



US00D871607S

(12) **United States Design Patent** (10) **Patent No.:** **US D871,607 S**  
**Williams et al.** (45) **Date of Patent:** **\*\* Dec. 31, 2019**

(54) **CONCENTRATION DETECTOR FOR  
LABORATORY USE**

(71) Applicant: **SPARTAN BIOSCIENCE INC.**,  
Ottawa (CA)

(72) Inventors: **Michael Edward Williams**, San Diego,  
CA (US); **Chris Harder**, Dunrobin  
(CA); **Marie Ashman**, Ottawa (CA);  
**Saakshi Surtwala**, Ottawa (CA); **Peter  
Goodings**, Ottawa (CA); **Louwrens  
Stassen**, Kanata (CA)

(73) Assignee: **SPARTAN BIOSCIENCE INC.**,  
Ottawa (CA)

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

(21) Appl. No.: **29/623,247**

(22) Filed: **Oct. 24, 2017**

(51) **LOC (12) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/224**

(58) **Field of Classification Search**  
USPC ..... D24/107, 112, 113, 128, 129, 186, 216,  
D24/219, 223, 224, 231, 232, 233;  
(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,171,224 A \* 12/1992 Tucker ..... A61M 5/3213  
604/110  
D370,062 S \* 5/1996 Tucker ..... D24/130  
(Continued)

**FOREIGN PATENT DOCUMENTS**

CN 201830430681 \* 8/2018

*Primary Examiner* — Susan Bennett Hattan

*Assistant Examiner* — Omeed Agilee

(74) *Attorney, Agent, or Firm* — Quarles & Brady LLP

(57) **CLAIM**

The ornamental design for a concentration detector for  
laboratory use, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of a concentration detector  
for laboratory use;

FIG. 2 is a front view of the concentration detector for  
laboratory use of FIG. 1;

FIG. 3 is a rear view of the concentration detector for  
laboratory use of FIG. 1;

FIG. 4 is a right side view of the concentration detector for  
laboratory use of FIG. 1;

FIG. 5 is a left side view of the concentration detector for  
laboratory use of FIG. 1;

FIG. 6 is a top view of the concentration detector for  
laboratory use of FIG. 1;

FIG. 7 is a bottom view of the concentration detector for  
laboratory use of FIG. 1;

FIG. 8 is a rear perspective view of the concentration  
detector for laboratory use of FIG. 1;

FIG. 9 is a front perspective view of the concentration  
detector for laboratory use of FIG. 1 showing environment  
structure;

FIG. 10 is a front perspective view a further embodiment of  
the concentration detector for laboratory use of FIG. 1;

FIG. 11 is a front view of the concentration detector for  
laboratory use of FIG. 10;

FIG. 12 is a rear view of the concentration detector for  
laboratory use of FIG. 10;

FIG. 13 is a right side view of the concentration detector for  
laboratory use of FIG. 10;

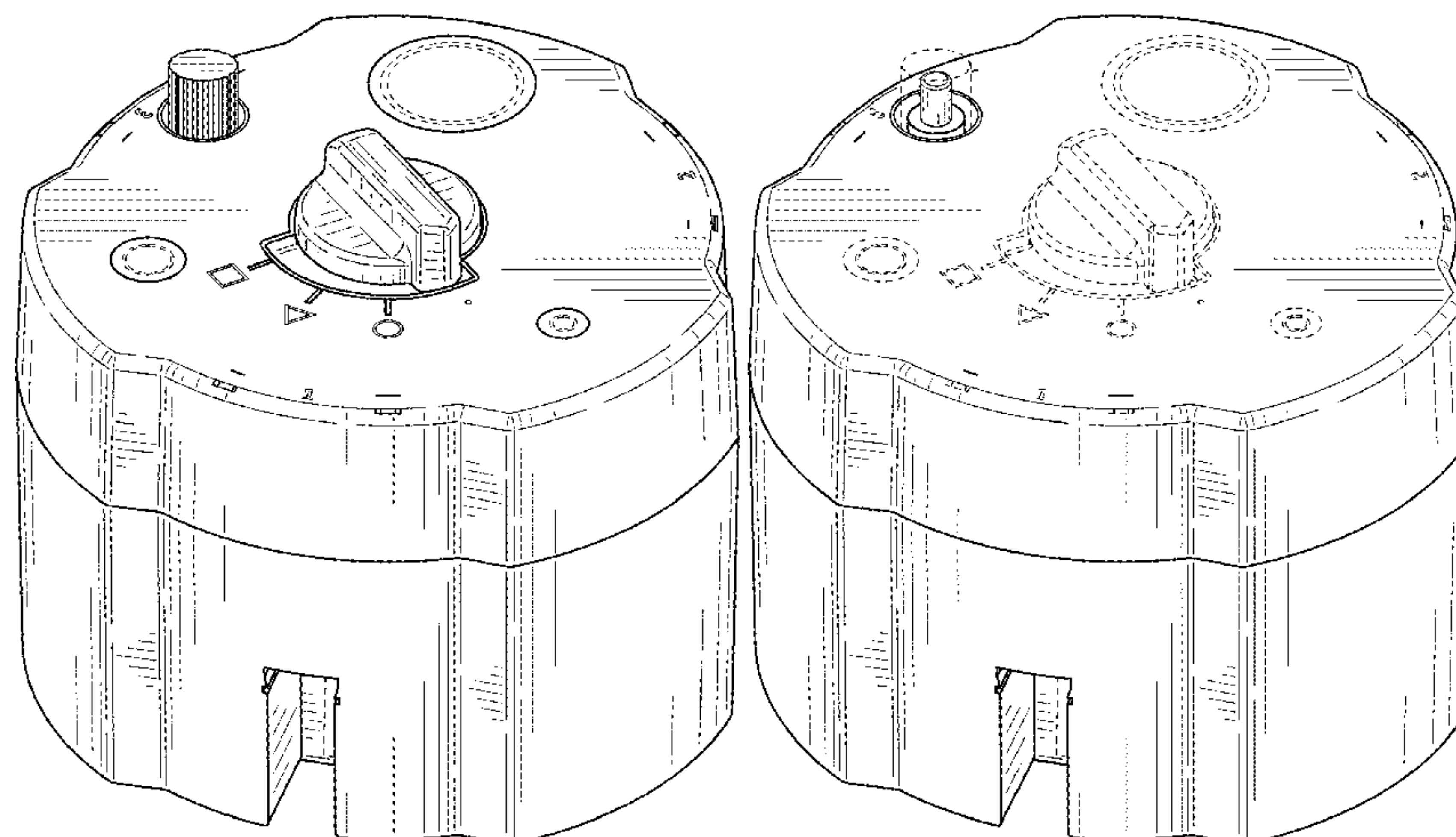
FIG. 14 is a left side view of the concentration detector for  
laboratory use of FIG. 10;

FIG. 15 is a top view of the concentration detector for  
laboratory use of FIG. 10;

FIG. 16 is a bottom view of the concentration detector for  
laboratory use of FIG. 10; and,

FIG. 17 is a rear perspective view of the concentration  
detector for laboratory use of FIG. 10.

(Continued)



The broken lines depict portions of the concentration detector for laboratory use that form no part of the claimed design.

1 Claim, 11 Drawing Sheets

(58) Field of Classification Search

USPC ..... D8/97, 300, 310, 349; D23/129, 223,  
D23/249, 259  
CPC .... A44C 5/0007; A44C 5/0023; A61M 5/158;  
A61M 5/1582  
See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

D370,263	S	*	5/1996	Falkenberg	.....	D24/108
D514,227	S	*	1/2006	Percival	.....	D10/78
D522,145	S	*	5/2006	Best	.....	D10/81
D666,717	S	*	9/2012	Hermle	.....	D24/138
D737,458	S	*	8/2015	Balaguru	.....	D24/216
D745,137	S	*	12/2015	Pipe	.....	D24/108
D783,176	S	*	4/2017	Gavlak	.....	D24/121
D794,816	S	*	8/2017	Koyama	.....	D24/224
D814,652	S	*	4/2018	Buxton	.....	D24/224
D817,509	S	*	5/2018	McMullin	.....	D24/216
D830,522	S	*	10/2018	Di Liberto	.....	D23/259
D835,778	S	*	12/2018	Mozzicato	.....	D24/121
D836,774	S	*	12/2018	Ross	.....	D24/127

