



US00D958972S

(12) **United States Design Patent** (10) **Patent No.:** **US D958,972 S**
Neby (45) **Date of Patent:** **** Jul. 26, 2022**

(54) **MEDICAL INJECTION DEVICE**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **SHL MEDICAL AG**, Zug (CH)

EM 008563951-0001 * 6/2021
EM 008563951-0004 * 6/2021

(72) Inventor: **Torbjörn Neby**, Hägersten (SE)

OTHER PUBLICATIONS

(73) Assignee: **SHL MEDICAL AG**, Zug (CH)

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

(21) Appl. No.: **29/761,149**

Introducing Smart Autoinjector: Changing the paradigm of usability, cost & size, Indian Express Group, [Post date unknown 2021], [site seen on Feb. 8, 2022], Seen at URL: <https://vimeo.com/476272690> (Year: 2021).*

(22) Filed: **Dec. 7, 2020**

SmartPilot—Transforming Ypsomate into a smart product system, Ypsomed AG, [Post date: Oct. 30, 2020], [Site seen Feb. 8, 2022], Seen at URL: <https://yds.ypsomed.com/en/injection-systems/smart-devices/smartpilot-for-ypsomate.html> (Year: 2020).*

(51) **LOC (13) Cl.** **24-02**

“SHL Group reaches major milestone of 3,000 employees” press release, SHL Medical, [Post date Sep. 1, 2015], [Site seen Feb. 8, 2022], Seen at URL: <https://www.shl-medical.com/shl-group-reaches-major-milestone-of-3000-employees/> (Year: 2015).*

(52) **U.S. Cl.**

USPC **D24/113**

(58) **Field of Classification Search**

USPC D24/112–114, 133, 186, 127–131, 144;
D19/115–123, 177, 193

CPC A61M 5/3156; A61M 5/31591; A61M
5/3155; A61M 5/3157; A61M 5/24;
A61M 5/31501; A61M 5/31551; A61M
5/31585

See application file for complete search history.

* cited by examiner

Primary Examiner — Natasha Vujcic

Assistant Examiner — Gilbert B Ford

(74) *Attorney, Agent, or Firm* — McDonnell Boehnen
Hulbert & Berghoff LLP

(56) **References Cited**

U.S. PATENT DOCUMENTS

D697,205	S	*	1/2014	Schneider	.....	D24/113
D748,244	S	*	1/2016	Petersen	.....	D24/113
D757,254	S	*	5/2016	Wohlfahrt	.....	D24/113
D757,255	S	*	5/2016	Wohlfahrt	.....	D24/113
D765,833	S	*	9/2016	Geert-Jensen	.....	D24/112
D773,648	S	*	12/2016	Wohlfahrt	.....	D24/113
D773,649	S	*	12/2016	Wohlfahrt	.....	D24/113
D789,528	S	*	6/2017	Wohlfahrt	.....	D24/130
10,117,996	B2	*	11/2018	Stefansen	.....	A61M 5/31536
D857,192	S	*	8/2019	Burkett	.....	D24/112
D863,549	S	*	10/2019	Jansen	.....	D24/113
D878,566	S	*	3/2020	Jansen	.....	D24/113
D908,867	S	*	1/2021	Nicholas	.....	D24/113
11,107,369	B2	*	8/2021	Chang	.....	G09B 23/285
D934,413	S	*	10/2021	Nicholas	.....	D24/113
2016/0243318	A1	*	8/2016	Despa	.....	G08B 21/18
2020/0276390	A1	*	9/2020	Song	.....	A61M 5/31571

(57) **CLAIM**

The ornamental design for a medical injection device, as shown and described.

DESCRIPTION

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawings will be provided by the Office upon request and payment of the necessary fee.

- FIG. 1 is a perspective view of the top and right of and above the complete medical injection device;
- FIG. 2 is a top elevation view thereof;
- FIG. 3 is a bottom elevation view thereof;
- FIG. 4 is a right side elevation thereof;
- FIG. 5 is a left side elevation view thereof;
- FIG. 6 is a top plan view thereof;
- FIG. 7 is a bottom plan view thereof;

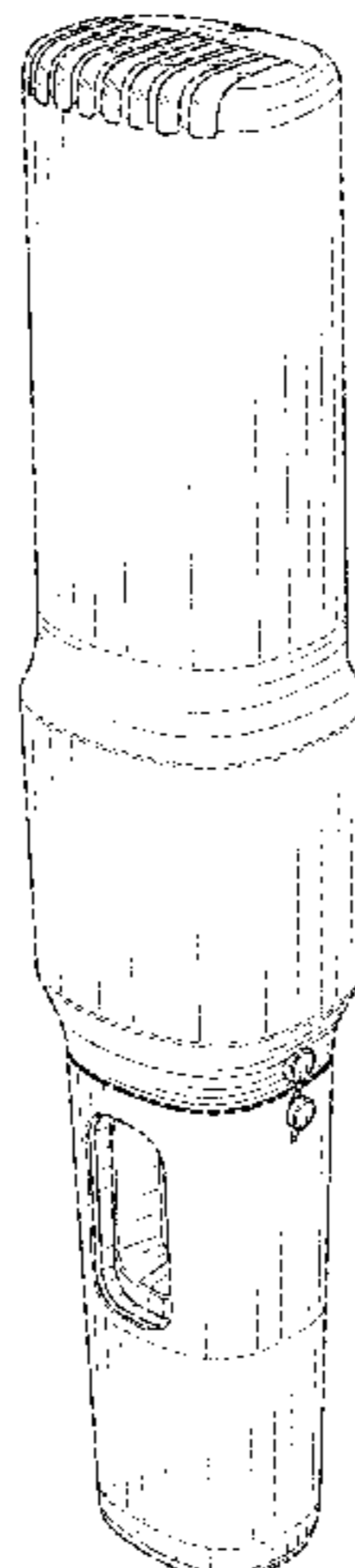


FIG. 8 is a perspective view of the top and right of and above the power pack portion of the medical injection device from FIG. 1;

FIG. 9 is a bottom elevation view of the power pack portion;

FIG. 10 is a top elevation view of the power pack portion;

FIG. 11 is a right side elevation of the power pack portion;

FIG. 12 is a left side elevation view of the power pack portion;

FIG. 13 is a top plan view of the power pack portion;

FIG. 14 is a bottom plan view of the power pack portion;

FIG. 15 is a perspective view of the top and right of and above the injector portion of the medical injection device with a protective cap from FIG. 1;

FIG. 16 is a bottom elevation view of the injector portion with a protective cap;

FIG. 17 is a top elevation view of the injector portion with a protective cap;

FIG. 18 is a right side elevation of the injector portion with a protective cap;

FIG. 19 is a left side elevation view of the injector portion with a protective cap;

FIG. 20 is a top plan view of the injector portion with a protective cap;

FIG. 21 is a bottom plan view of the injector portion with a protective cap;

FIG. 22 is a perspective view of the top and right of and above the injector portion of the medical injection device without a protective cap of FIG. 1;

FIG. 23 is a bottom elevation view of the injector portion without a protective cap;

FIG. 24 is a top elevation view of the injector portion without a protective cap;

FIG. 25 is a right side elevation of the injector portion without a protective cap;

FIG. 26 is a left side elevation view of the injector portion without a protective cap;

FIG. 27 is a top plan view of the injector portion without a protective cap;

FIG. 28 is a bottom plan view of the injector portion without a protective cap;

FIG. 29 is a top plan view of a first embodiment of the power pack portion shown in an operational mode with optical emitters therewithin illuminated and emitting a shade of a yellowish light;

FIG. 30 is a top plan view of a second embodiment of the power pack portion shown in an operational mode with optical emitters therewithin illuminated and emitting a shade of a greenish light;

FIG. 31 is a top plan view of a third embodiment of the power pack portion shown in an operational mode with optical emitters therewithin illuminated and emitting a shade of a purplish light;

FIG. 32 is a top plan view of a fourth embodiment of the power pack portion shown in an operational mode with optical emitters therewithin illuminated and emitting a shade of a blueish light;

FIG. 33 is a top plan view of a fifth embodiment of the power pack portion shown in an operational mode with optical emitters therewithin illuminated and emitting a shade of a reddish light;

FIG. 34 is a top plan view of a sixth embodiment of the power pack portion shown in an operational mode with optical emitters therewithin illuminated and emitting a shade of a dark purplish light;

FIG. 35 is a top plan view of a seventh embodiment of the power pack portion shown in an operational mode with optical emitters therewithin illuminated and emitting a shade of a dark orangish light;

FIG. 36 is a top plan view of the first embodiment of the power pack portion shown in a charging mode where showing an optical emitter therewithin is in an illuminated state and emitting a shade of a yellowish light;

FIG. 37 is a top plan view of the second embodiment of the power pack portion shown in a charging mode where an optical emitter therewithin is in an illuminated state and emitting a shade of a greenish light;

FIG. 38 is a top plan view of the third embodiment of the power pack portion shown in a charging mode where an optical emitter therewithin is in an illuminated state and emitting a shade of a purplish light;

FIG. 39 is a top plan view of fourth embodiment of the the power pack portion shown in a charging mode where an optical emitter therewithin is in an illuminated state and emitting a shade of a blueish light;

FIG. 40 is a top plan view of the fifth embodiment of the power pack portion shown in a charging mode where an optical emitter therewithin is in an illuminated state and emitting a shade of a reddish light;

FIG. 41 is a top plan view of the sixth embodiment of the power pack portion shown in a charging mode where an optical emitter therewithin is in an illuminated state and emitting a shade of a dark purplish light;

FIG. 42 is a top plan view of the seventh embodiment of the power pack portion shown in a charging mode where an optical emitter therewithin is in an illuminated state and emitting a shade of an orangish light;

FIG. 43 is a top plan view of the power pack portion shown in an operational mode emitting illumination from the rectangular regions;

FIG. 44 is a top plan view of the power pack portion shown in a charging state emitting illumination from the square region;

FIG. 45 is a top plan view of the power pack portion shown in an operational mode with the rectangular regions in an activated illuminated state; and,

FIG. 46 is a top plan view of the power pack portion in a charging mode with the square region in an activated illuminated state.

The radiating dash-dot lines in FIG. 43 show an illuminated state of the rectangular regions at the top of the power pack portion of the medical injection device. The radiating dash-dot lines in FIG. 44 show an illuminated state of the lower square region at the bottom of the power pack portion of the medical injection device. None of these dash-dot lines form part of the claimed design. The shaded top rectangular regions in FIG. 45 and the square region in FIG. 46 illustrate a contrast in appearance compared to the same regions shown unshaded in FIG. 13.

The broken lines in the drawings illustrate portions of the medical injection device and forms no part of the claimed design. The broken line which defines the bounds of the claimed invention forms no part of the claimed design.

