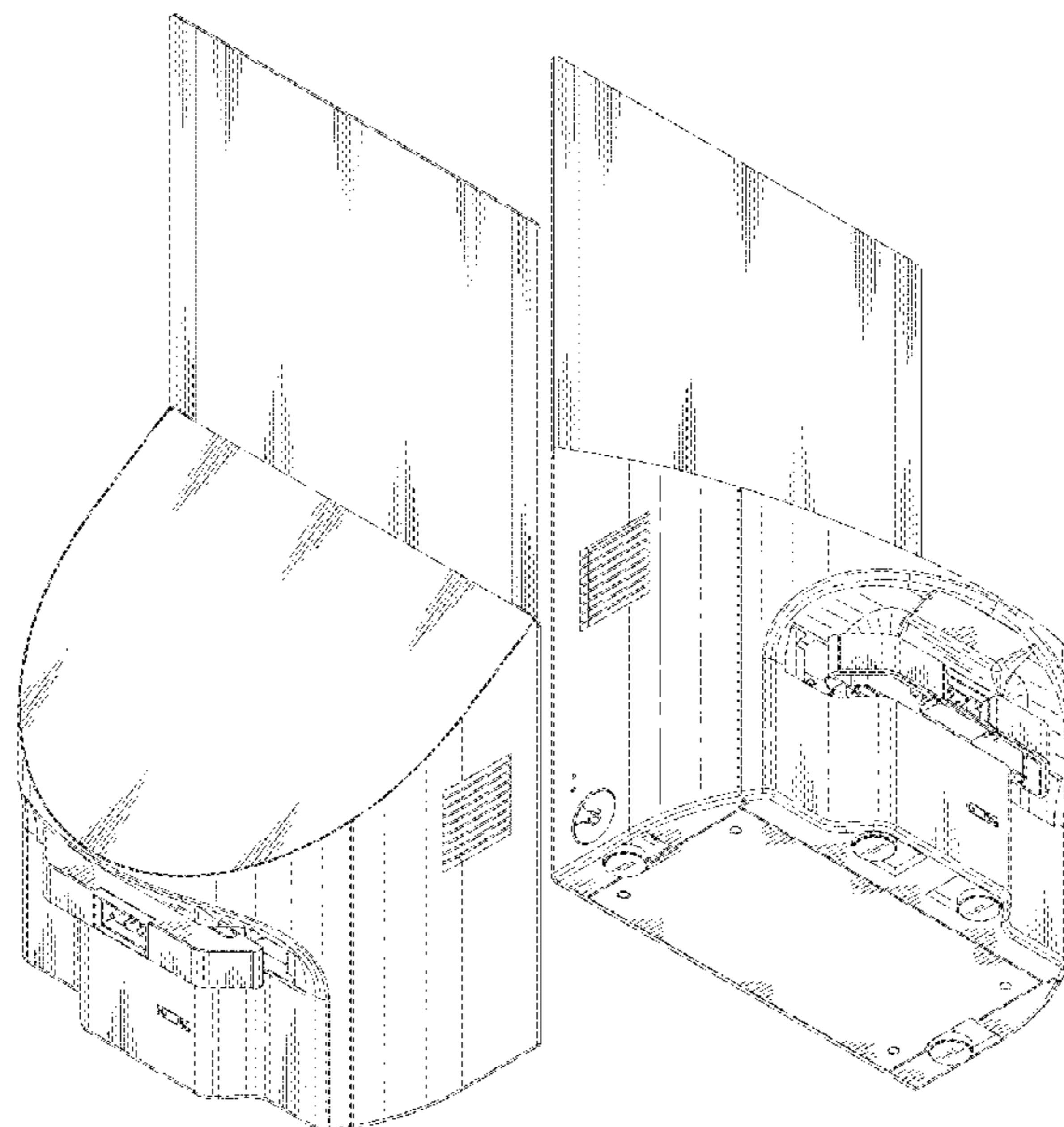
We claim the ornamental design for a charging station for robot, as shown and described.

DESCRIPTION

FIG. 1 is a top, left, perspective view of a charging station for robot, showing our new design;
FIG. 2 is a top, right, front rear perspective view thereof;
FIG. 3 is a bottom, left, front perspective view thereof;
FIG. 4 is bottom, right, front perspective view thereof;
FIG. 5 is a front elevational view thereof;
FIG. 6 is a rear elevational view thereof;
FIG. 7 is a top plan view thereof;
FIG. 8 is a bottom plan view thereof;
FIG. 9 is right side elevational view thereof;
FIG. 10 is a left side elevational view thereof; and,
FIG. 11 is a partial, enlarged front view of the detail identified in FIG. 5.

The equal-length broken lines depict portions of the charging station for robot that form no part of the claimed design.

1 Claim, 11 Drawing Sheets



(56)

References Cited

OTHER PUBLICATIONS

“Narwal Robotics”. Found online Jan. 10, 2022 at china-gadgets.com. Reference dated Aug. 11, 2019. Retrieved from <https://china-gadgets.com/narwal-robotics-vacuum-robot/>. (Year: 2019).*

“Shark Robot”. Found online Jan. 10, 2022 at amazon.com. Reference dated Nov. 17, 2019. Retrieved from https://www.amazon.com/Shark-R1001AE-Self-Empty-Connected-Capacity/dp/B07S864GPW/ref=asc_df_B07S864GPW/?th=1. (Year: 2019).*