\* cited by examiner

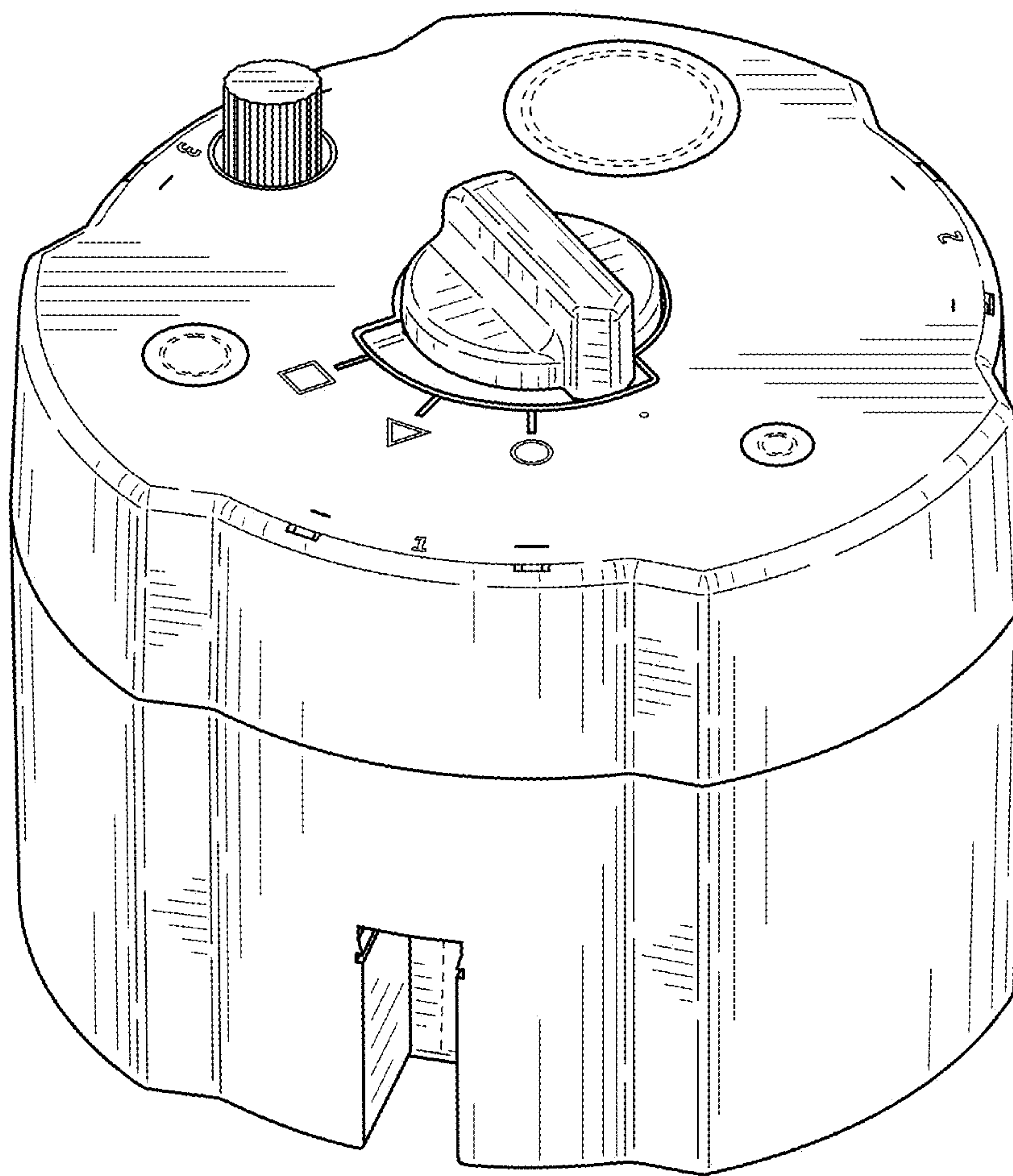


FIG. 1

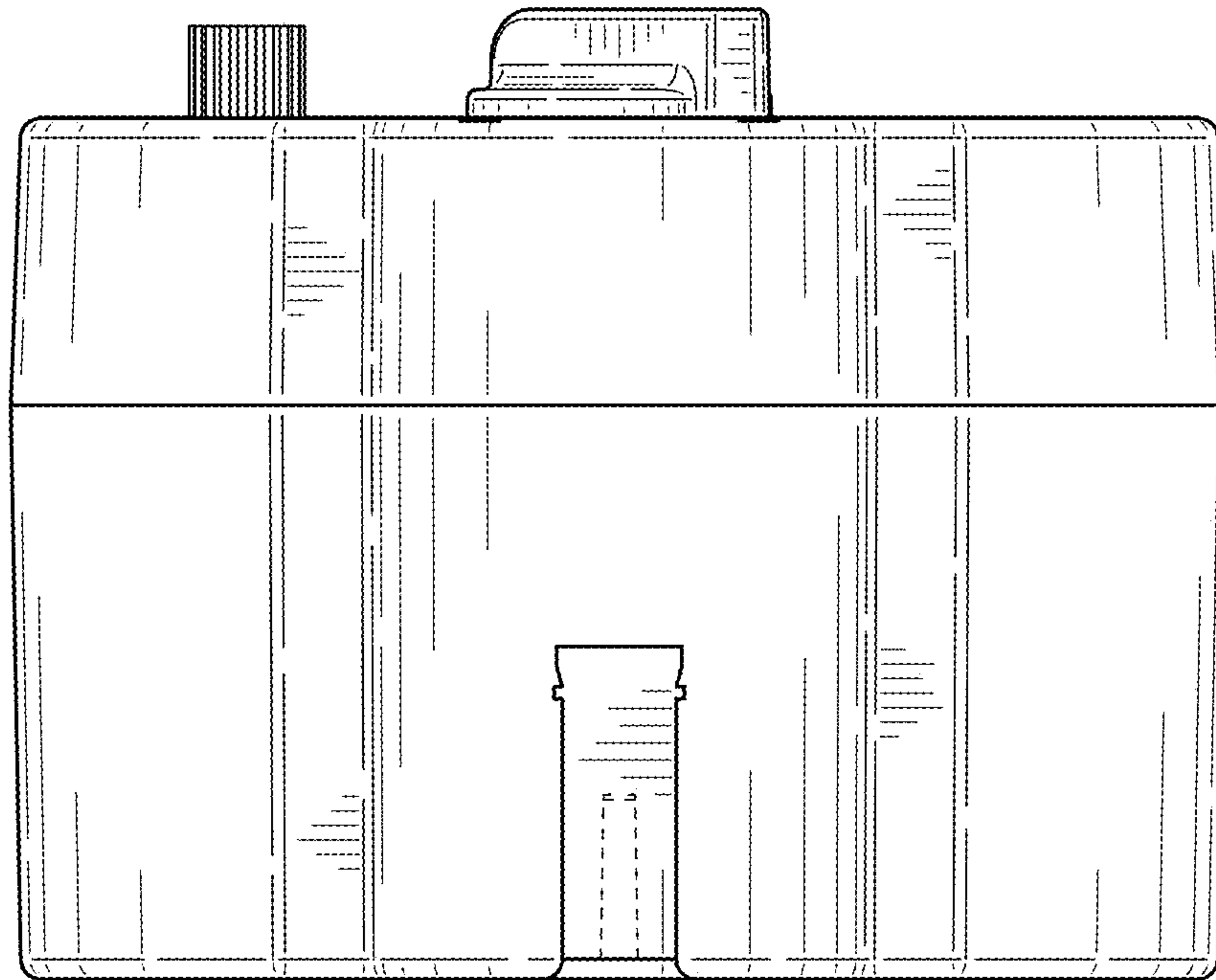


FIG. 2

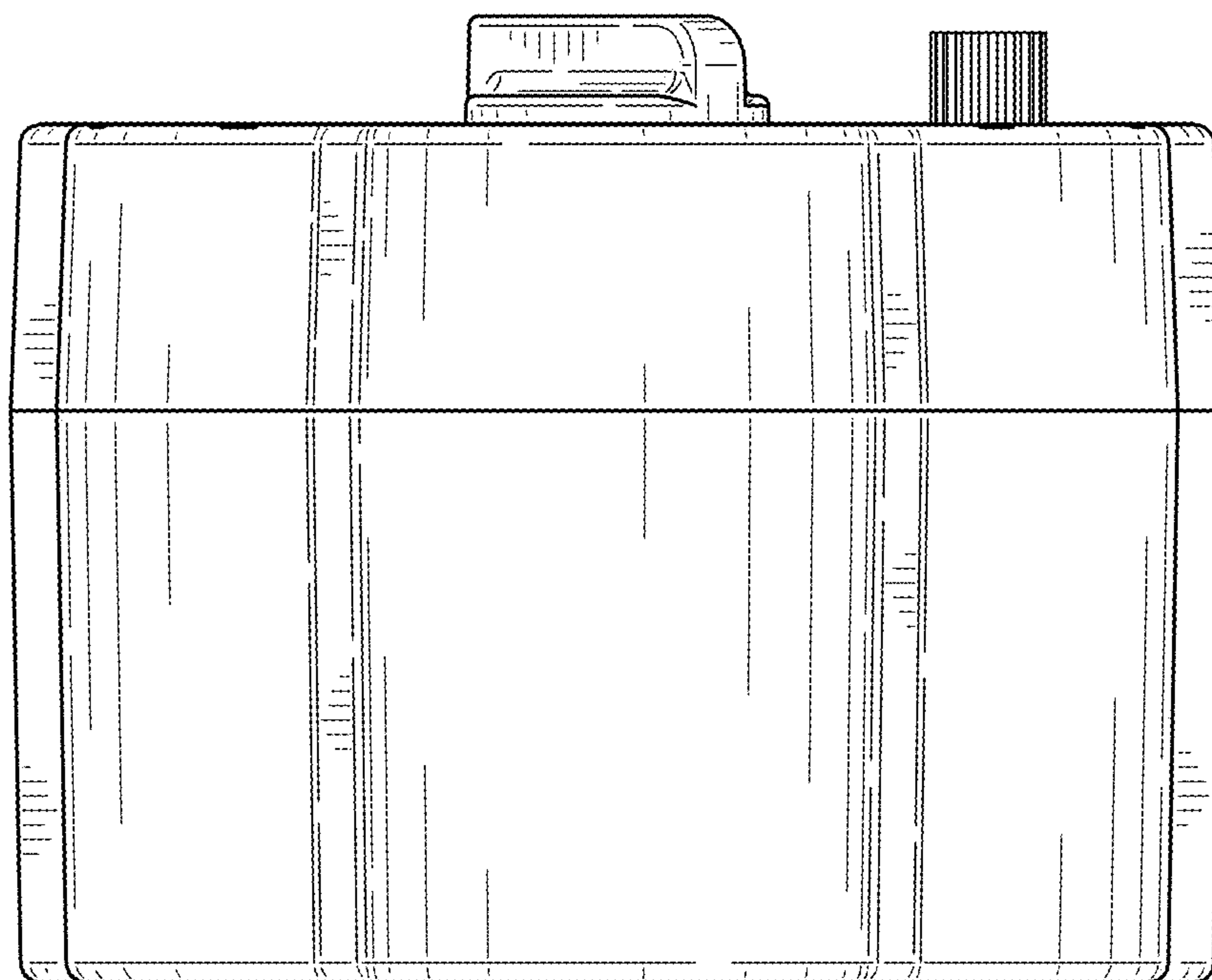


FIG. 3



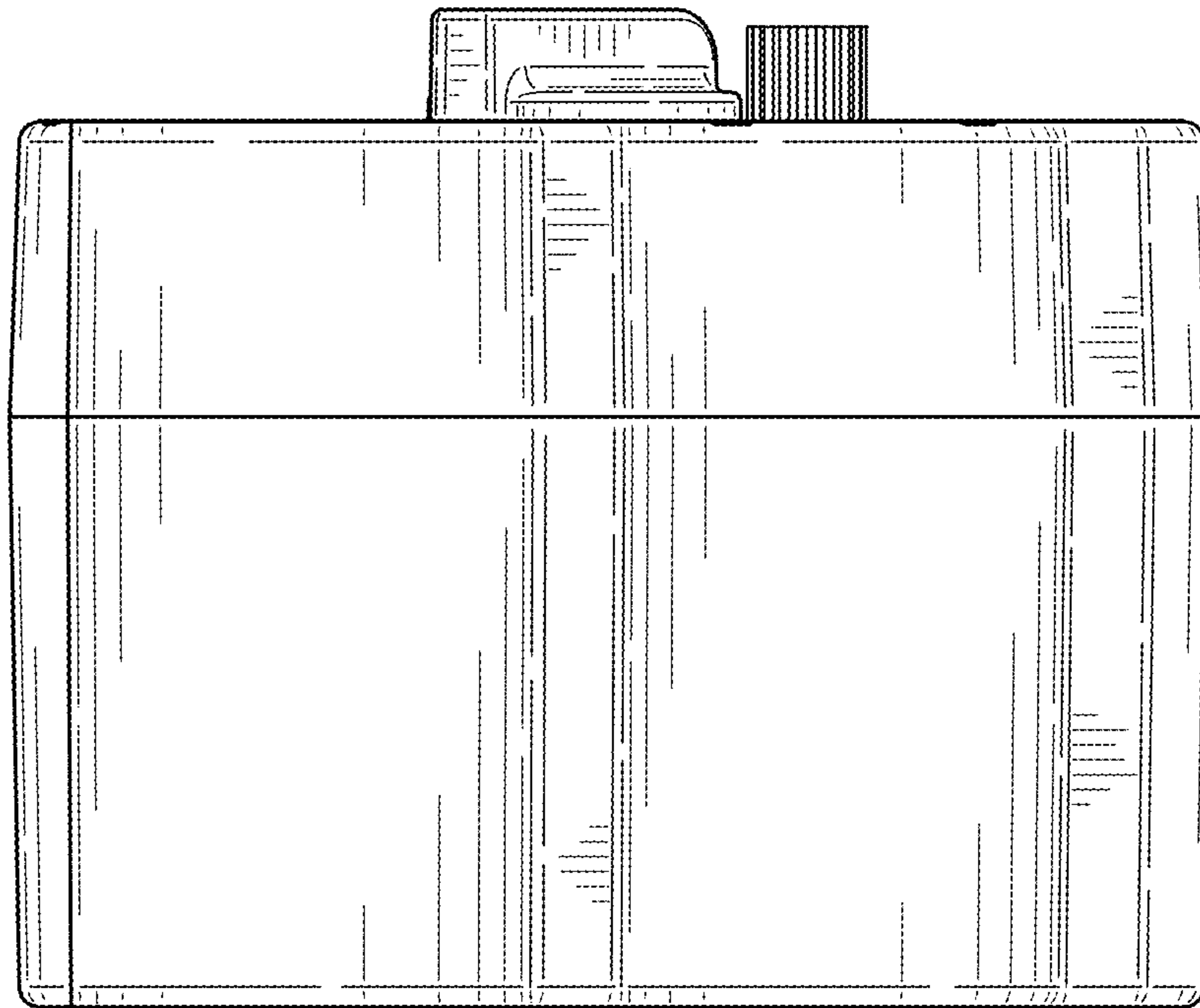


FIG. 4

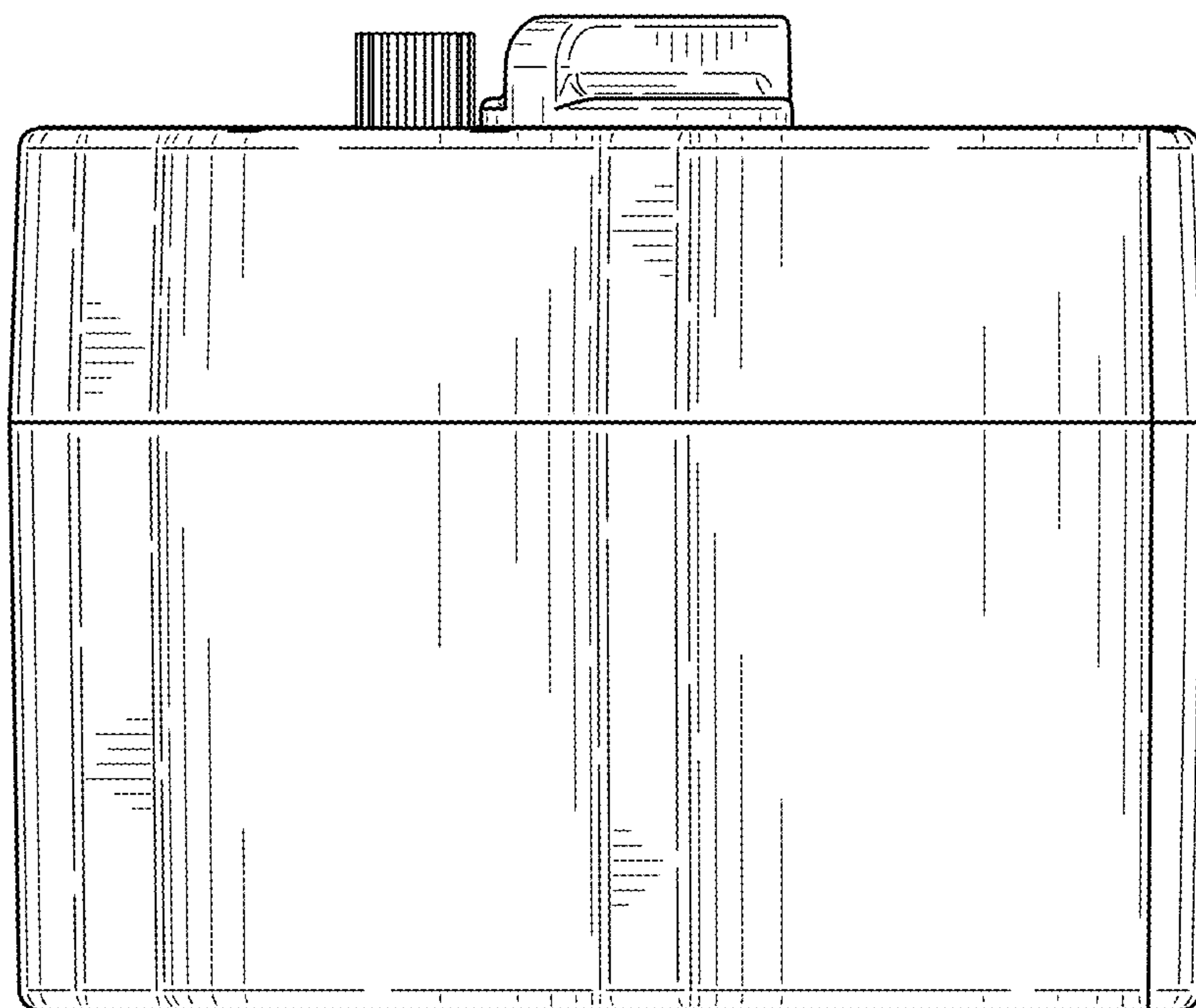


FIG. 5

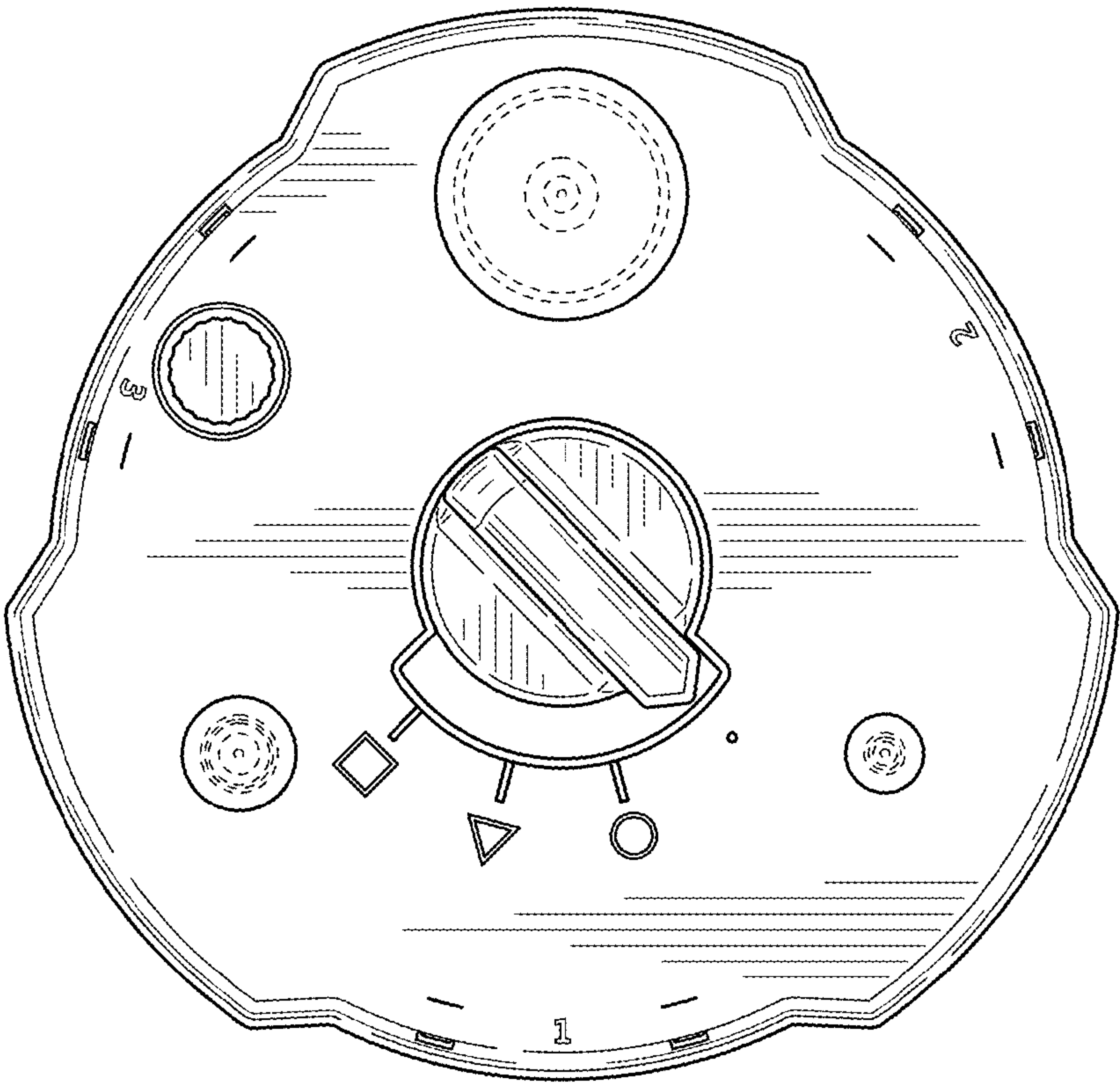


FIG. 6

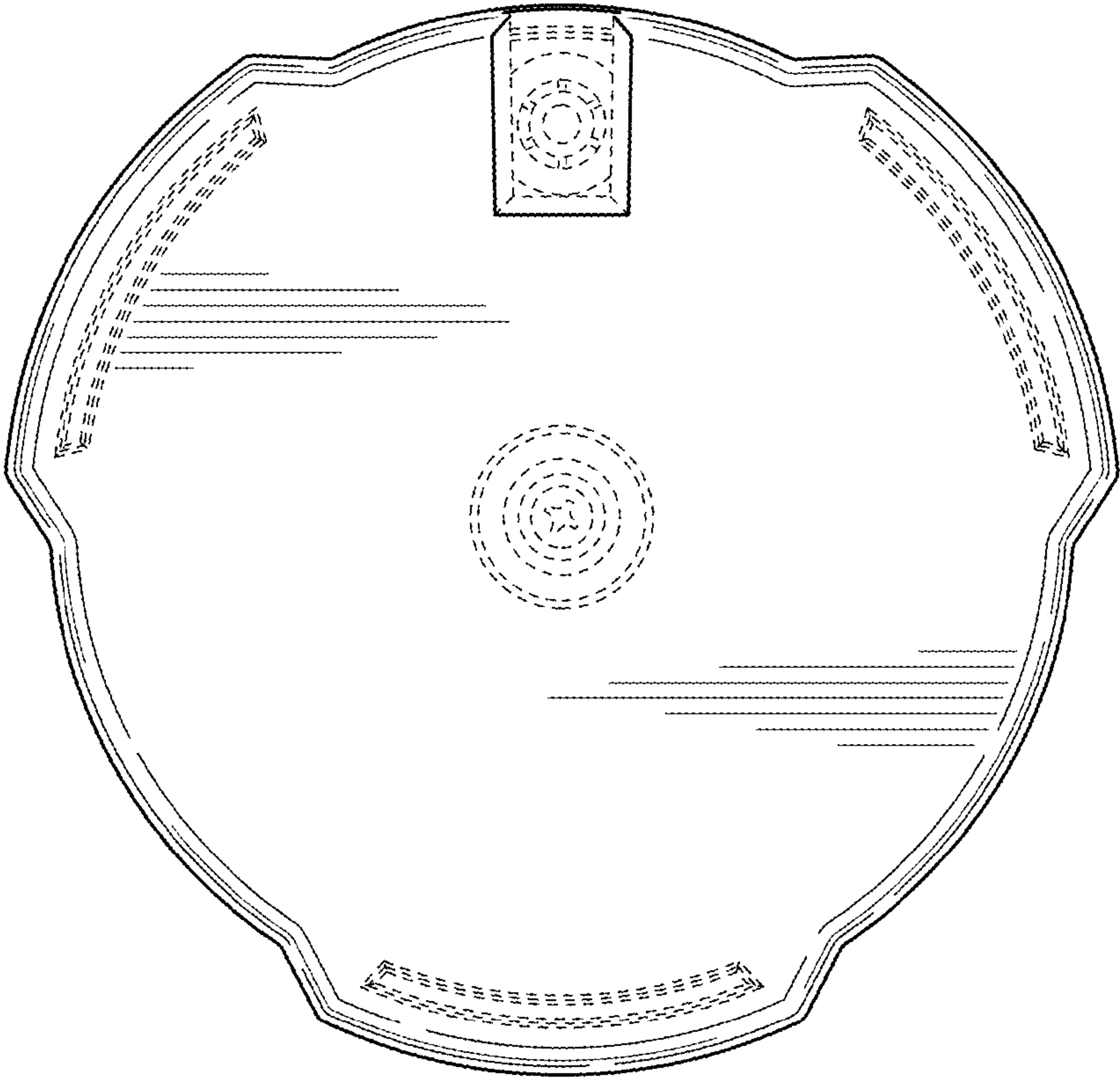


FIG. 7

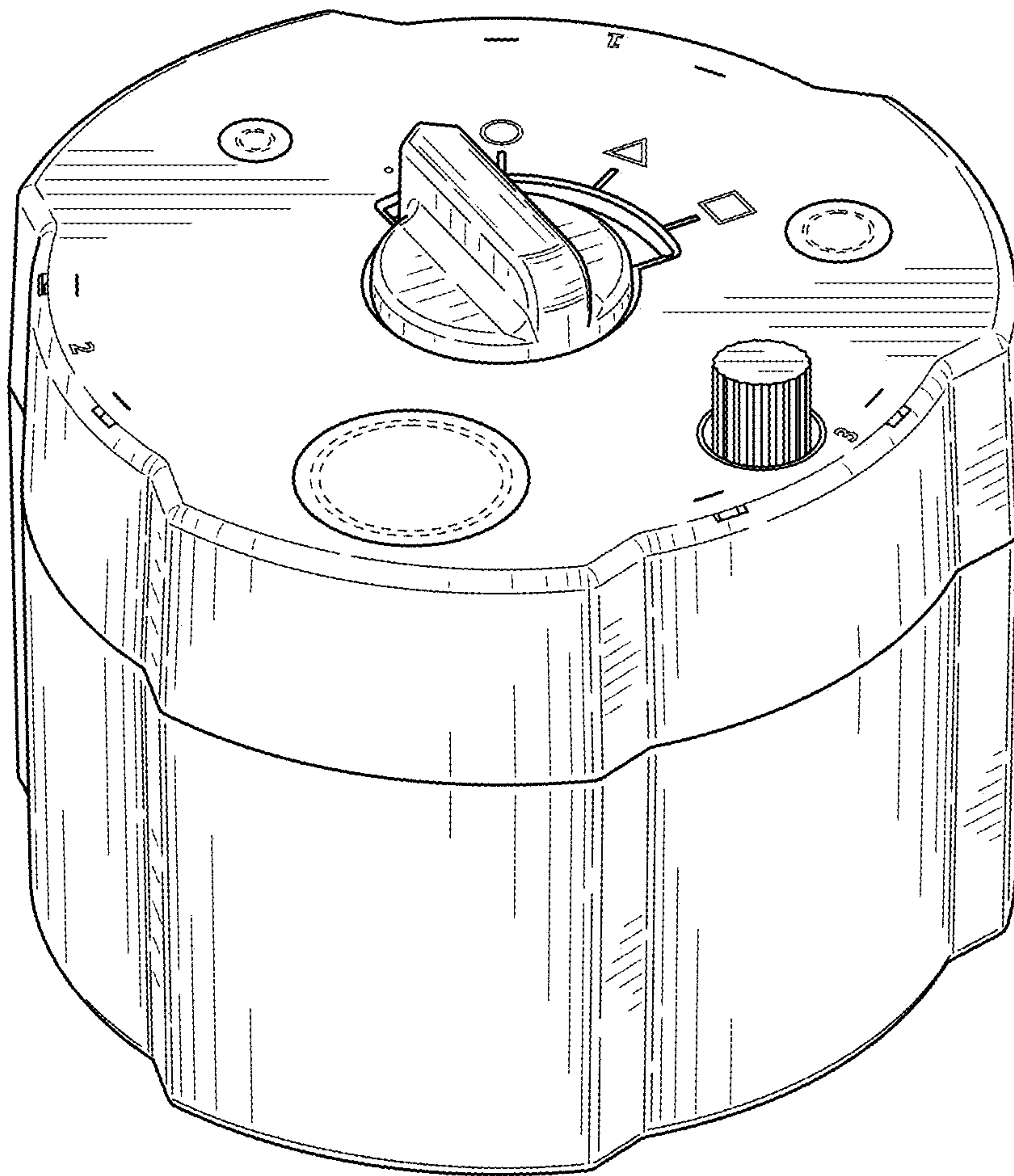


FIG. 8

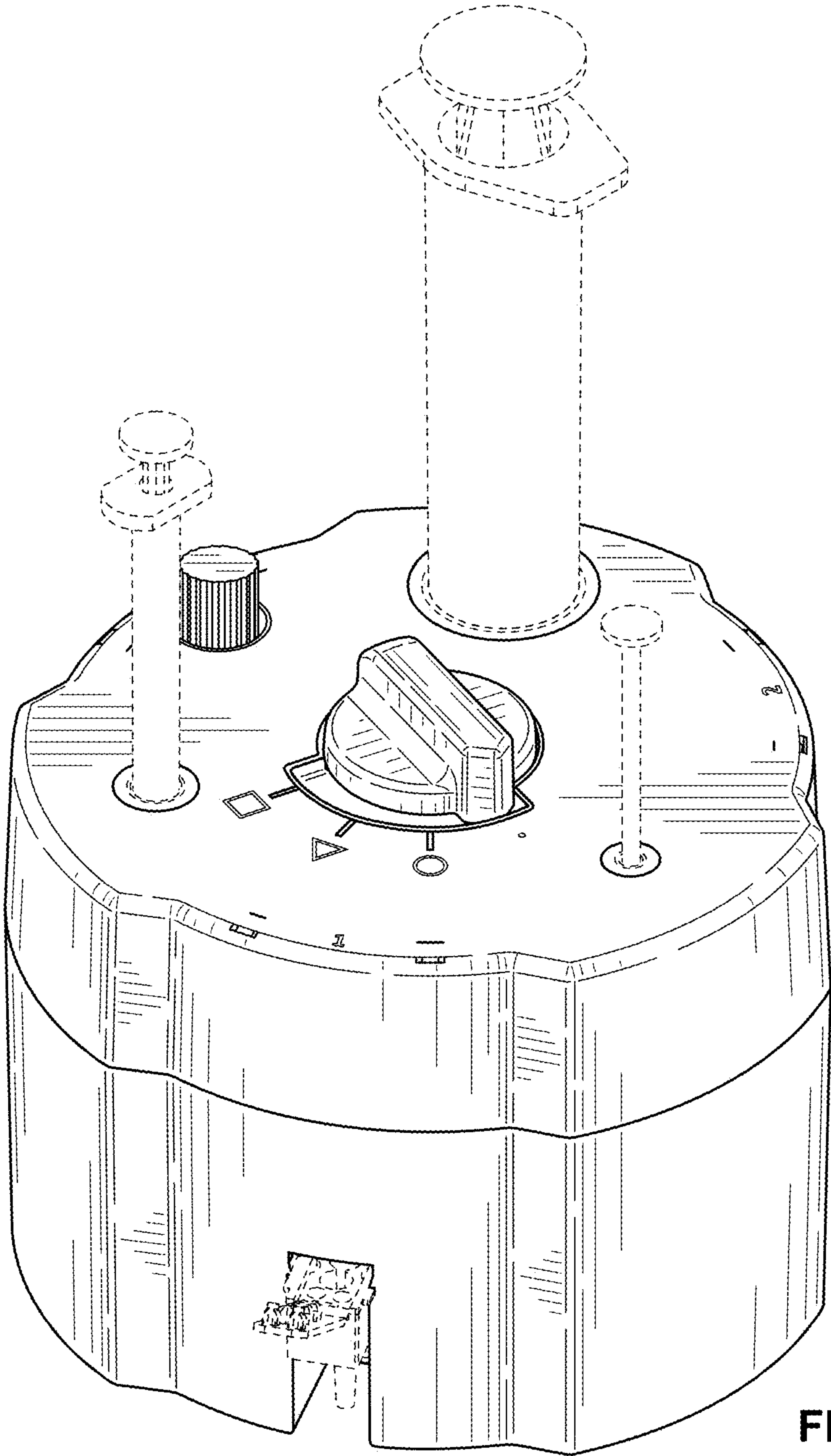


FIG. 9



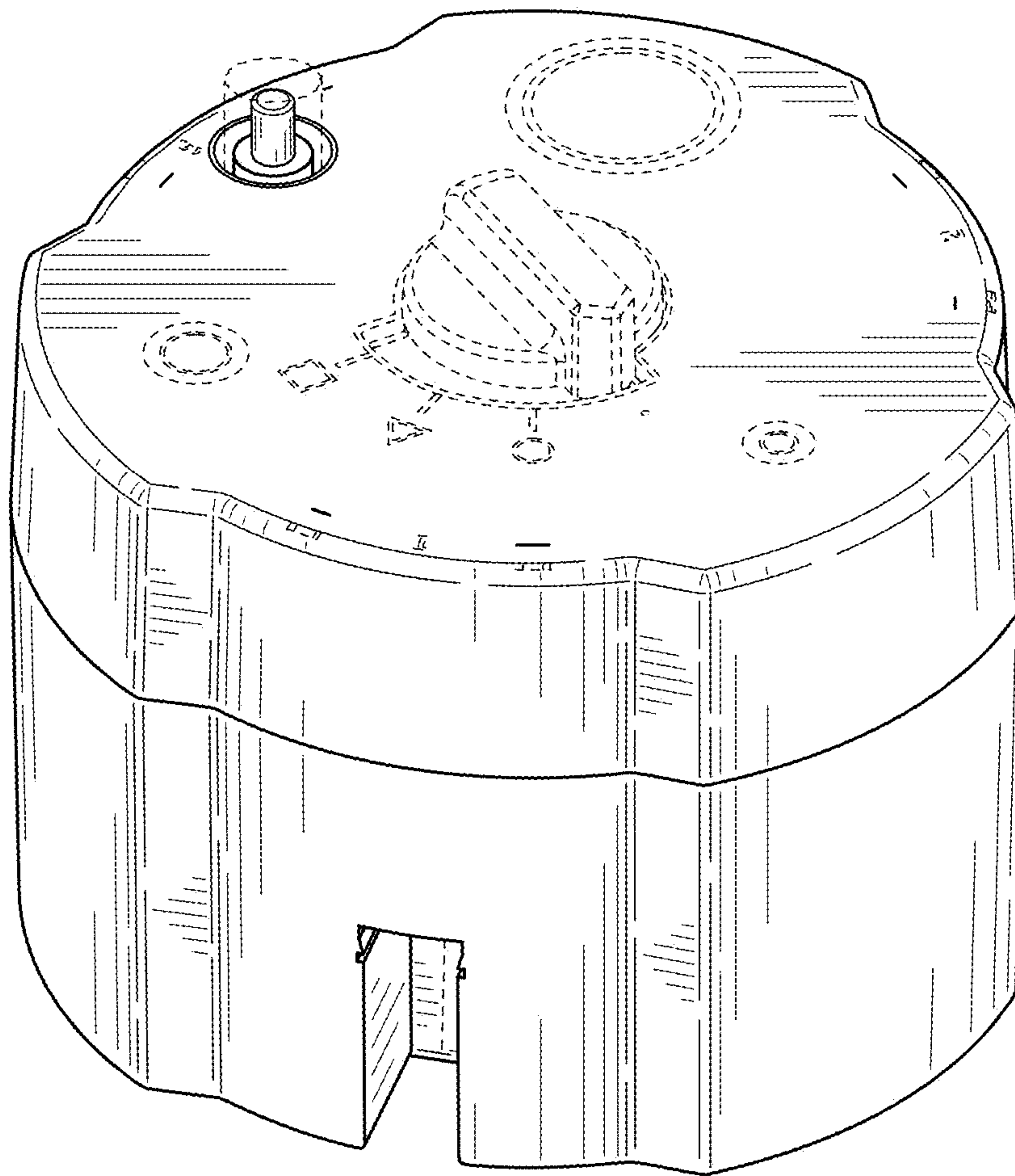


FIG. 10

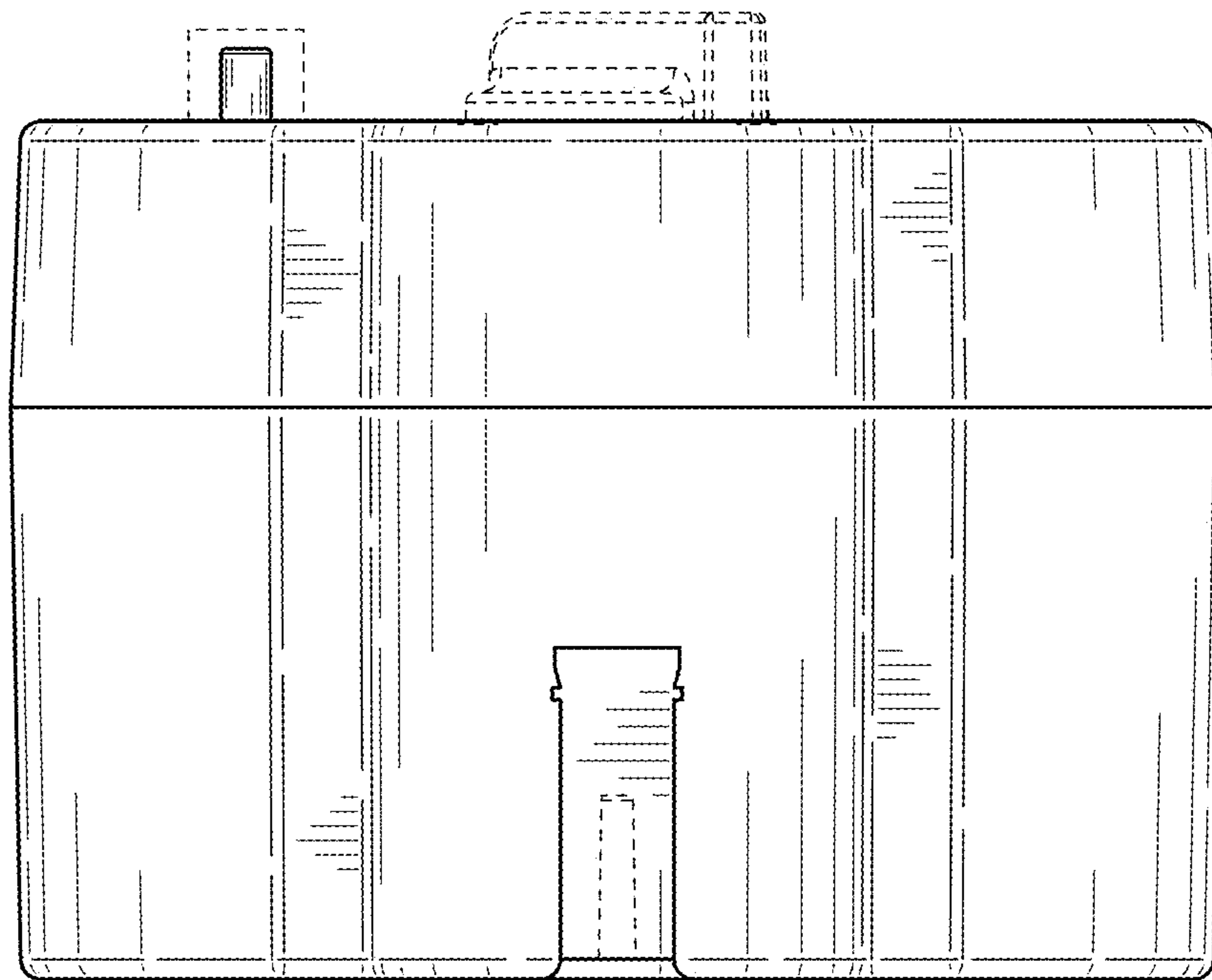


FIG. 11

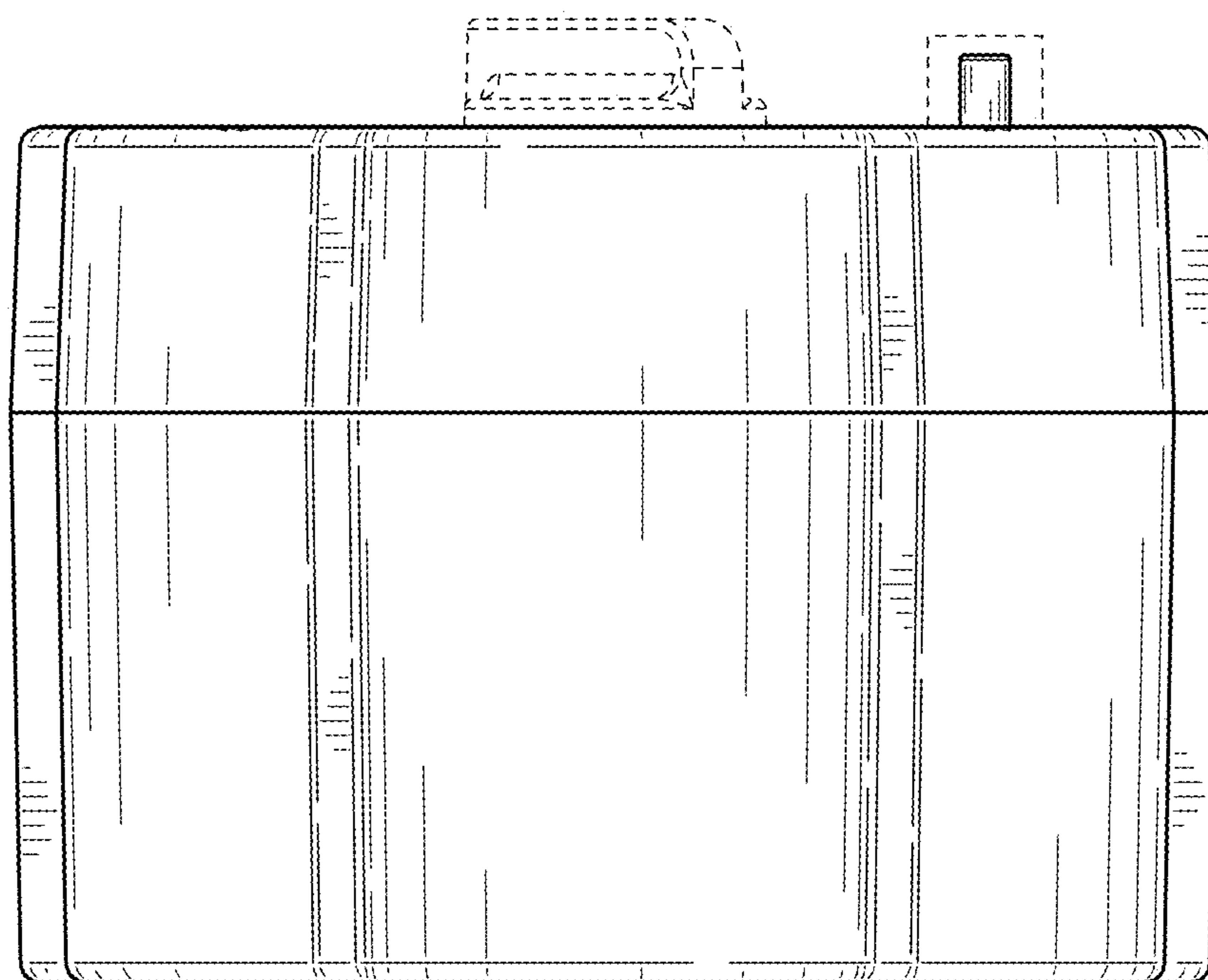


FIG. 12

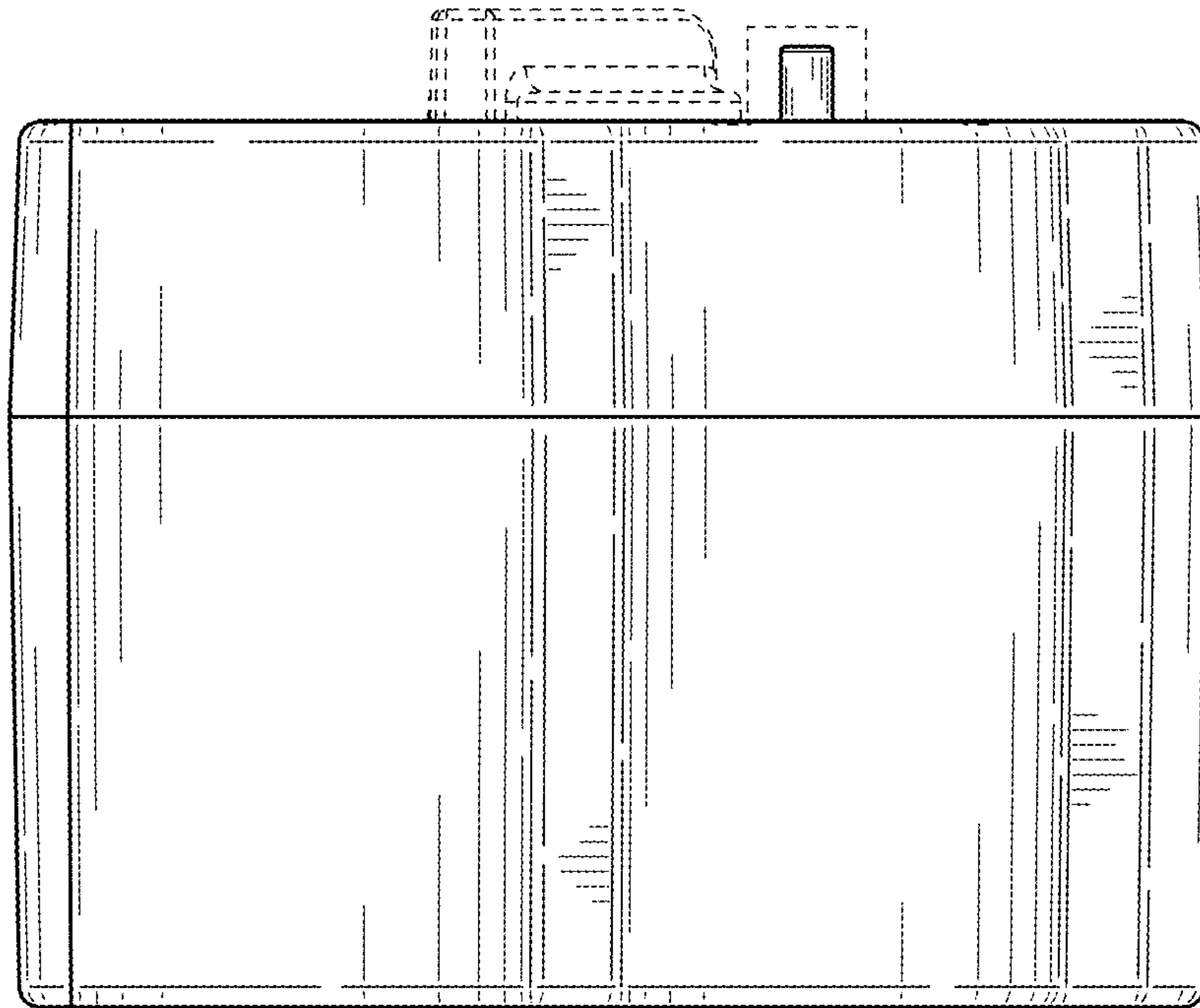


FIG. 13

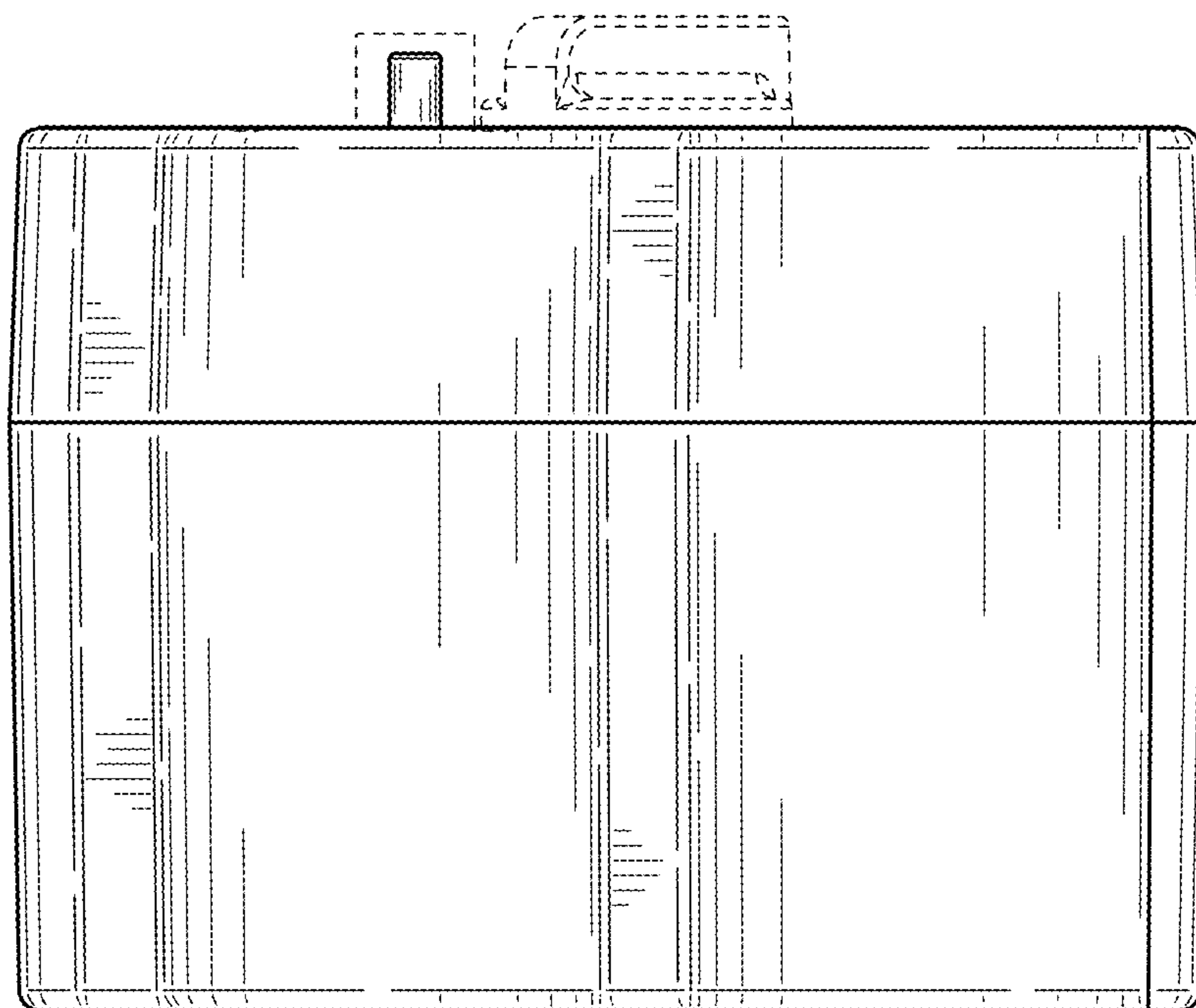


FIG. 14

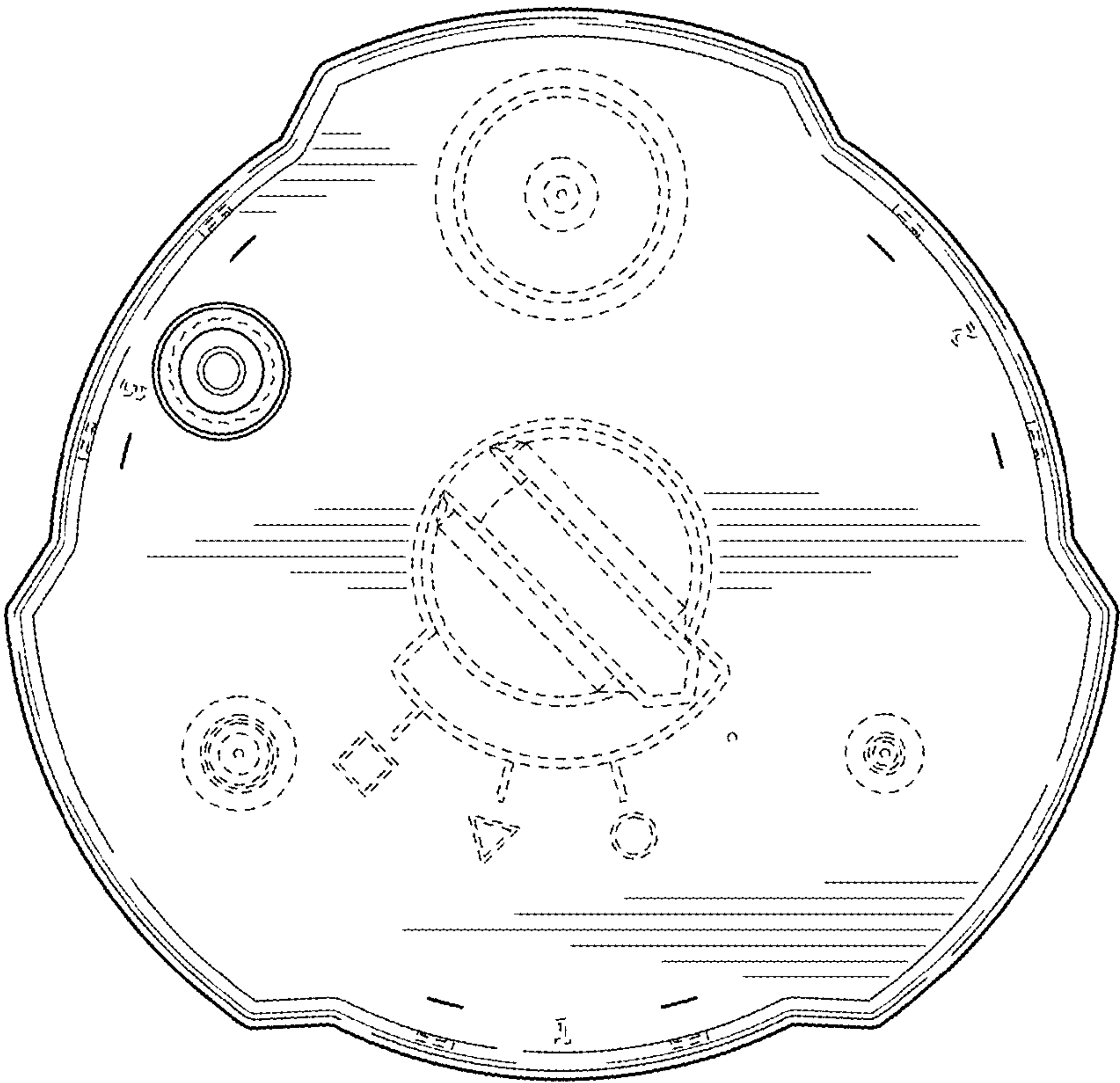