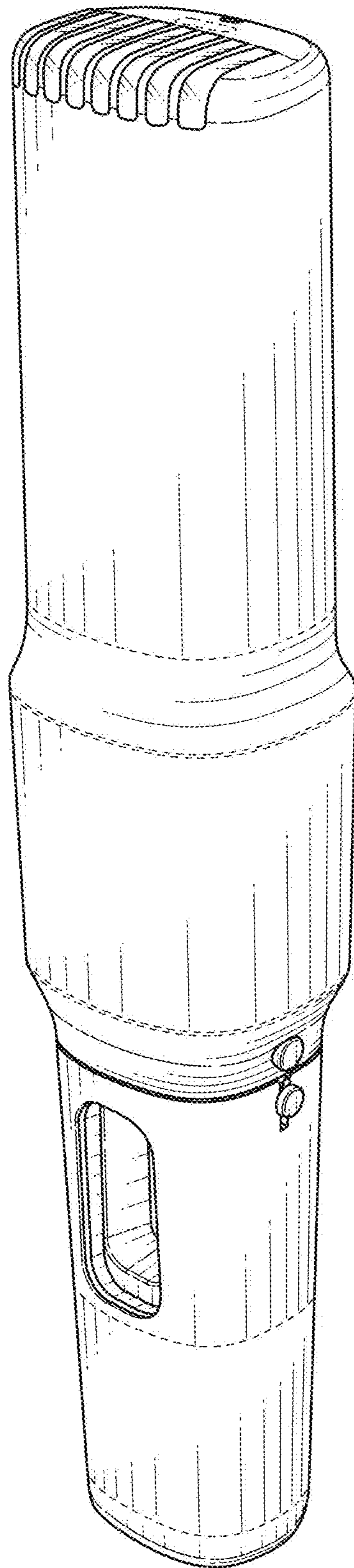


FIG. 1

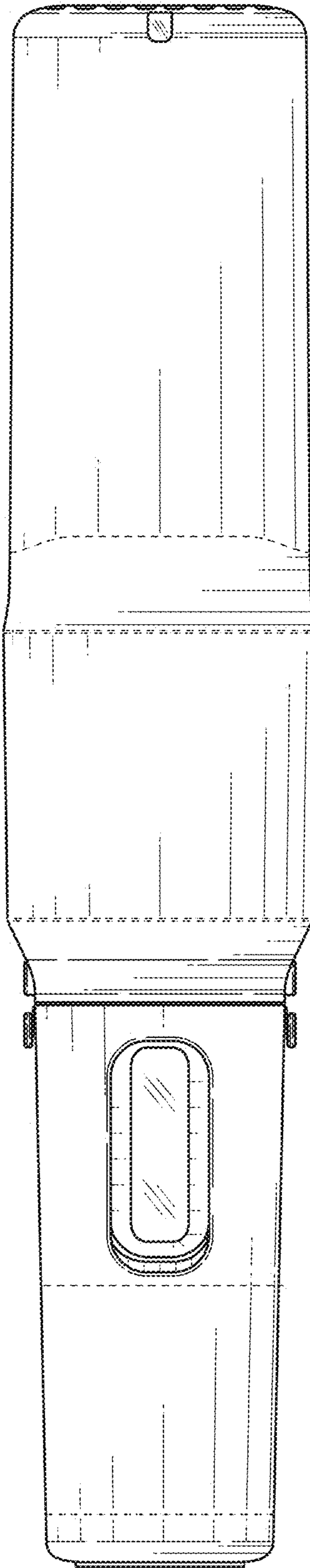


FIG. 2

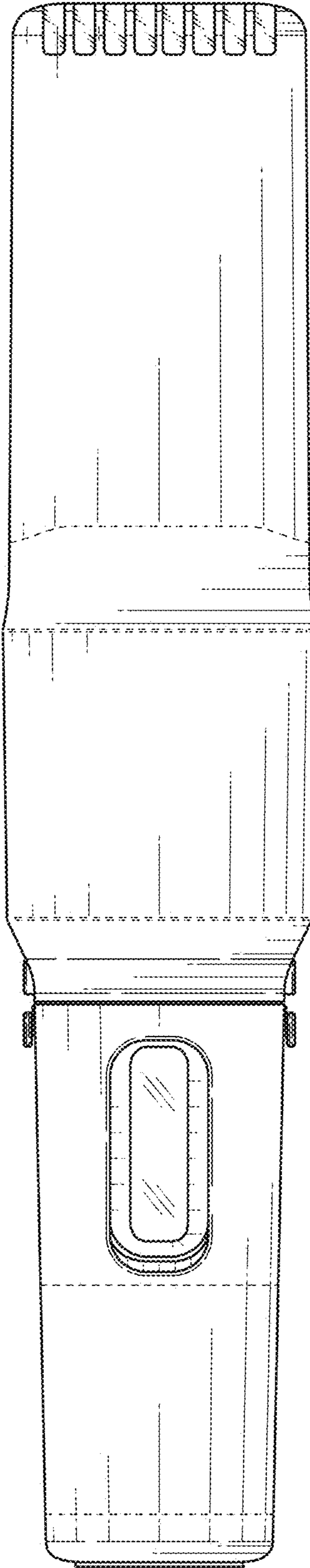


FIG. 3

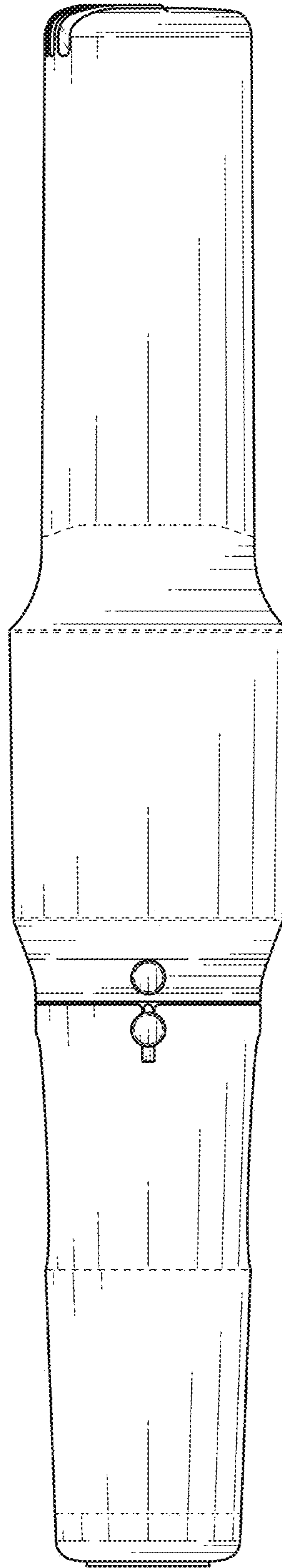


FIG. 4

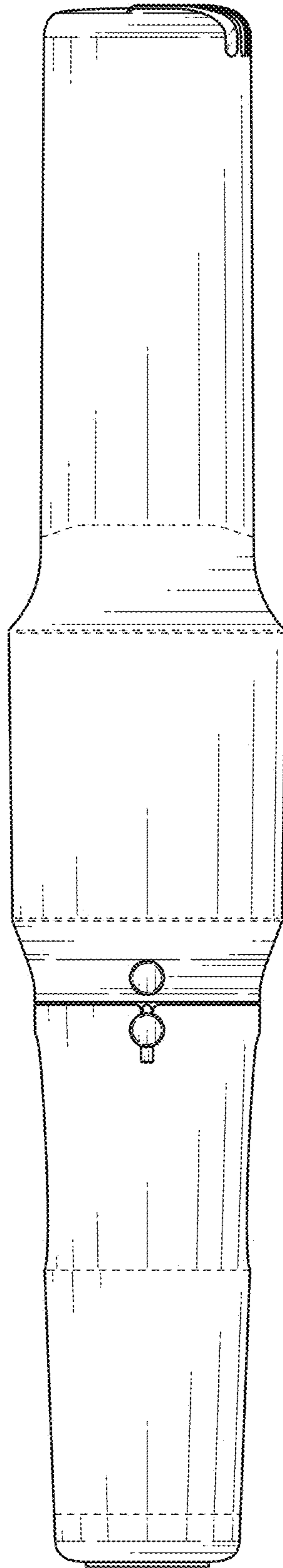


FIG. 5

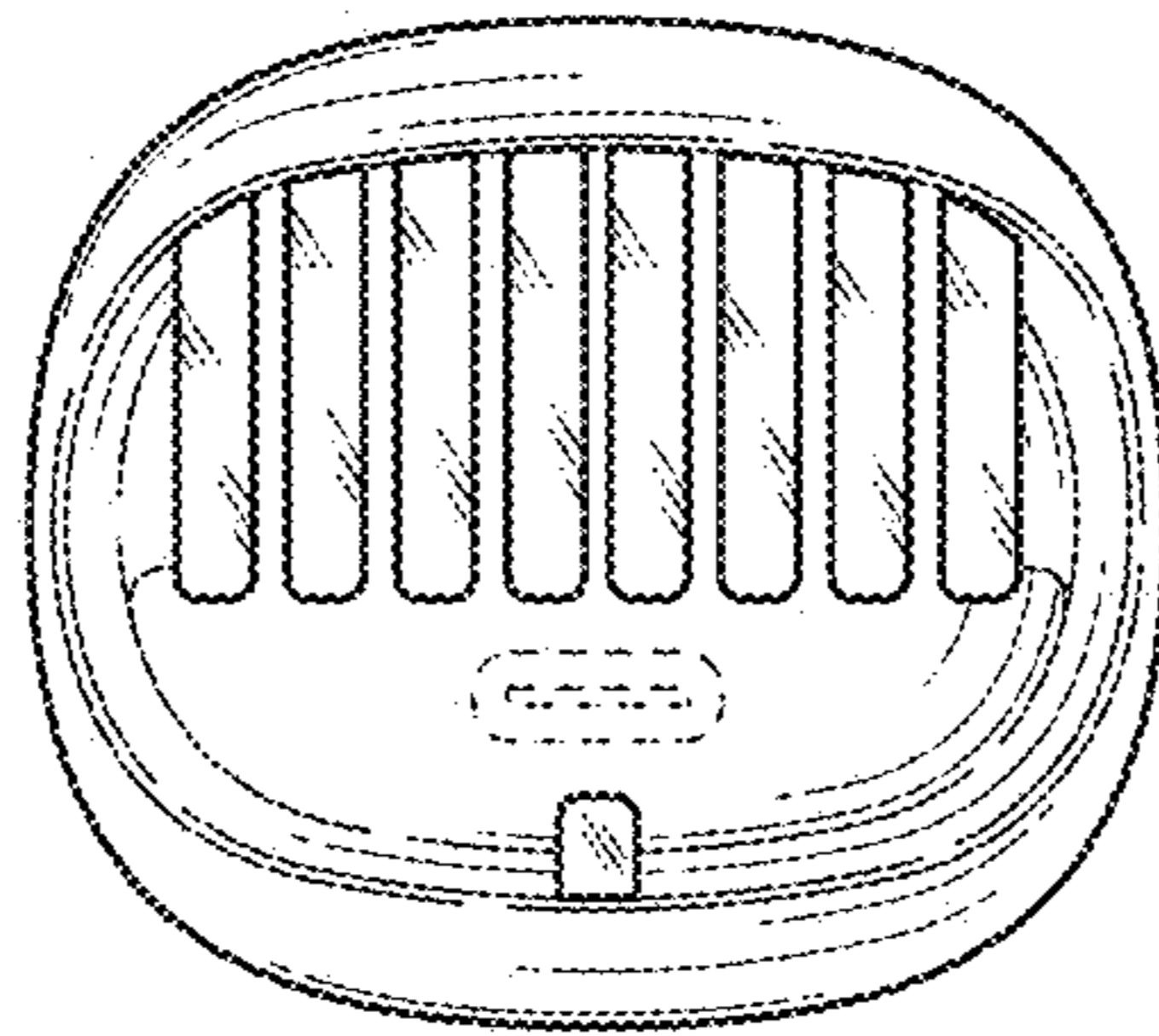


FIG. 6

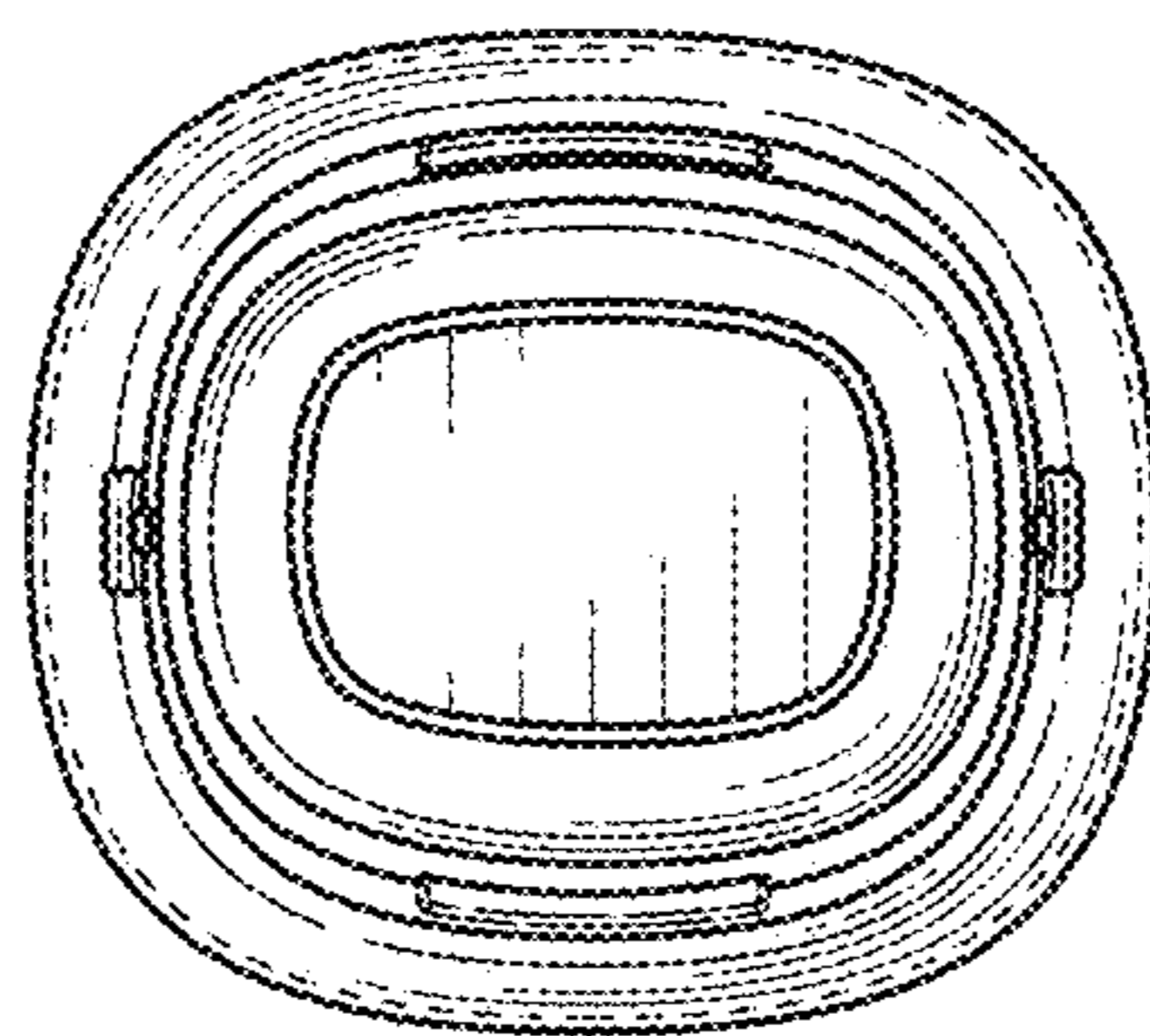