* cited by examiner

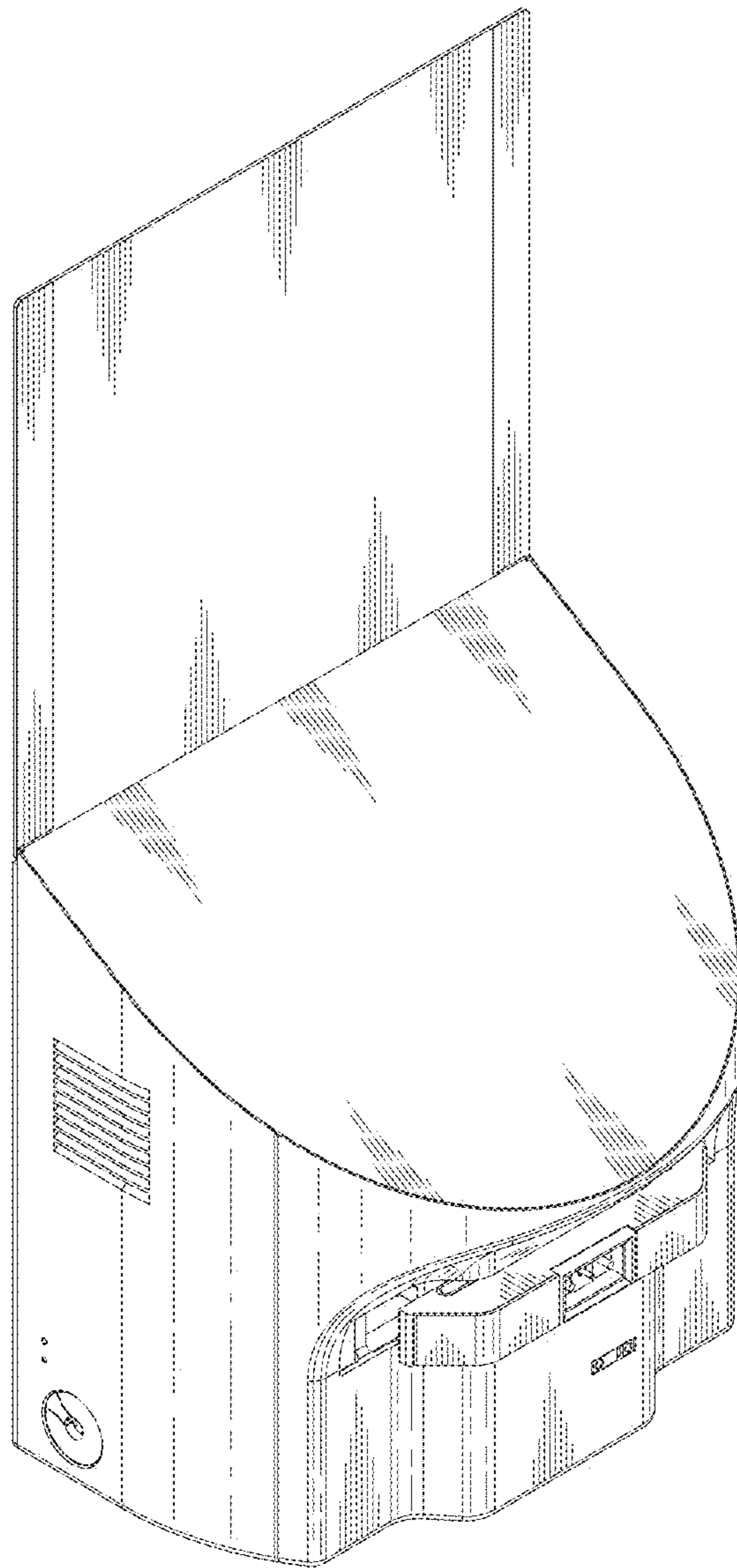


FIG. 1

