



US00D938034S

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

(10) **Patent No.:** **US D938,034 S**
(45) **Date of Patent:** **** Dec. 7, 2021**

(54) **HUMERAL IMPLANT**

(71) Applicant: **HOWMEDICA OSTEONICS CORP.**,
Mahwah, NJ (US)

(72) Inventors: **Kevin P. Knox**, Fort Wayne, IN (US);
Austin Wyatt Mutchler, Warsaw, IN
(US); **Shawn M. Gargac**, Fort Wayne,
IN (US); **Alexander Paul Wolfe**, Fort
Wayne, IN (US); **David R. Stump**,
Columbia City, IN (US)

(73) Assignee: **HOWMEDICA OSTEONICS CORP.**,
Mahwah, NJ (US)

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

(21) Appl. No.: **29/729,987**

(22) Filed: **Mar. 31, 2020**

(51) **LOC (13) Cl.** **24-03**

(52) **U.S. Cl.**
USPC **D24/155**

(58) **Field of Classification Search**
USPC D2/617; D3/201, 203.1, 203.6, 203.7,
D3/304, 306, 314; D8/382; D14/205,
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D433,130 S * 10/2000 Cude D24/121
D617,459 S * 6/2010 Bogue D24/155
(Continued)

OTHER PUBLICATIONS

Med Gadget, "Tornier Announces First Implant in U.S. Trial of Its
Simpliciti Stemless Shoulder Joint Replacement System", first
available Aug. 5, 2011. (<https://www.medgadget.com/2011/08/tornier-announces-first-implant-in-u-s-trial-of-its-simpliciti-stemless-shoulder-joint-replacement-system.html>) (Year: 2011).*

(Continued)

Primary Examiner — Christian P. McLean

Assistant Examiner — Justin A Johnson

(74) *Attorney, Agent, or Firm* — Duane Morris LLP

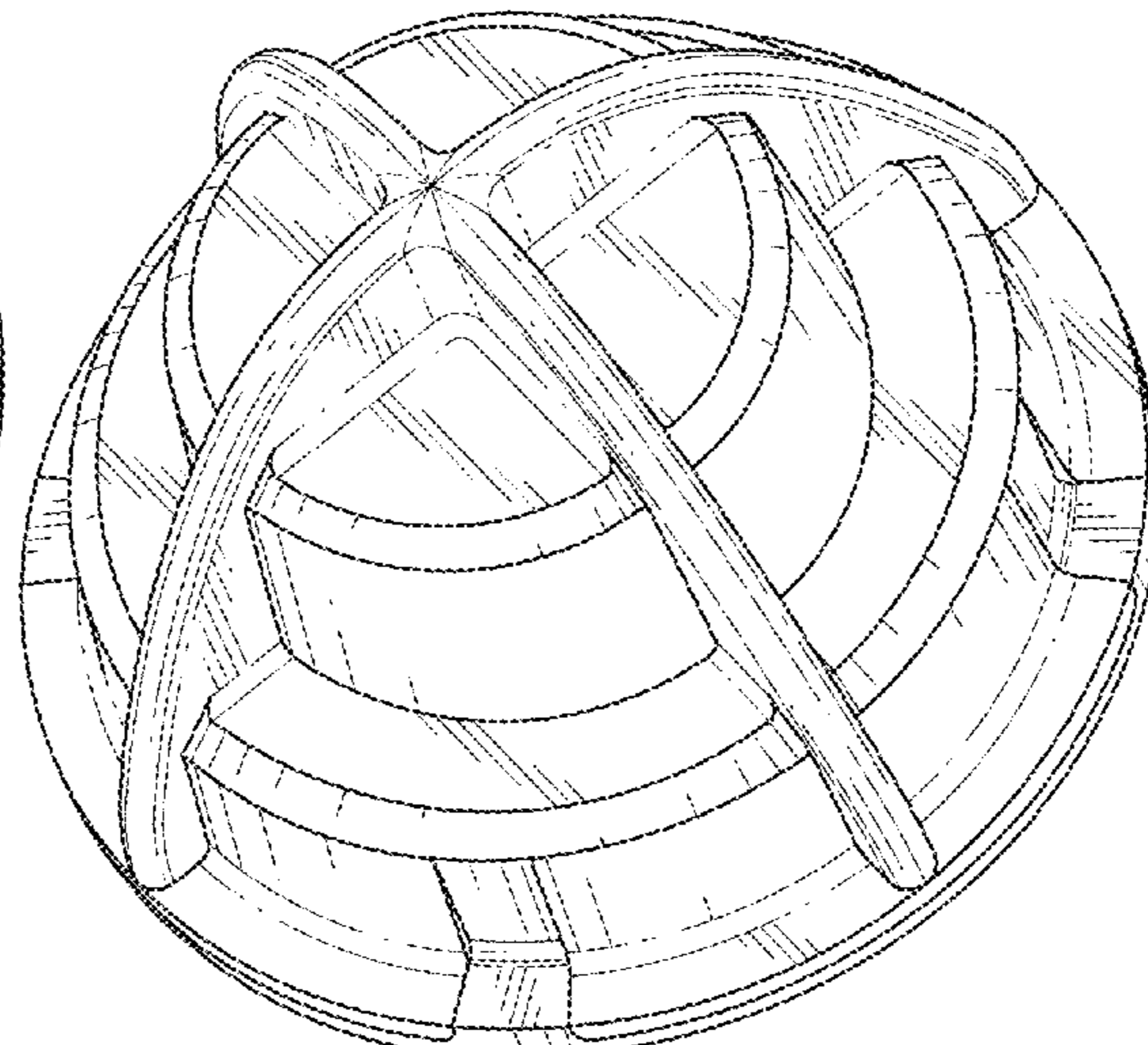
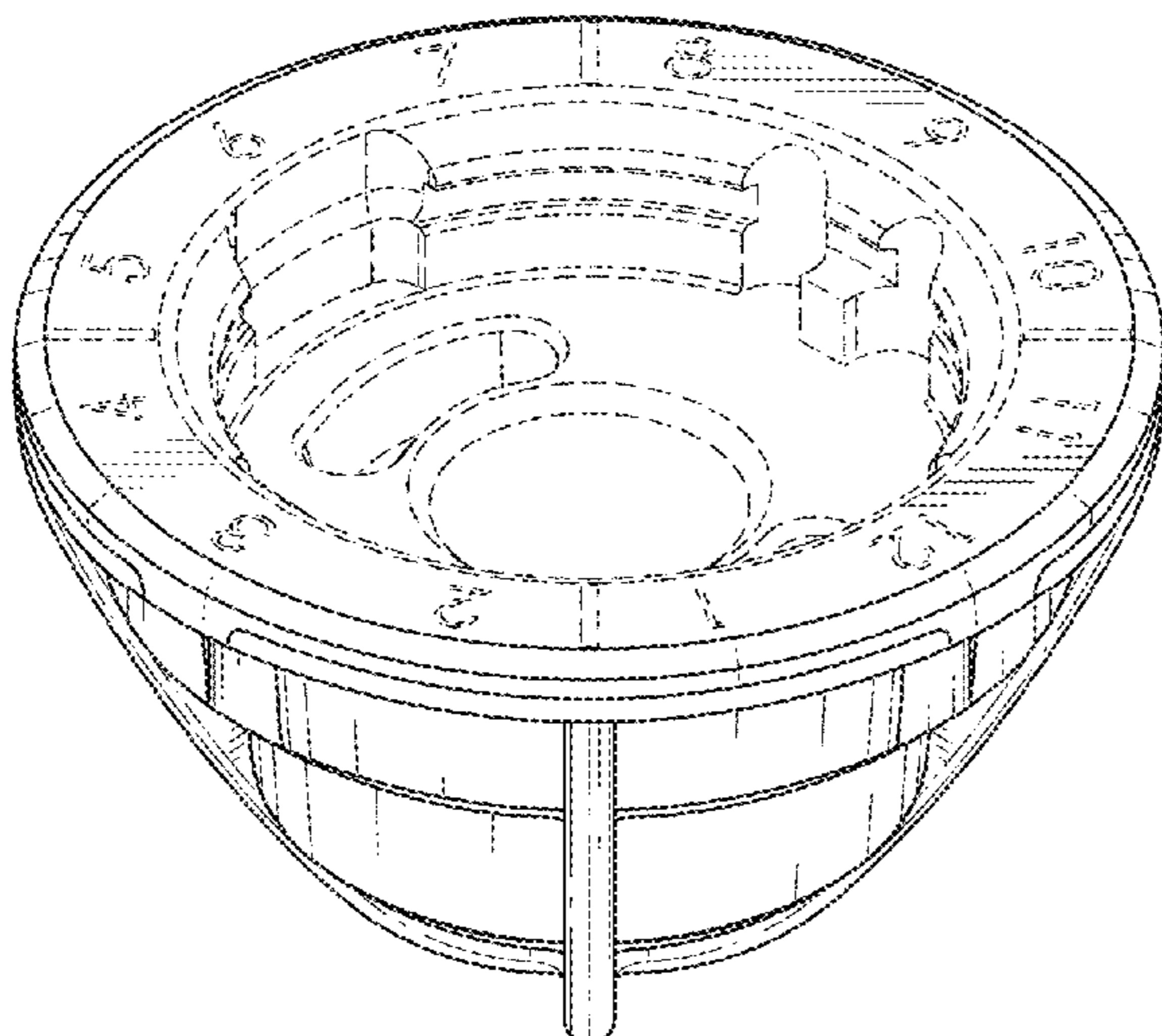
(57) **CLAIM**

The ornamental design for a humeral implant, as shown and
described.

DESCRIPTION

FIG. 1 is a top perspective view of an embodiment of a
humeral implant of our design;
FIG. 2 is a bottom perspective view thereof;
FIGS. 3-6 are side views thereof;
FIG. 7 is a top view thereof; and
FIG. 8 is a bottom view thereof.
FIG. 9 is a top perspective view of another embodiment of
a humeral implant of our design;
FIG. 10 is a bottom perspective view of the design of FIG.
9;
FIGS. 11-14 are side views of the design of FIG. 9;
FIG. 15 is a top view of the design of FIG. 9; and
FIG. 16 is a bottom view of the design of FIG. 9.
FIG. 17 is a top perspective view of another embodiment of
a humeral implant of our design;
FIG. 18 is a bottom perspective view of the design of FIG.
17;
FIGS. 19-22 are side views of the design of FIG. 17;
FIG. 23 is a top view of the design of FIG. 17; and
FIG. 24 is a bottom view of the design of FIG. 17.
FIG. 25 is a top perspective view of another embodiment of
a humeral implant of our design;
FIG. 26 is a bottom perspective view of the design of FIG.
25;
FIGS. 27-30 are side views of the design of FIG. 25;
FIG. 31 is a top view of the design of FIG. 25; and
FIG. 32 is a bottom view of the design of FIG. 25.
The broken lines immediately adjacent to the shaded areas
depict the bounds of the claimed design, while all other
broken lines are directed to environment. The broken lines
form no part of the claimed design.

1 Claim, 20 Drawing Sheets



(58) Field of Classification Search

USPC D14/223; D15/199; D24/101, 102, 104,
D24/133, 141, 155, 171, 188, 190, 193,
D24/194, 196, 216, 224, 227, 228, 229,
D24/231; D29/123
CPC .. A41D 19/00; A41D 19/0017; A41D 19/015;
A41D 19/0055; A61B 17/80; A61B
2017/00292; A61B 2017/00796; A61B
2017/00969; A61B 50/30; A61B 50/33;
A61F 2/00; A61F 2/02; A61F 2002/046;
A61F 2/12; A61F 2/20; A61F 2/203;
A61F 2/26; A61F 2/28; A61F 2002/2853;
A61F 2/30; A61F 2/50; A61F 2002/5038;
A61F 2002/5058; A61F 2002/5064; A61F
2/52; A61F 2002/526; A61F 2/54; A61F
2/58; A61F 2/583; A61F 2/60; A61F
2/604; A61F 2/64; A61F 2/66; A61F
2002/6614; A61F 2002/6621; A61F
2002/6628; A61F 2/82; A61F 2/86; A61F
2/88; A61F 2/885; A61F 2/4014; A61F
2002/4018; A61F 2002/4022; A61F
2002/4029; A61F 2002/4033; A61F
2002/4037; A61F 2002/4044; A61F
2002/4051; A61F 2/4059; A61F
2002/4062; A61F 2002/4066; A61F
2002/407; A61F 2002/4074; A61F
2002/4077; A61F 2/4081; A61F
2002/4085; A61N 1/05; A61N 1/0551;
A61N 1/20; A61M 16/04

See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

D705,438	S *	5/2014	Wainwright	.....	D24/216
D743,552	S *	11/2015	Bronnimann	.....	D24/155
D765,260	S *	8/2016	Sparr	.....	D24/190
D776,295	S *	1/2017	Wainwright	.....	D24/224
10,722,373	B2 *	7/2020	Hodorek	.....	A61F 2/4014
D896,369	S *	9/2020	Chase	.....	D24/123
D908,874	S *	1/2021	Conklin	.....	D24/140
2013/0245775	A1 *	9/2013	Metcalfe	.....	A61F 2/4684 623/19.12
2014/0236304	A1 *	8/2014	Hodorek	.....	A61B 17/8875 623/19.14
2017/0304063	A1 *	10/2017	Hatzidakis	.....	A61F 2/4003
2020/0214845	A1 *	7/2020	Knox	.....	A61F 2/4612

OTHER PUBLICATIONS

Wright Media, "Tornier Aequalis Reversed FX", first available May 19, 2016. (https://www.wrightmedia.com/ProductFiles/Files/PDFs/CAW-1146_EN_LR_LE.pdf) (Year: 2016).*

Wright Media, "Aequalis Ascend Flex", first available Jul. 30, 2019. (https://www.wrightmedia.com/ProductFiles/Files/PDFs/AP-010187_EN_LR_LE.pdf) (Year: 2019).*

Arthrex, "Univers Revers Shoulder System", first available Apr. 24, 2019. (https://www.arthrex.com/resources/surgical-technique-guide/qkv6M00_50qt2QFBx1PKnA/univers-revers-shoulder-system) (Year: 2019).*