FIG. 7

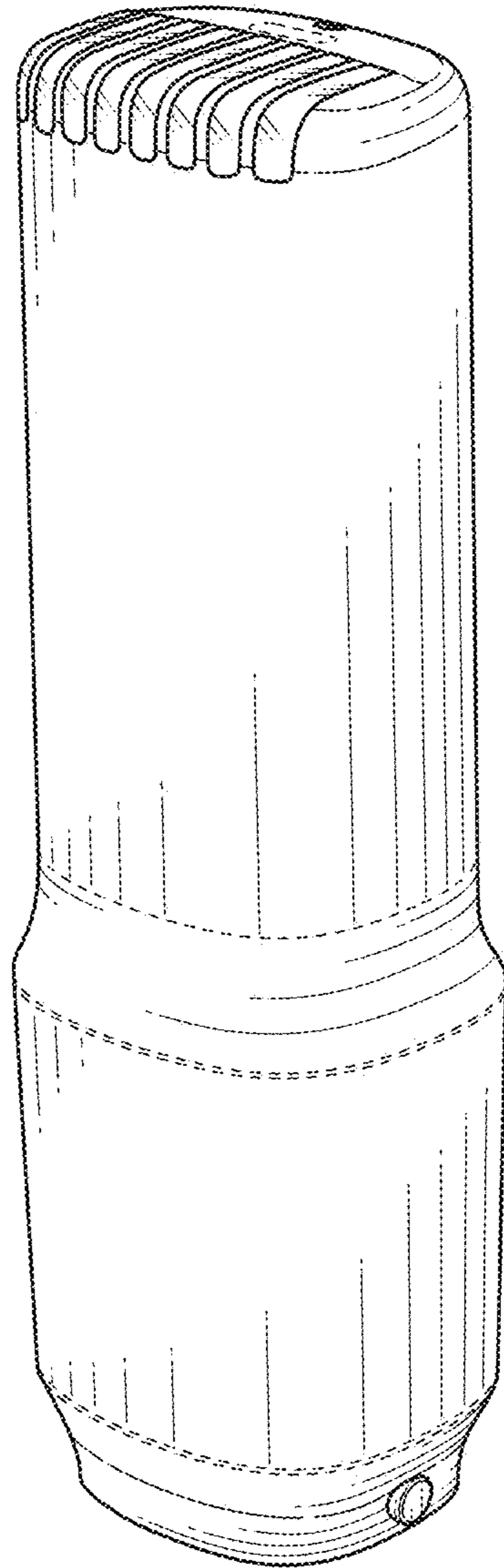


FIG. 8

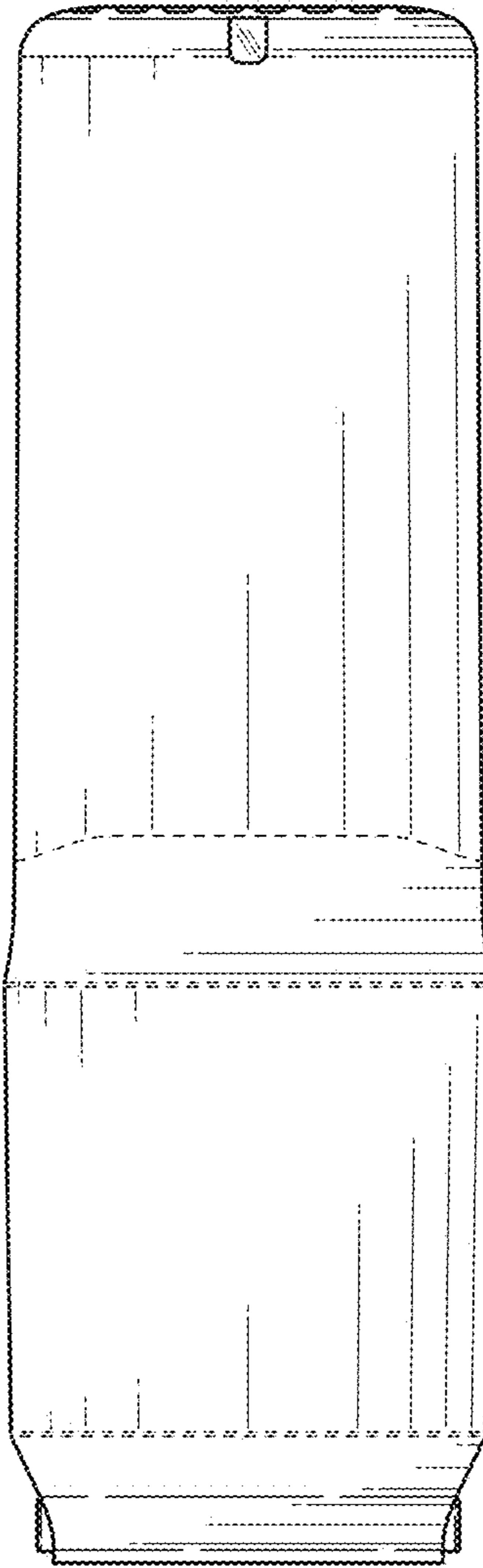


FIG. 9

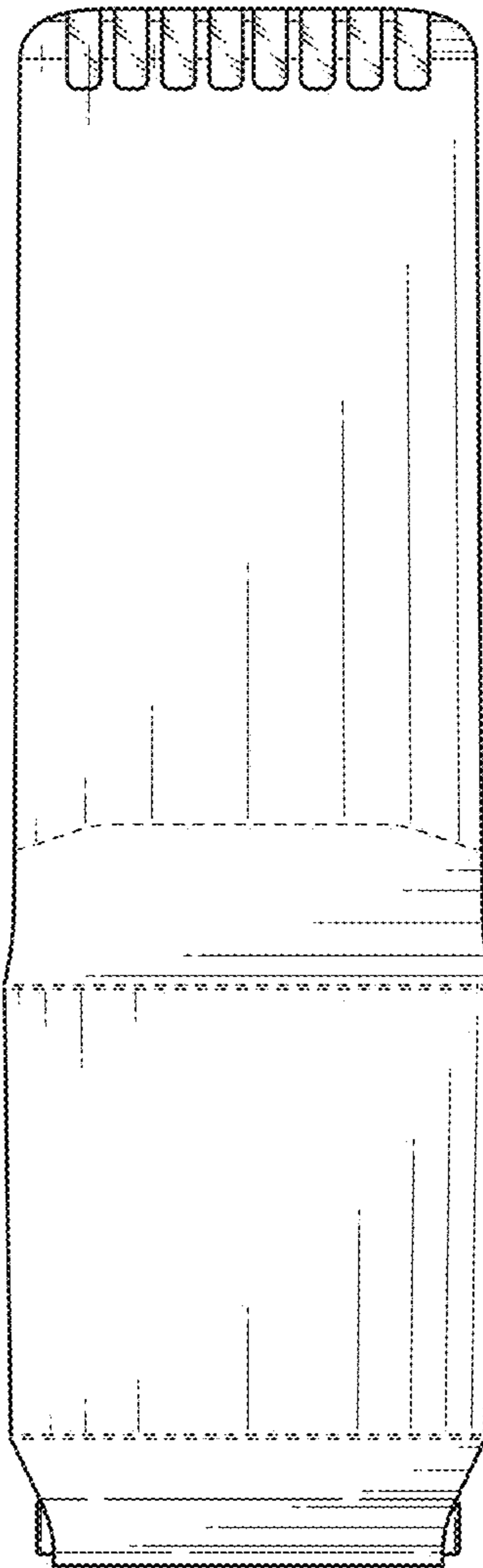


FIG. 10

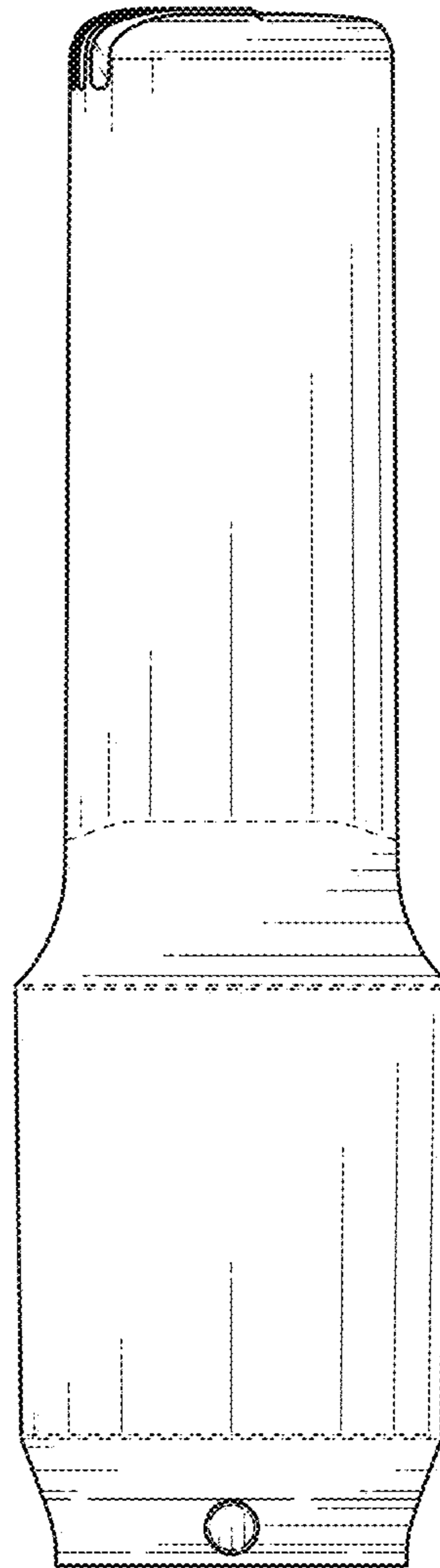


FIG. 11

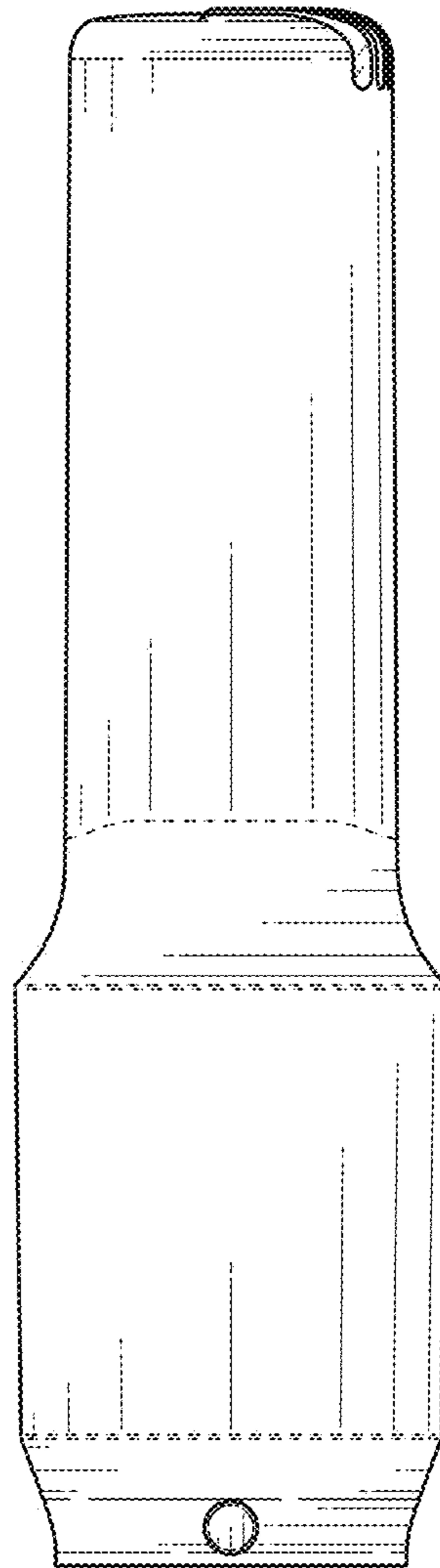


FIG. 12

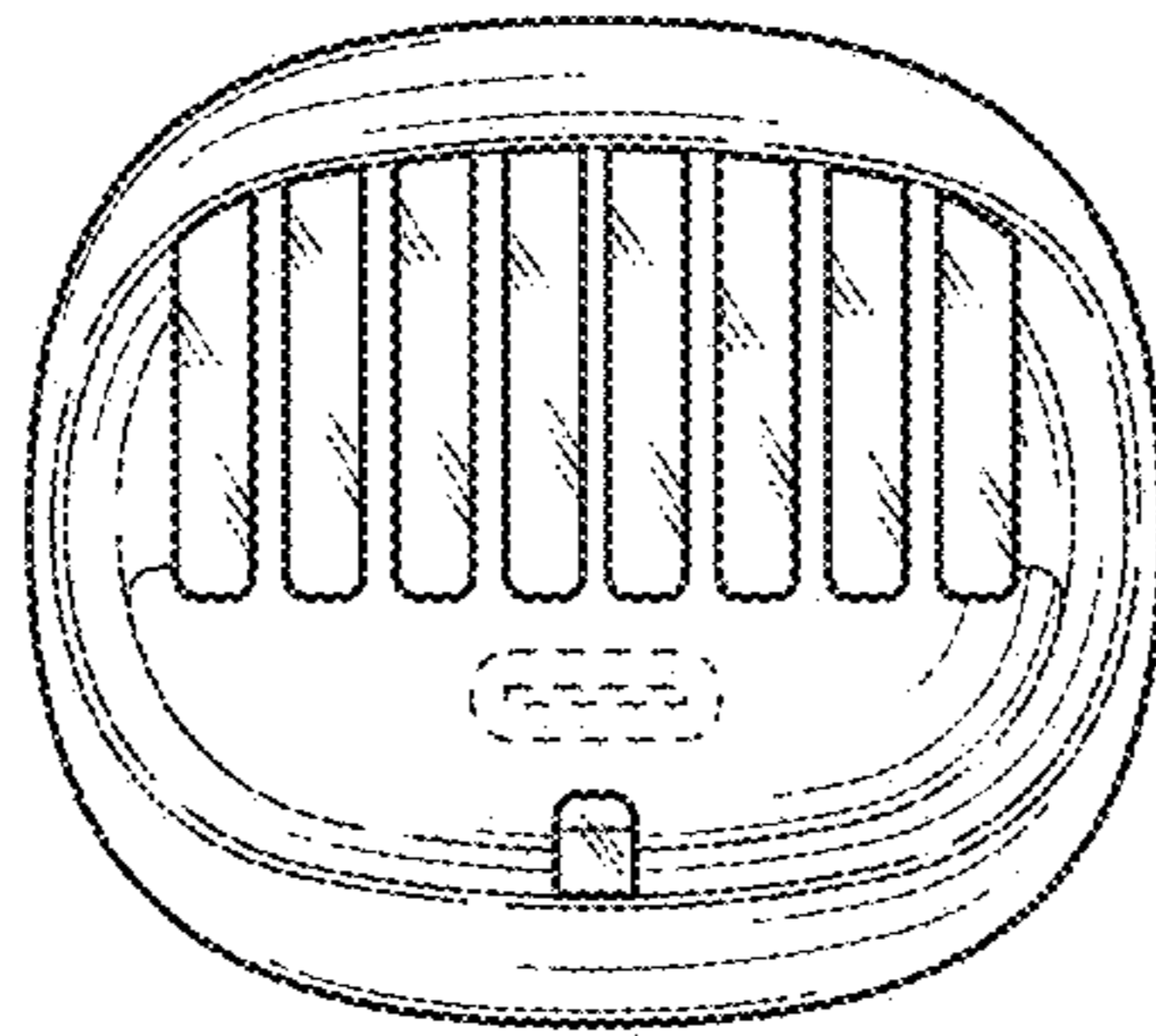


FIG. 13