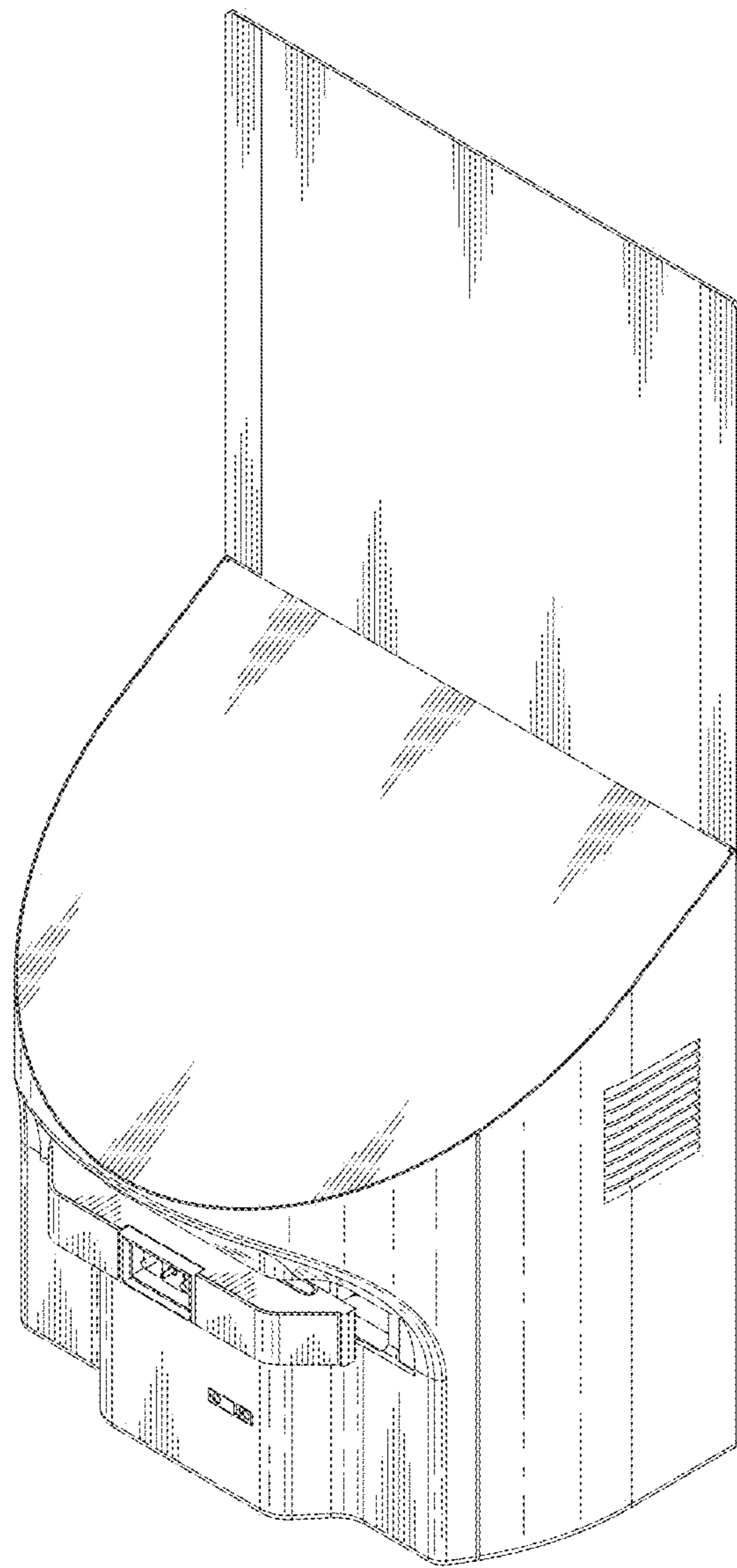


FIG. 2

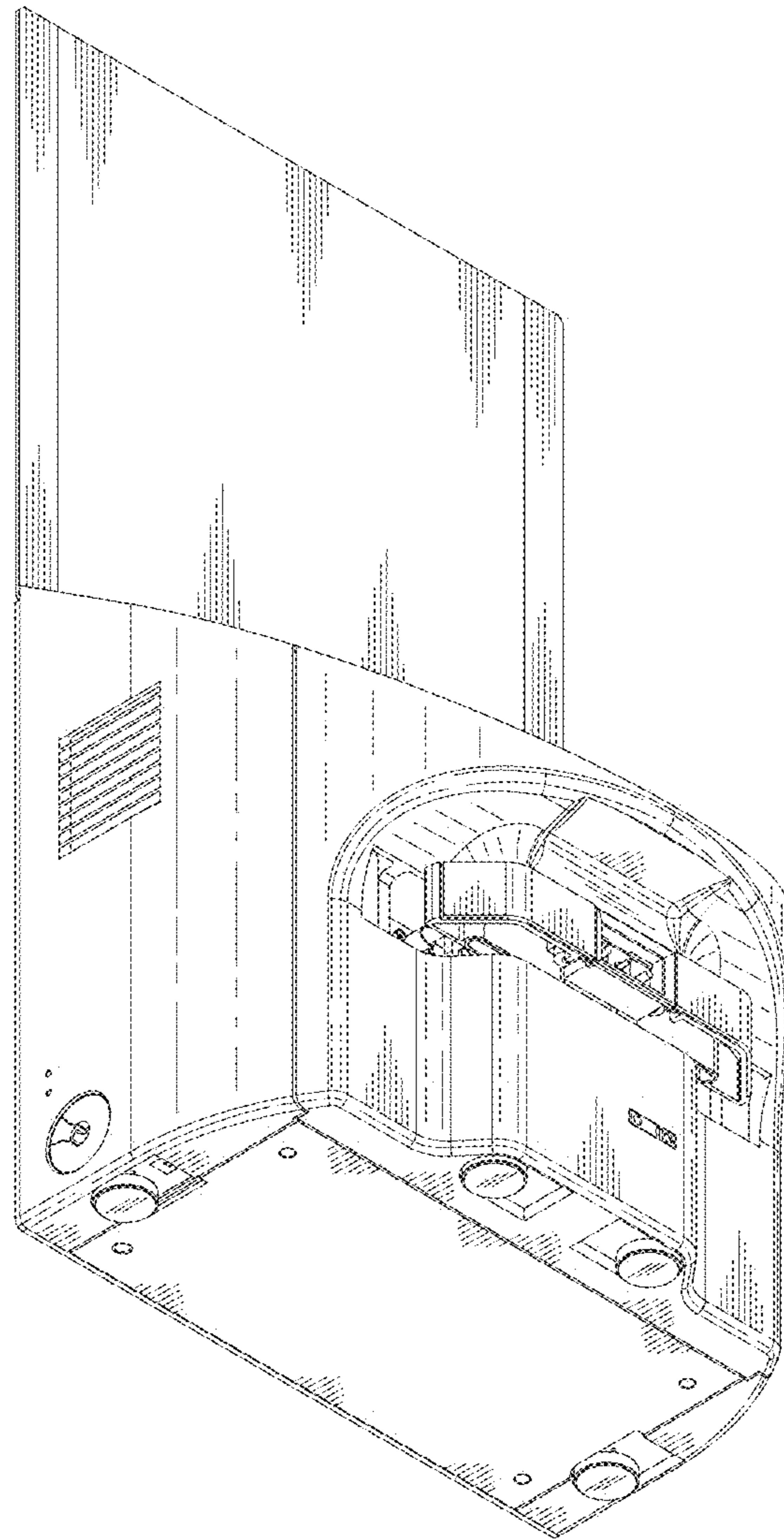