FIG. 15

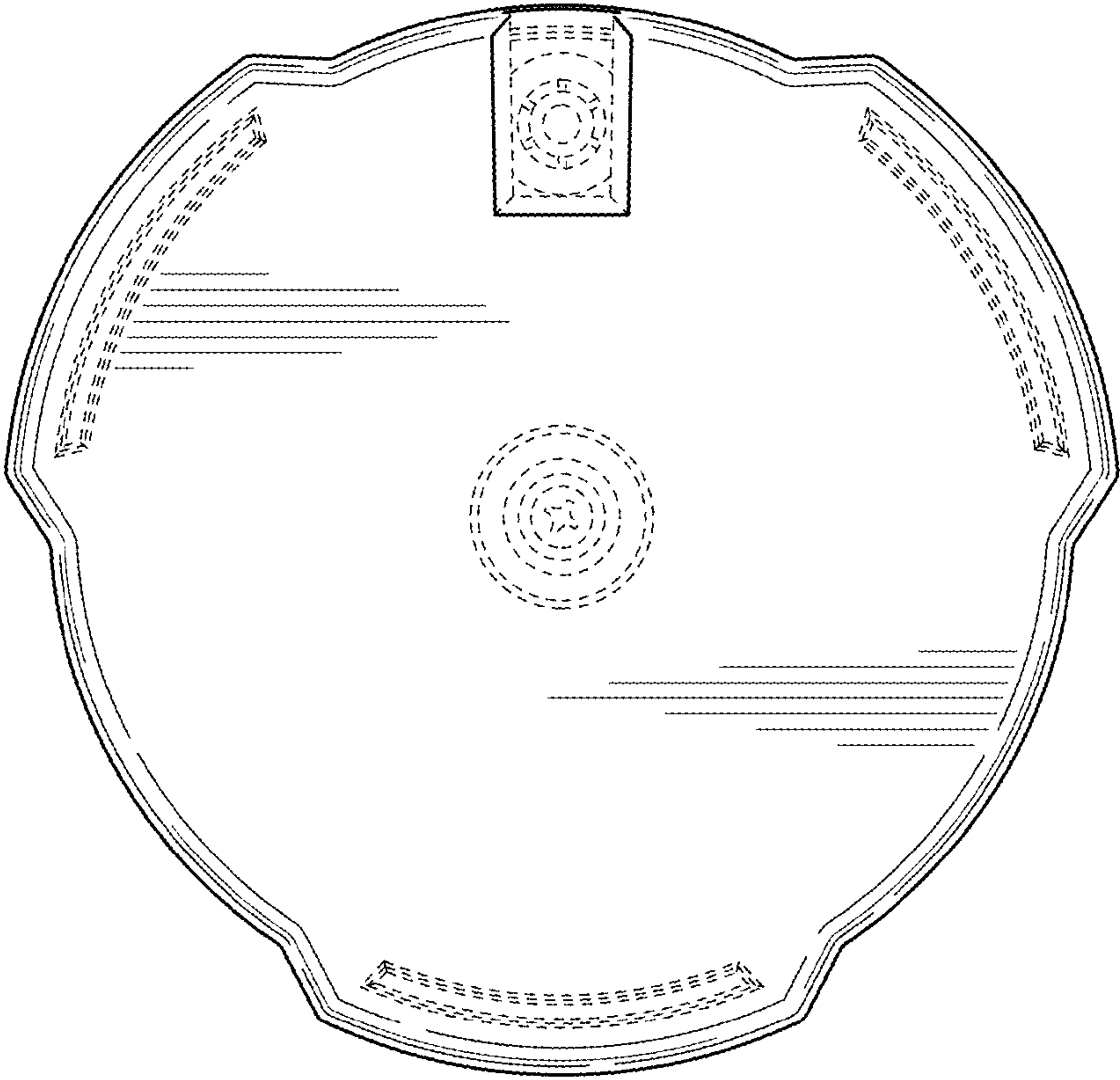


FIG. 16



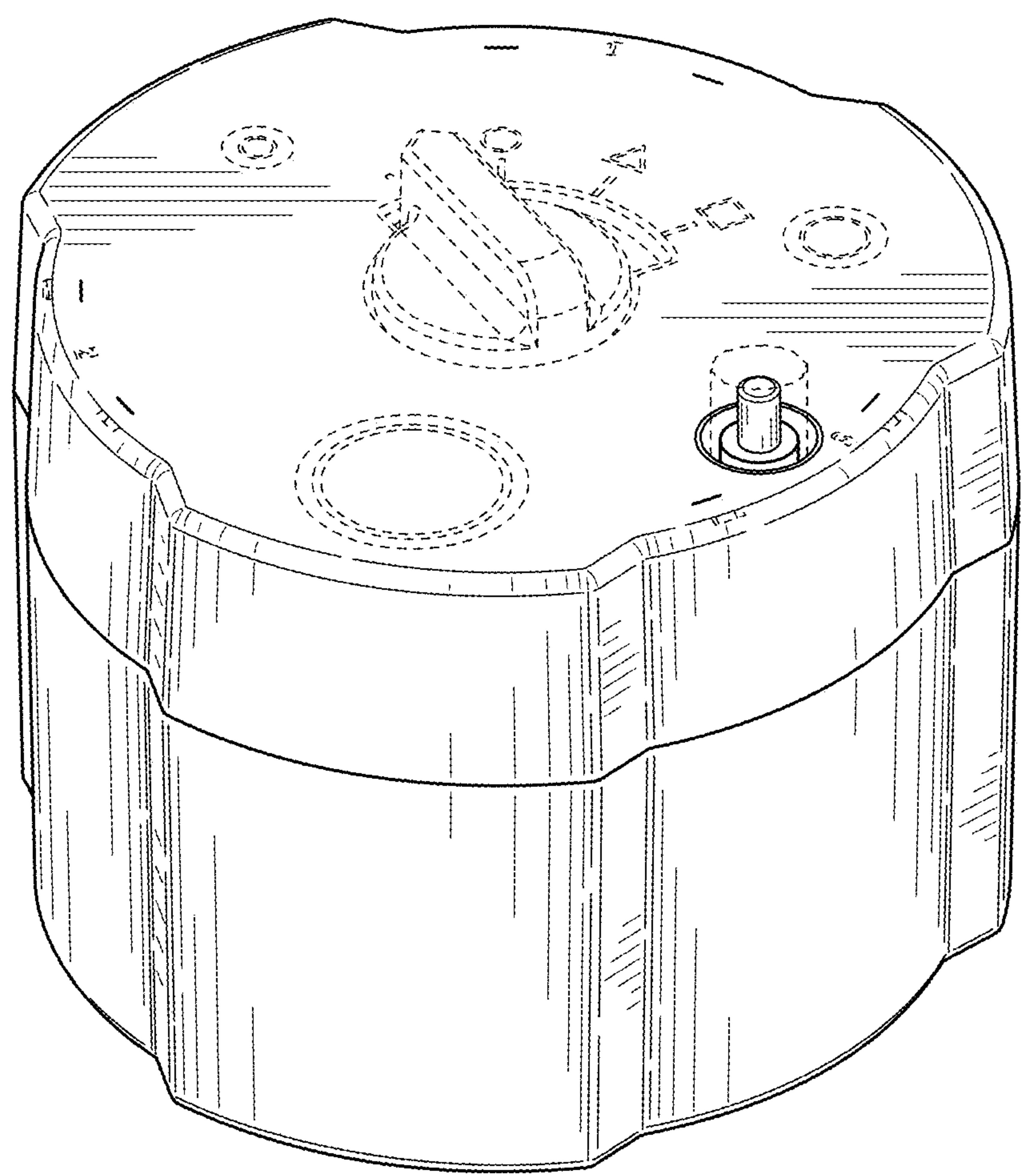


FIG. 17

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : D871,607 S  
APPLICATION NO. : 29/623247  
DATED : December 31, 2019  
INVENTOR(S) : Michael Edward Williams et al.

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title Page

In item (54) "CONCENTRATION DETECTOR FOR LABORATORY USE" should read  
--CONCENTRATION CARTRIDGE--.

Under Description:

"FIG. 1 is a front perspective view of a concentration detector for laboratory use;" should read --FIG. 1 is a front perspective view of a concentration cartridge;--.

"FIG. 2 is a front view of the concentration detector for laboratory use of FIG. 1;" should read --FIG. 2 is a front view of the concentration cartridge of FIG. 1;--.