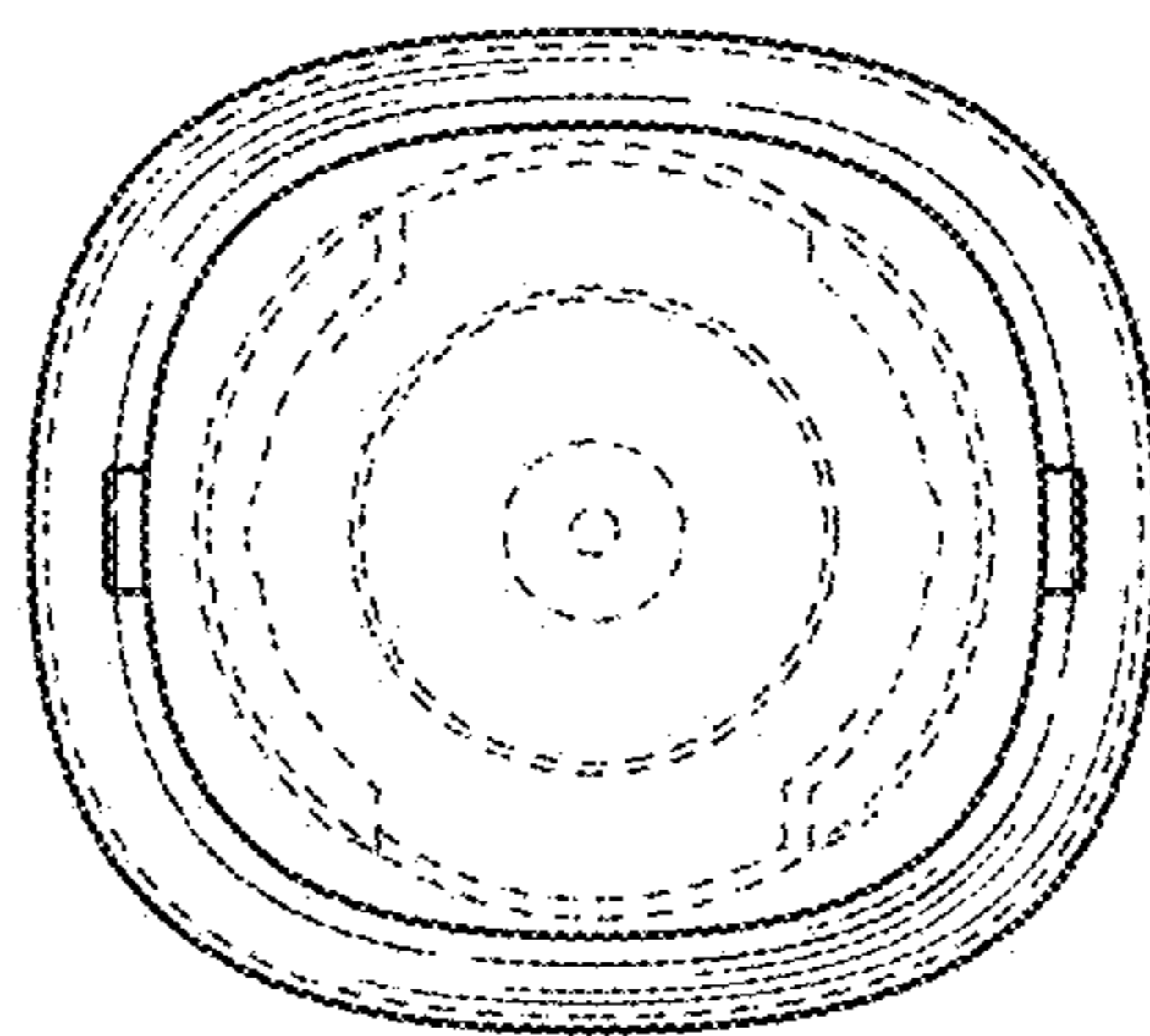


FIG. 14

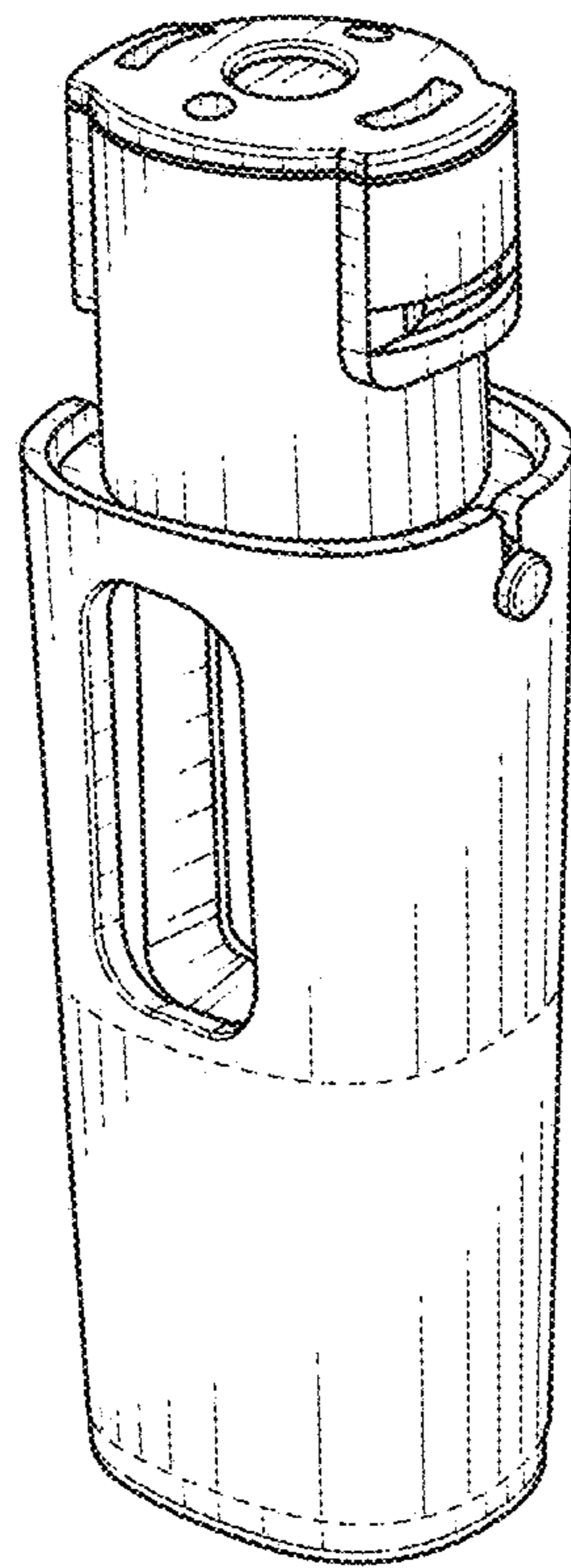


FIG. 15

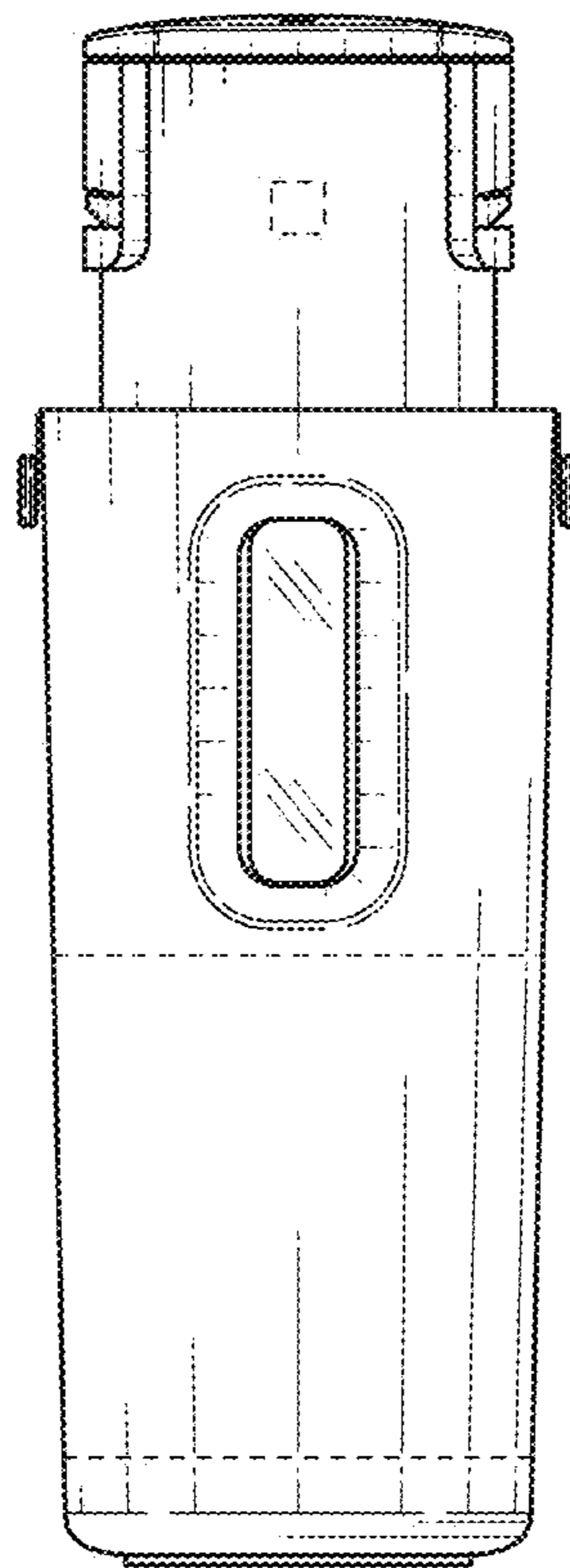


FIG. 16

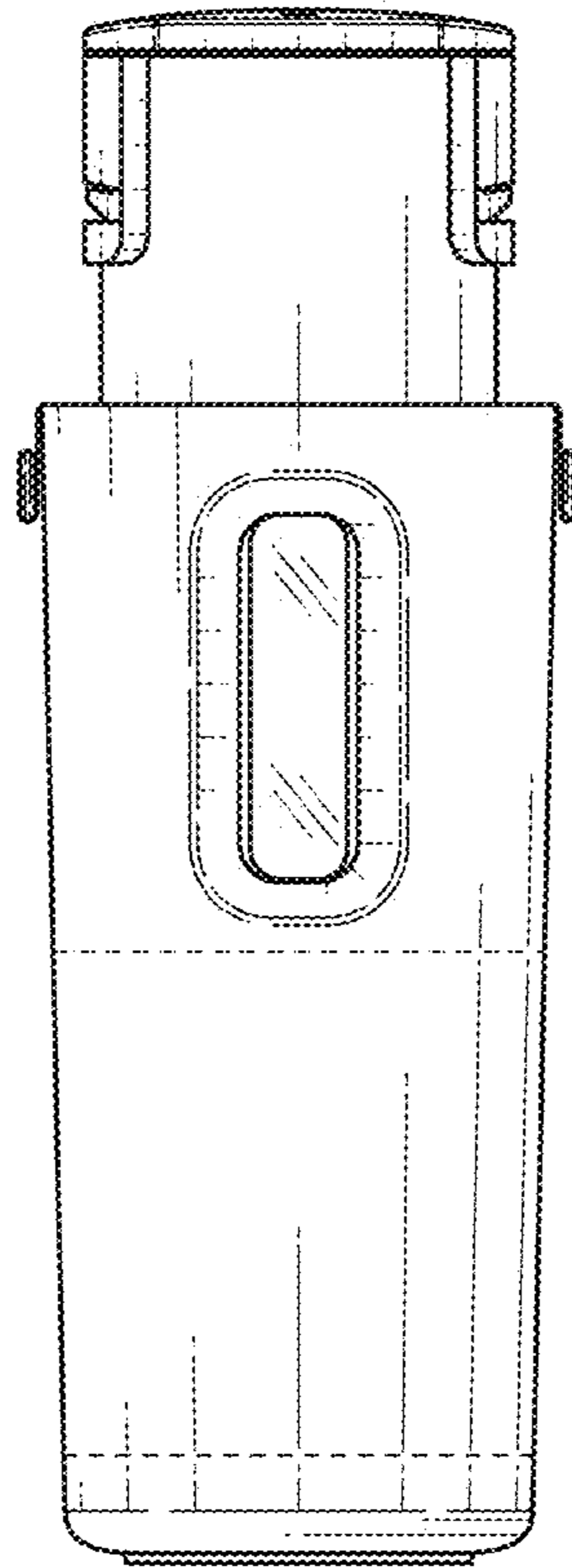


FIG. 17

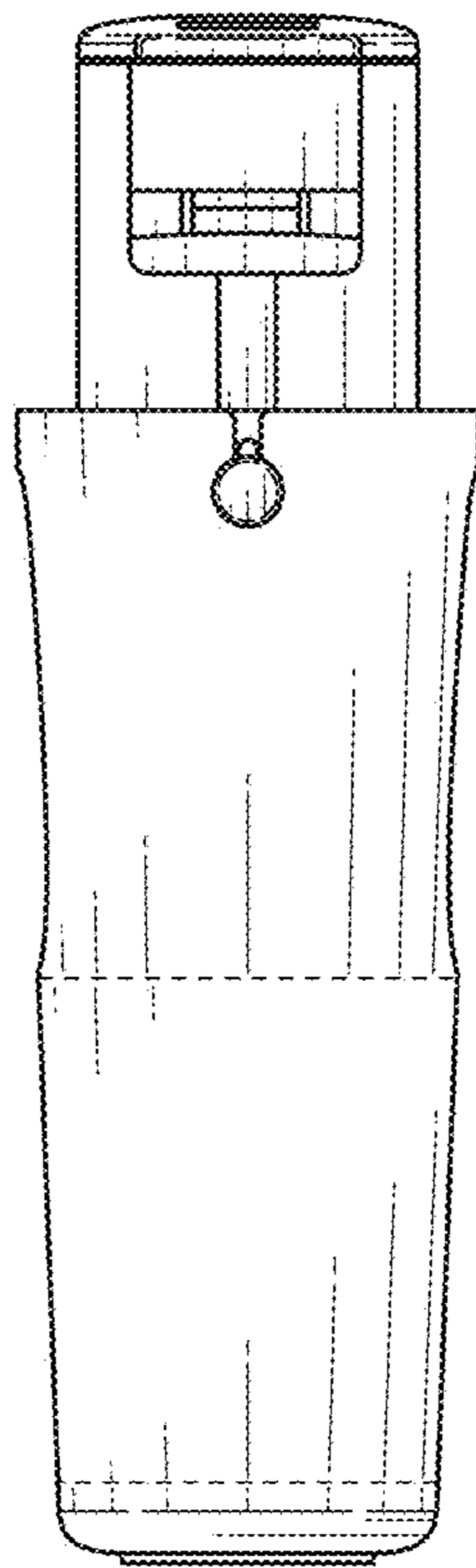


FIG. 18

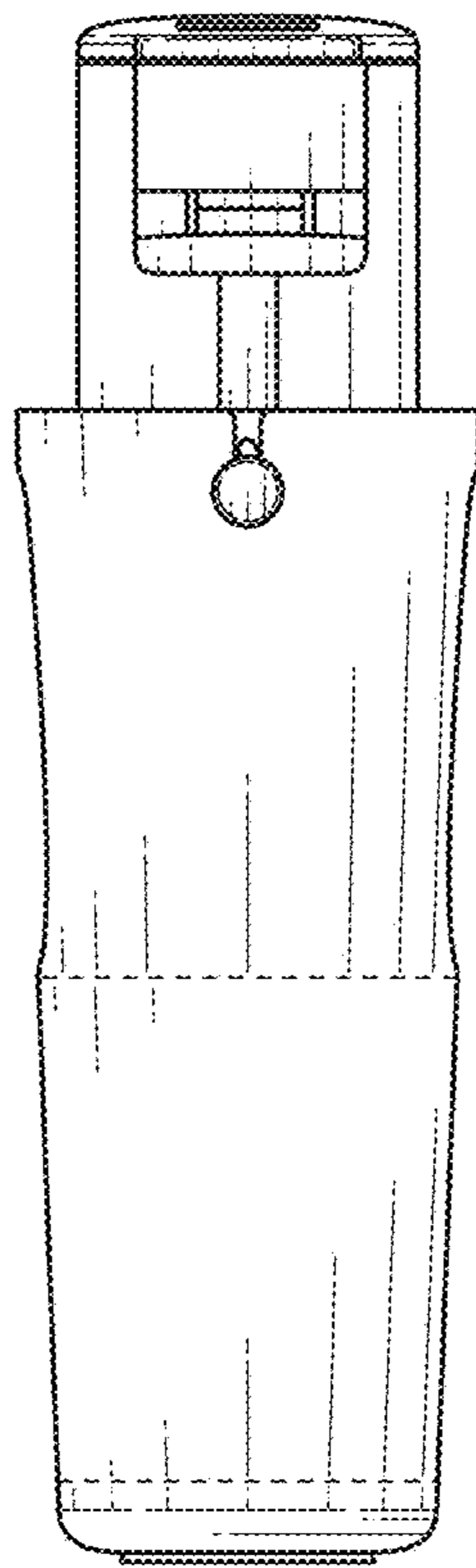


FIG. 19

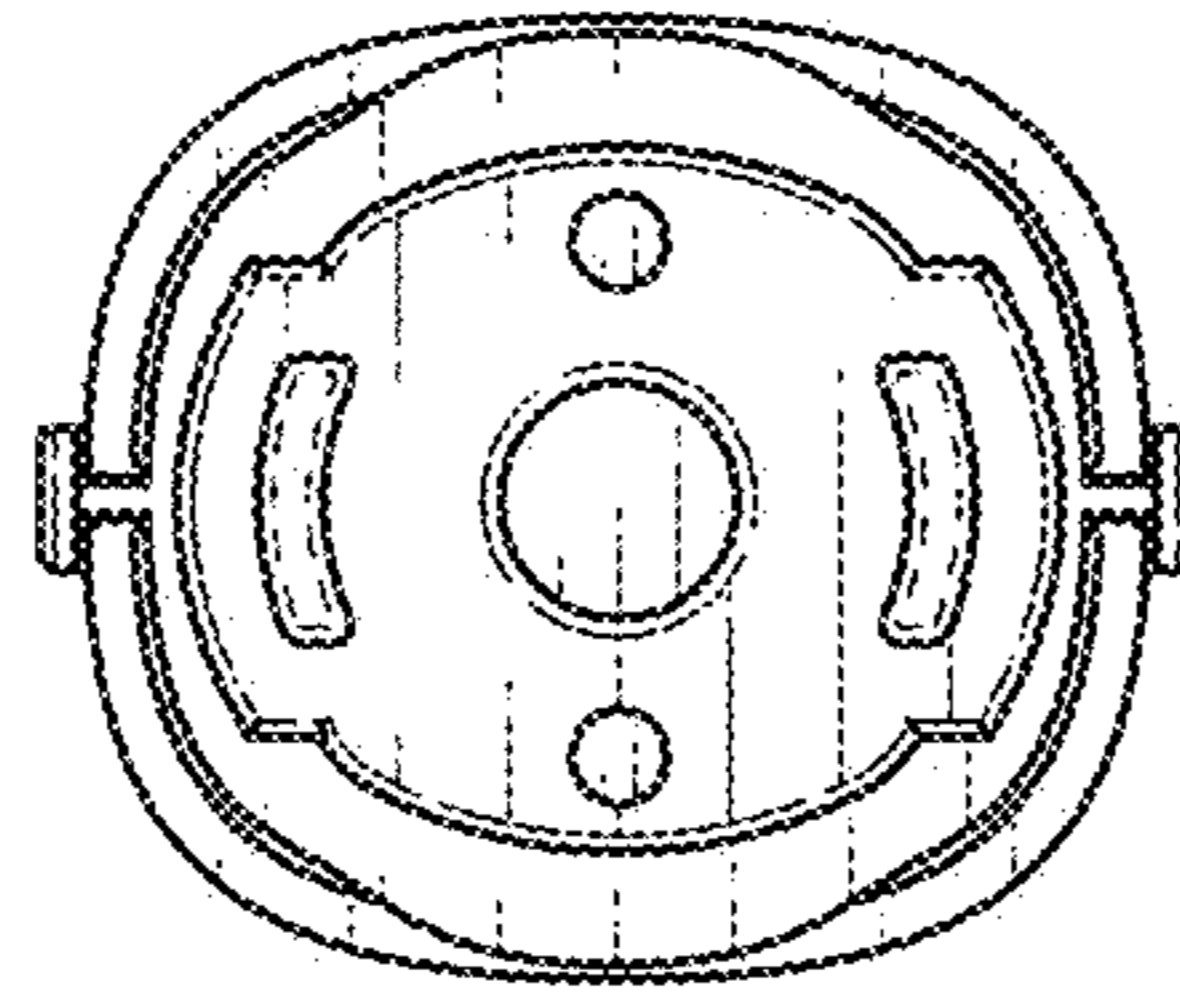