FIG. 3

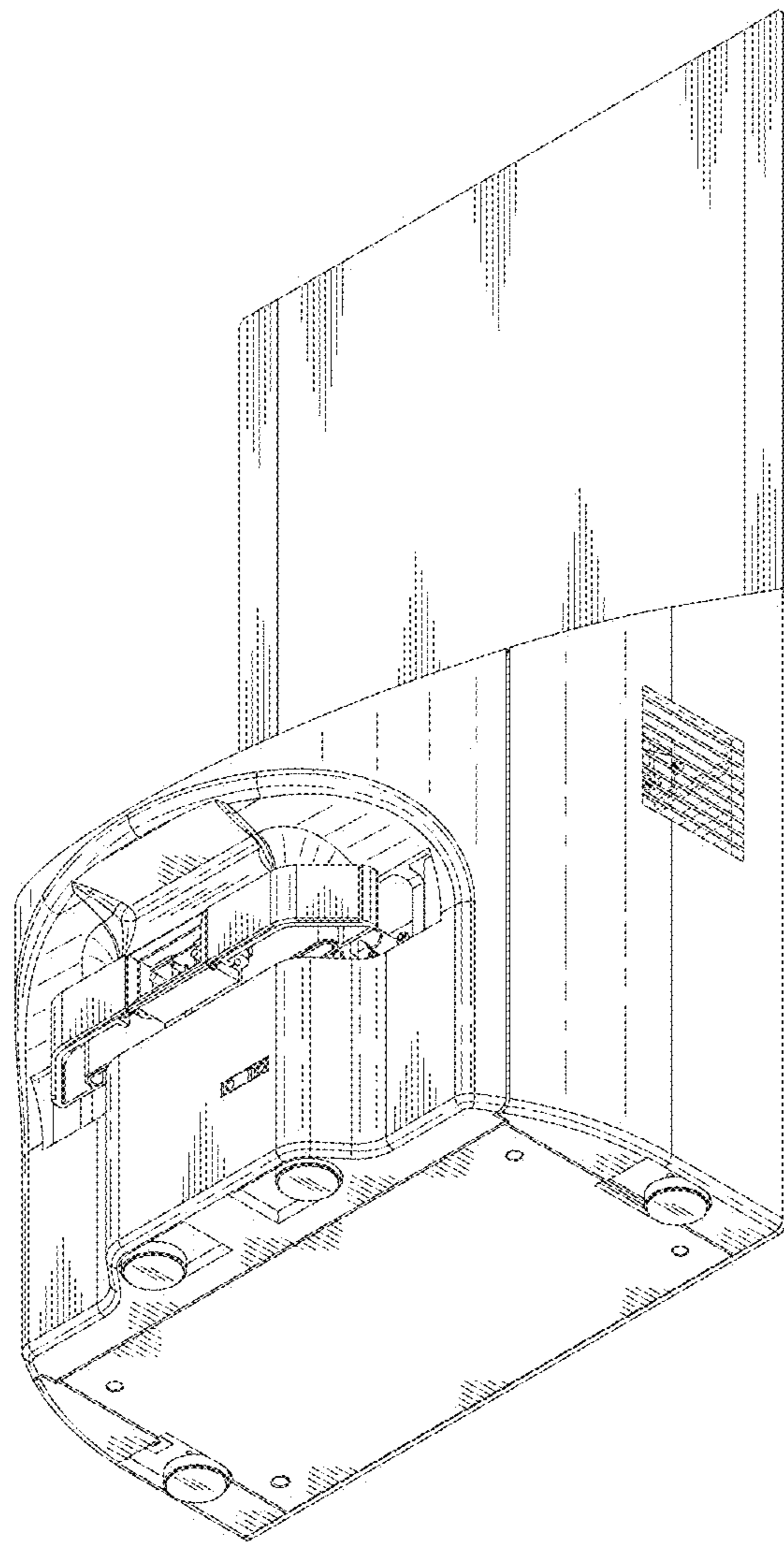


FIG. 4

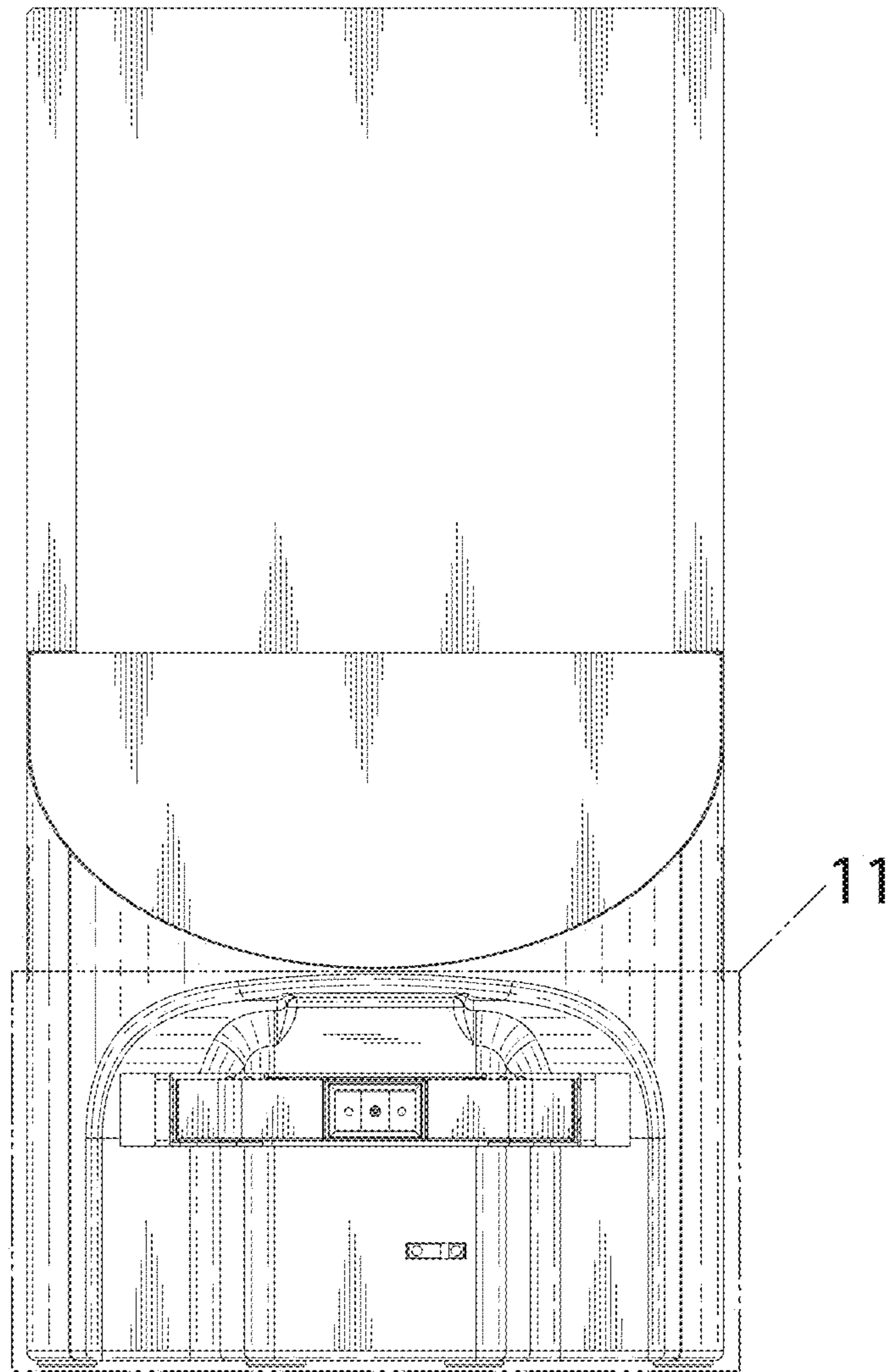


