



US00D876278S

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

(10) **Patent No.:** **US D876,278 S**

(45) **Date of Patent:** **** Feb. 25, 2020**

- (54) **AUTOMATIC GUIDED VEHICLE**
- (71) Applicant: **NIDEC-SHIMPO CORPORATION**,
Kyoto (JP)
- (72) Inventors: **Masashi Sokuza**, Kyoto (JP);
Masahiro Akamatsu, Kyoto (JP)
- (73) Assignee: **NIDEC-SHIMPO CORPORATION**,
Kyoto (JP)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/649,174**
- (22) Filed: **May 28, 2018**
- (30) **Foreign Application Priority Data**
Nov. 28, 2017 (JP) 2017-026469
- (51) **LOC (12) Cl.** **12-06**
- (52) **U.S. Cl.**
USPC **D12/16.1**
- (58) **Field of Classification Search**
USPC D12/319-345, 1-4, 16.1, 214;
D21/436-454; D30/160; D15/199
CPC B64C 29/0025; B64C 2201/108; B64C
2201/048; B64C 2201/088; B64C 29/00;
B64C 29/0058; B64C 39/001; B64C
39/024; B64C 39/062; B64C 2201/141;
B64C 27/12
See application file for complete search history.

- (56) **References Cited**
U.S. PATENT DOCUMENTS
D90,805 S * 10/1933 Fehrenbach D12/333
D130,013 S * 10/1941 Abemethy 244/63
D136,664 S * 11/1943 White 244/35 R
D138,469 S * 8/1944 Eichman 244/35 R
D151,327 S * 10/1948 Coates 244/74
D158,132 S * 4/1950 Salisbury 296/181.5

- D158,133 S * 4/1950 Salisbury D12/108
- D169,862 S * 6/1953 Myser 244/117 R
- D169,863 S * 6/1953 Myser 244/117 R
- D169,864 S * 6/1953 Myser 244/117 R
- D171,569 S * 3/1954 Apostolescu D12/328
- D177,445 S * 4/1956 Trautmann D12/333
- D183,108 S * 6/1958 Postelson D12/333
- 3,090,580 A * 5/1963 Kehlet B64D 17/78
244/113
- D197,748 S * 3/1964 Postelson D12/325
- D200,184 S * 1/1965 Thomas D12/333
- D200,941 S * 4/1965 Fiedler D12/308
- D213,731 S * 4/1969 Hsi D12/323
- D217,744 S * 6/1970 Peterson D12/308
- D219,648 S * 1/1971 Weaver D12/325
- D231,976 S * 7/1974 Torelli D12/325
- D243,520 S * 3/1977 Brown D12/218
- D304,575 S * 11/1989 Batzel D34/31
- D326,082 S * 5/1992 Finlay D12/345

(Continued)