* cited by examiner

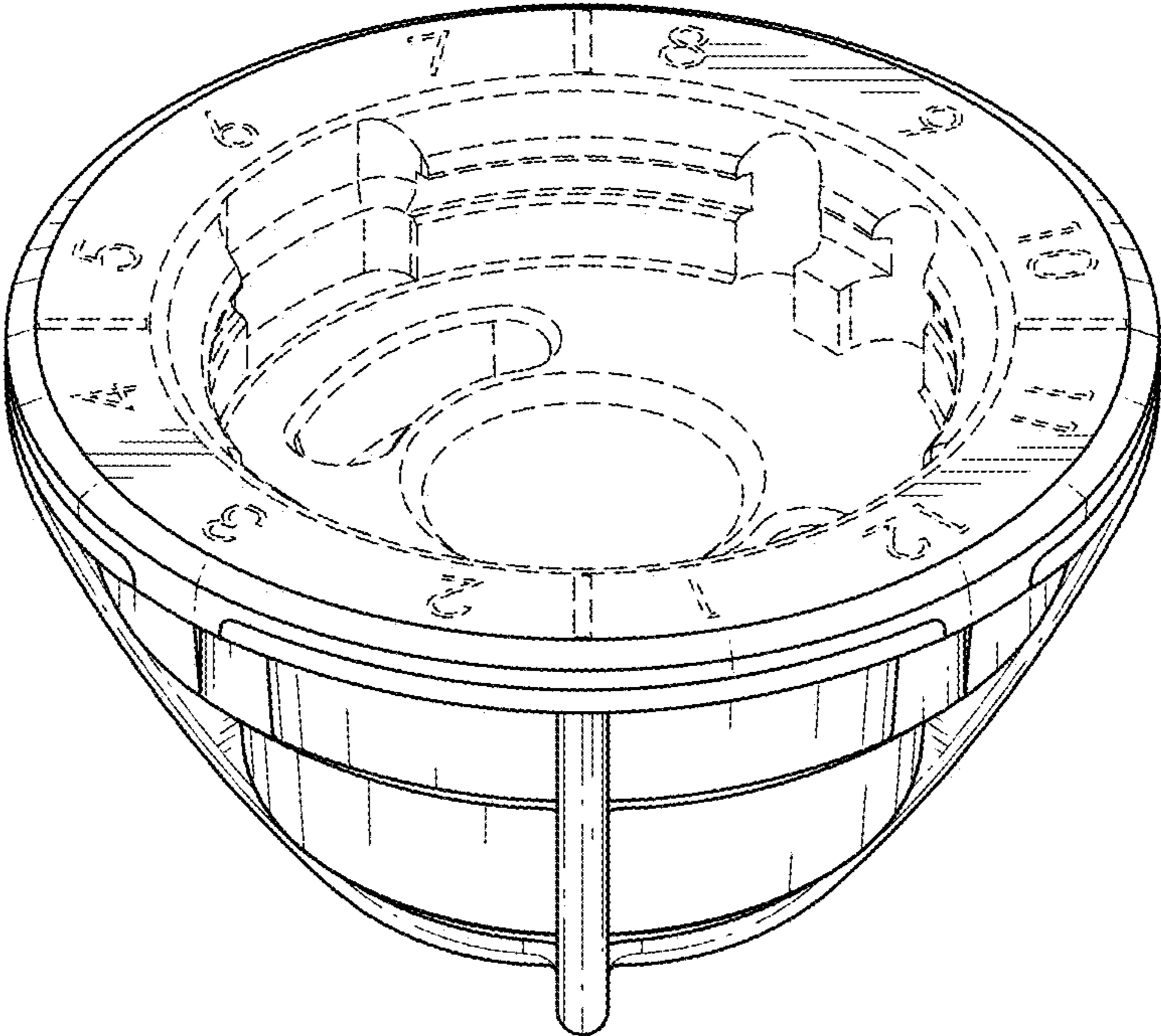


FIG. 1

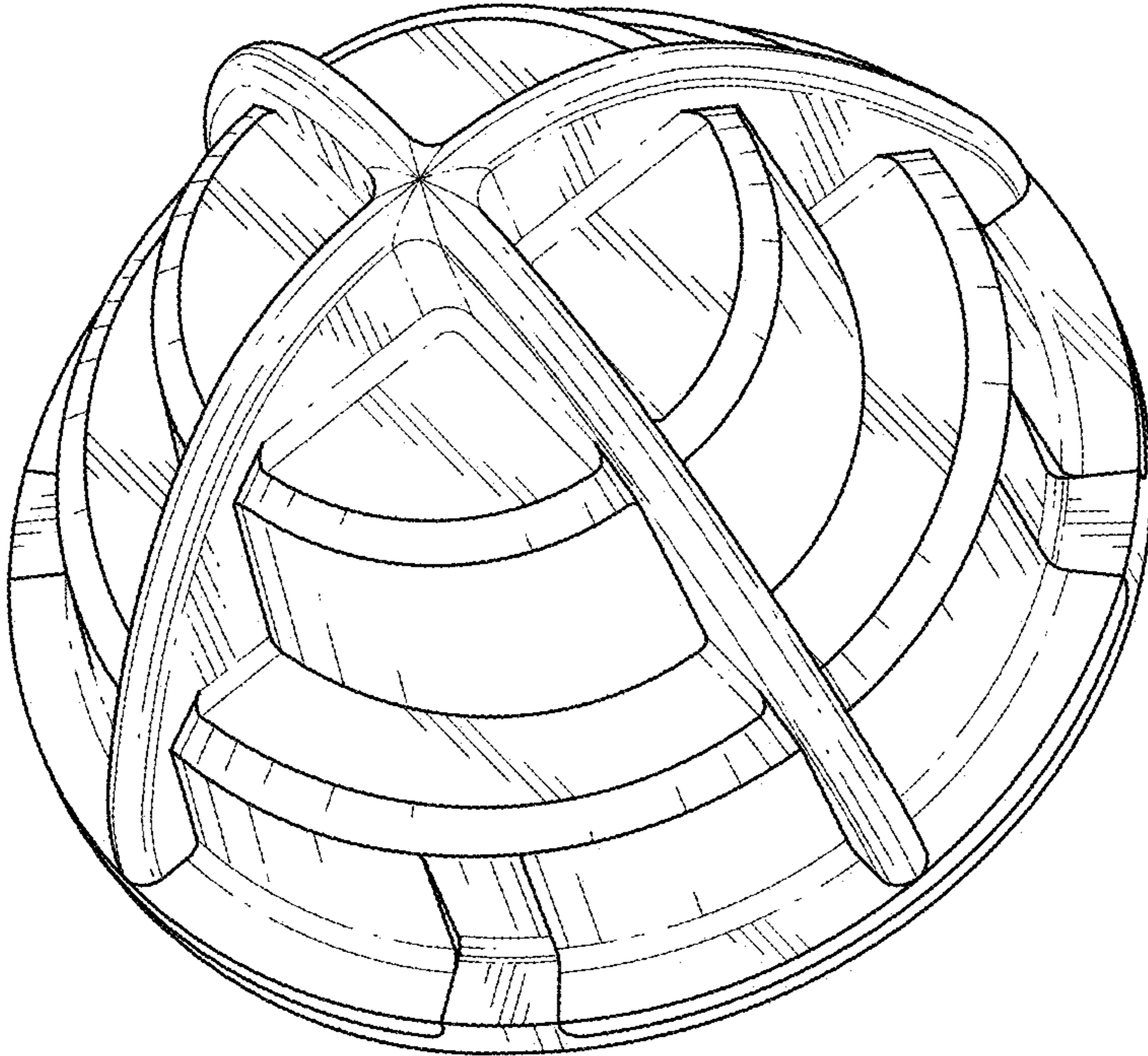


FIG. 2

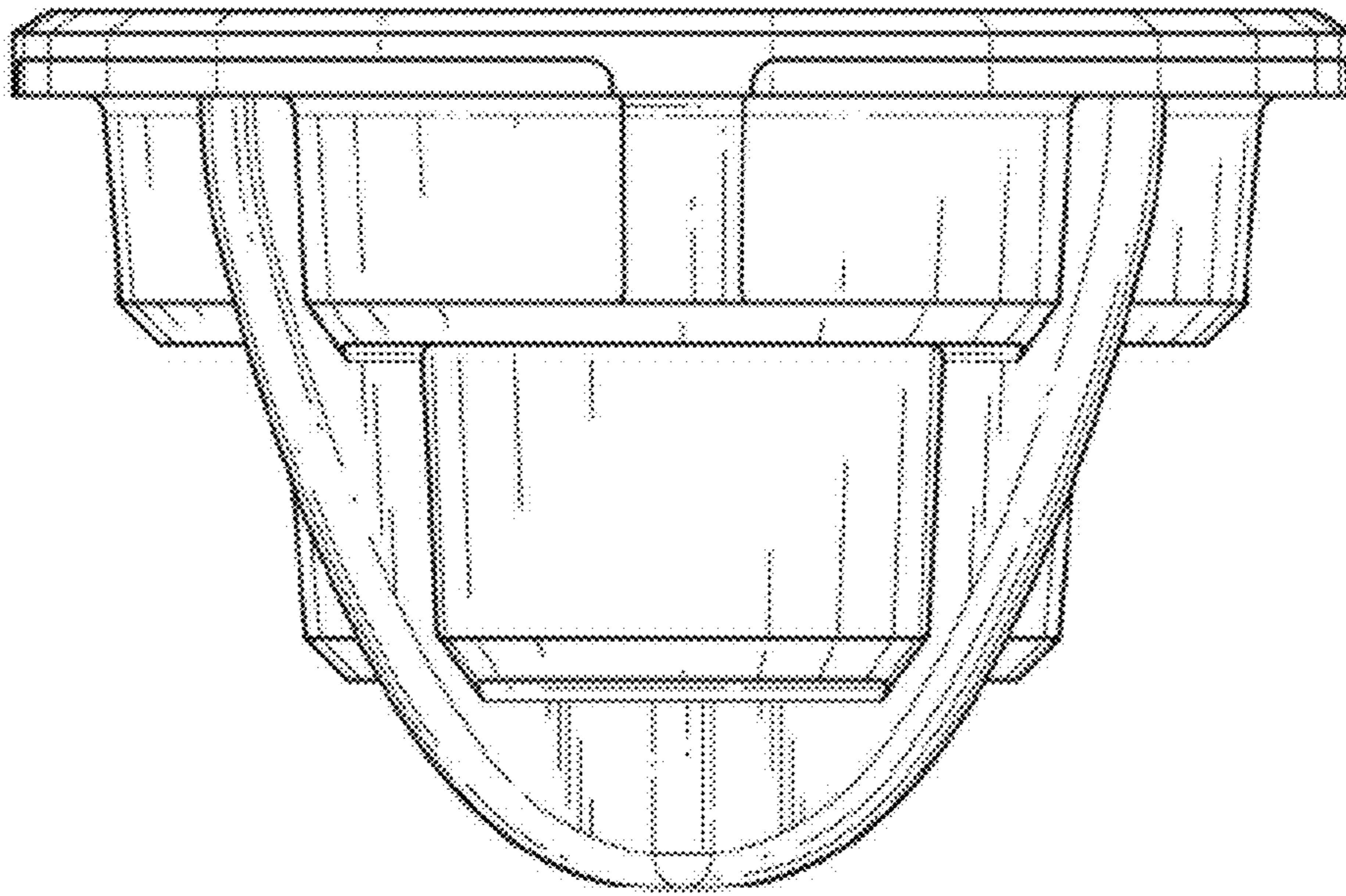


Fig. 3

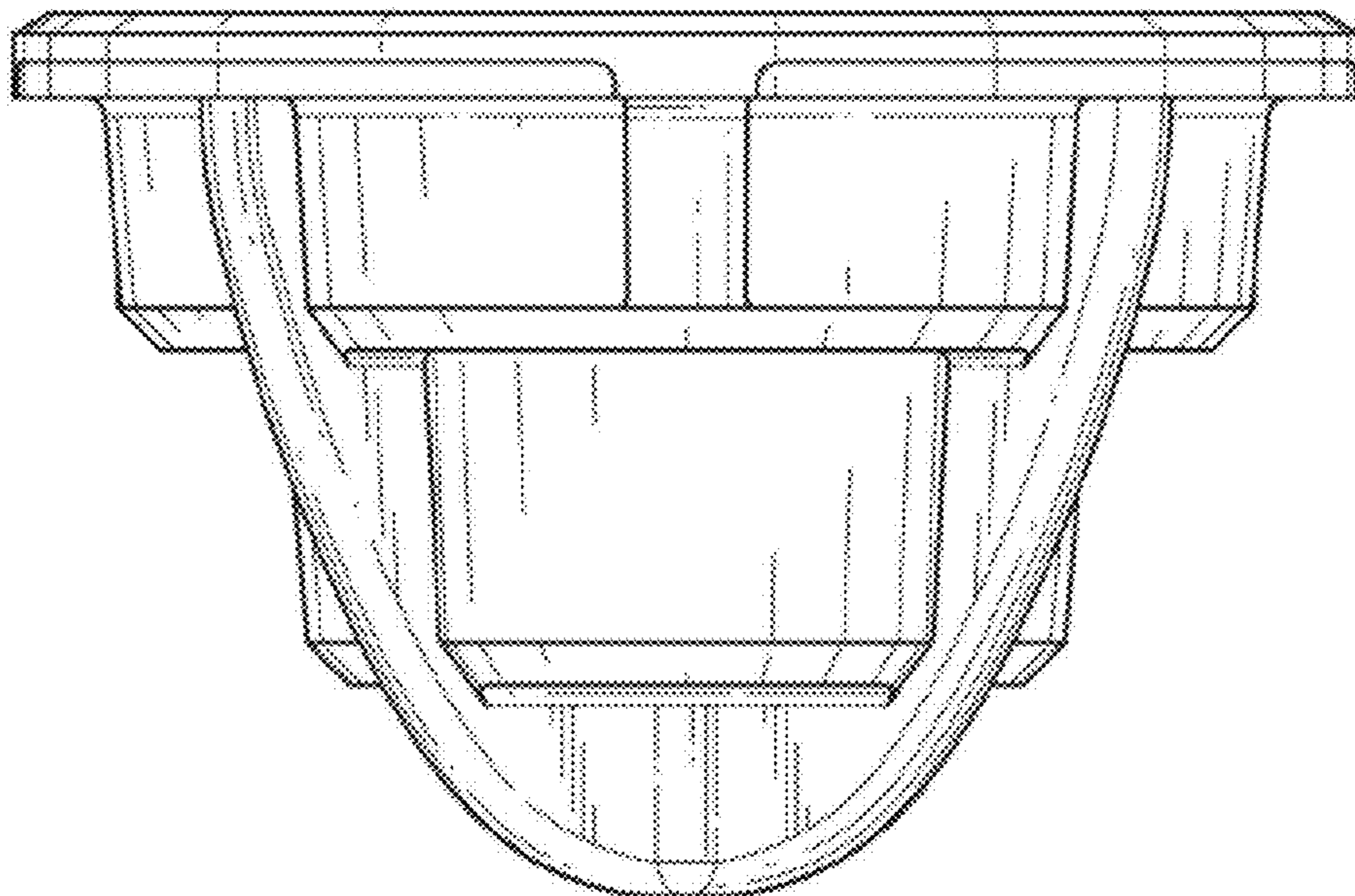


Fig. 4