FIG. 5

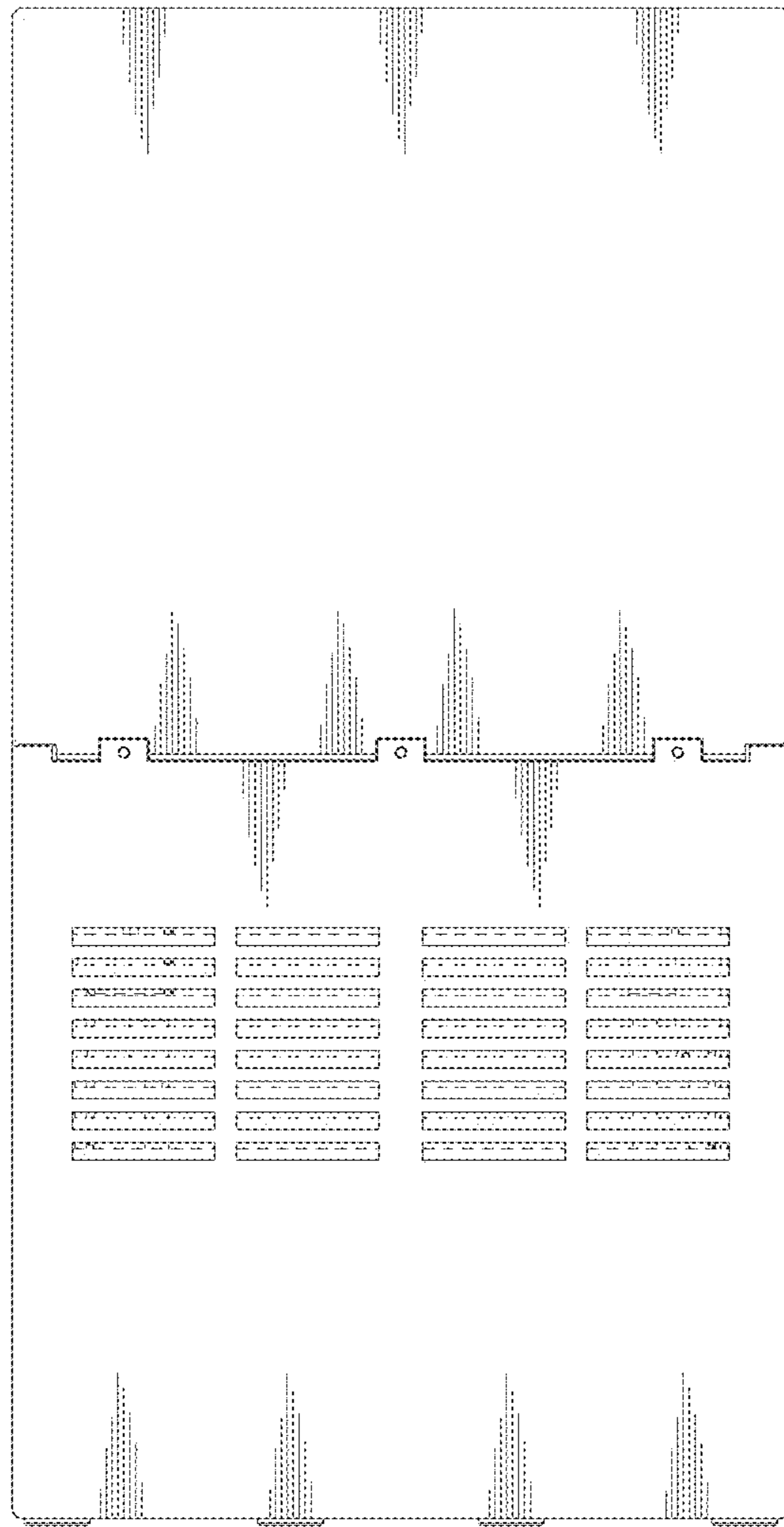


FIG. 6