"FIG. 3 is a rear view of the concentration detector for laboratory use of FIG. 1;" should read --FIG. 3 is a rear view of the concentration cartridge of FIG. 1;--.

"FIG. 4 is a right side view of the concentration detector for laboratory use of FIG. 1;" should read --FIG. 4 is a right side view of the concentration cartridge of FIG. 1;--.

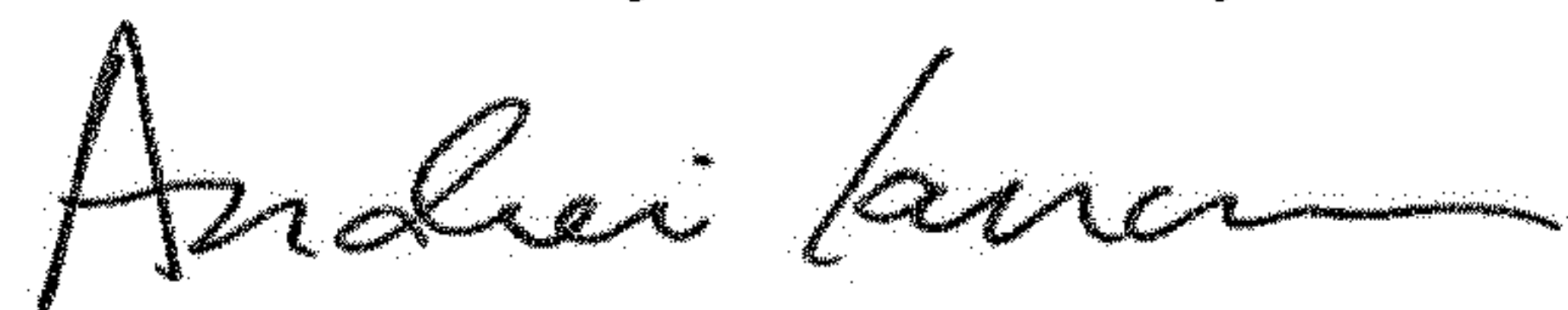
"FIG. 5 is a left side view of the concentration detector for laboratory use of FIG. 1;" should read --FIG. 5 is a left side view of the concentration cartridge of FIG. 1;--.

"FIG. 6 is a top view of the concentration detector for laboratory use of FIG. 1;" should read --FIG. 6 is a top view of the concentration cartridge of FIG. 1;--.