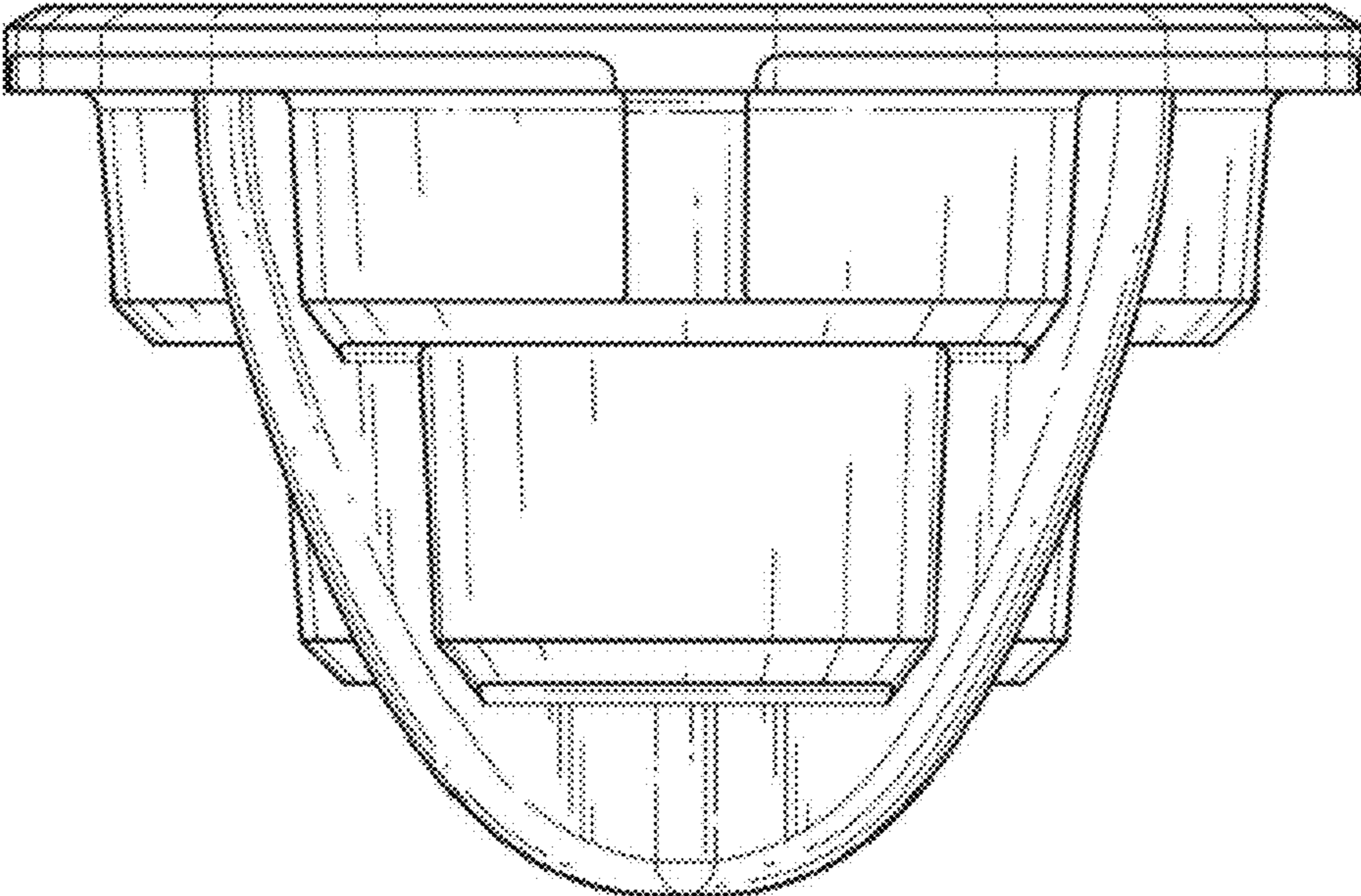


Fig. 5

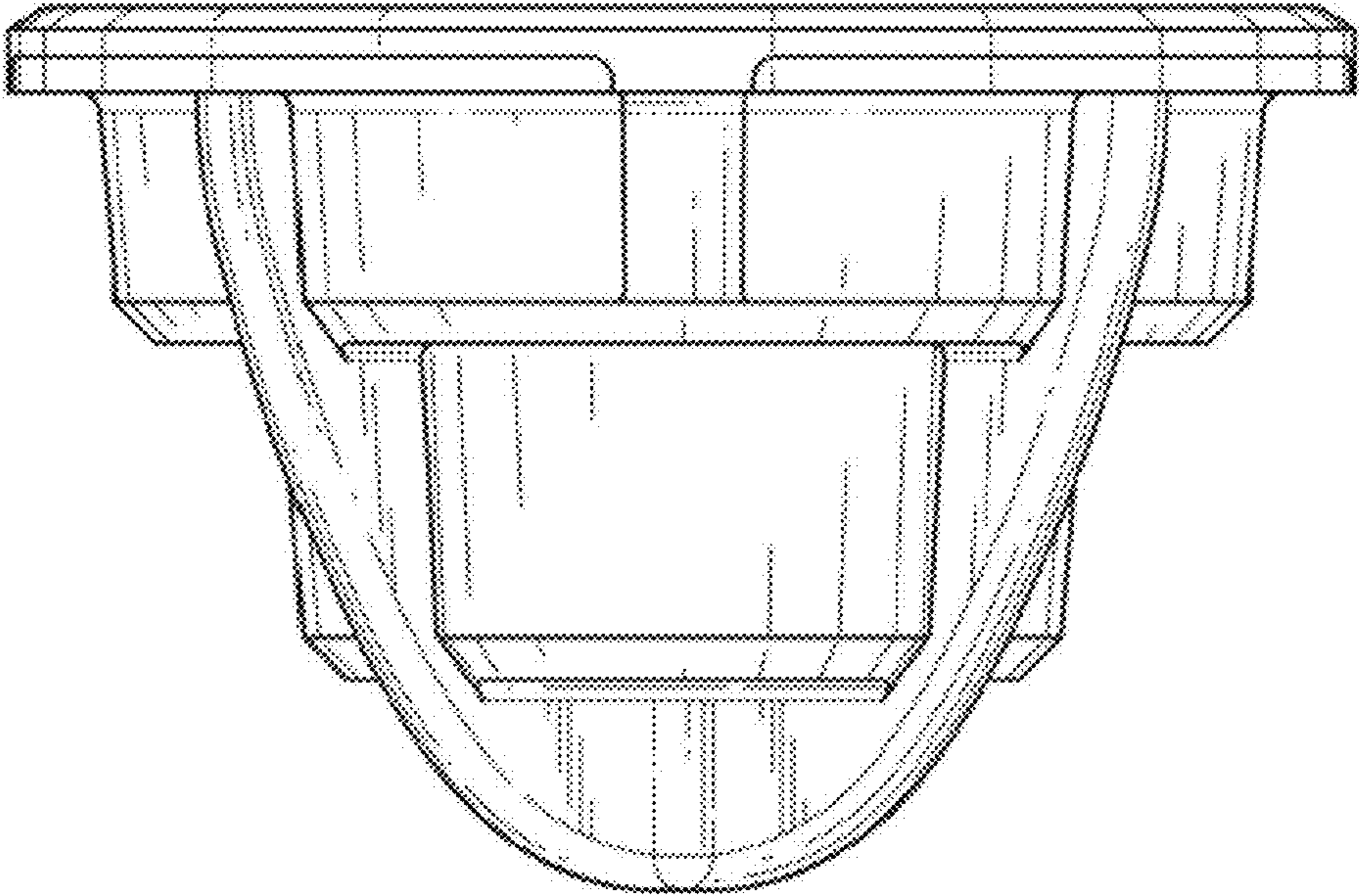


Fig. 6

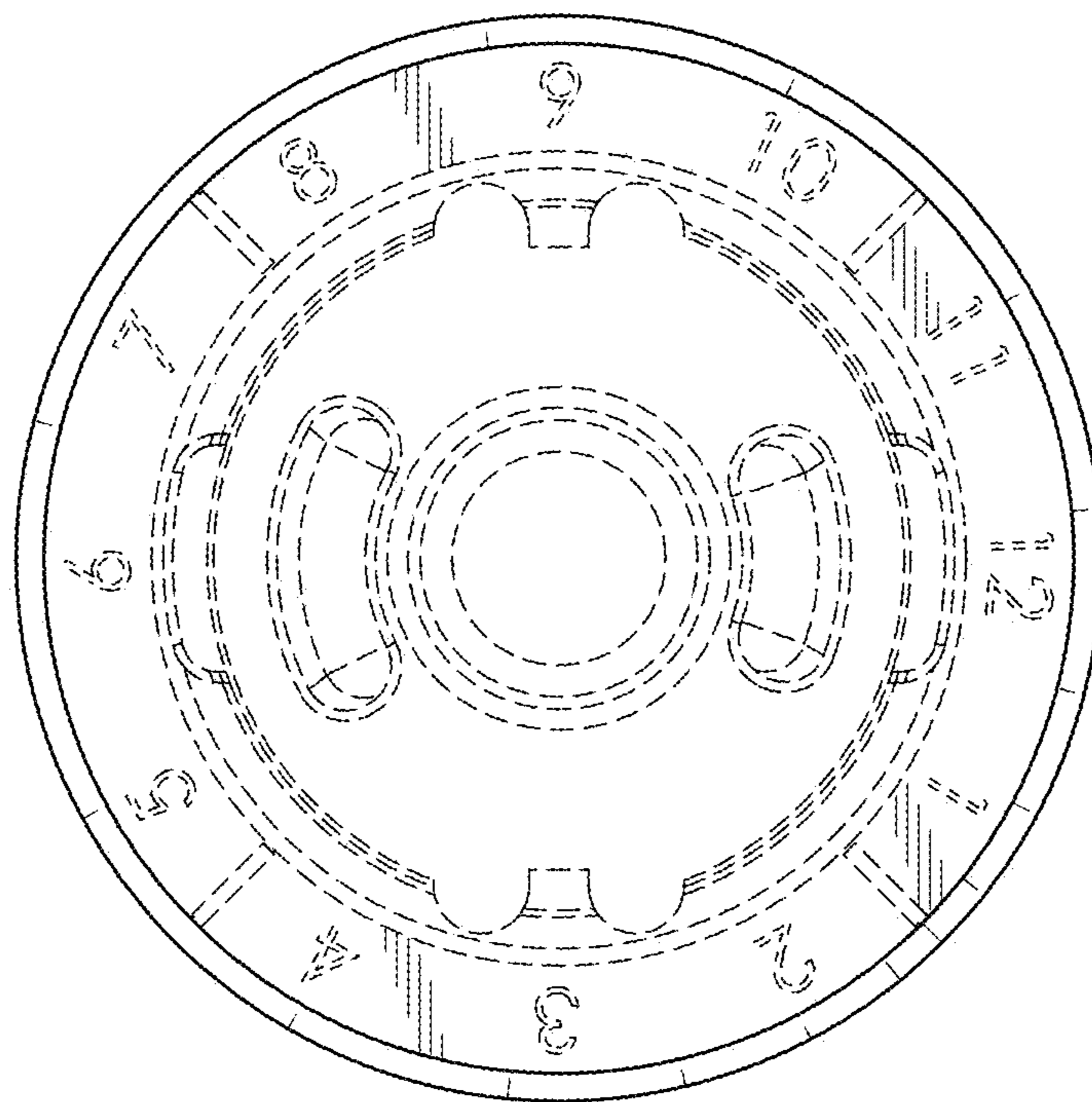


FIG. 7

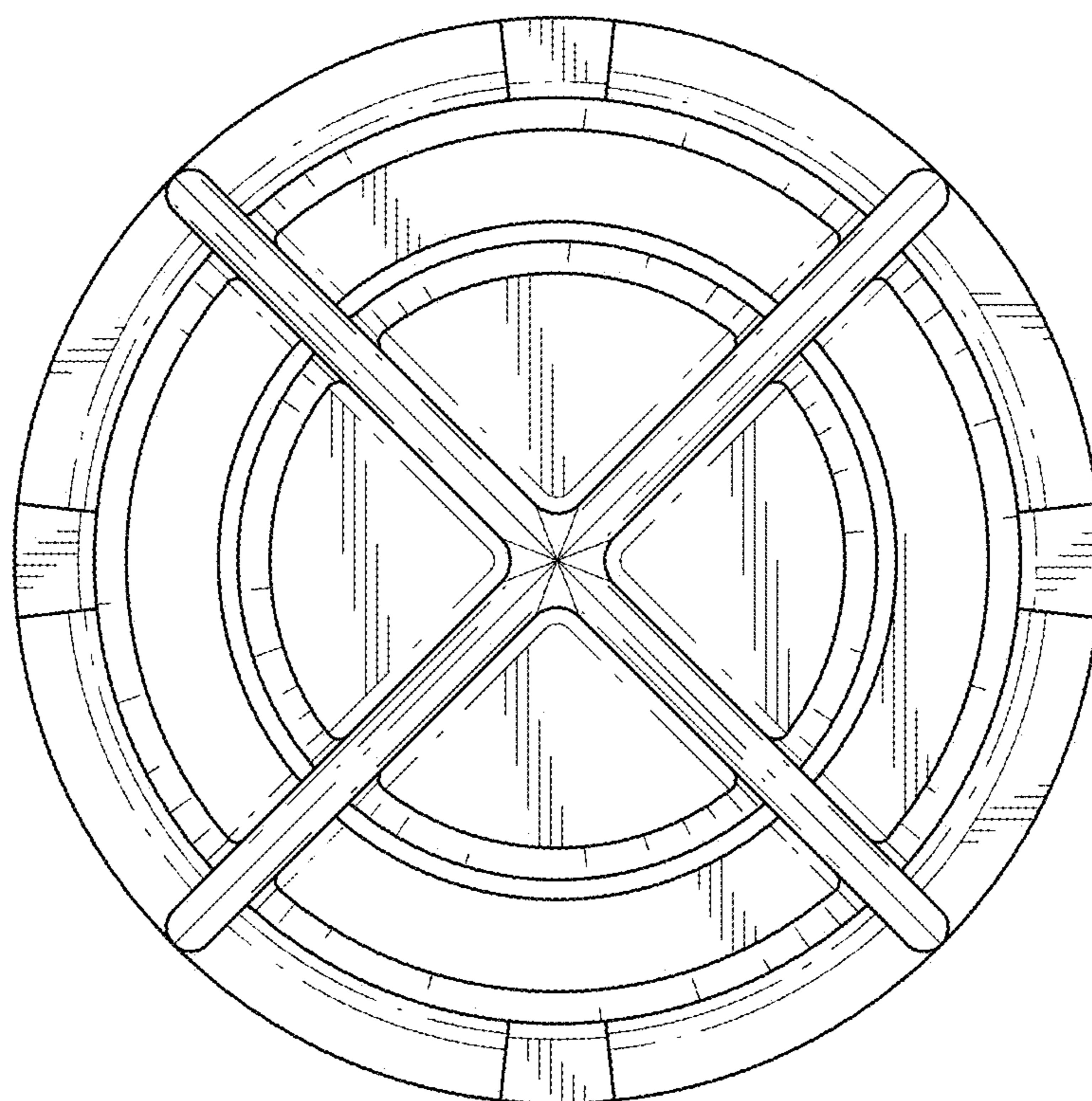


FIG. 8

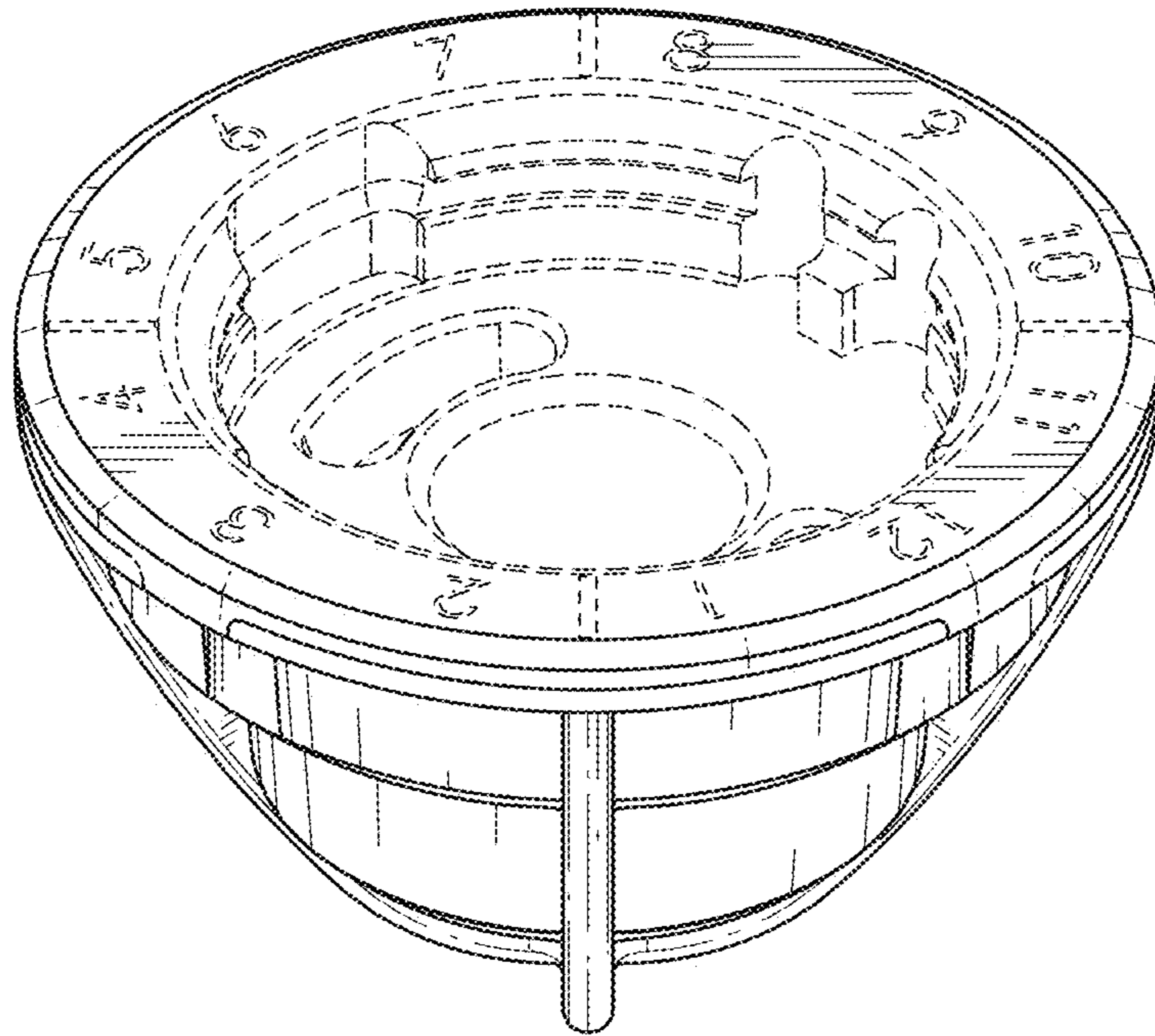


FIG. 9