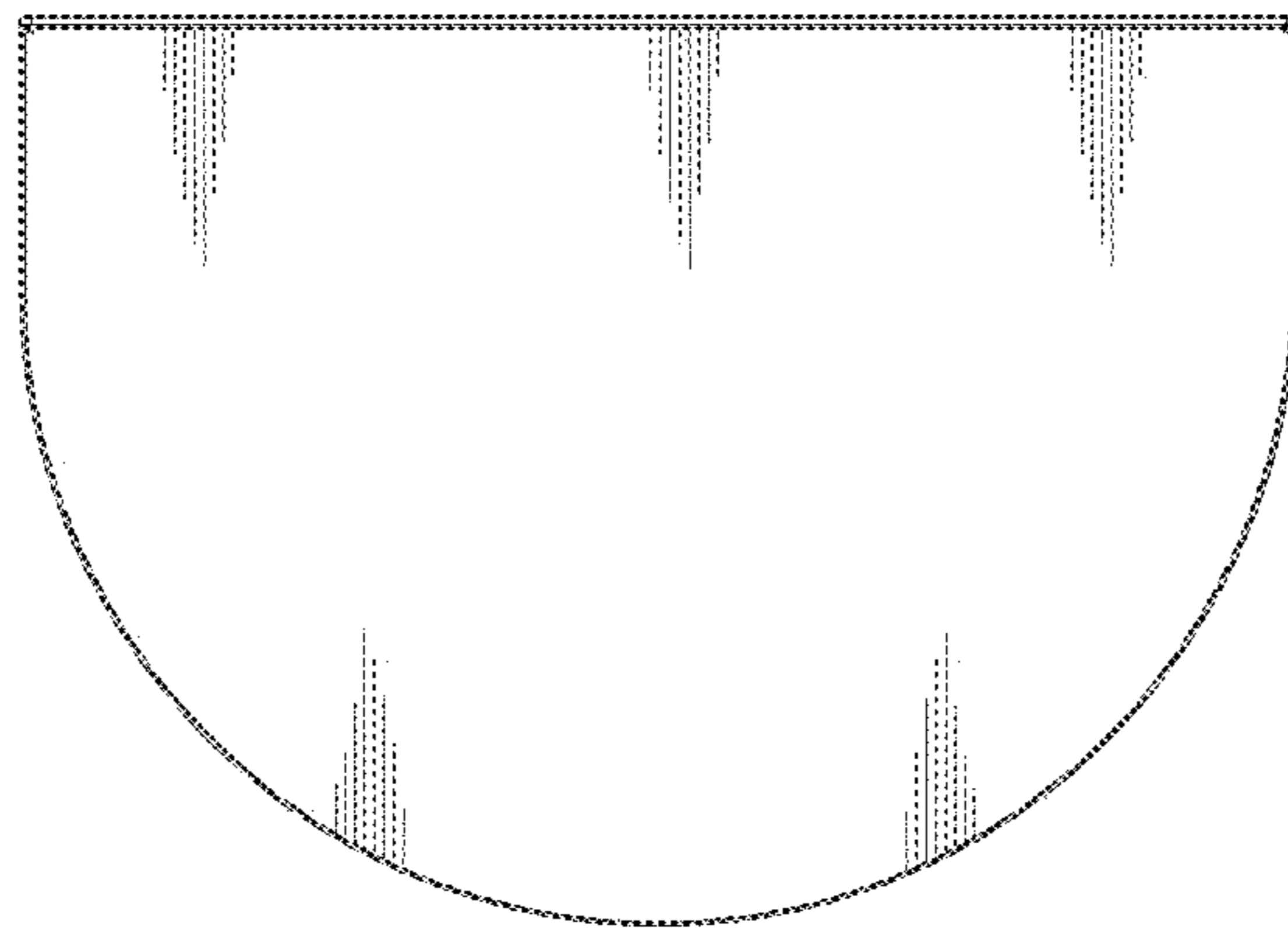


FIG. 7

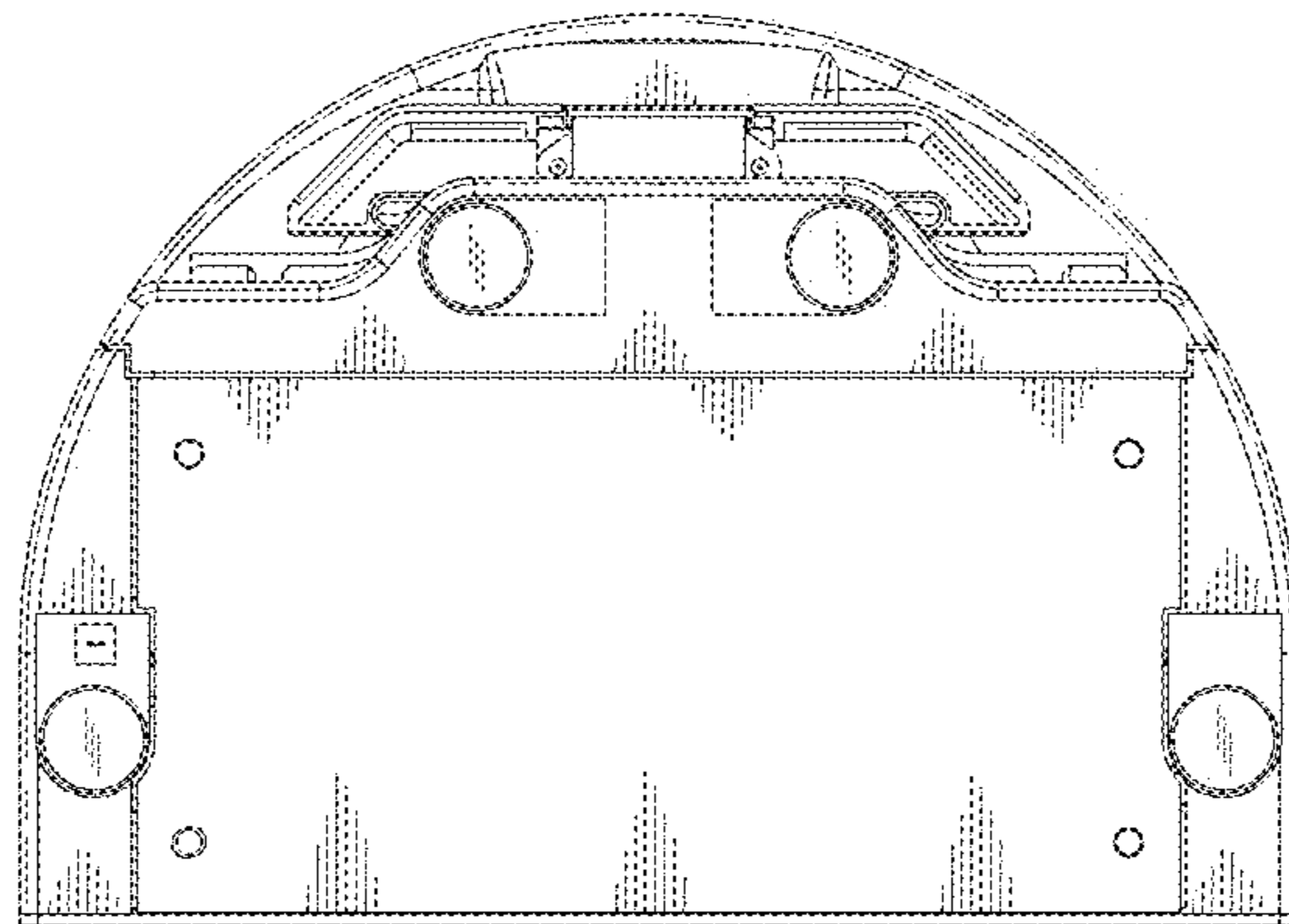