Primary Examiner — Marissa J Cash
(74) *Attorney, Agent, or Firm* — JCIPRNET

(57) **CLAIM**

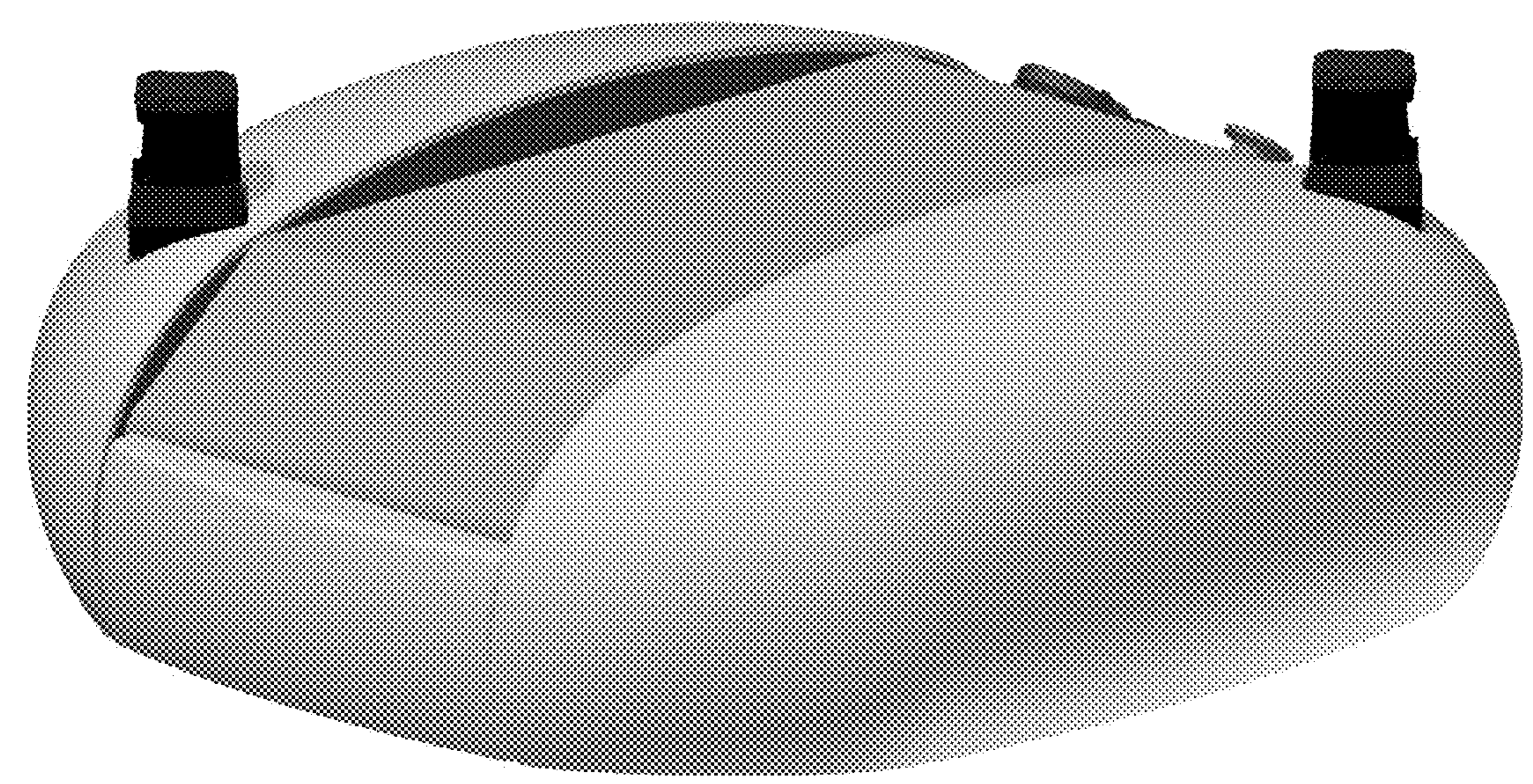
The ornamental design for an automatic guided vehicle, as shown.

DESCRIPTION

FIG. 1 is a perspective view of an automatic guided vehicle showing our new design;
 FIG. 2 is a front view thereof;
 FIG. 3 is a rear view thereof;
 FIG. 4 is a left side view thereof;
 FIG. 5 is a right side view thereof;
 FIG. 6 is a top view thereof; and,
 FIG. 7 is a bottom view thereof.

The part of the photograph shown in coarse dot pattern, along with the broken-line perimeter illustrates portions of the automatic guided vehicle that form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D328,872 S * 8/1992 Sutton D10/59
 5,203,521 A * 4/1993 Day B64C 39/064
 244/12.2
 5,312,069 A * 5/1994 Bollinger F02K 3/068
 244/12.3
 5,351,911 A * 10/1994 Neumayr B64C 39/001
 244/12.2
 D365,545 S * 12/1995 Wainfan D12/331
 D371,536 S * 7/1996 Jones D12/333
 D396,685 S * 8/1998 Baumgartner D12/320
 D476,943 S * 7/2003 Reinhard D12/319
 D564,042 S * 3/2008 Roy D21/443
 7,353,089 B1 * 4/2008 McEvoy G05D 1/028
 701/2
 D575,915 S * 8/2008 Dreyer D32/21
 D663,255 S * 7/2012 Pasternak D12/319
 D691,337 S * 10/2013 Kim D32/21
 D697,019 S * 1/2014 Friesel D12/319

D743,647 S * 11/2015 Heck D32/21
 D748,878 S * 2/2016 Dooley D32/21
 D778,515 S * 2/2017 Choi D32/21
 D785,878 S * 5/2017 Kjaergaard D32/21
 9,682,772 B2 * 6/2017 Yoon B60F 5/02
 D810,653 S * 2/2018 Hu D12/327
 D810,799 S * 2/2018 Sokuza D15/199
 D812,663 S * 3/2018 Waters D15/199
 D818,872 S * 5/2018 Ho D12/16.1
 D818,873 S * 5/2018 Tian D12/16.1
 D821,264 S * 6/2018 Choo D12/16.1
 D821,287 S * 6/2018 Lichter D12/308
 D837,852 S * 1/2019 Nilsson D15/199
 D839,331 S * 1/2019 Nilsson D15/199
 10,202,189 B2 * 2/2019 Zhao B64C 39/024
 D843,888 S * 3/2019 Wang D12/16.1
 D846,441 S * 4/2019 Kim D12/16.1
 D846,443 S * 4/2019 Kim D12/16.1
 2013/0340201 A1 * 12/2013 Jang A47L 9/009
 15/319