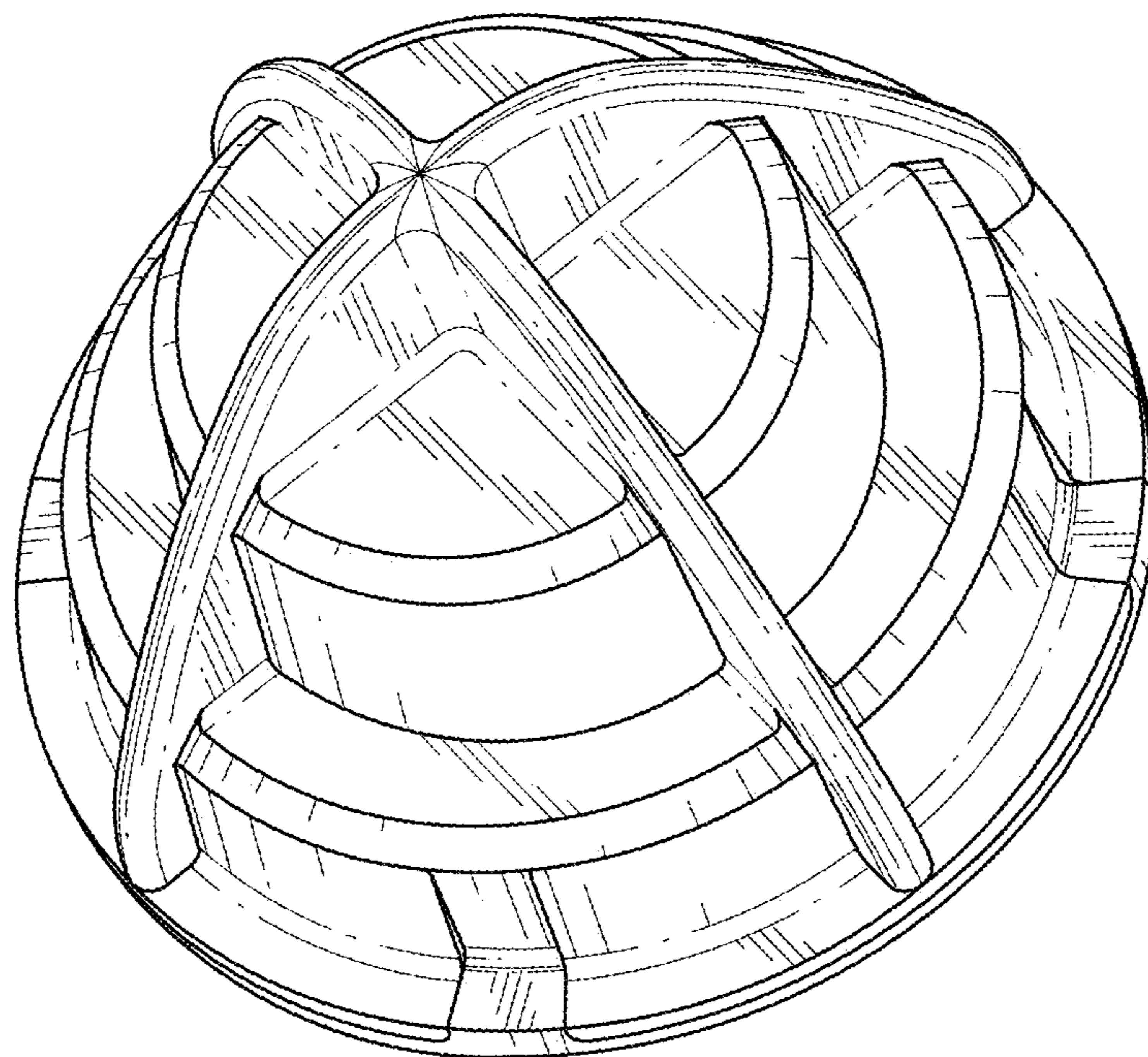


FIG. 10

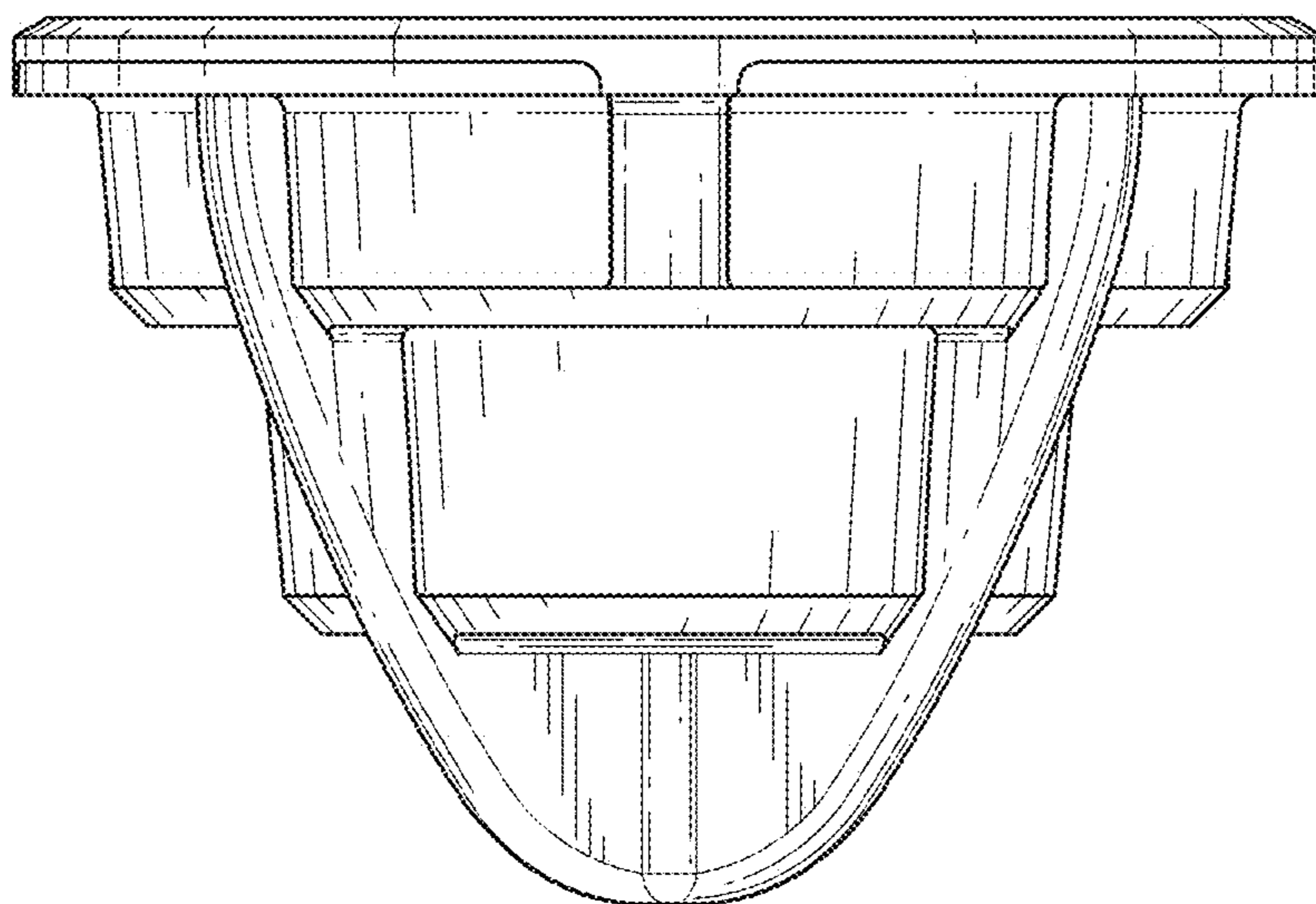


FIG. 11

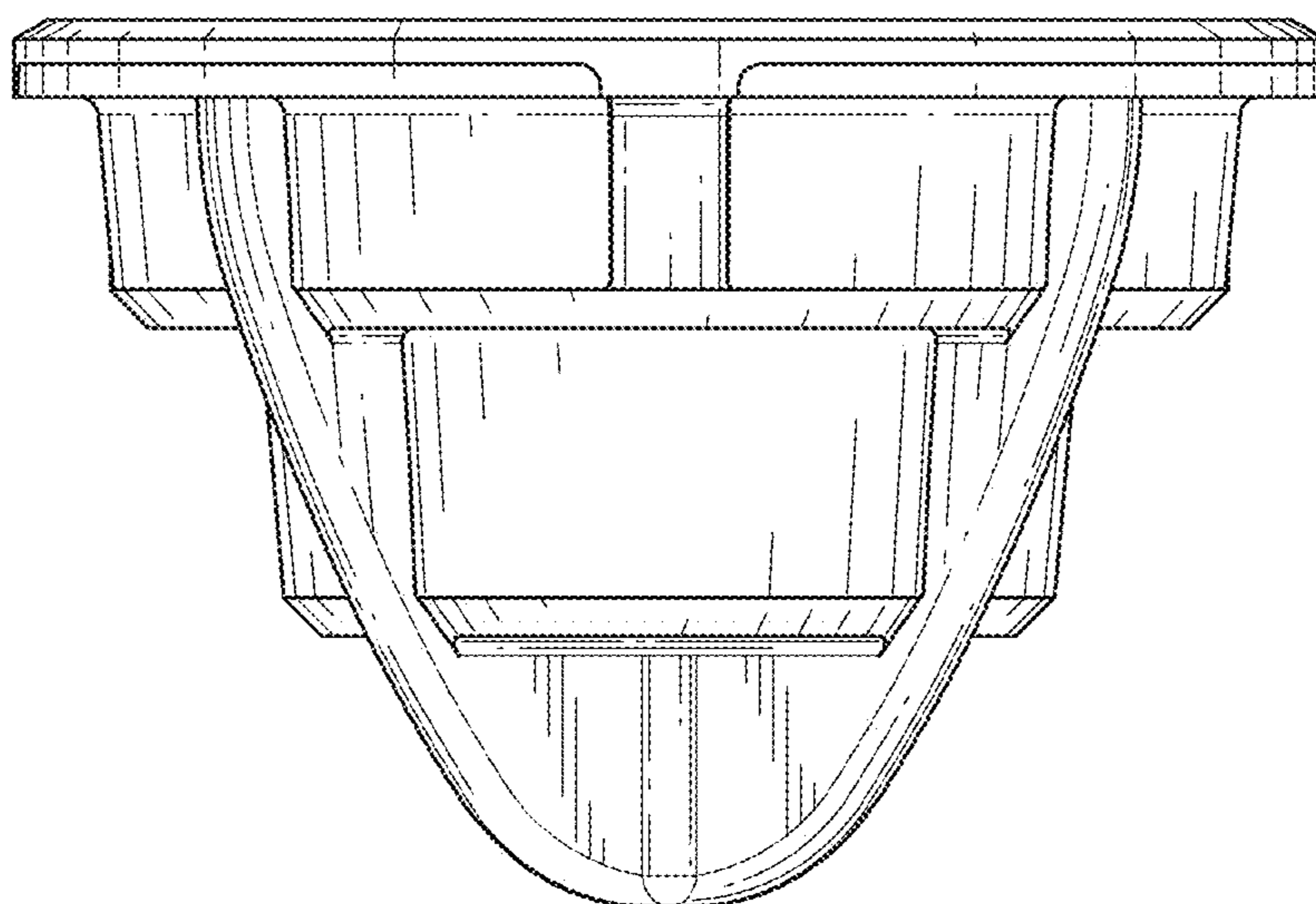


FIG. 12

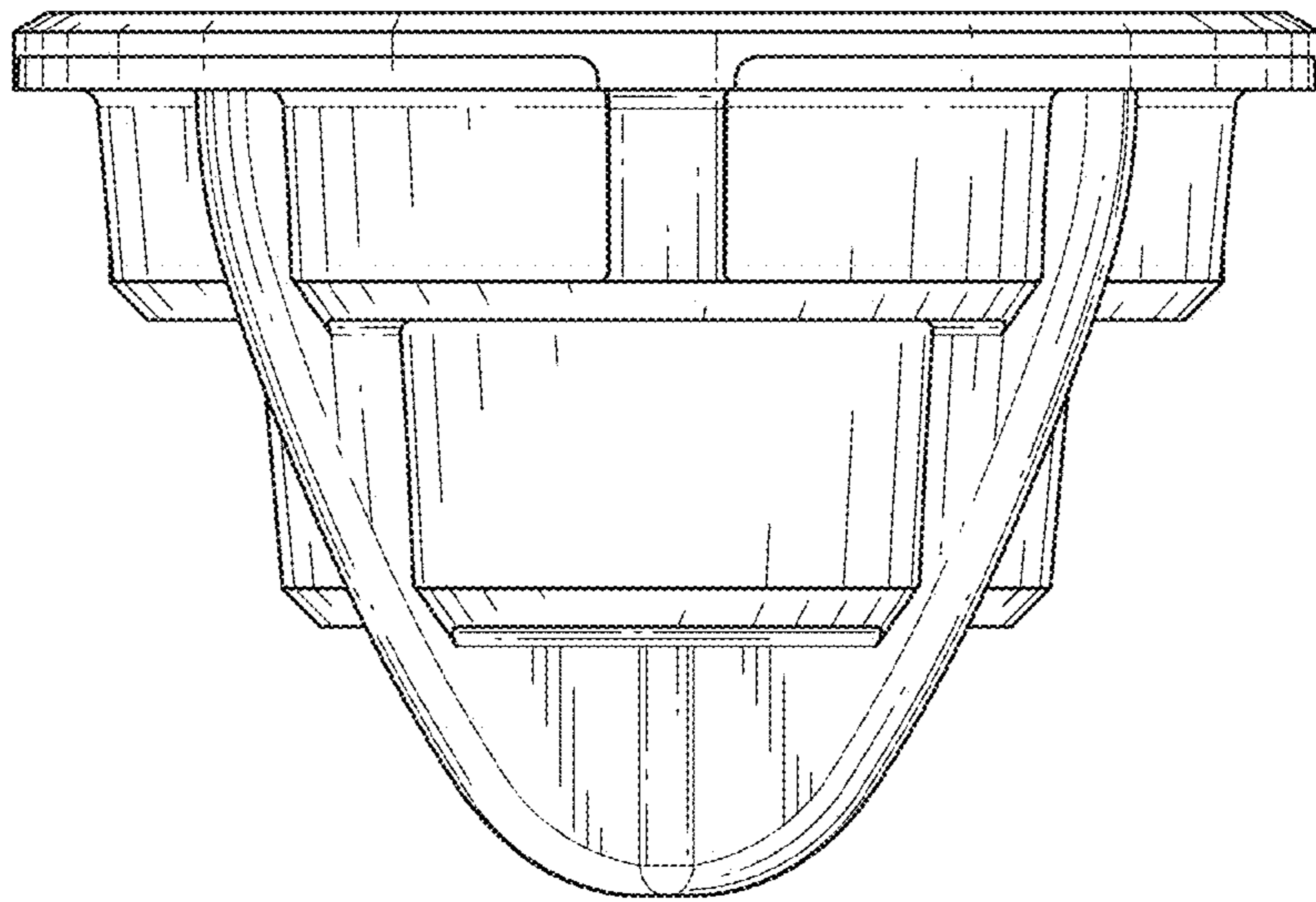


FIG. 13

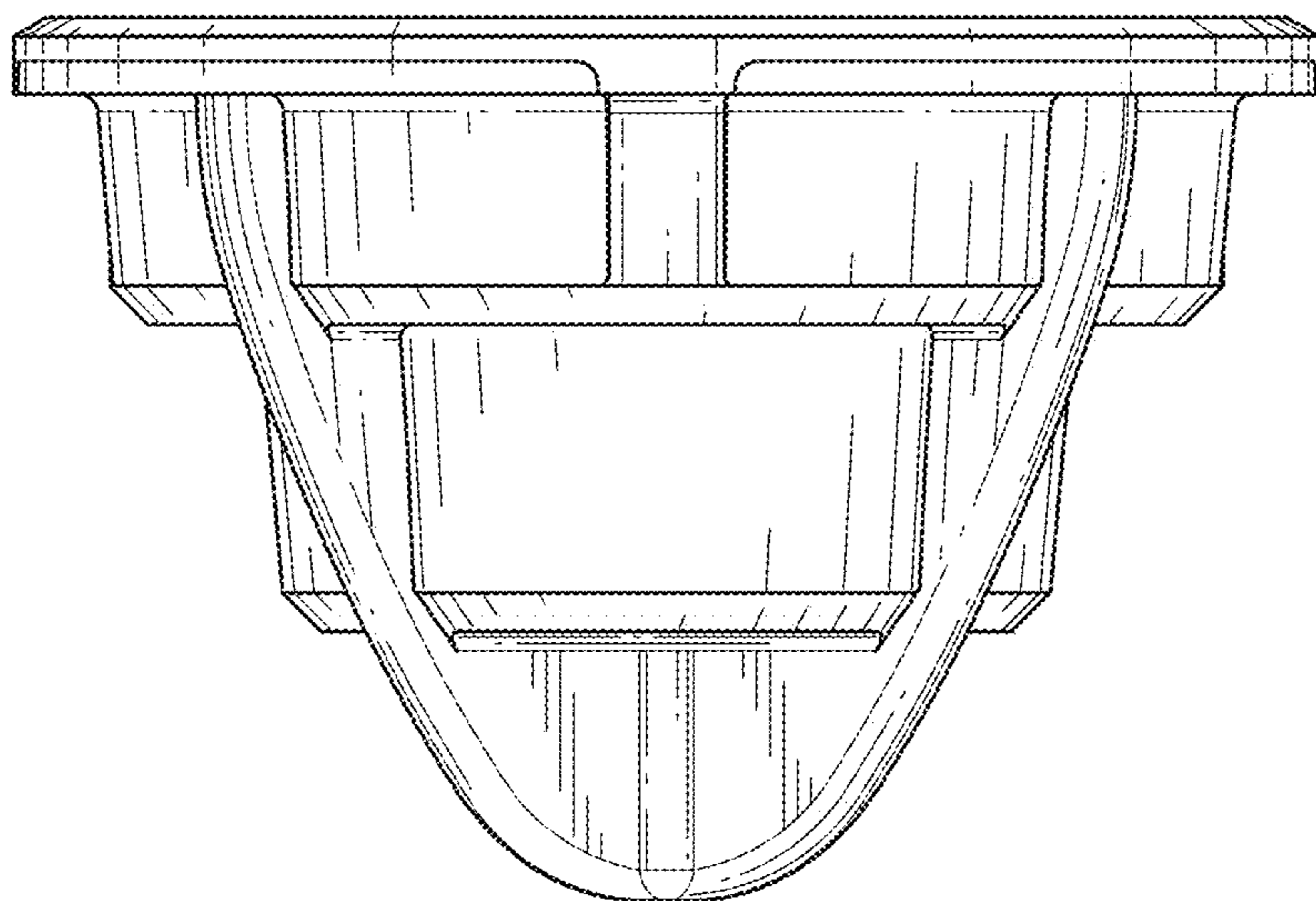