"FIG. 7 is a bottom view of the concentration detector for laboratory use of FIG. 1;" should read --FIG. 7 is a bottom view of the concentration cartridge of FIG. 1;--.

"FIG. 8 is a rear perspective view of the concentration detector for laboratory use of FIG. 1;" should read --FIG. 8 is a rear perspective view of the concentration cartridge of FIG. 1;--.

Signed and Sealed this  
Eleventh Day of February, 2020



Andrei Iancu  
*Director of the United States Patent and Trademark Office*

“FIG. 9 is a front perspective view of the concentration detector for laboratory use of FIG. 1 showing environment structure;” should read --FIG. 9 is a front perspective view of the concentration cartridge of FIG. 1 showing environment structure;--.

“FIG. 10 is a front perspective view a further embodiment of the concentration detector for laboratory use of FIG. 1;” should read --FIG. 10 is a front perspective view a further embodiment of the concentration cartridge of FIG. 1;--.

“FIG. 11 is a front view of the concentration detector for laboratory use of FIG. 10;” should read --FIG. 11 is a front view of the concentration cartridge of FIG. 10;--.

“FIG. 12 is a rear view of the concentration detector for laboratory use of FIG. 10;” should read --FIG. 12 is a rear view of the concentration cartridge of FIG. 10;--.

“FIG. 13 is a right side view of the concentration detector for laboratory use of FIG. 10;” should read -FIG. 13 is a right side view of the concentration cartridge of FIG. 10;--.