FIG. 8

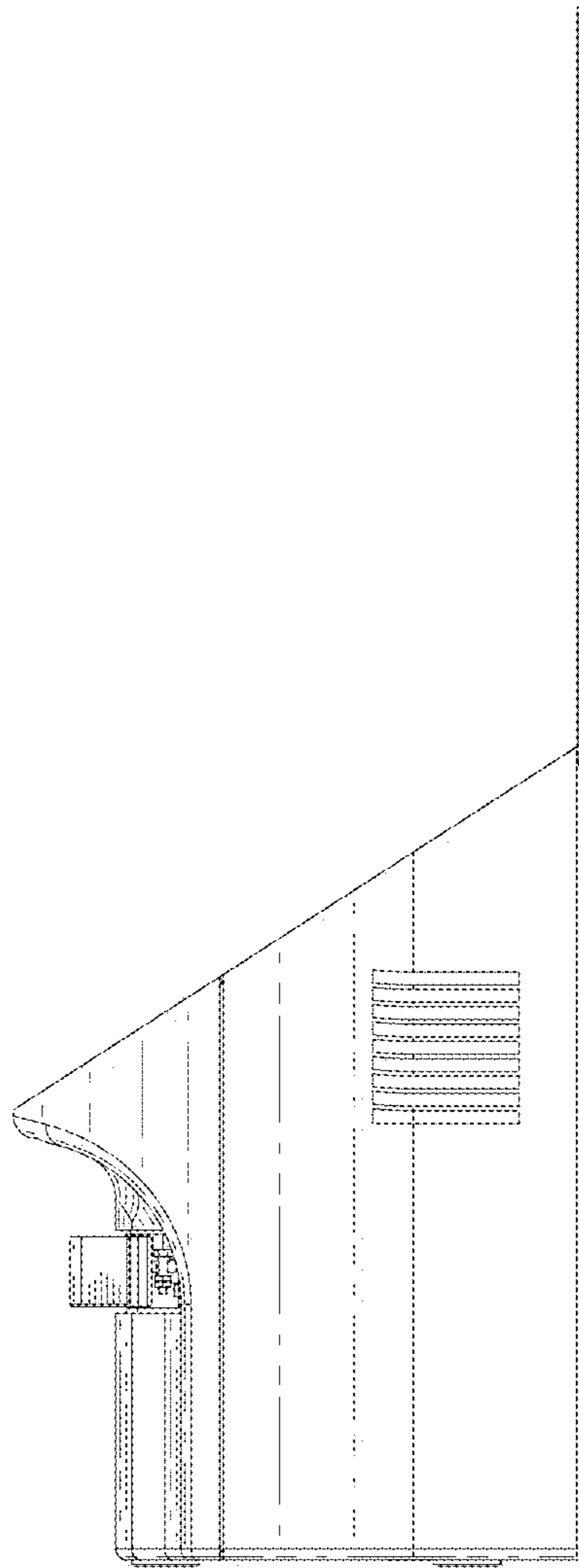


FIG. 9