FIG. 14

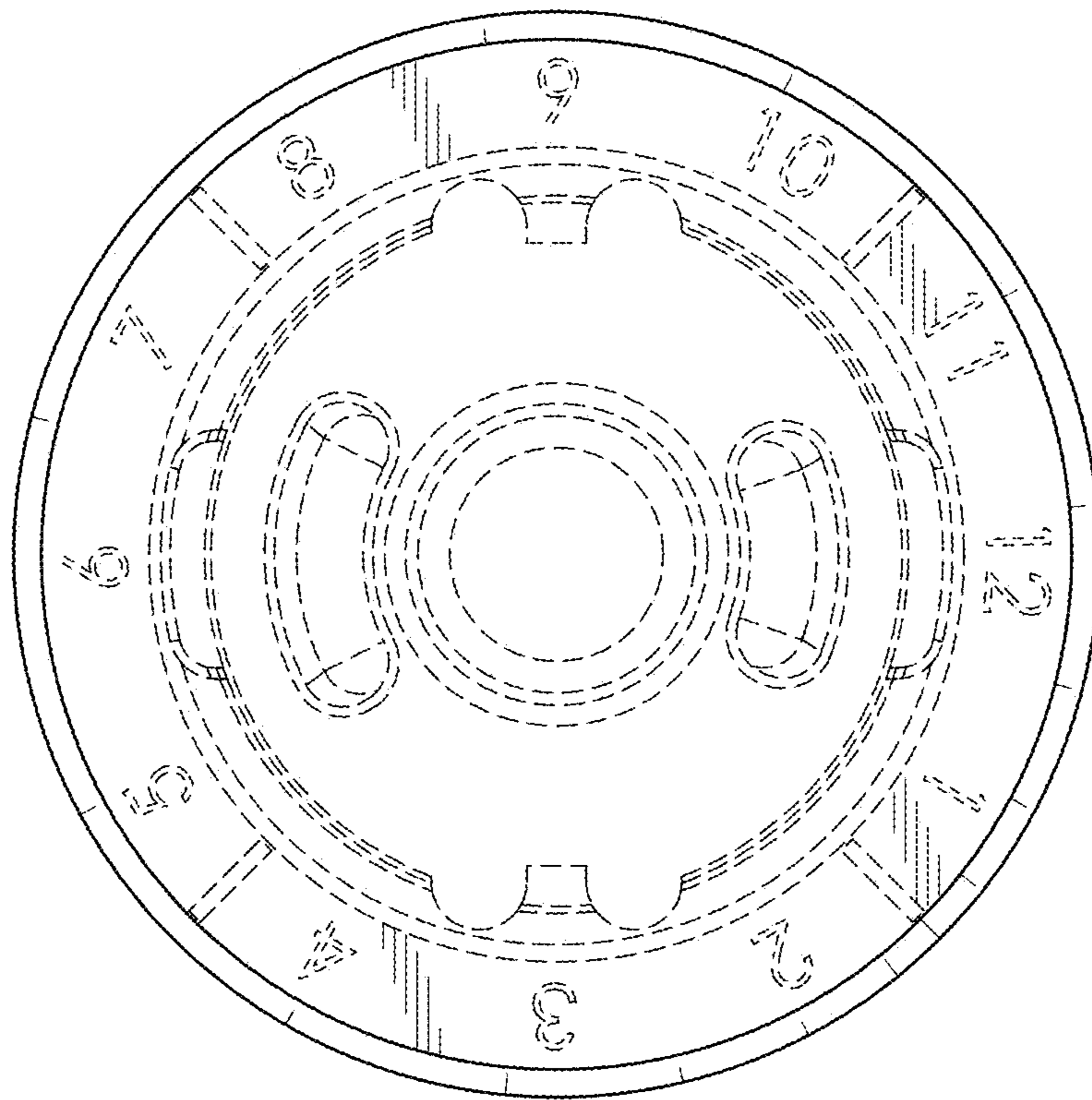


FIG. 15

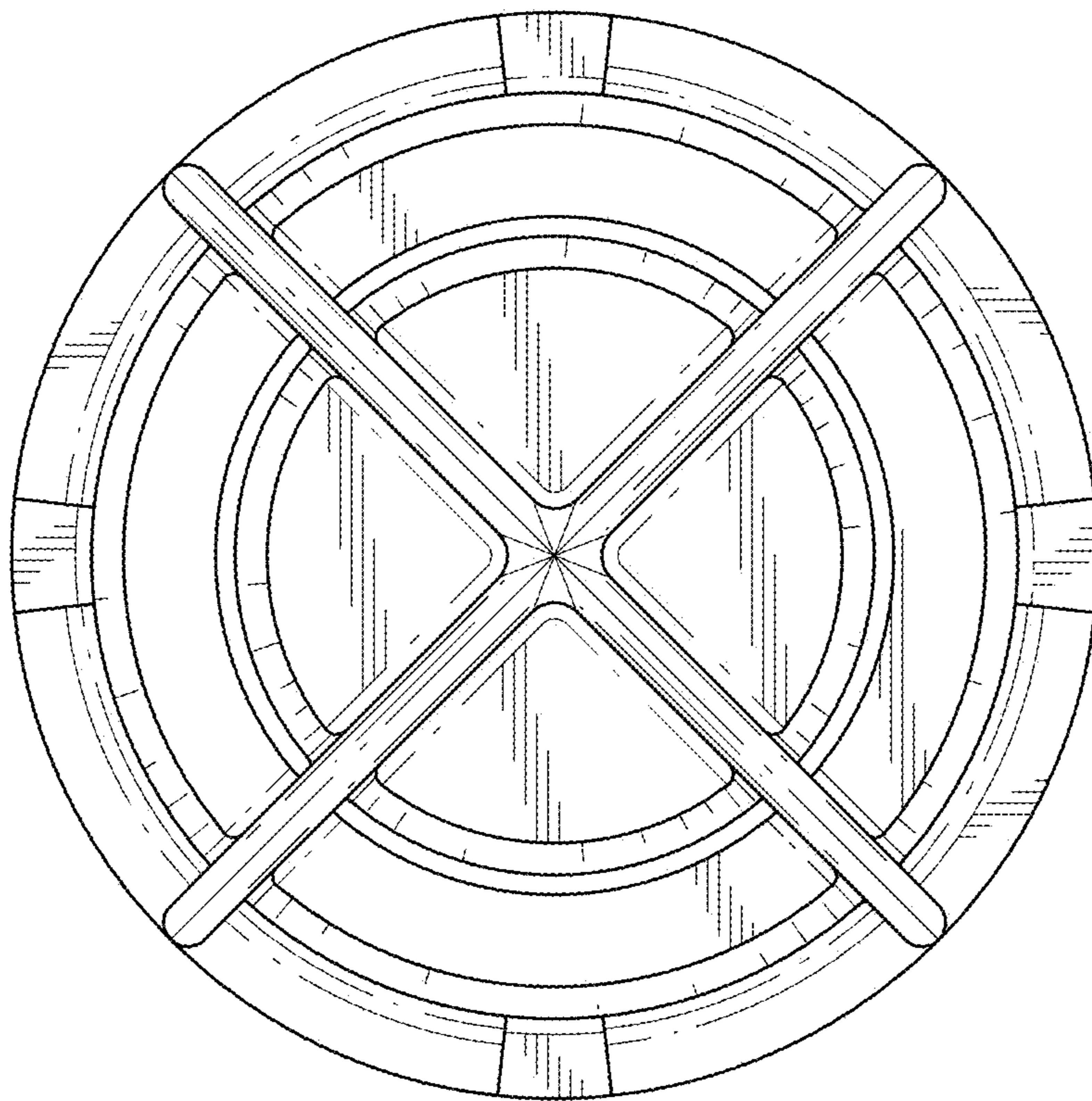


FIG. 16

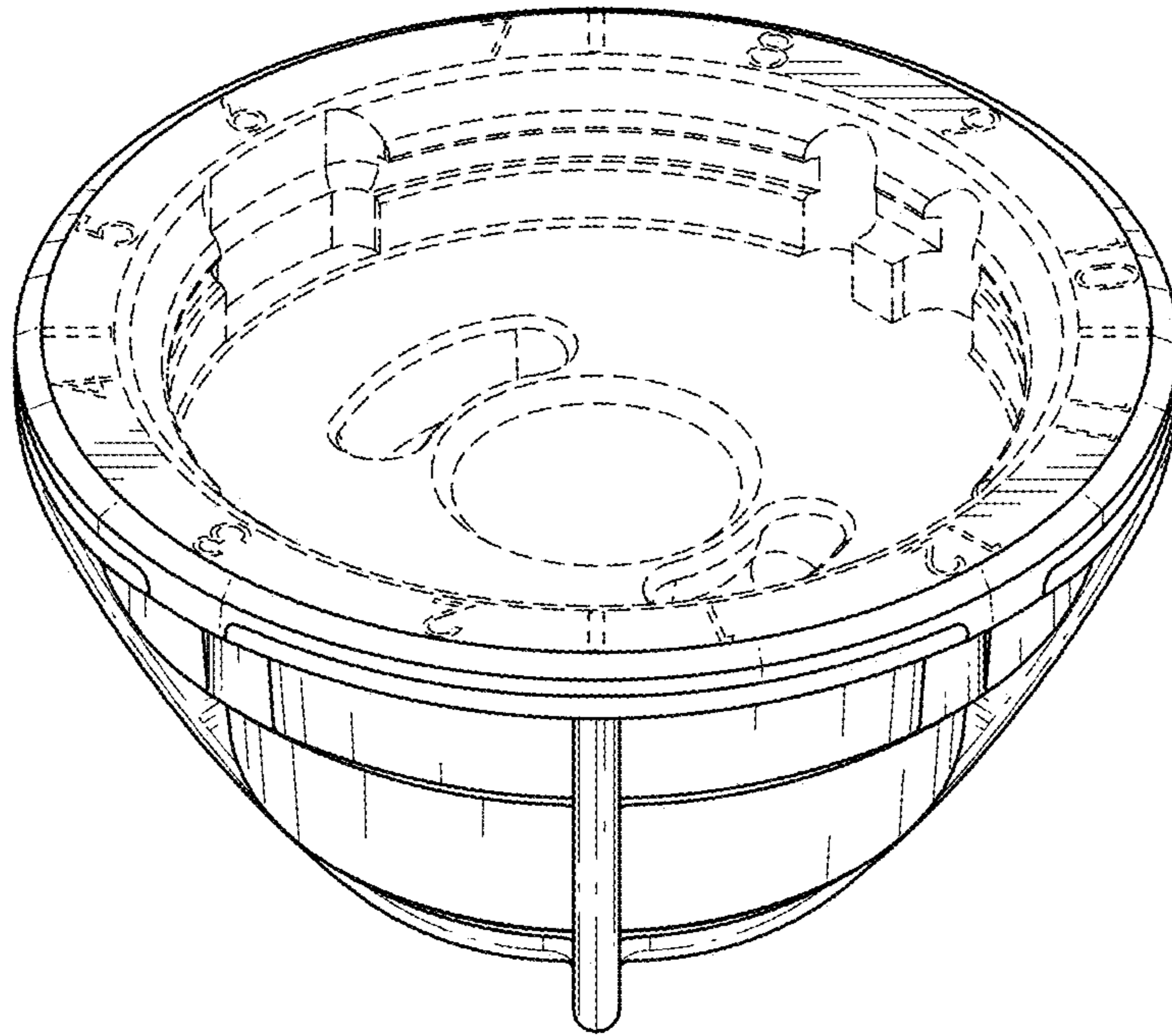


FIG. 17

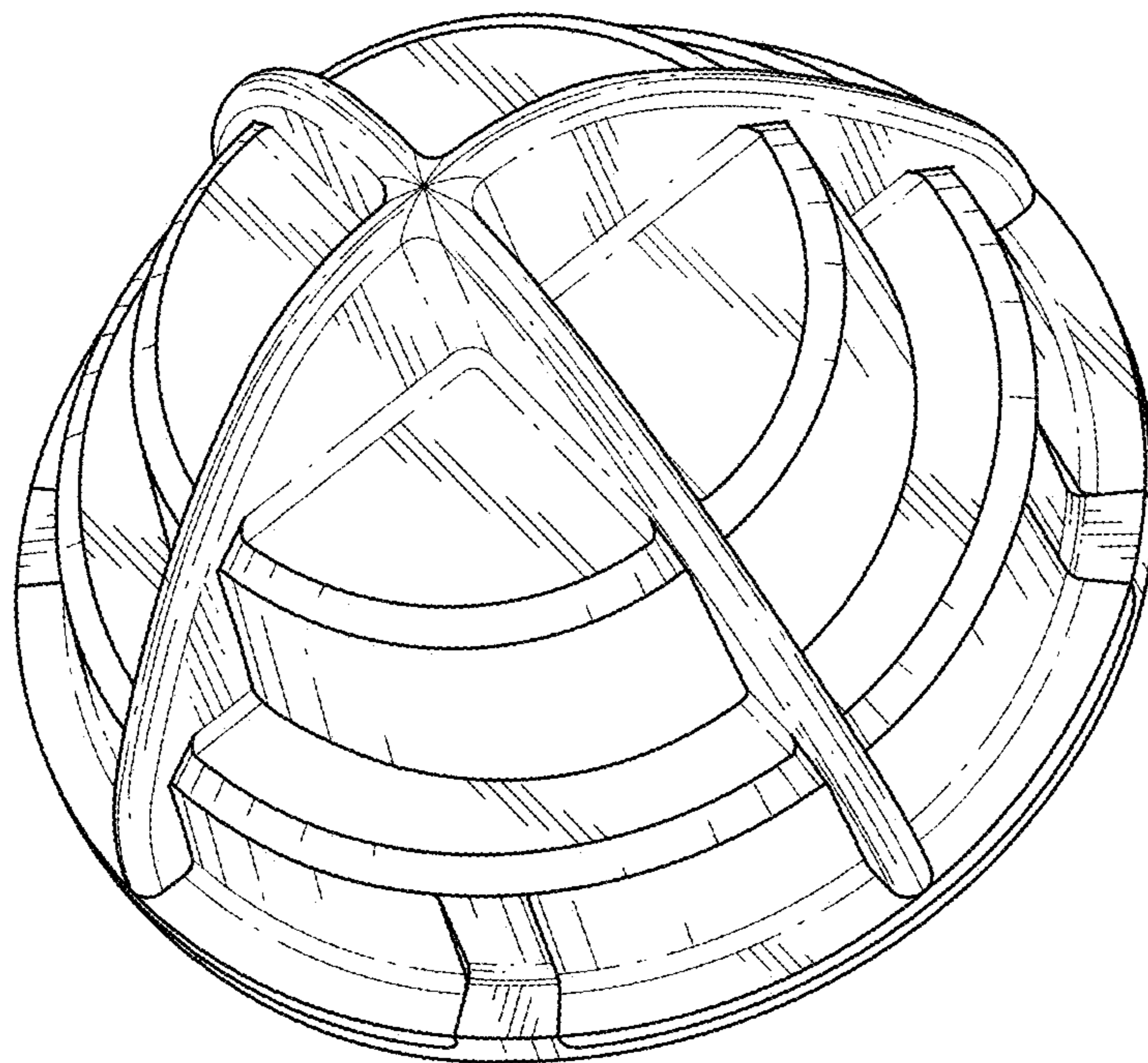


FIG. 18