FIG. 20

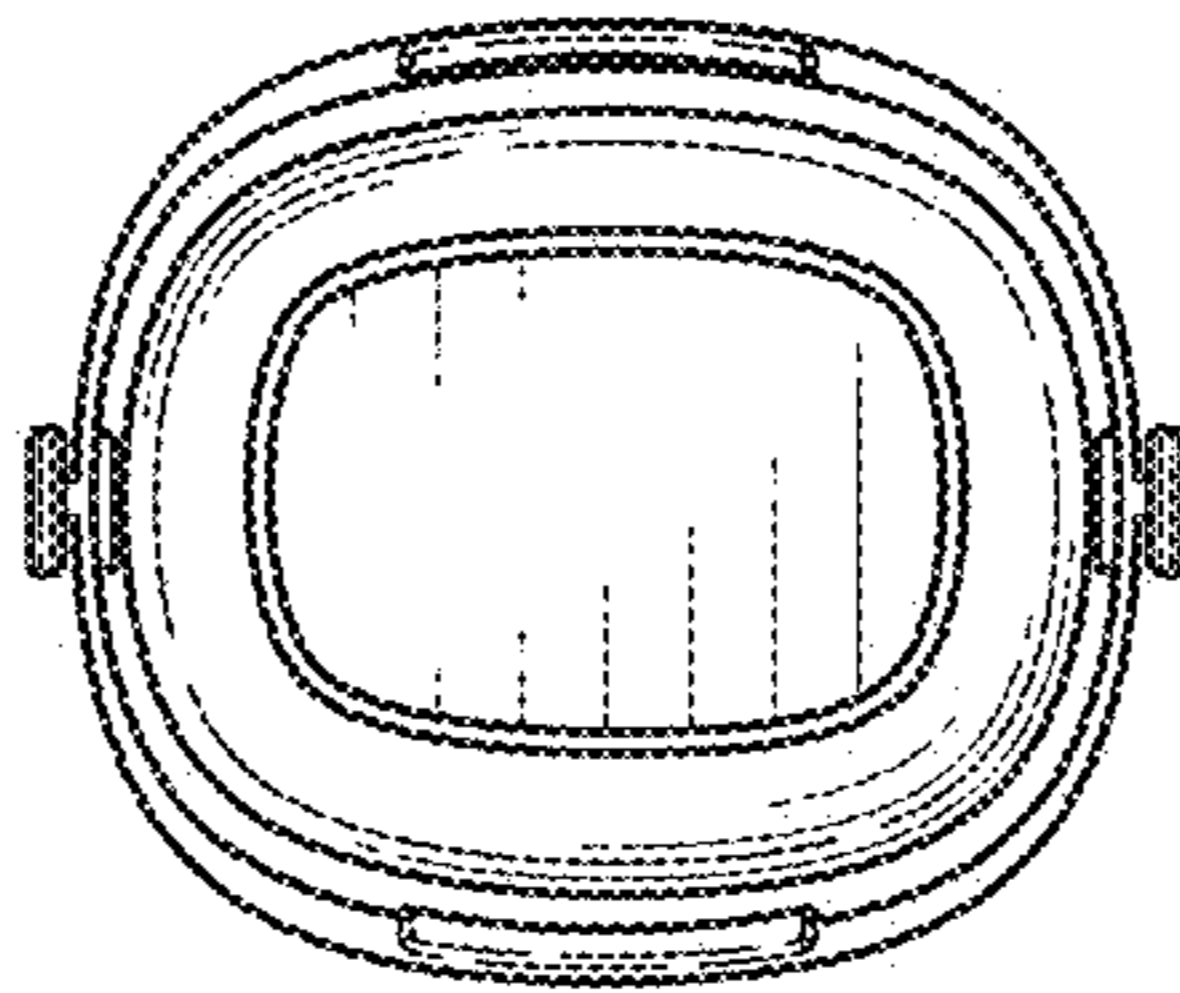


FIG. 21

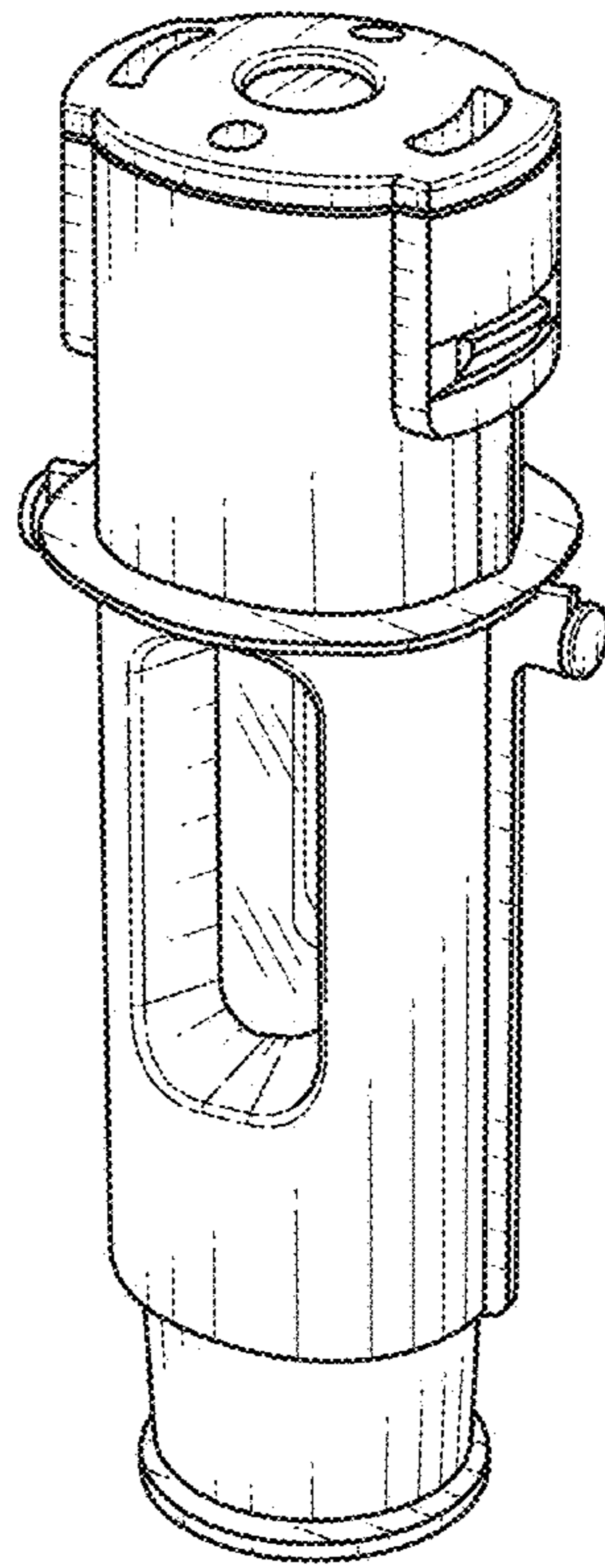


FIG. 22

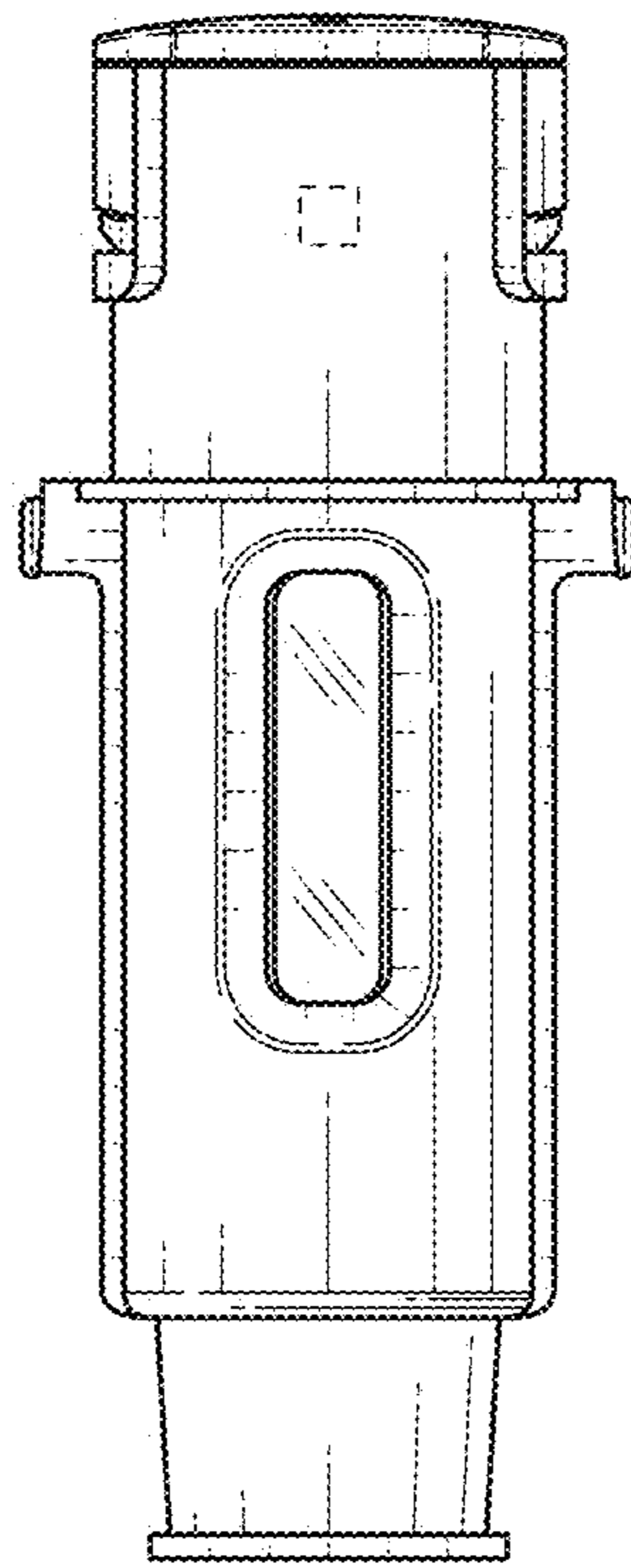


FIG. 23

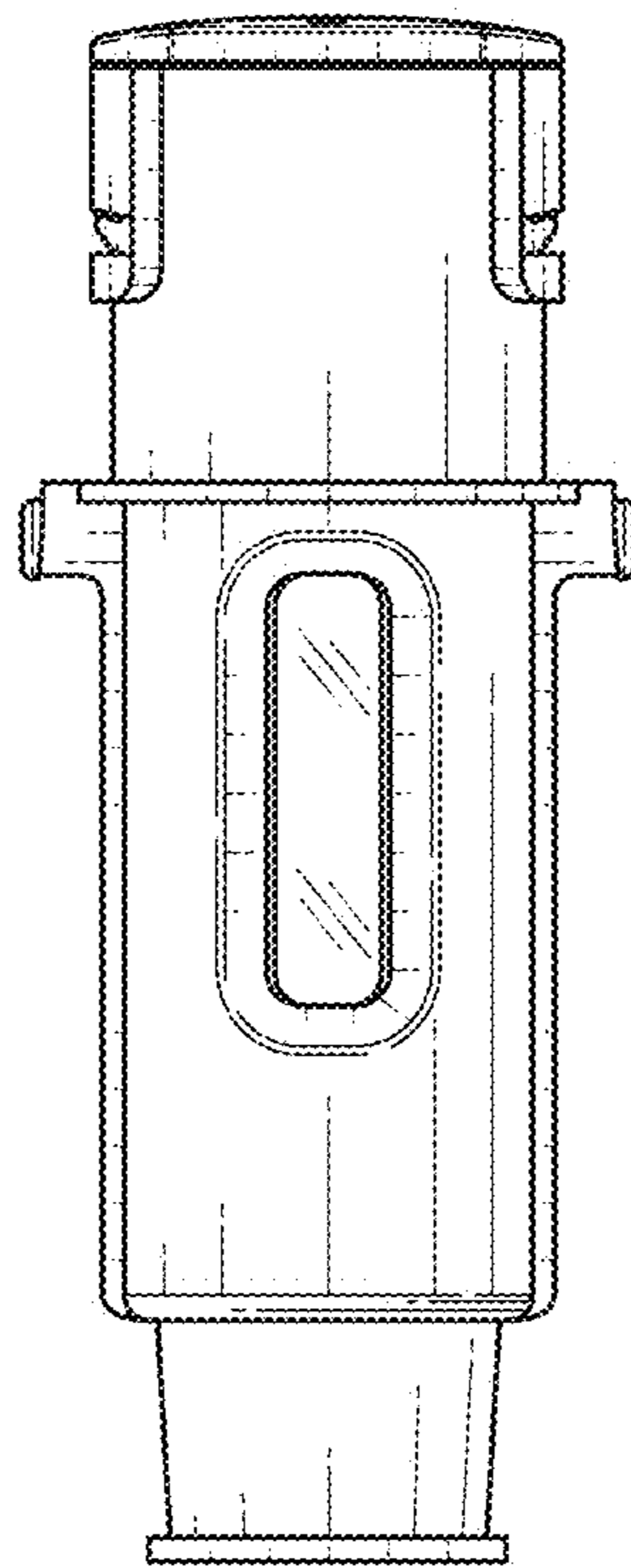


FIG. 24

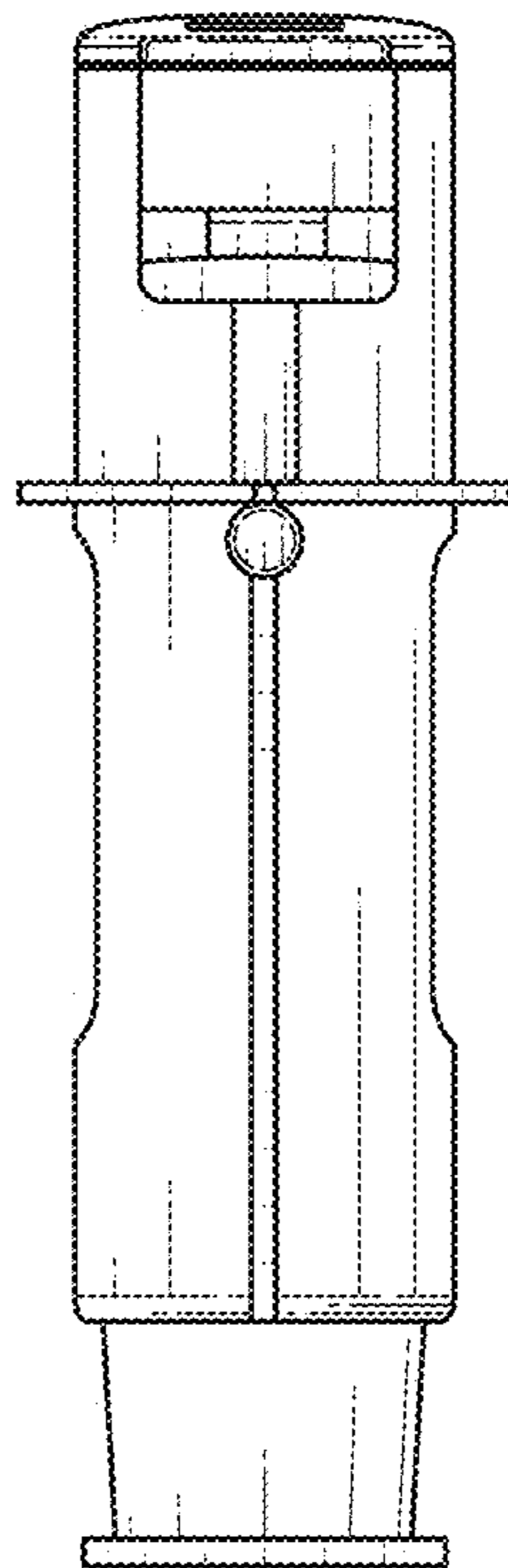


FIG. 25

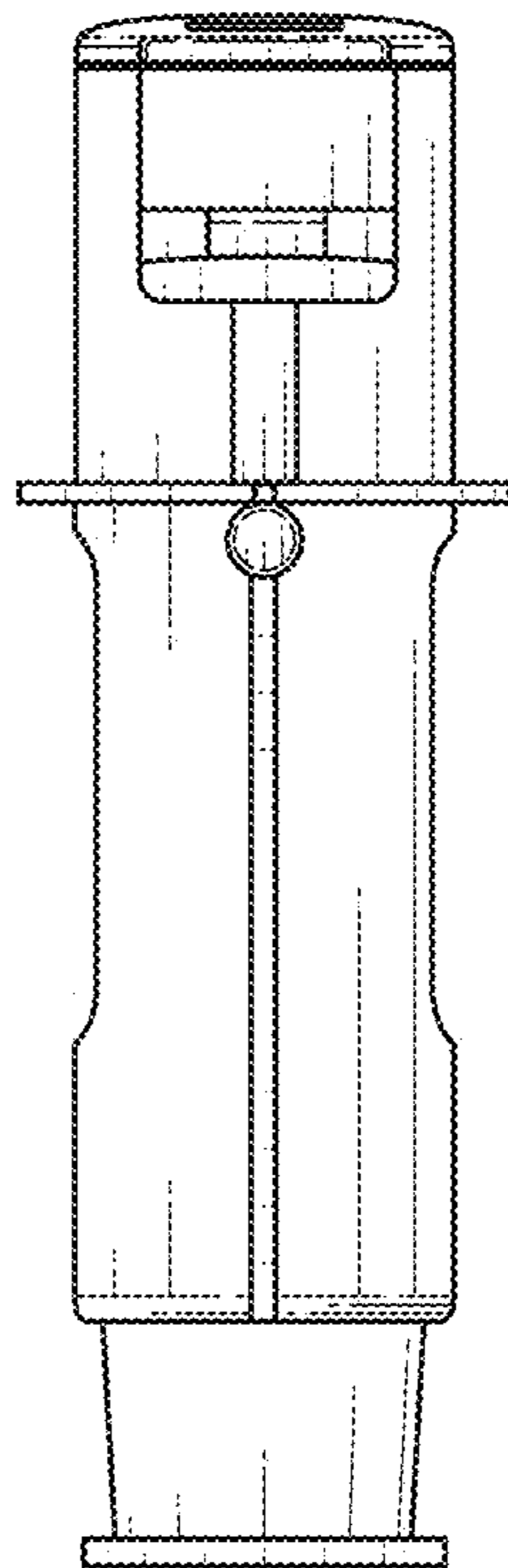


FIG. 26