“FIG. 14 is a left side view of the concentration detector for laboratory use of FIG. 10;” should read --FIG. 14 is a left side view of the concentration cartridge of FIG. 10;--.

“FIG. 15 is a top view of the concentration detector for laboratory use of FIG. 10;” should read --FIG. 15 is a top view of the concentration cartridge of FIG. 10;--.

“FIG. 16 is a bottom view of the concentration detector for laboratory use of FIG. 10; and,” should read --FIG. 16 is a bottom view of the concentration cartridge of FIG. 10; and--.

“FIG. 17 is a rear perspective view of the concentration detector for laboratory use of FIG. 10.” should read --FIG. 17 is a rear perspective view of the concentration cartridge of FIG. 10.--.

On page 2, the first line:

“The broken lines depict portions of the concentration detector for laboratory use that form no part of the claimed design.” should read --The broken lines depict portions of the concentration cartridge that form no part of the claimed design.--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : D871,607 S  
APPLICATION NO. : 29/623247  
DATED : December 31, 2019  
INVENTOR(S) : Michael Edward Williams et al.

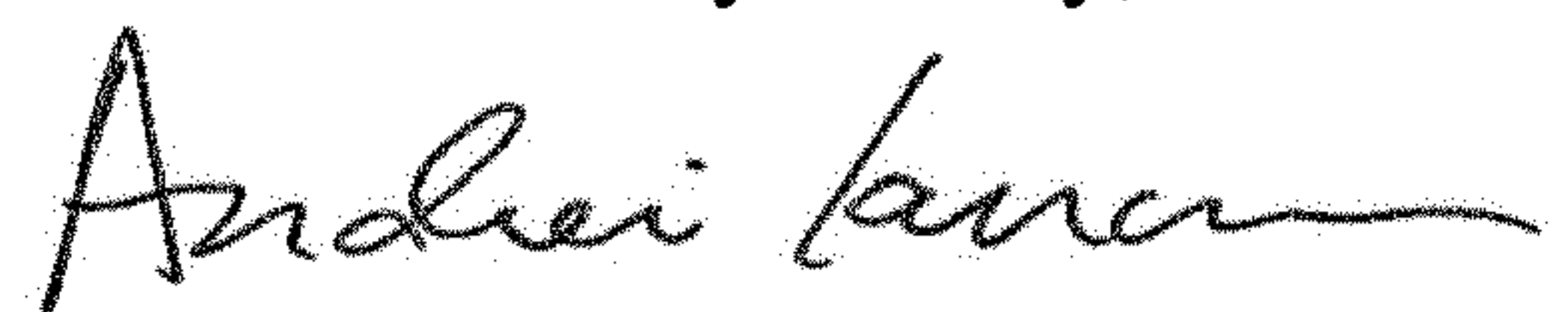
Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title Page

In Item (72), inventor "Saakshi Surtwala" should read --Saakshi Sutarwala--.

Signed and Sealed this  
Seventh Day of July, 2020

A handwritten signature in black ink, appearing to read "Andrei Iancu".

Andrei Iancu  
*Director of the United States Patent and Trademark Office*