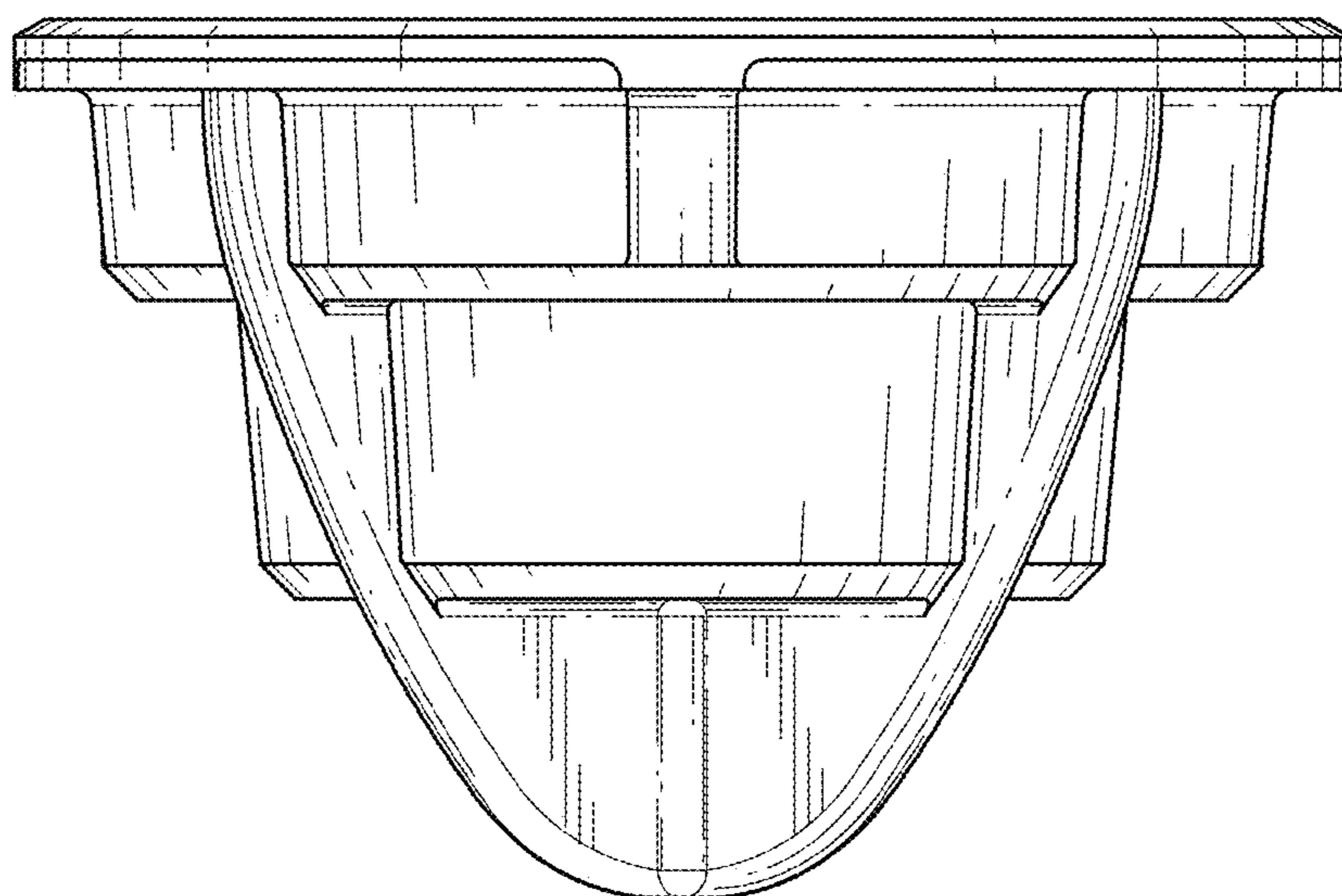


FIG. 19

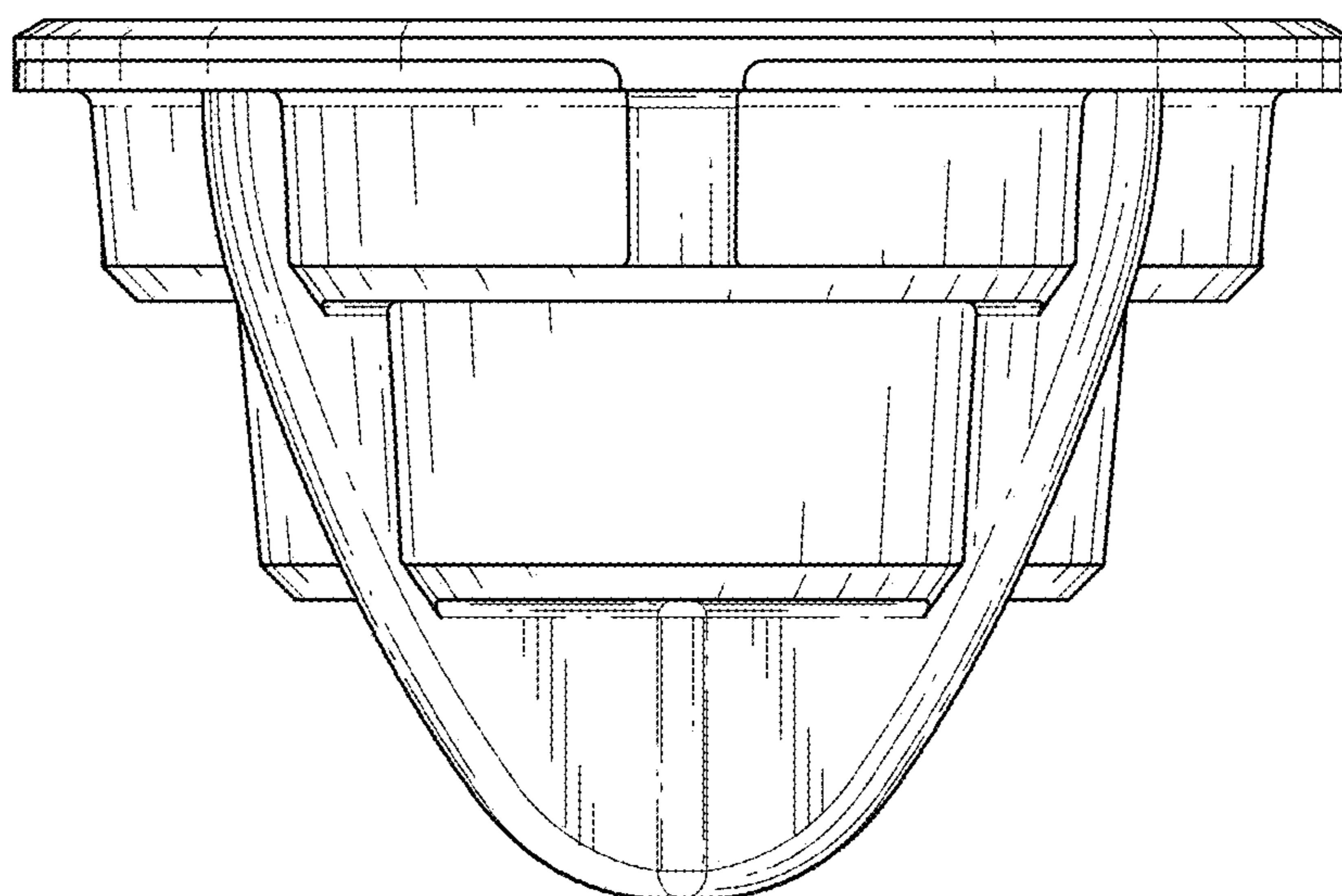


FIG. 20

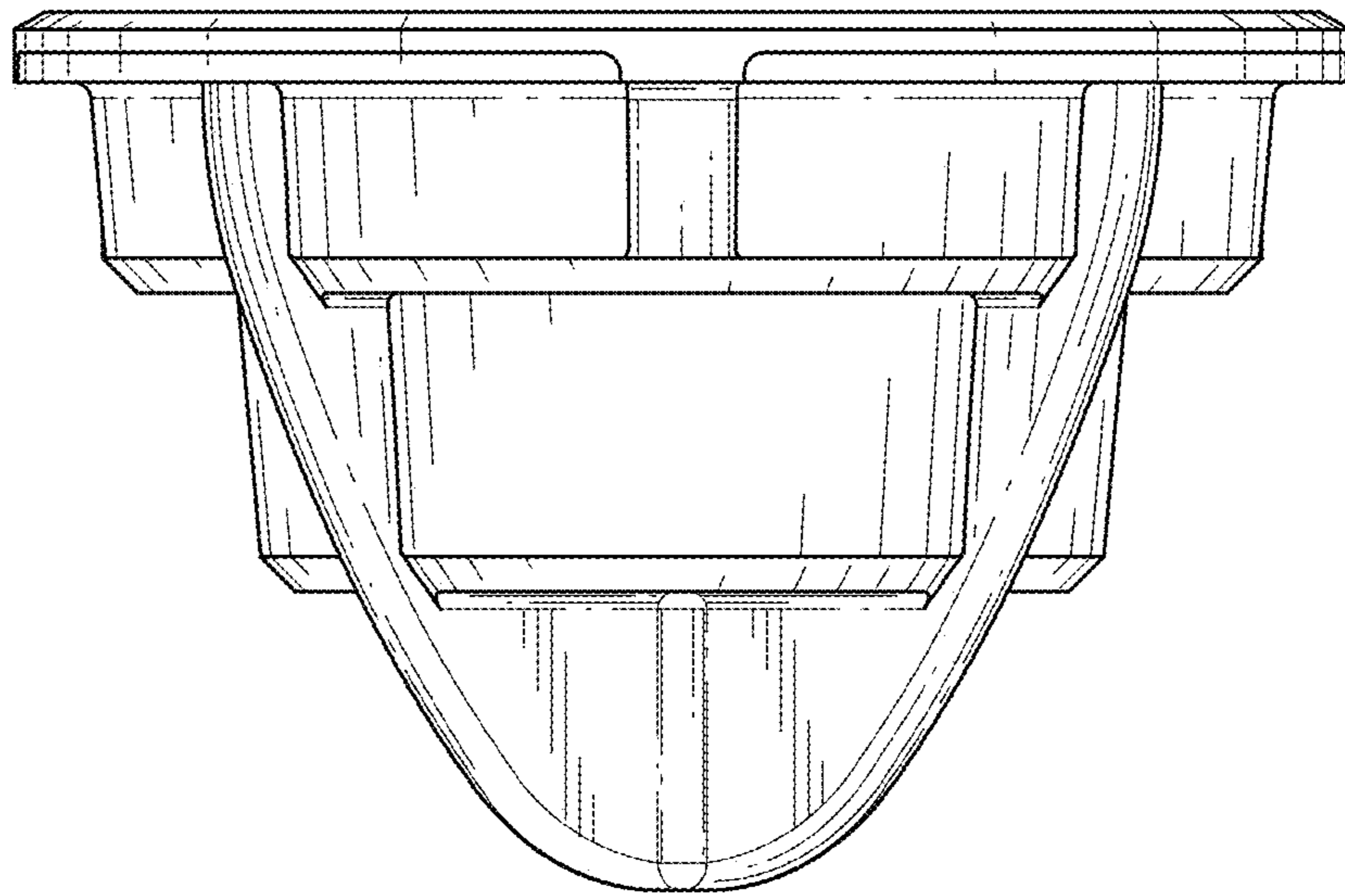


FIG. 21

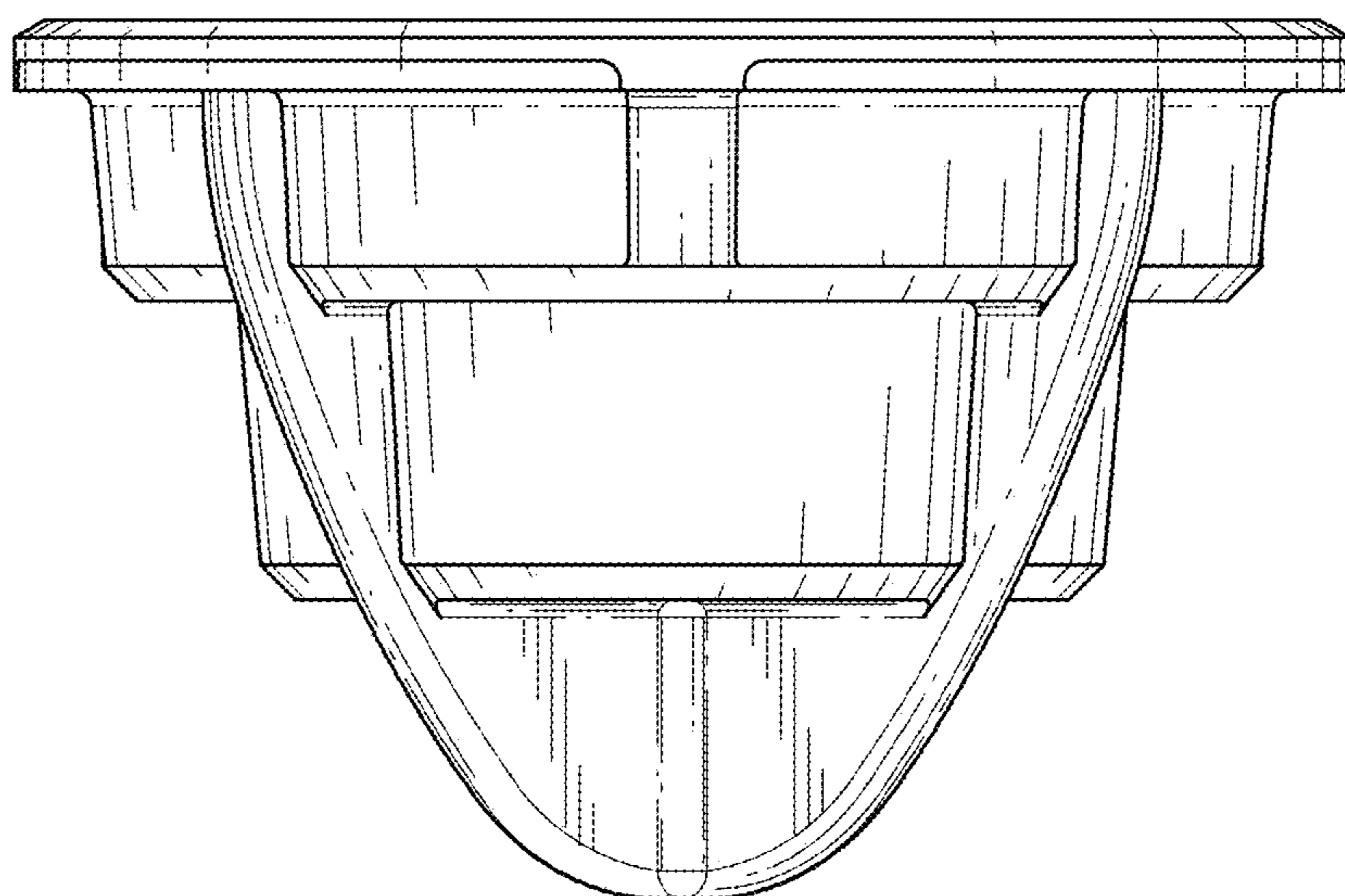


FIG. 22

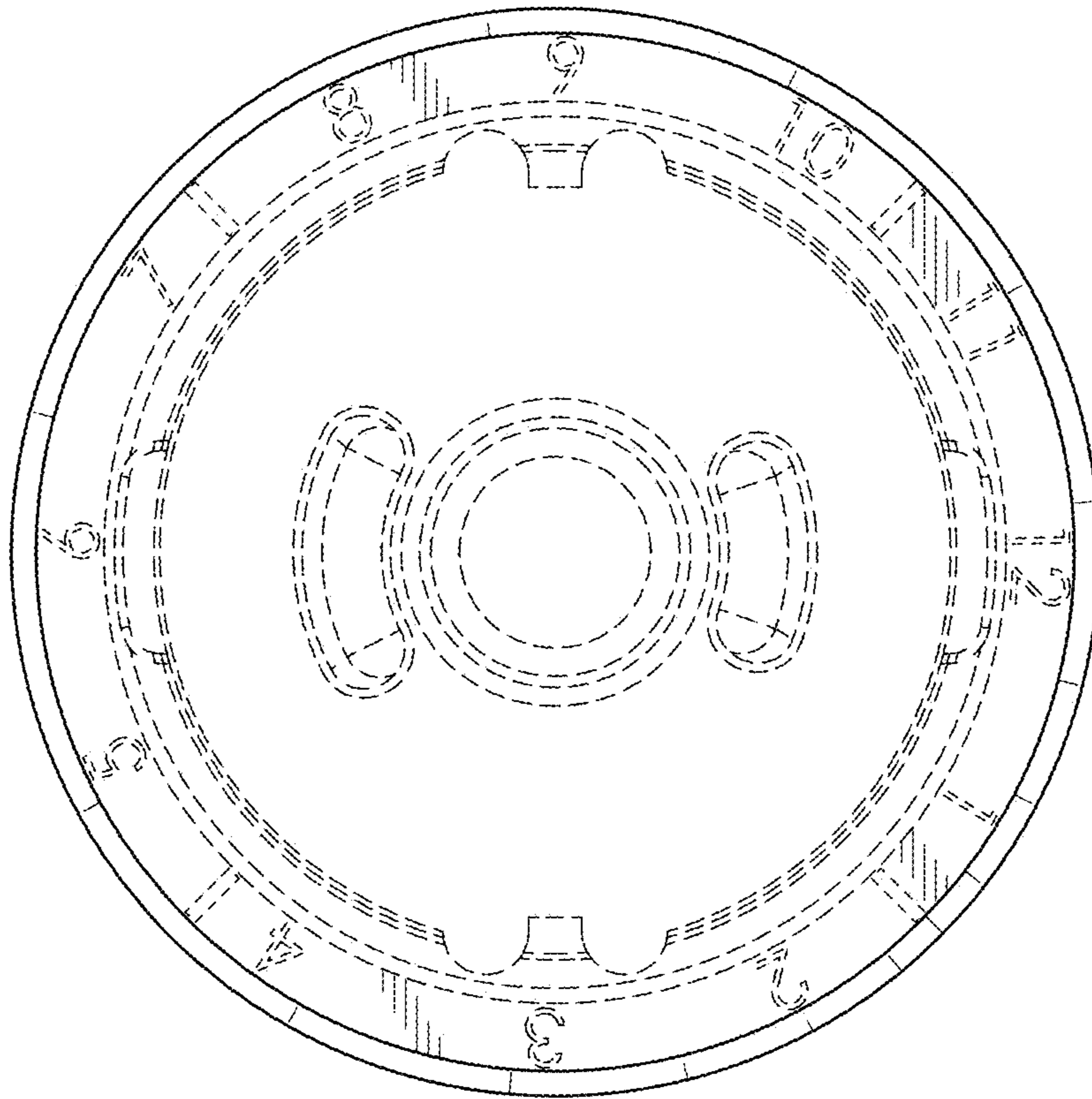