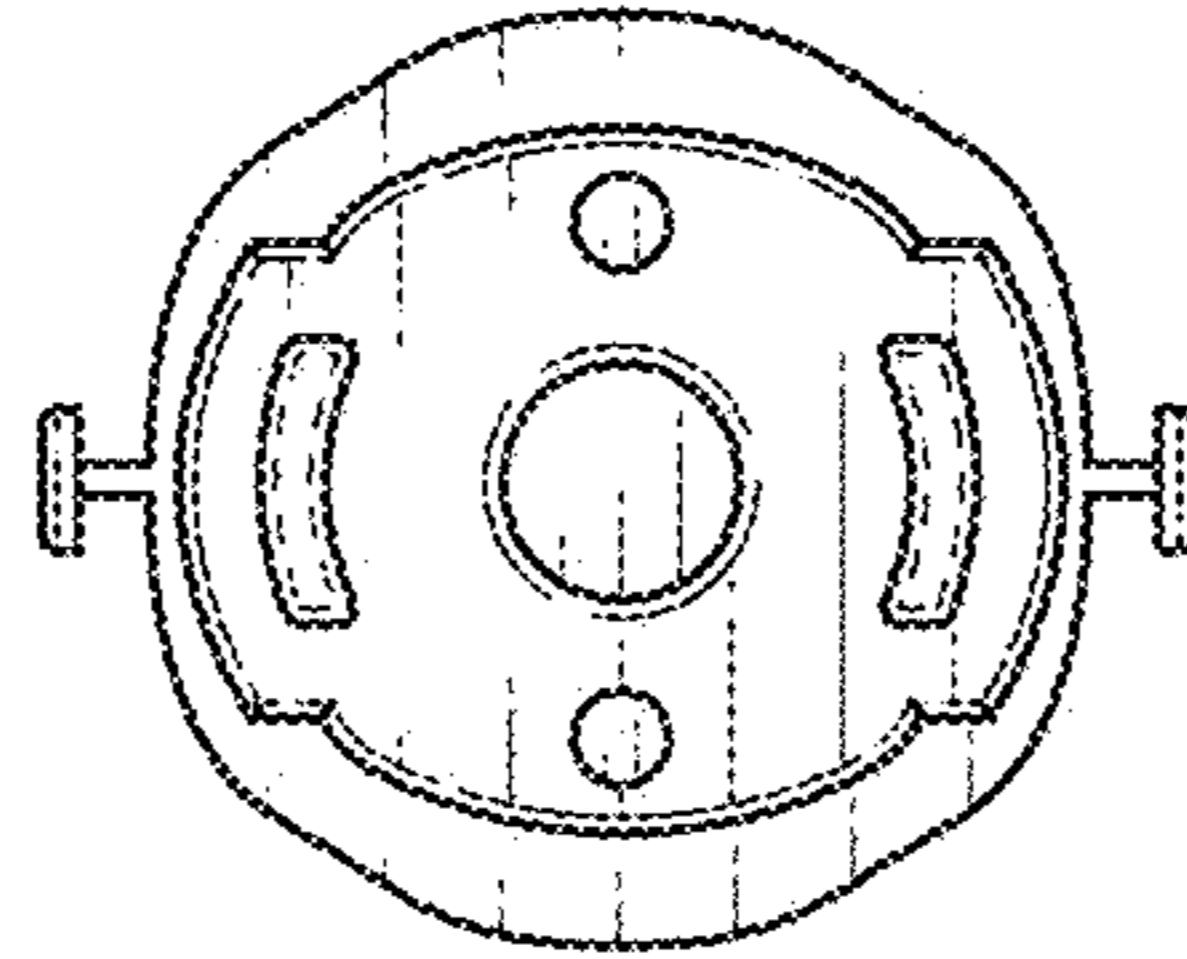


FIG. 27

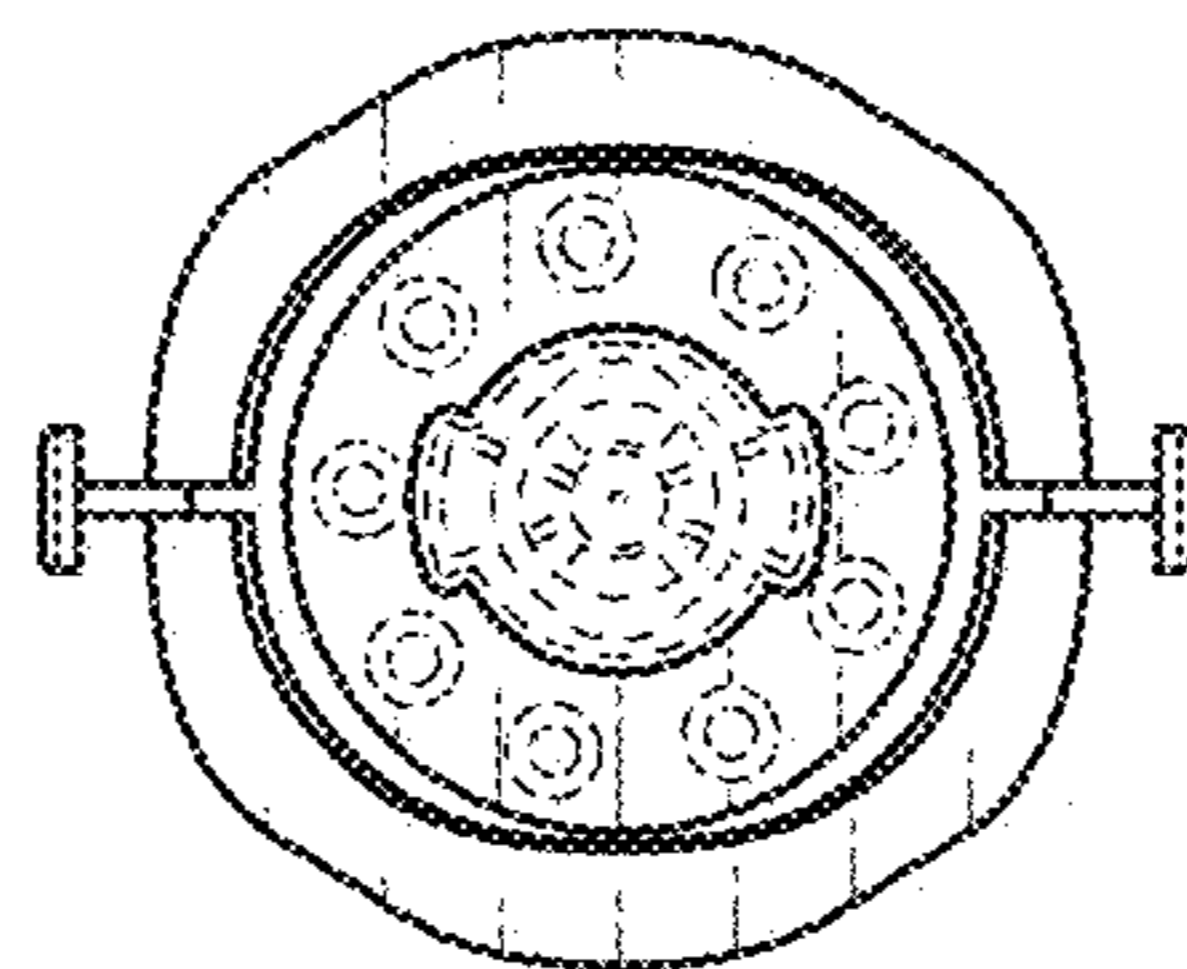


FIG. 28

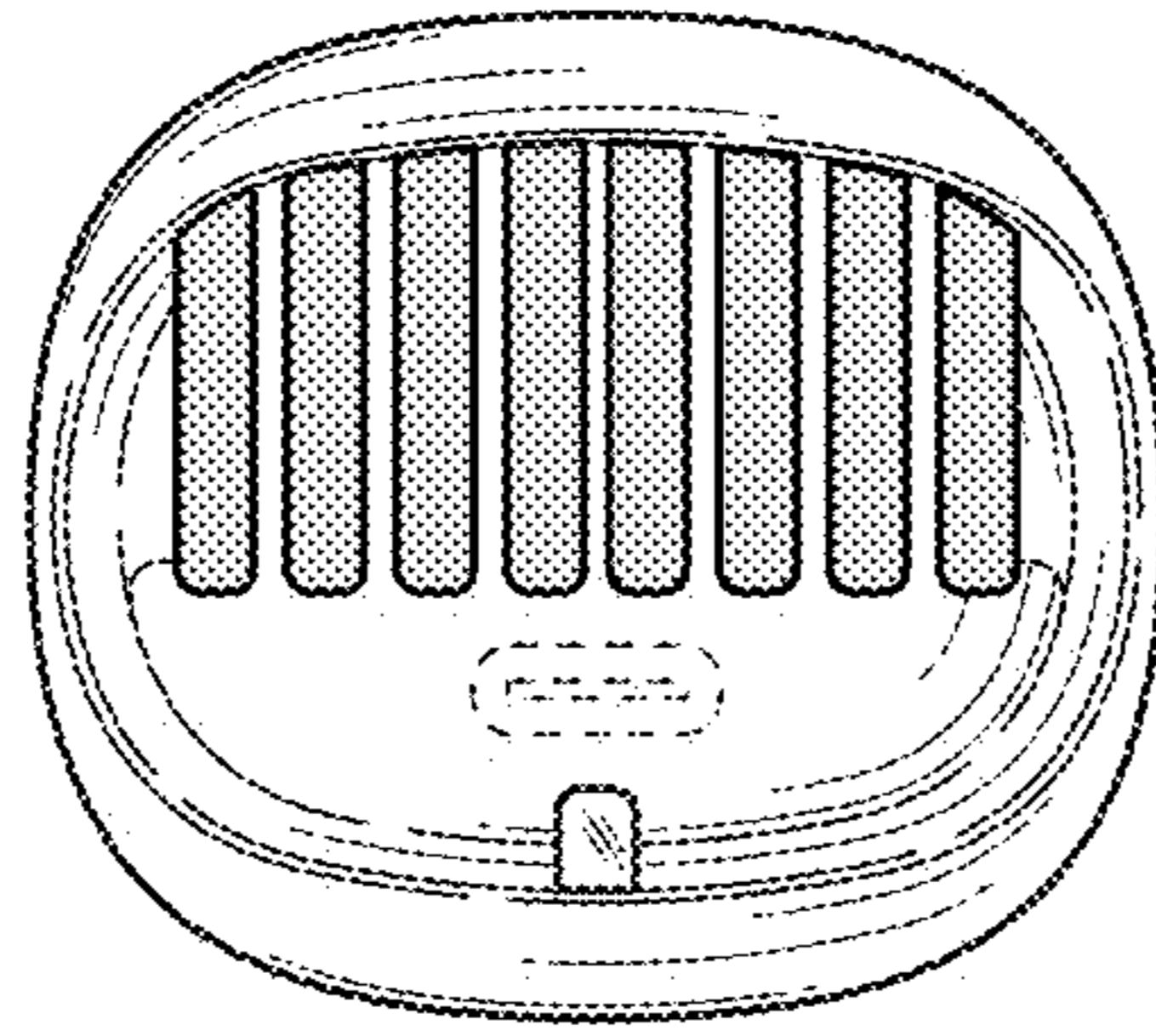


FIG. 29

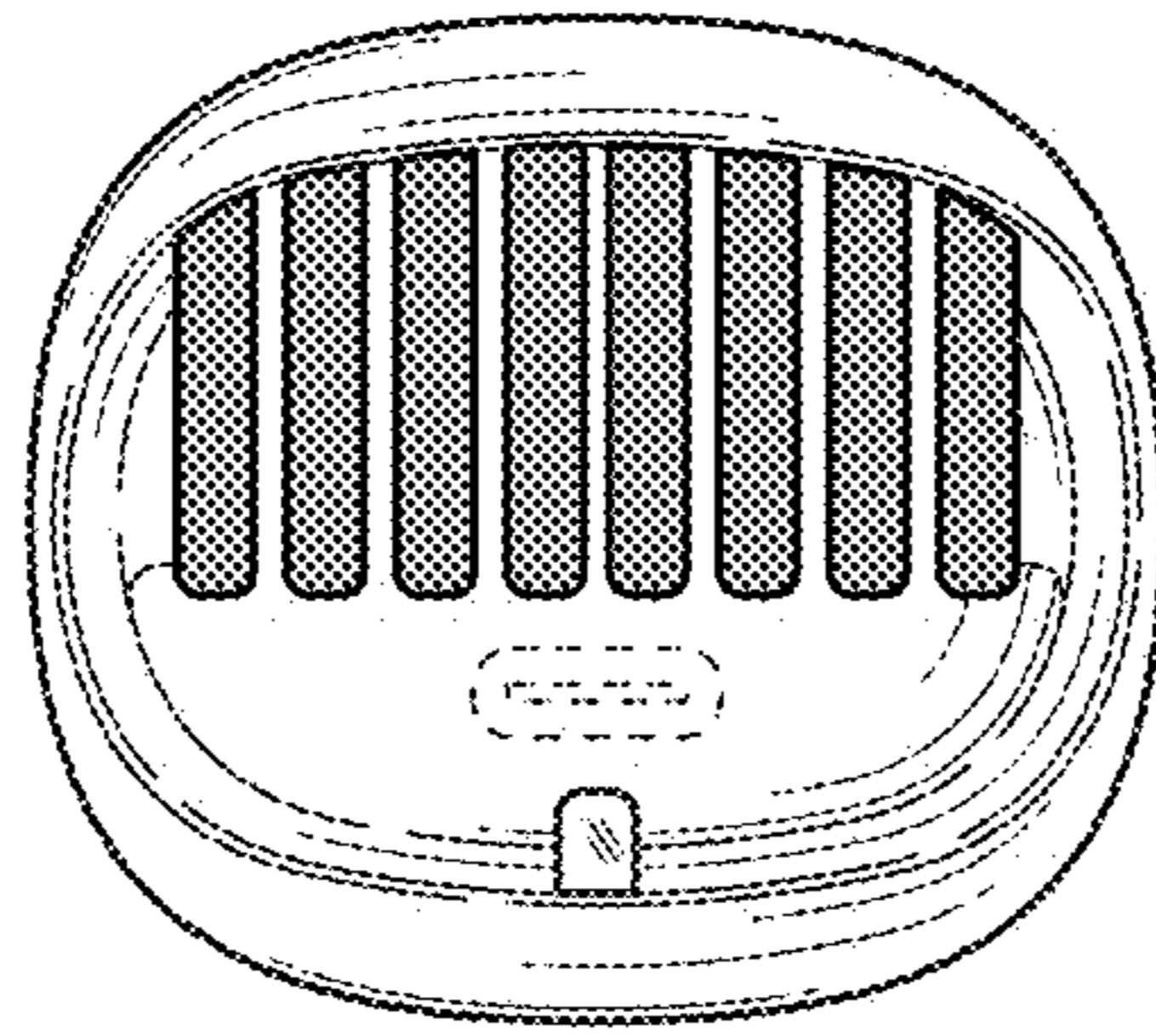


FIG. 30

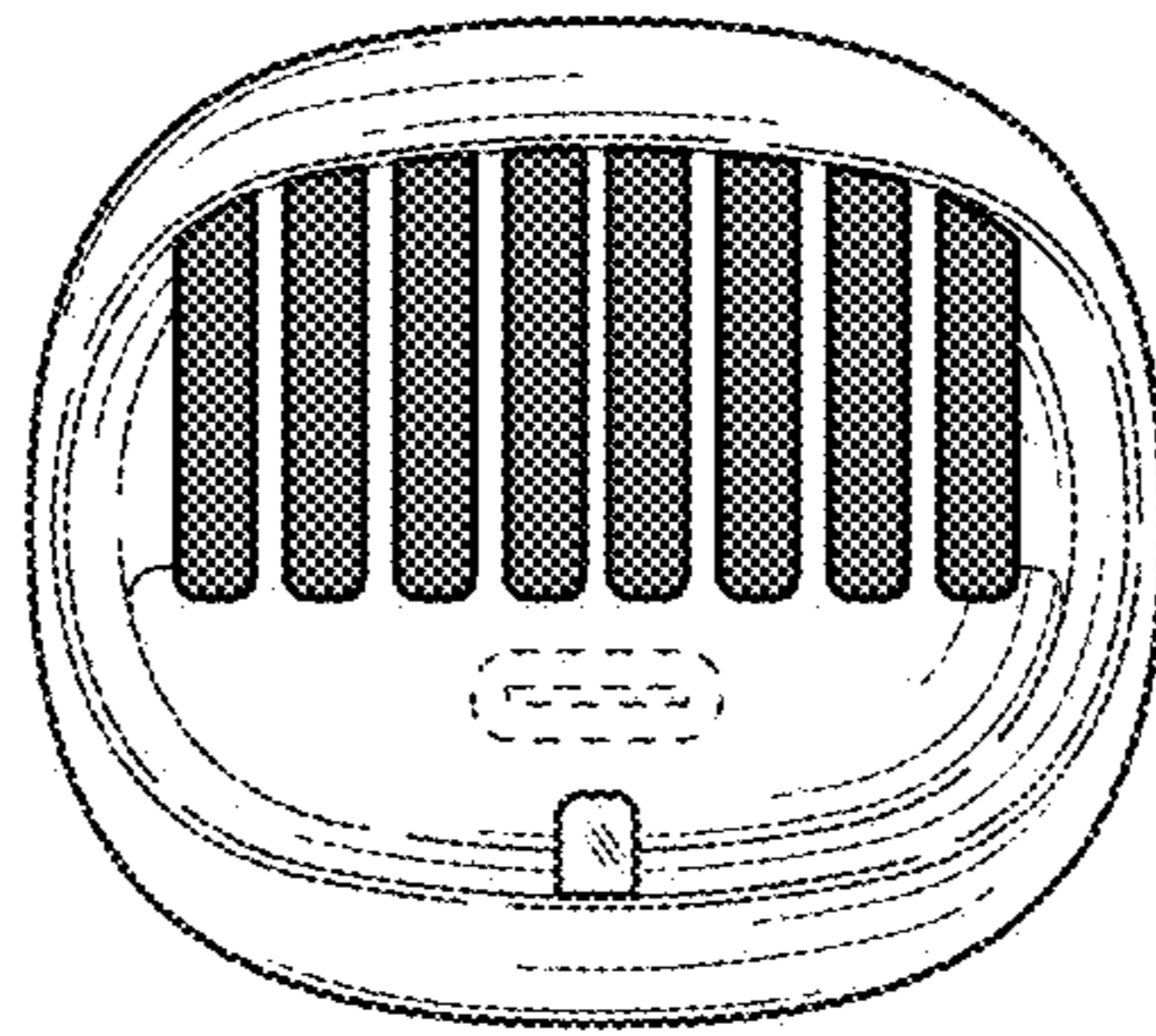


FIG. 31

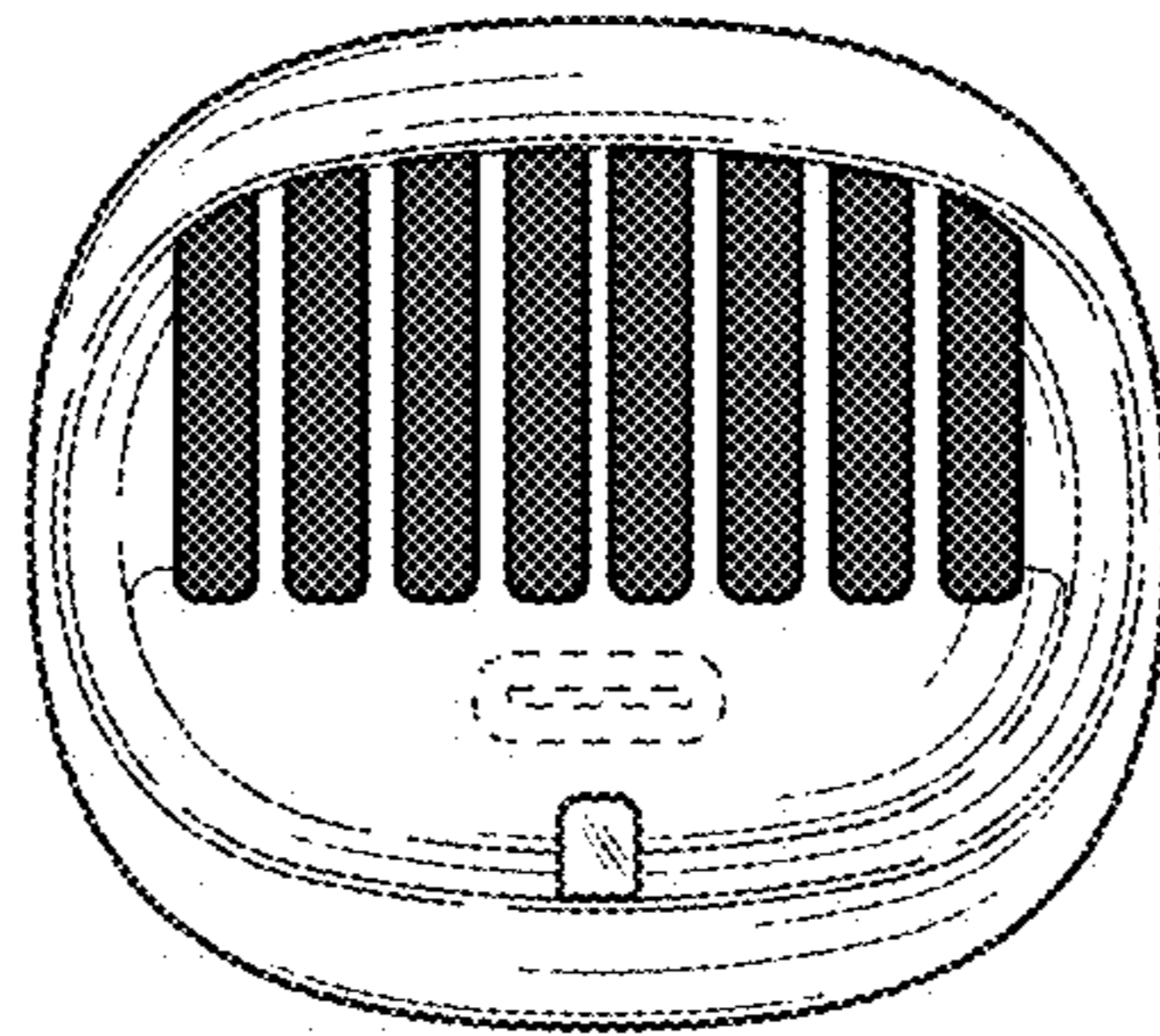


FIG. 32

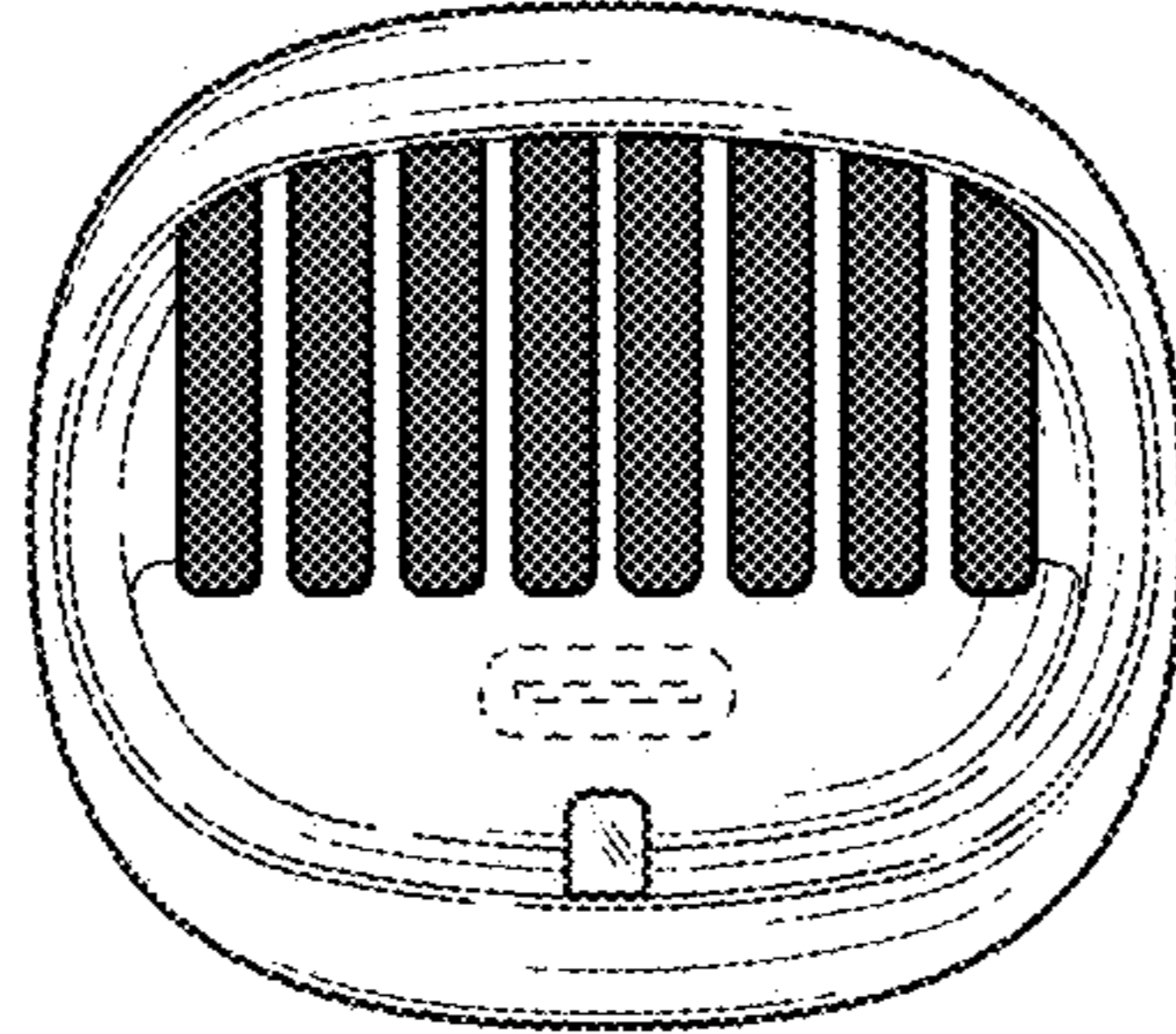