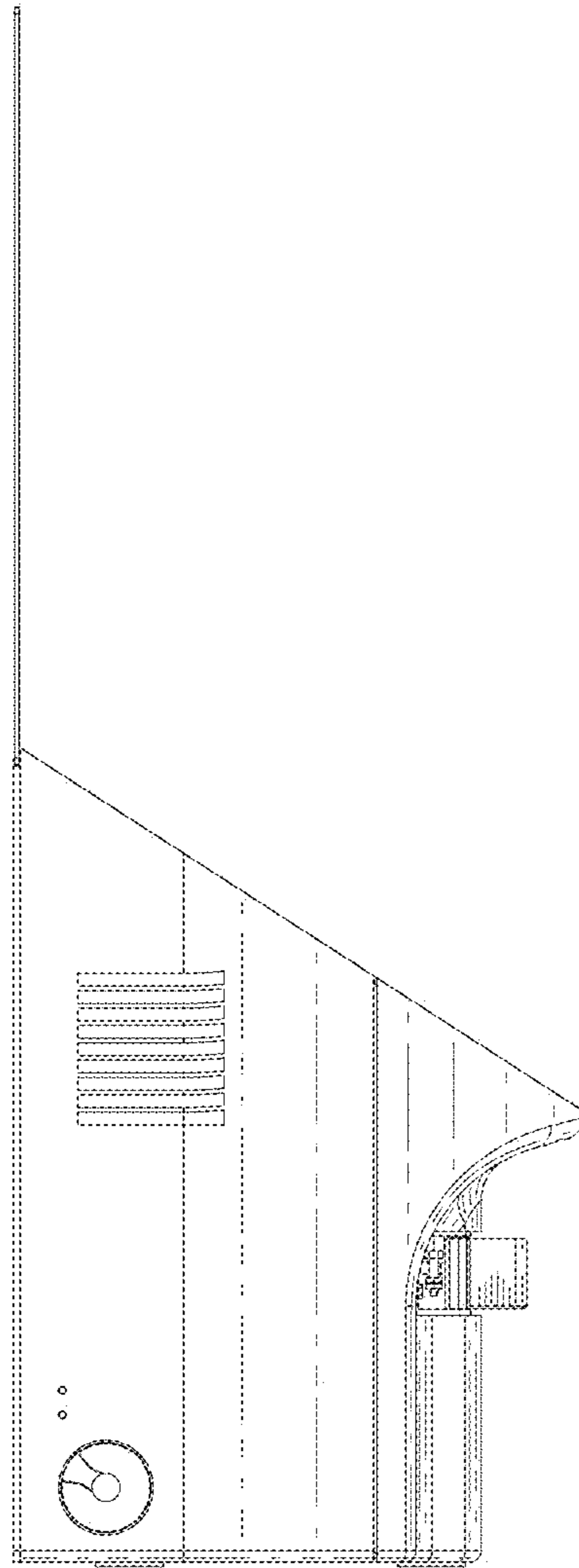


FIG. 10

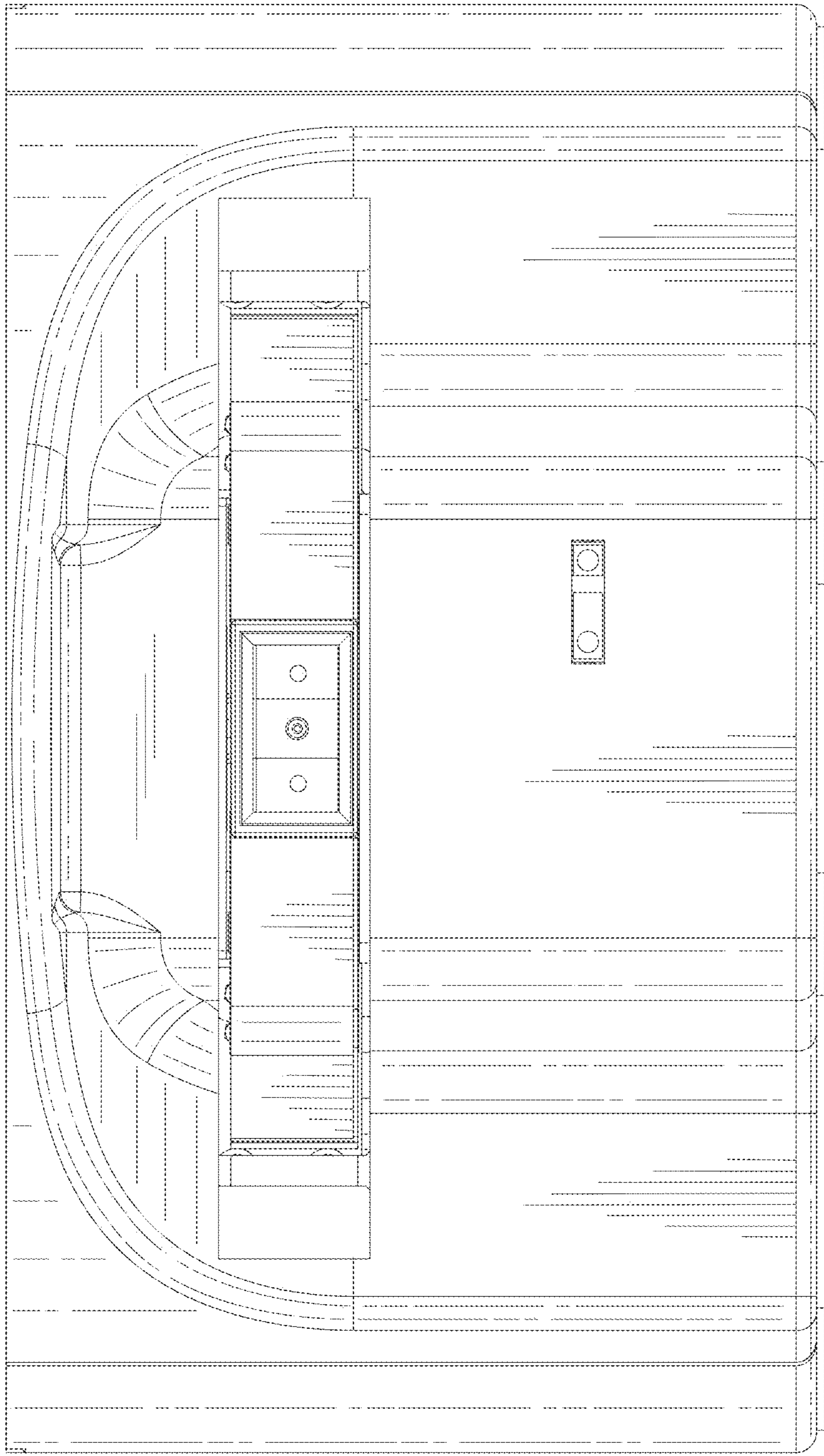


FIG. 11