FIG. 23

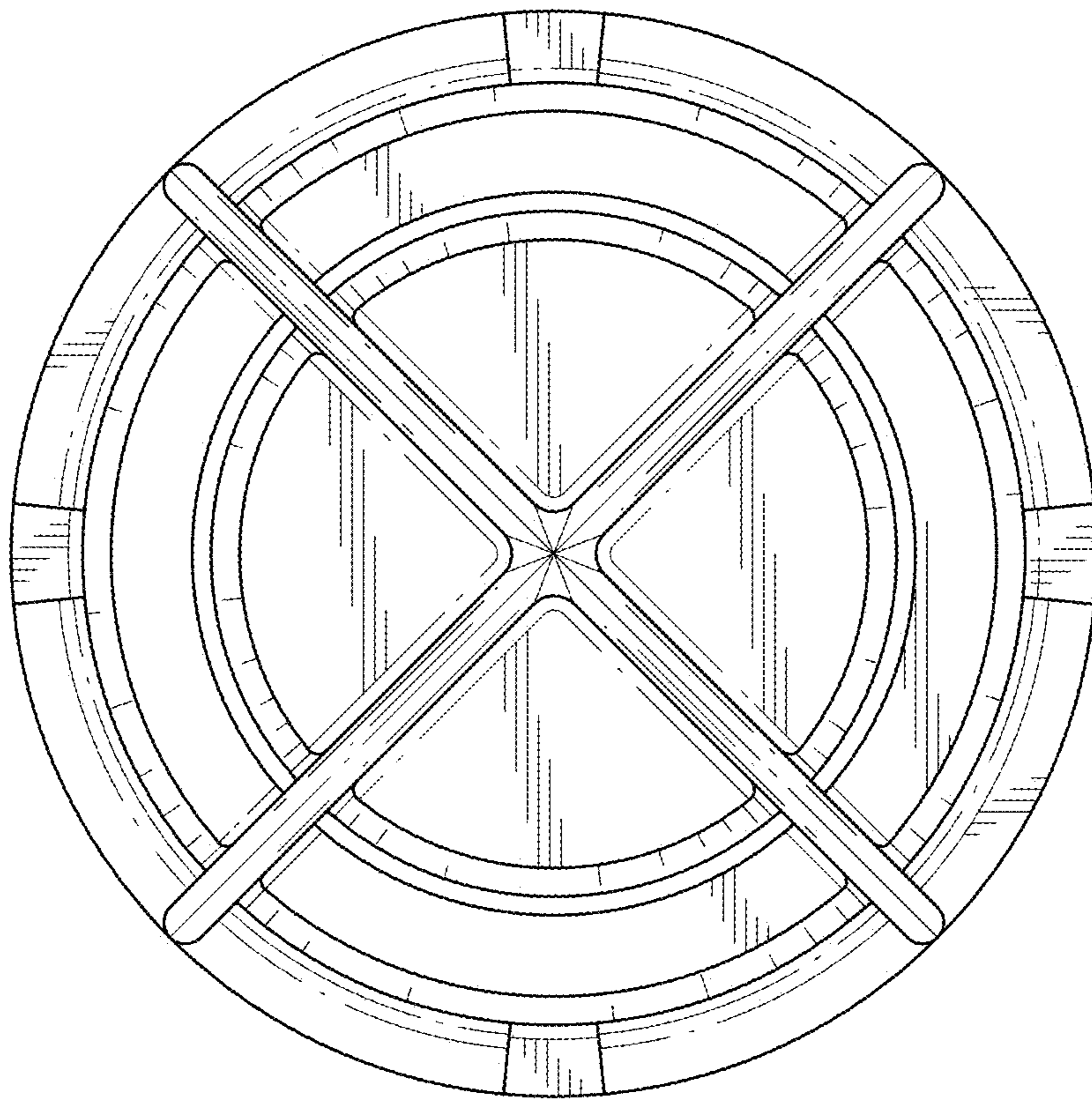


FIG. 24

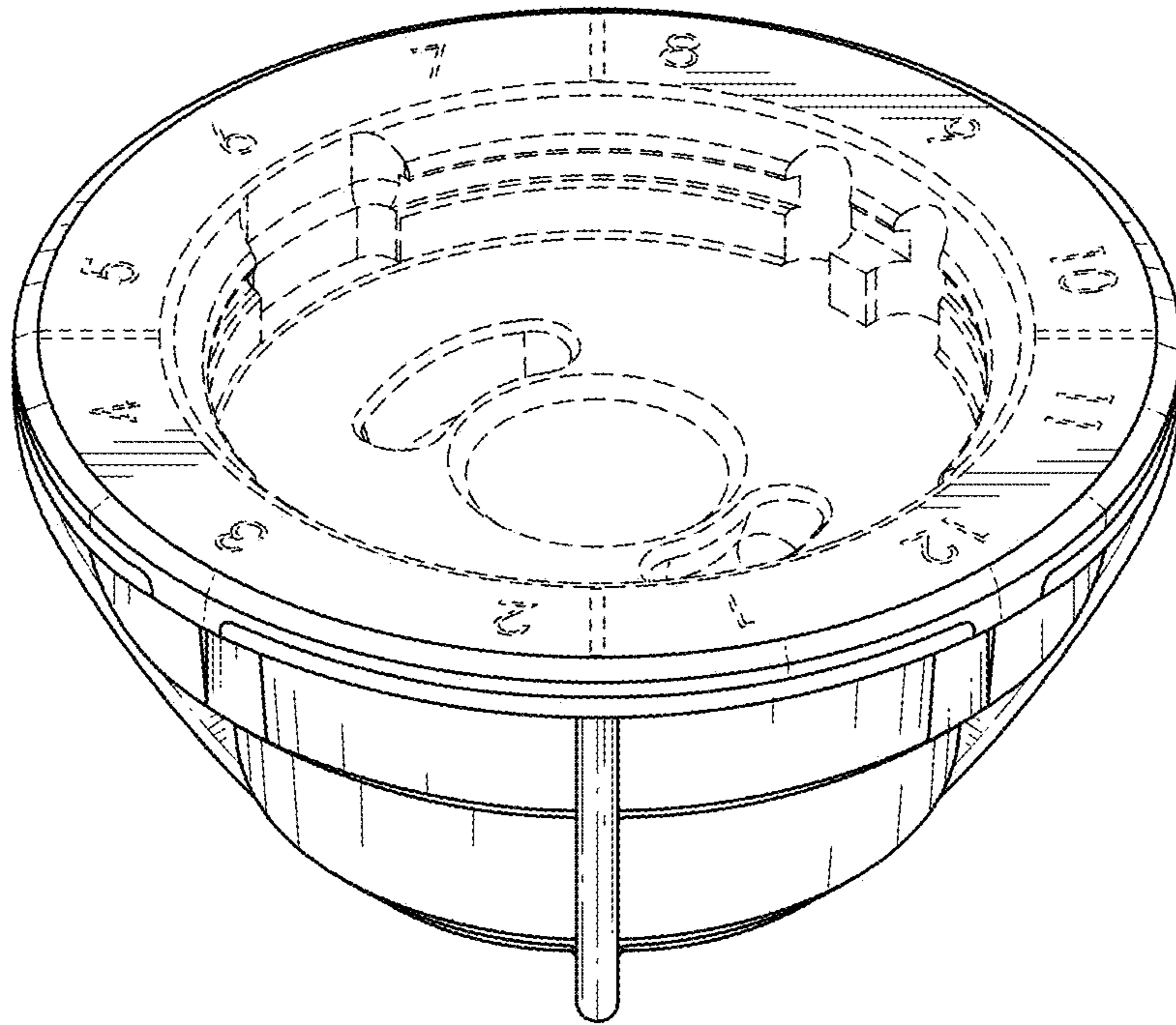


FIG. 25

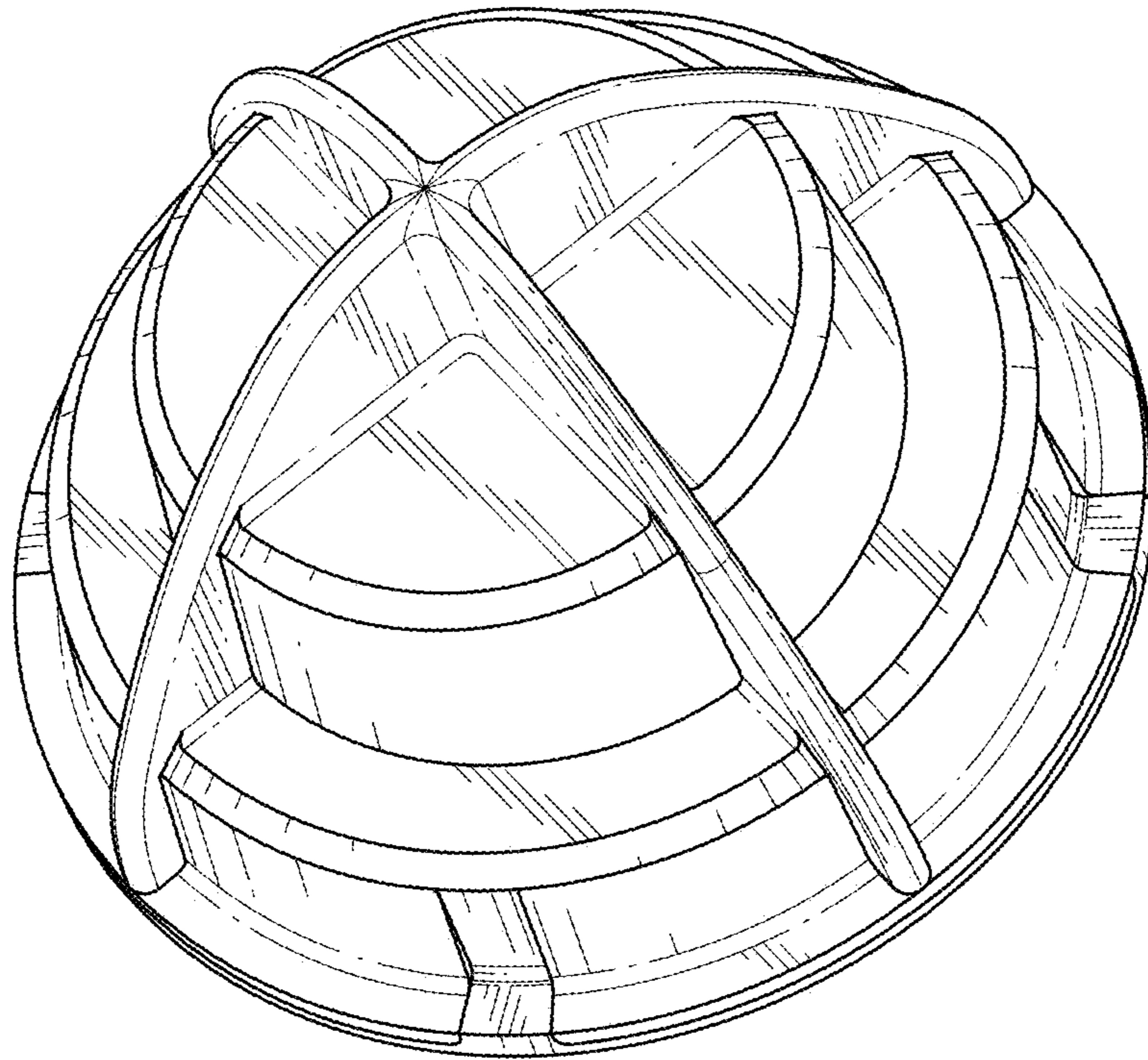


FIG. 26

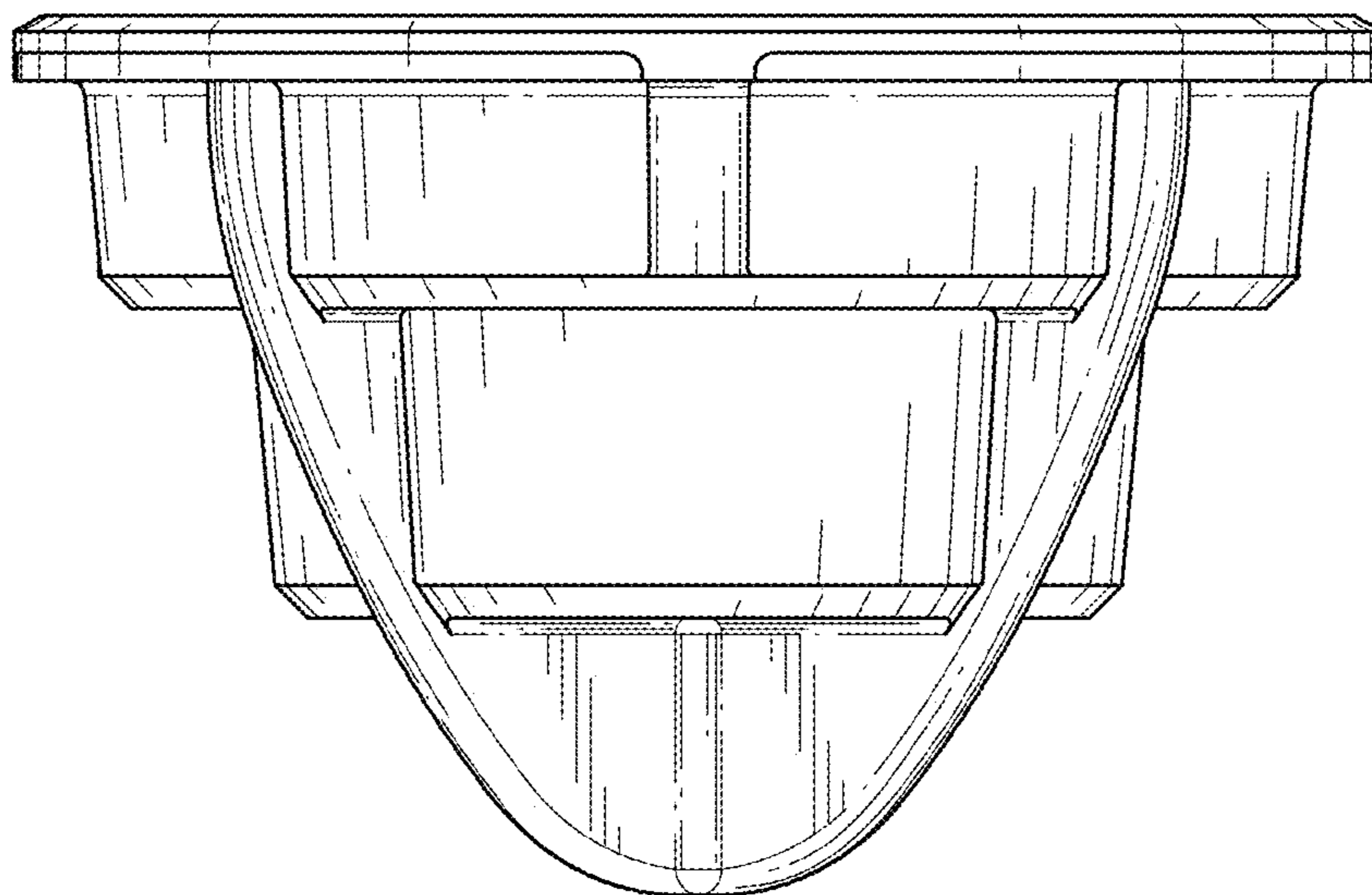


FIG. 27