FIG. 33

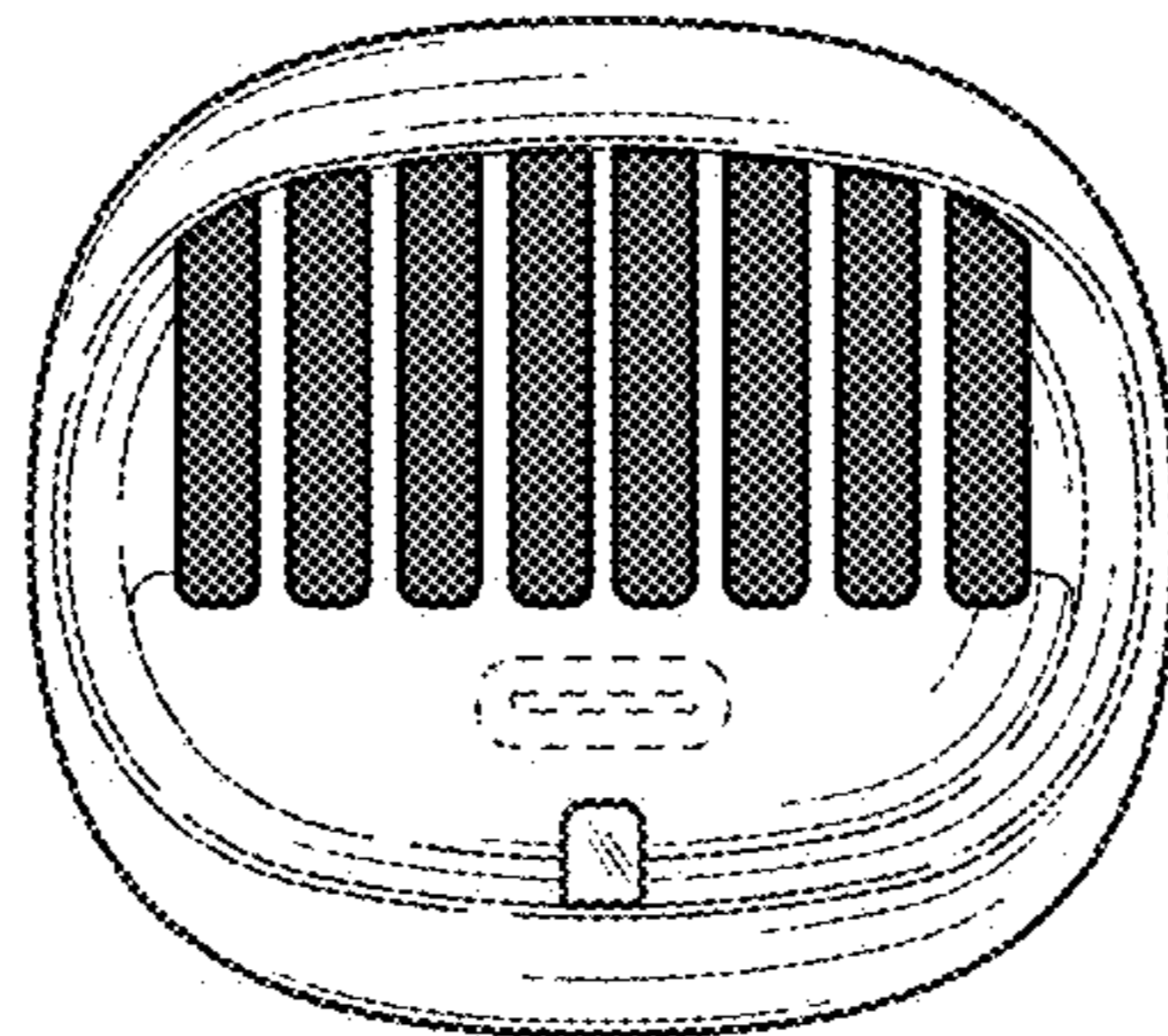


FIG. 34

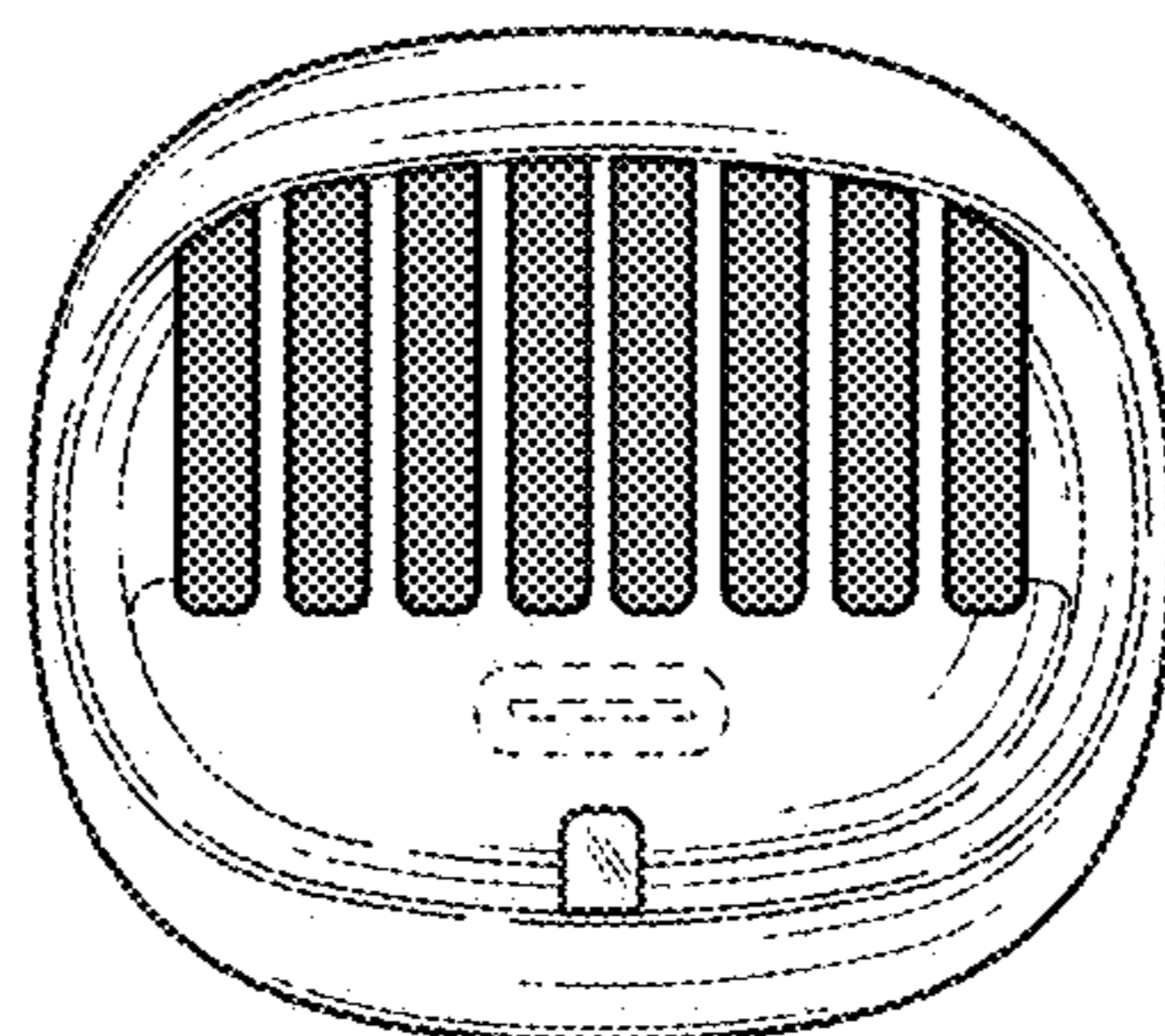


FIG. 35

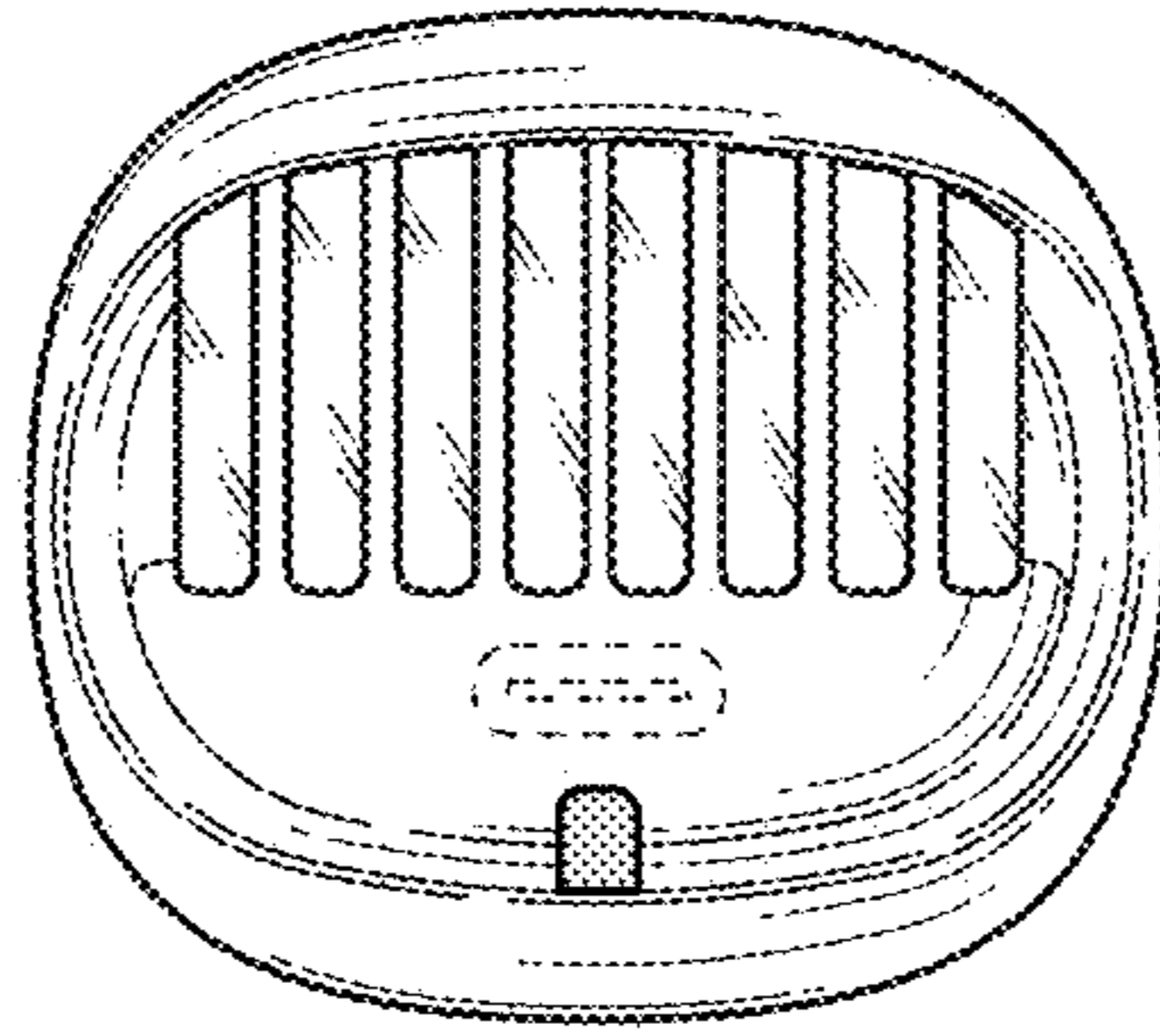


FIG. 36

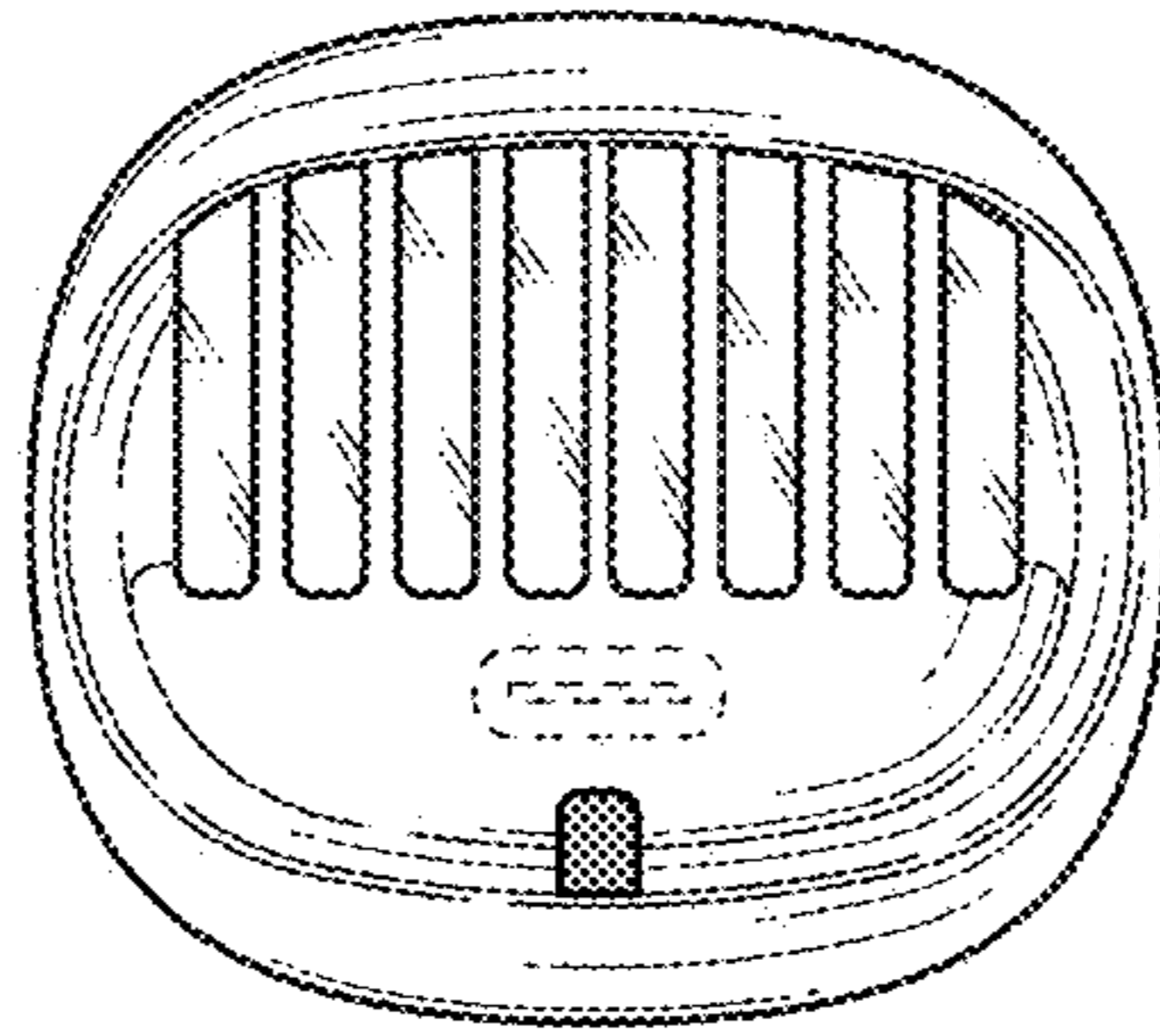


FIG. 37

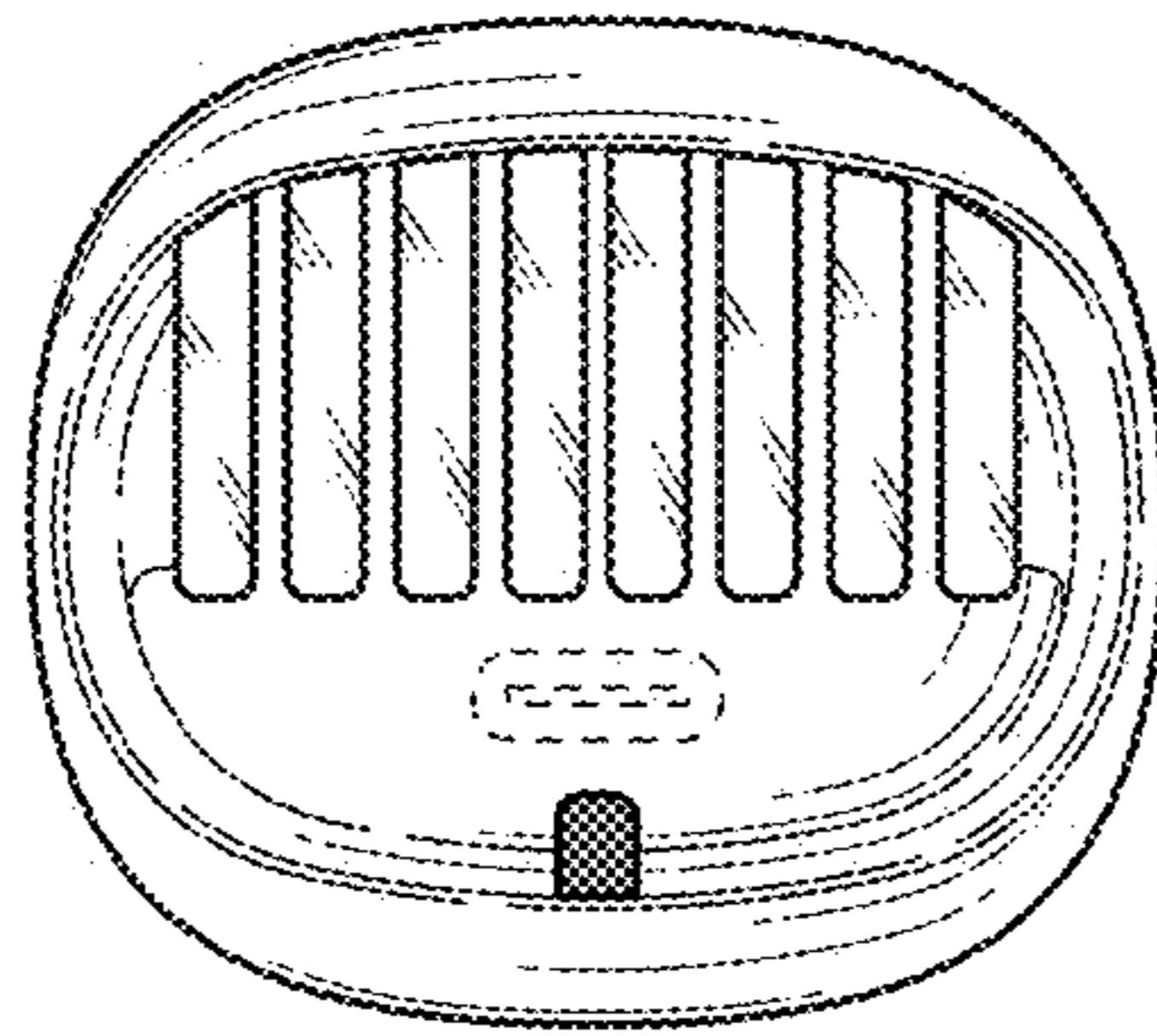


FIG. 38

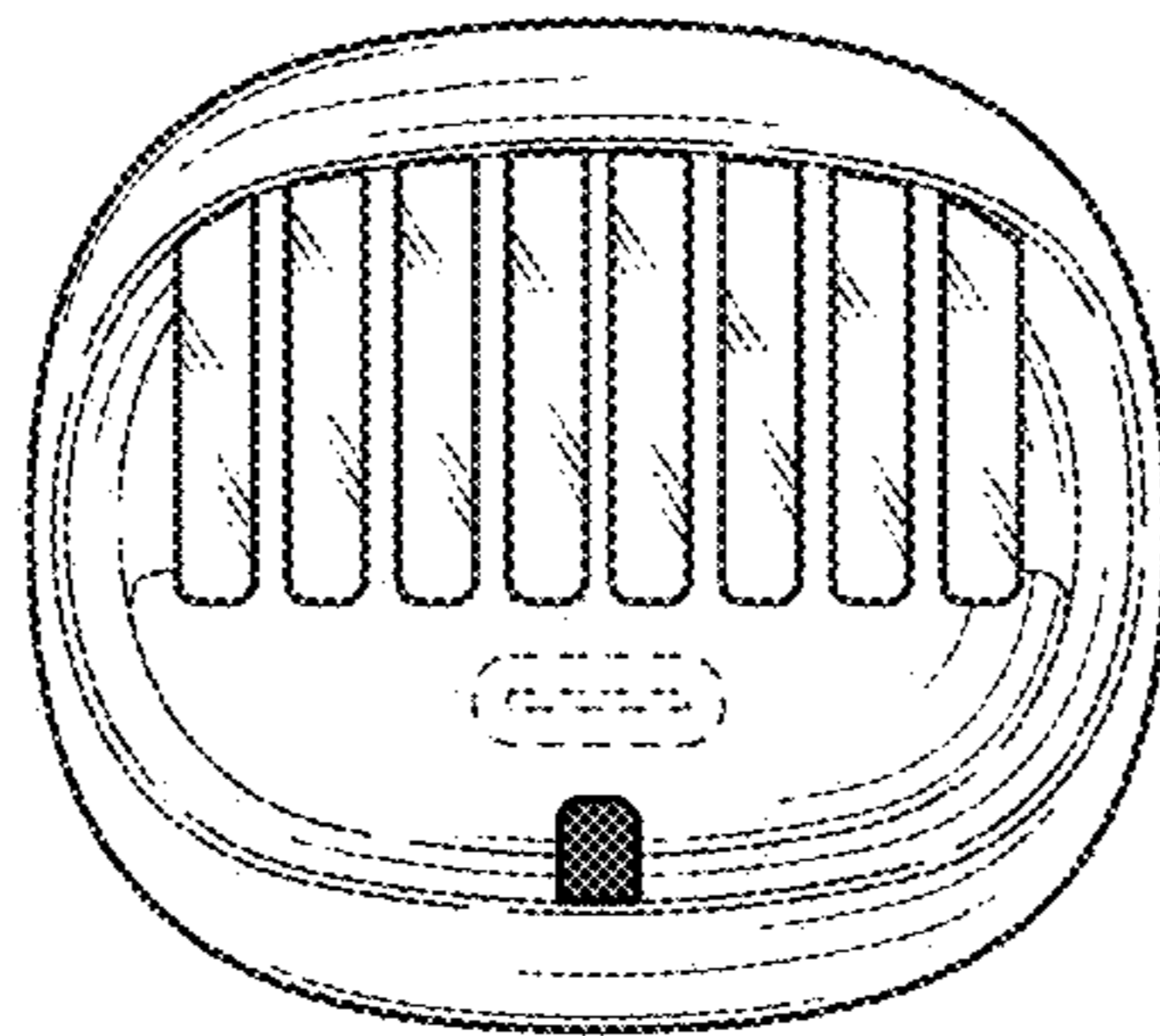


FIG. 39

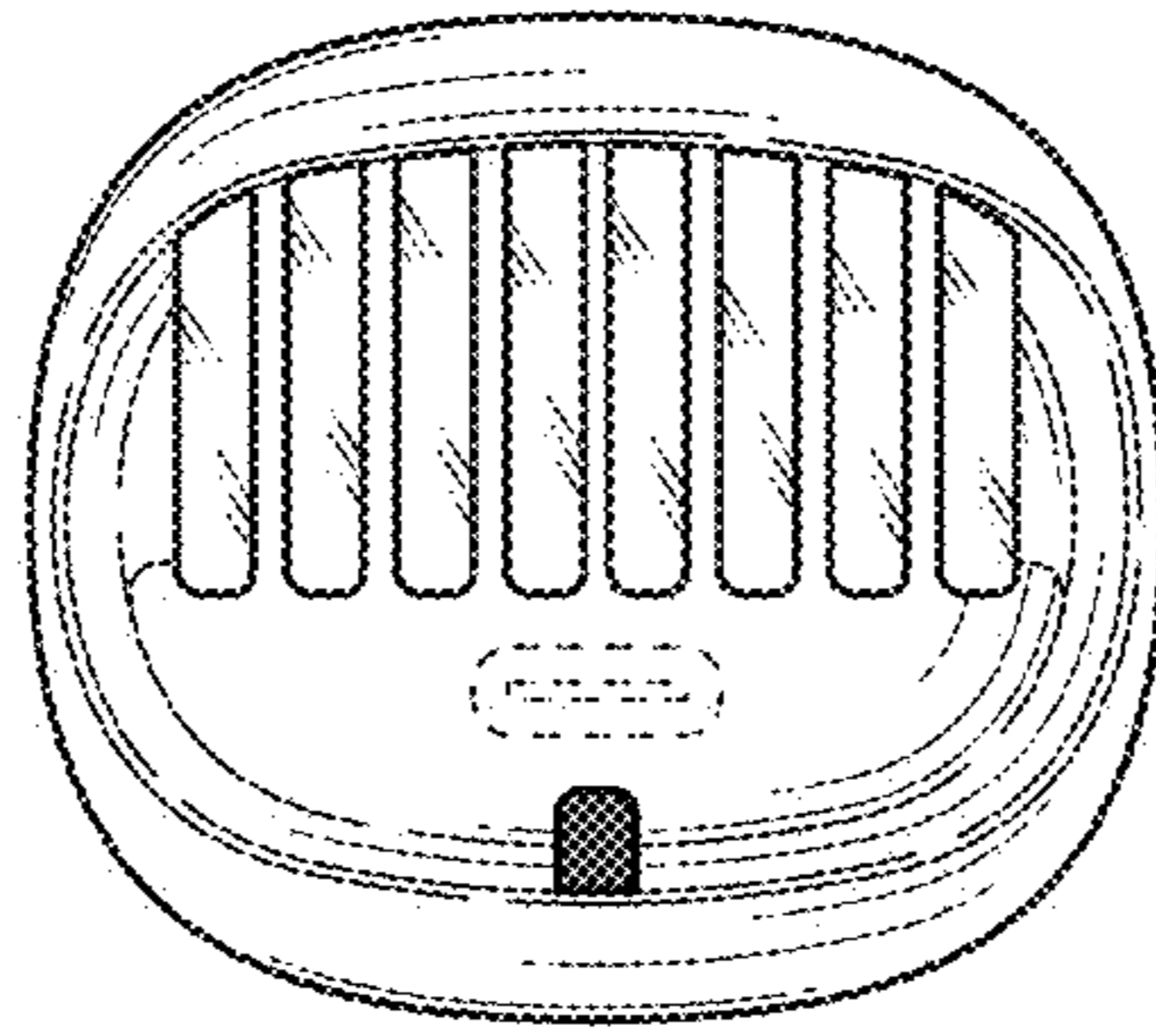