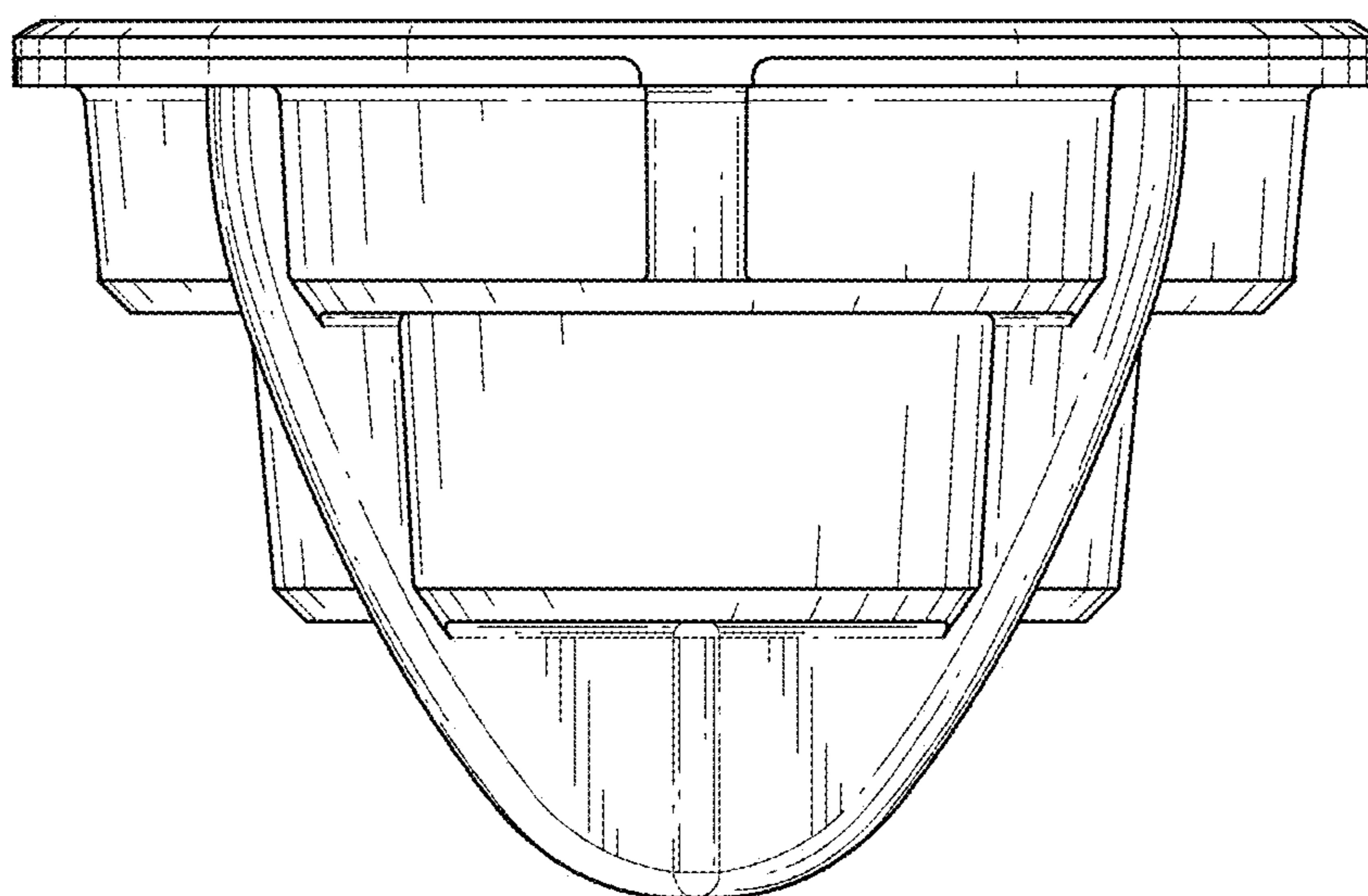


FIG. 28

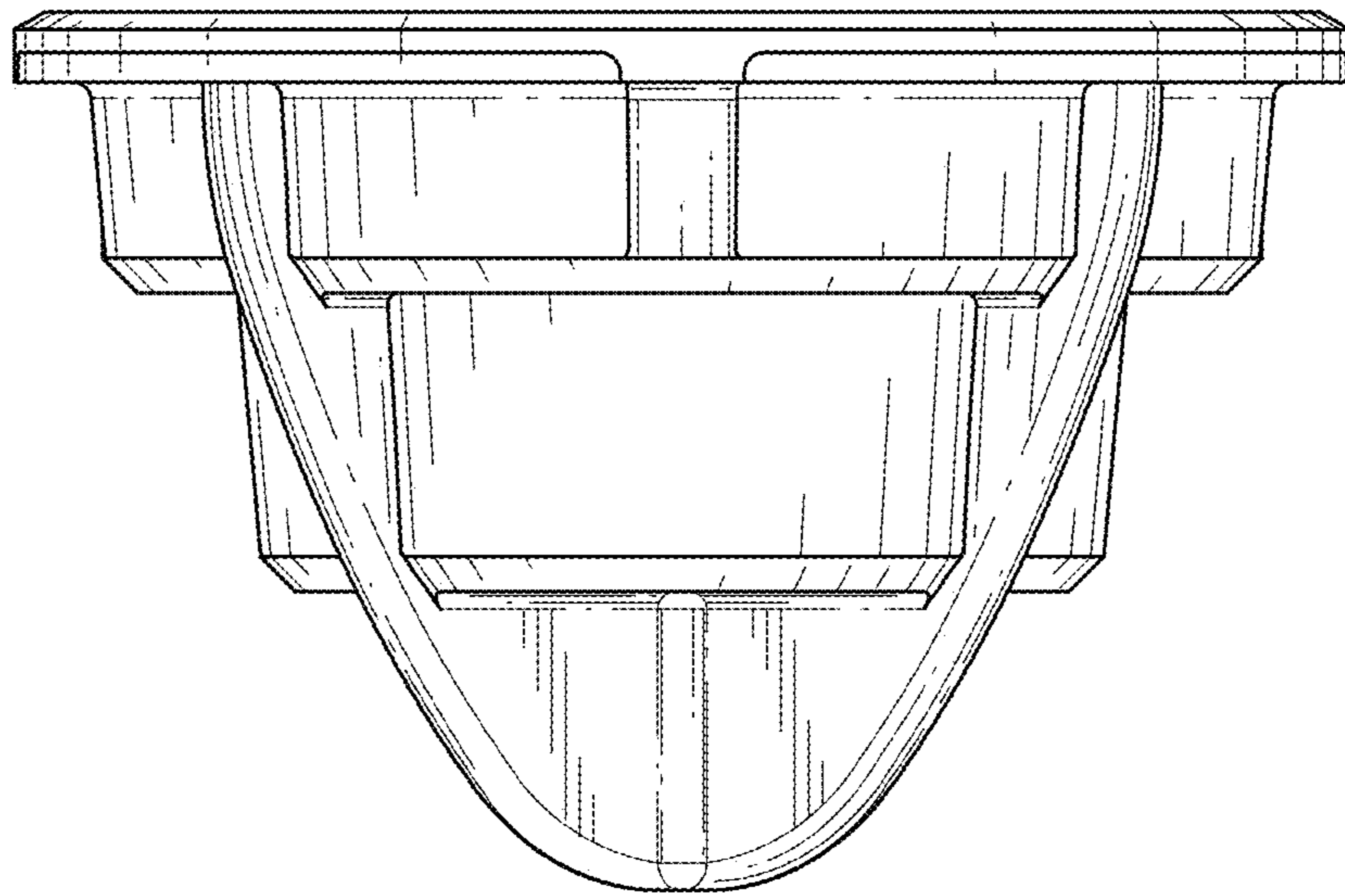


FIG. 29

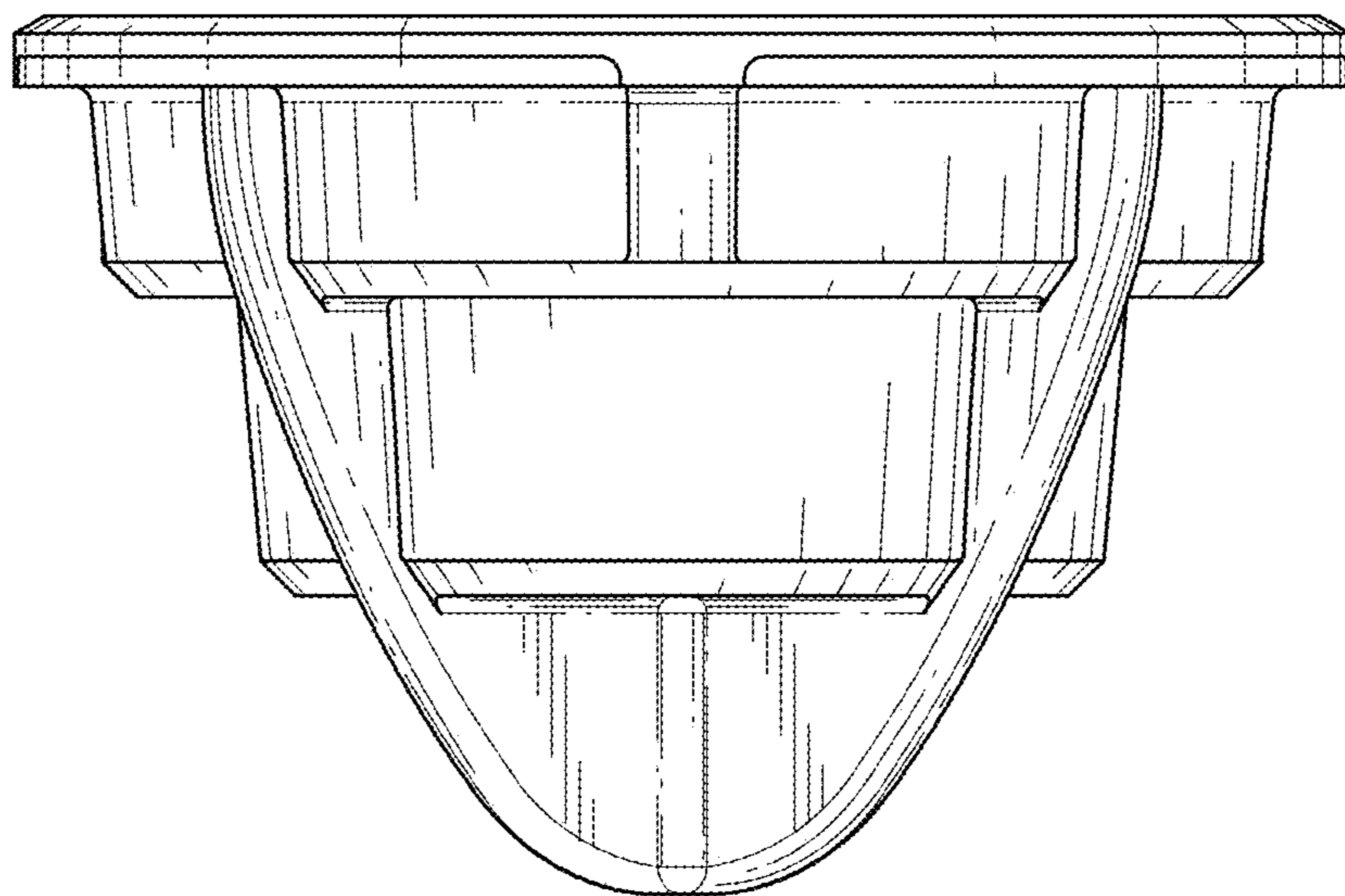


FIG. 30

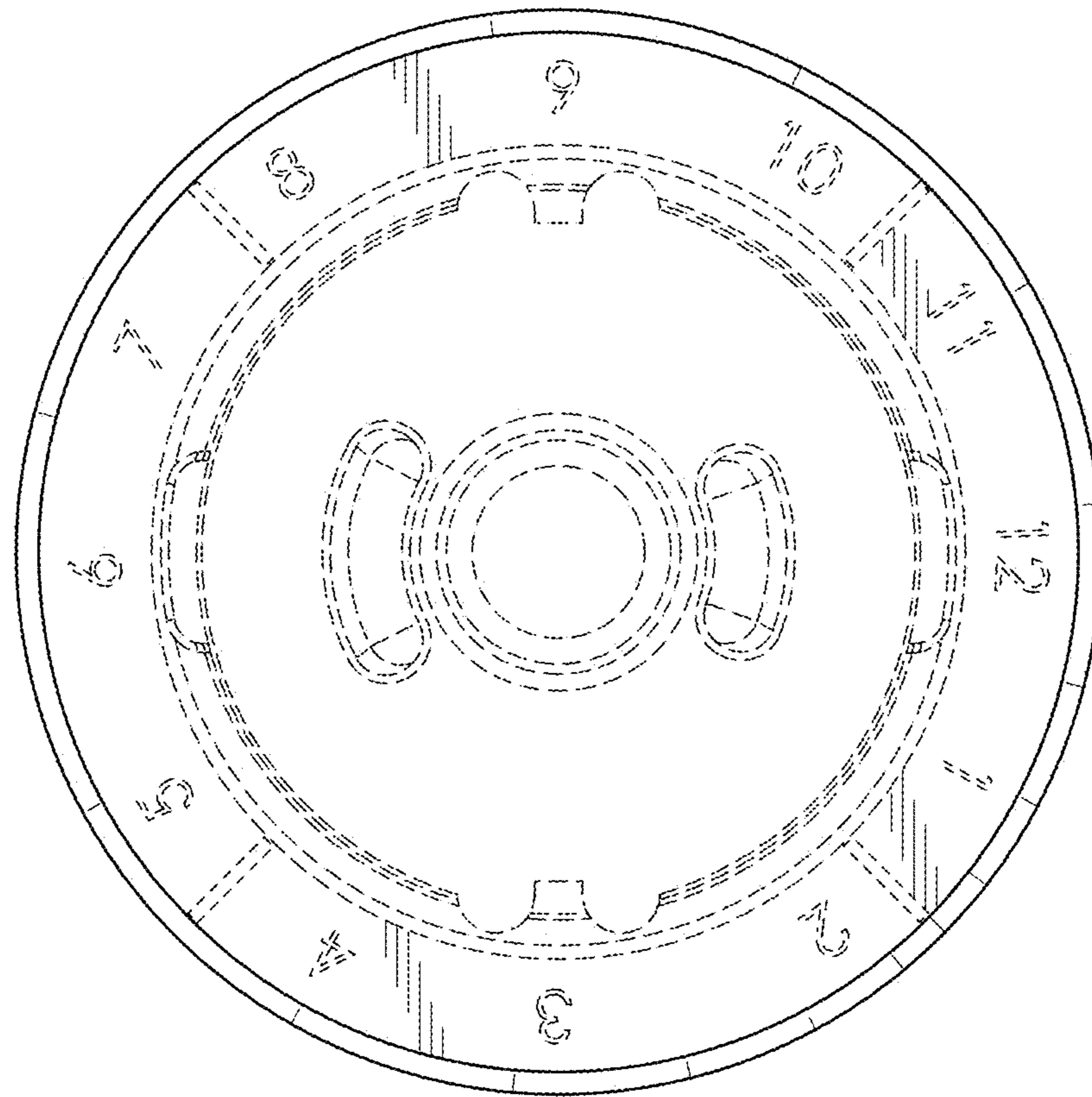


FIG. 31

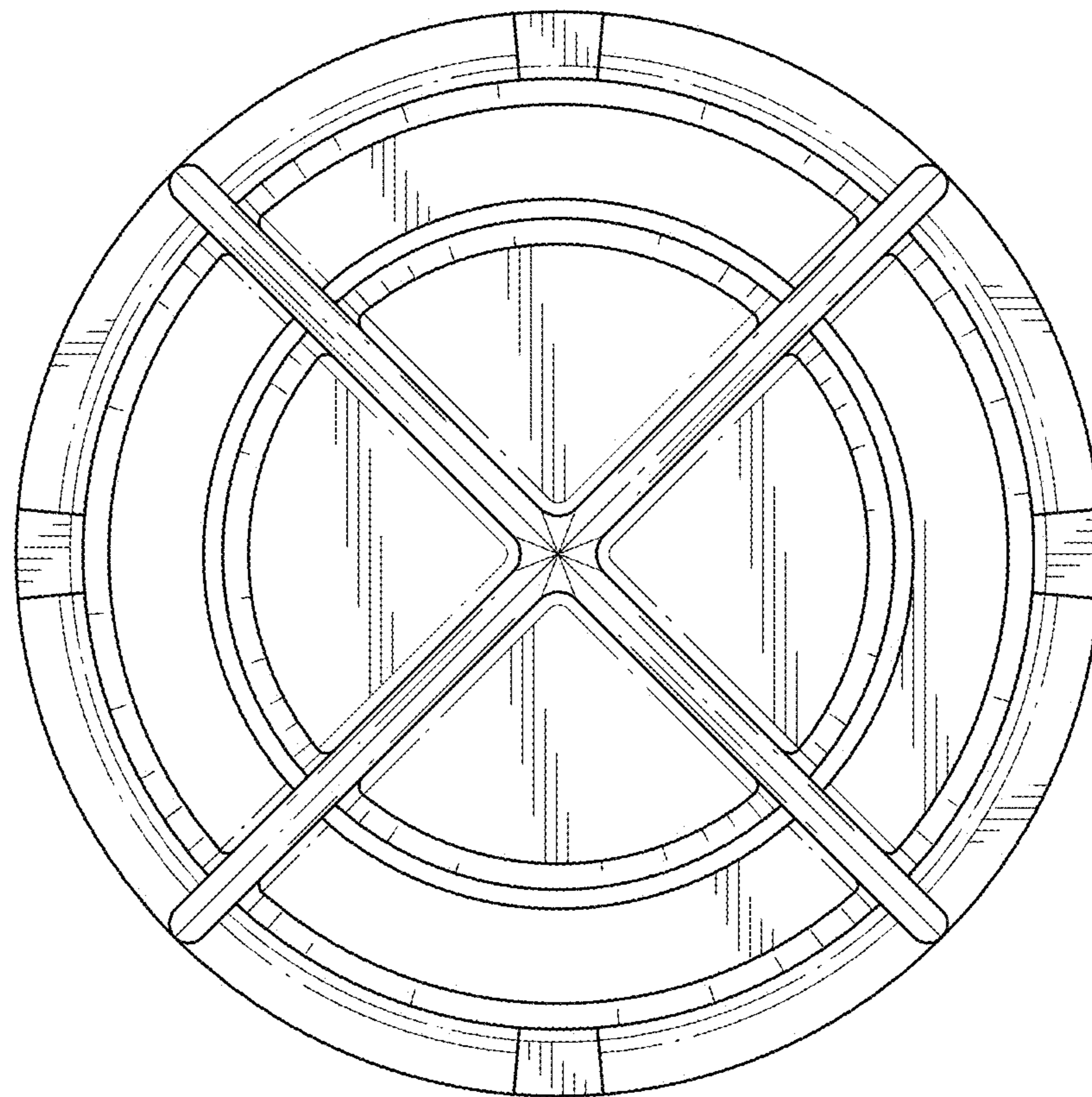


FIG. 32