FIG. 40

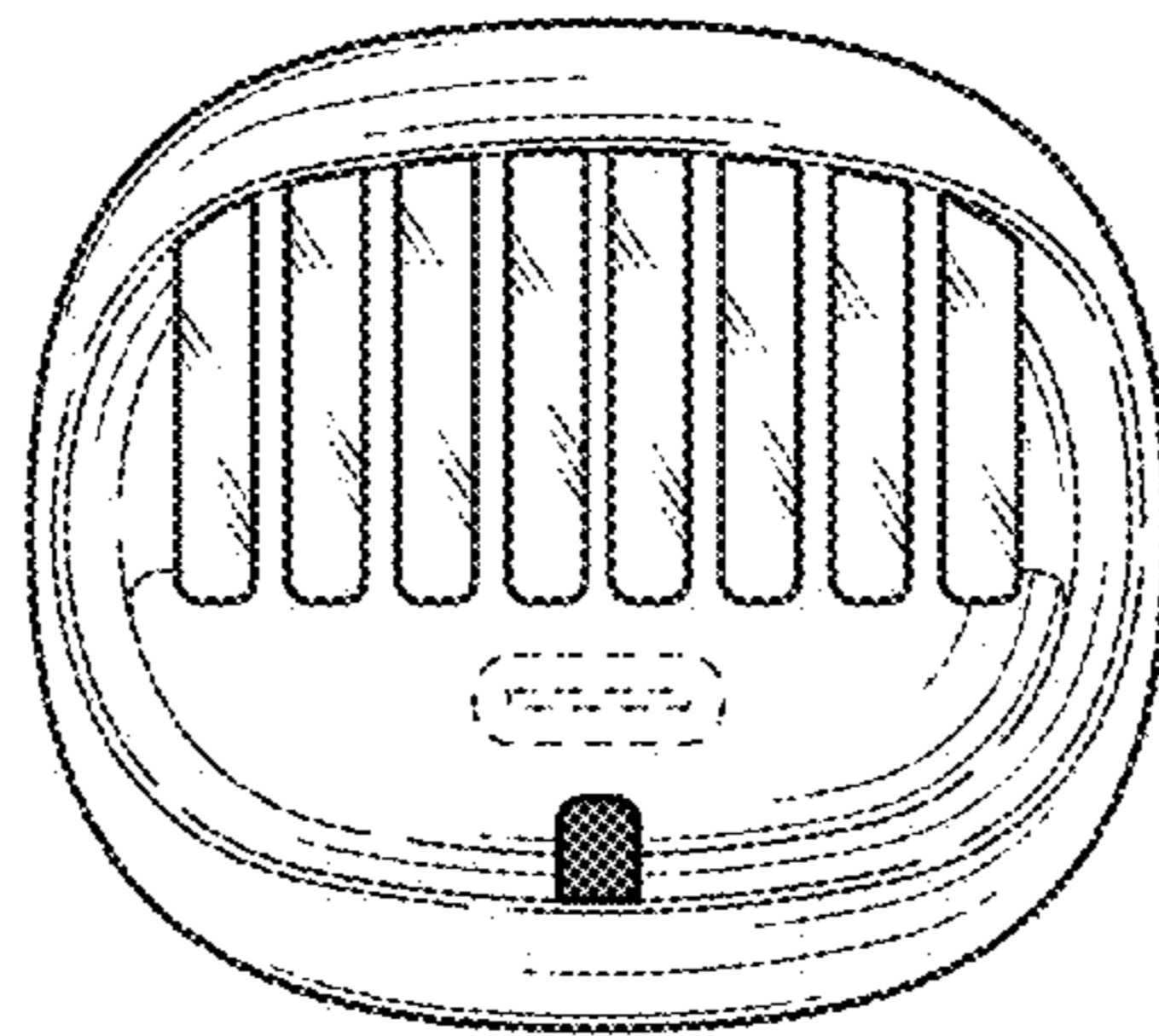


FIG. 41

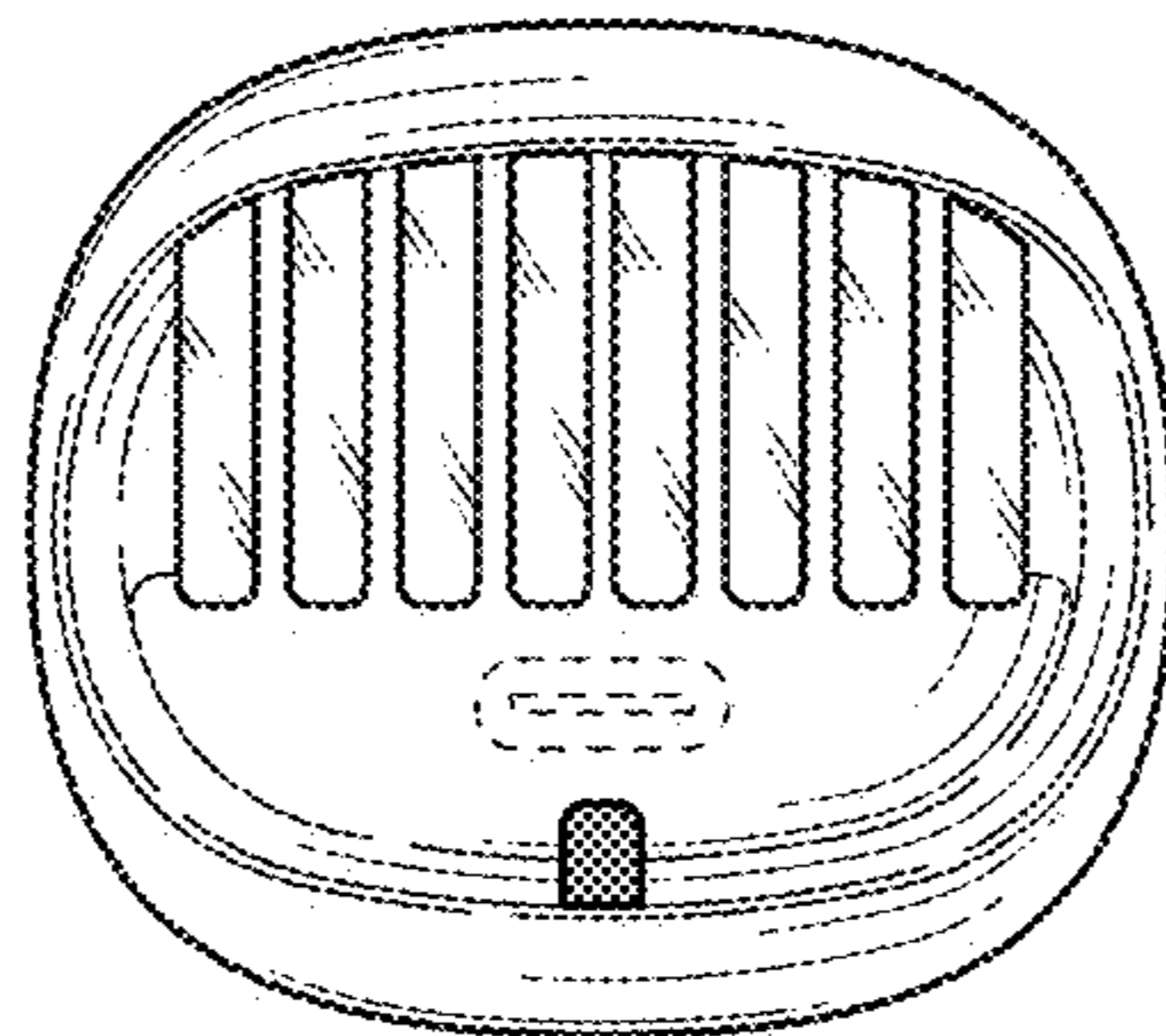


FIG. 42

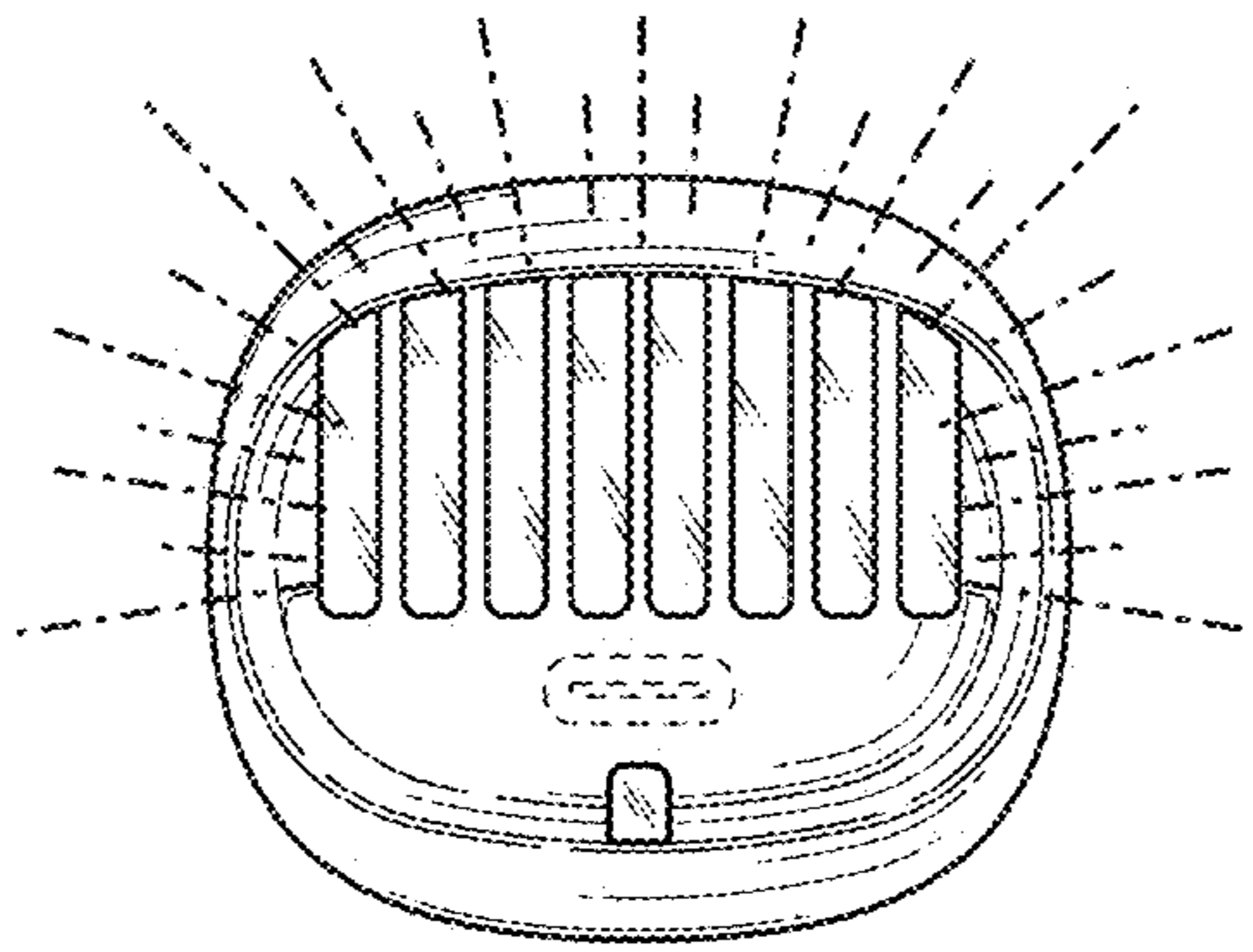


FIG. 43

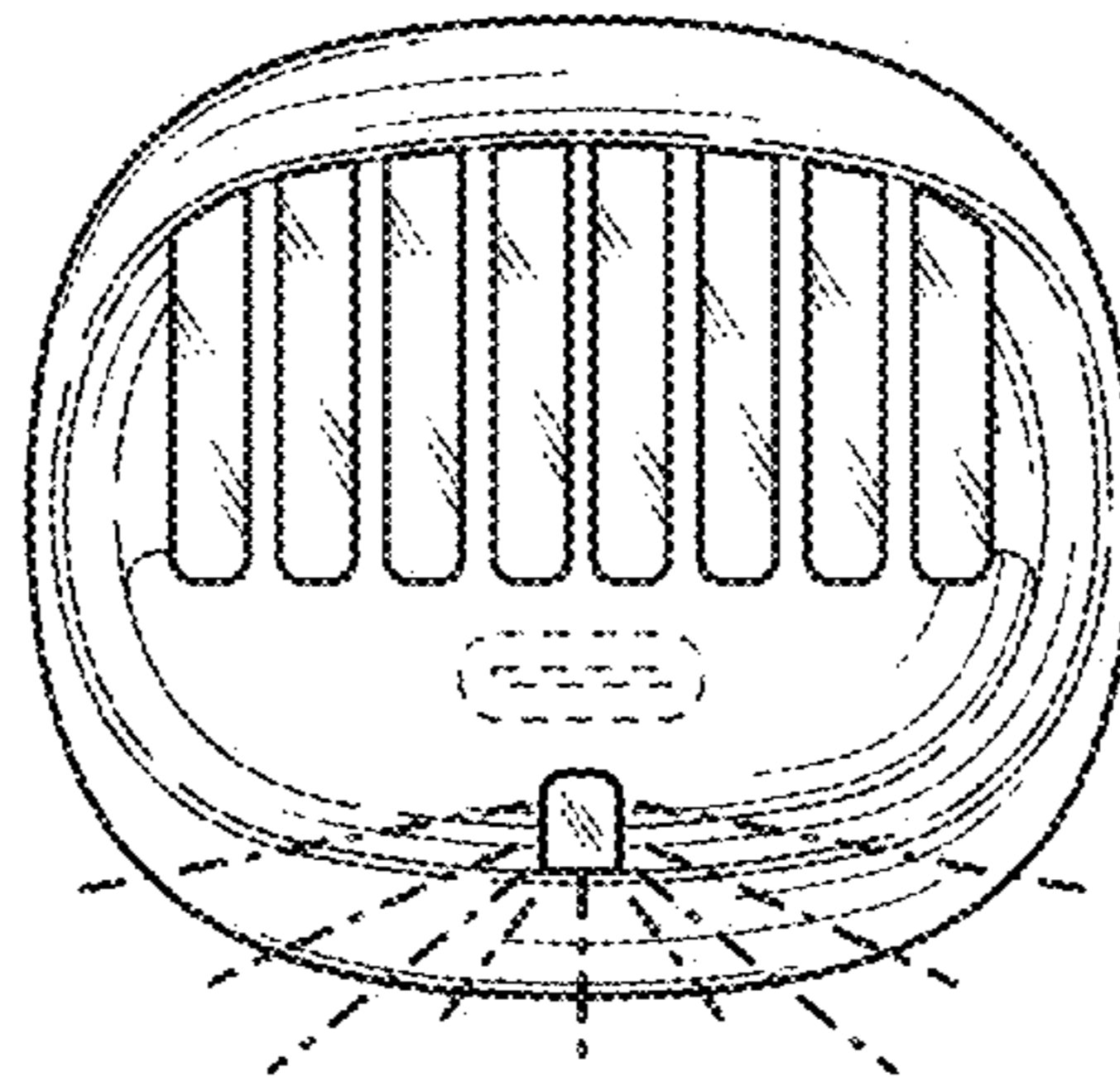


FIG. 44

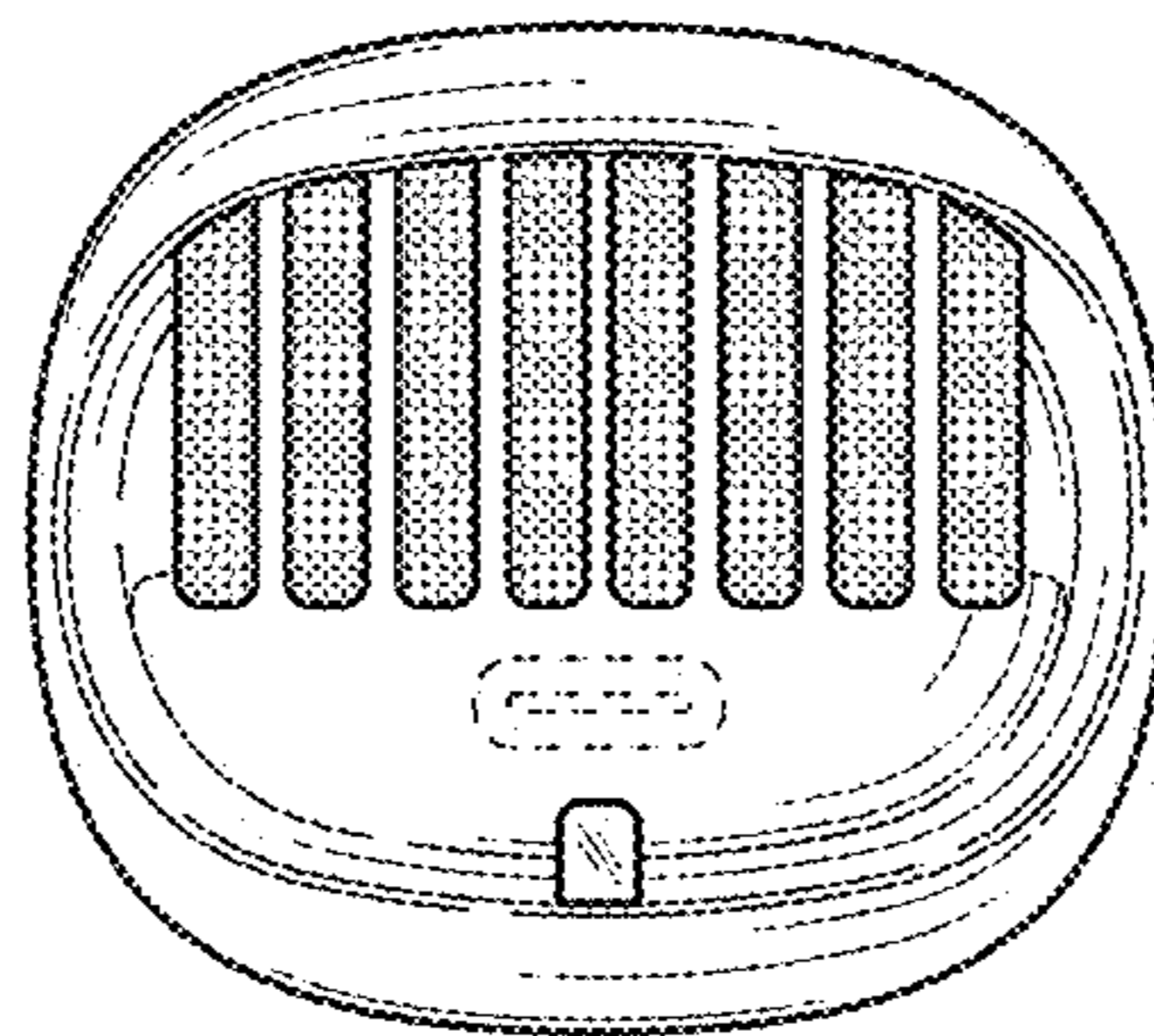


FIG. 45

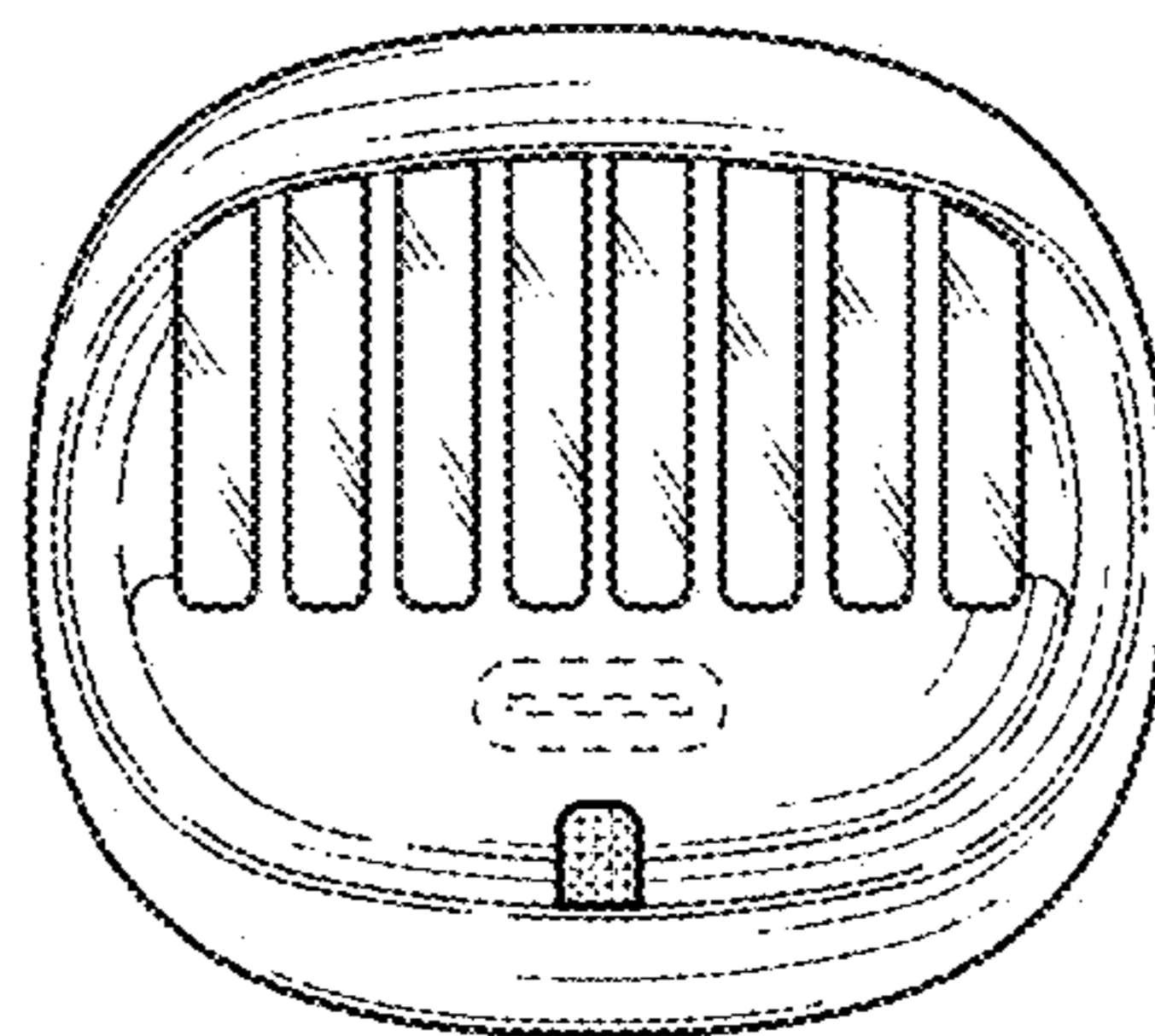


FIG. 46