* cited by examiner

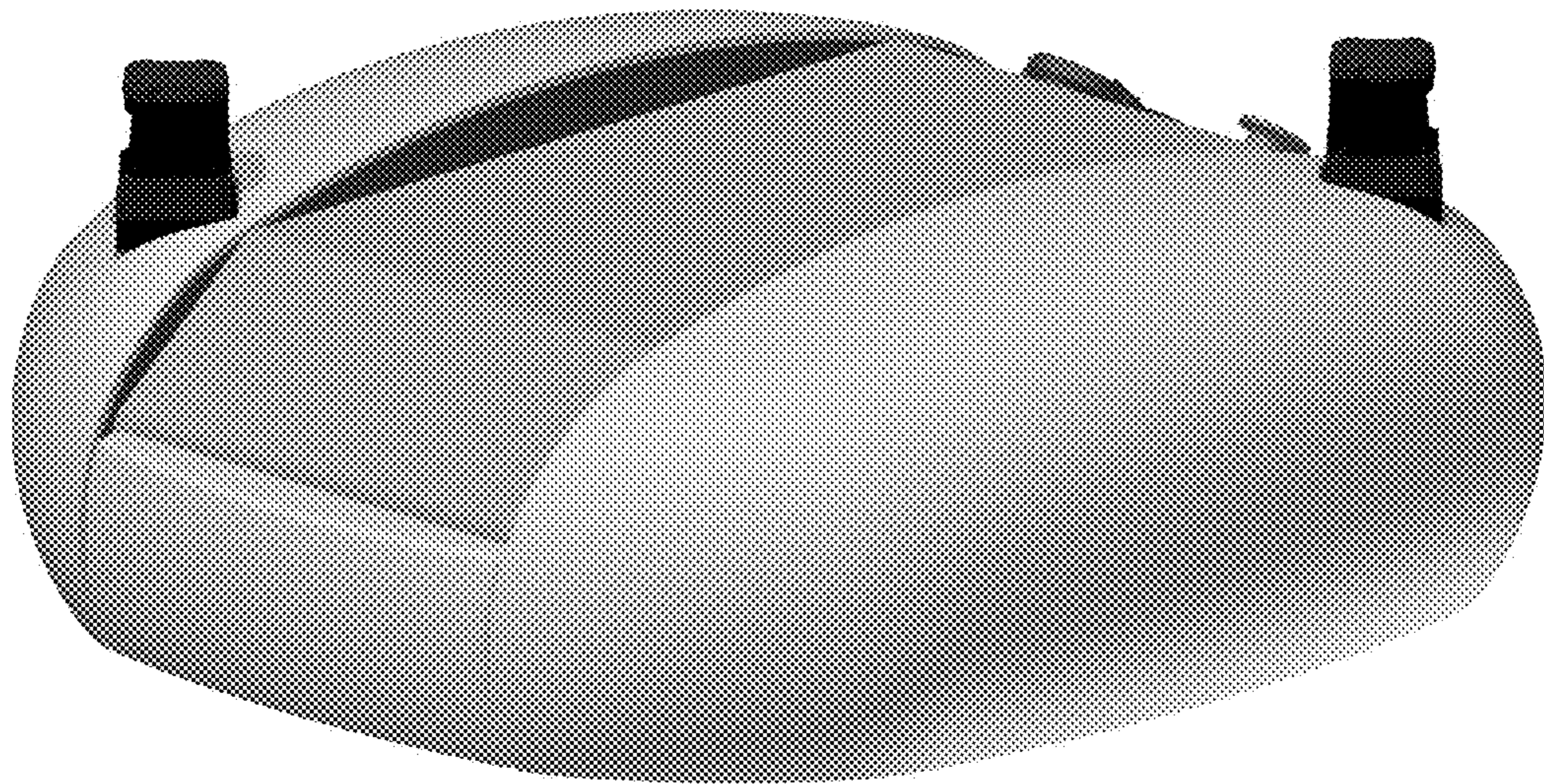


FIG. 1

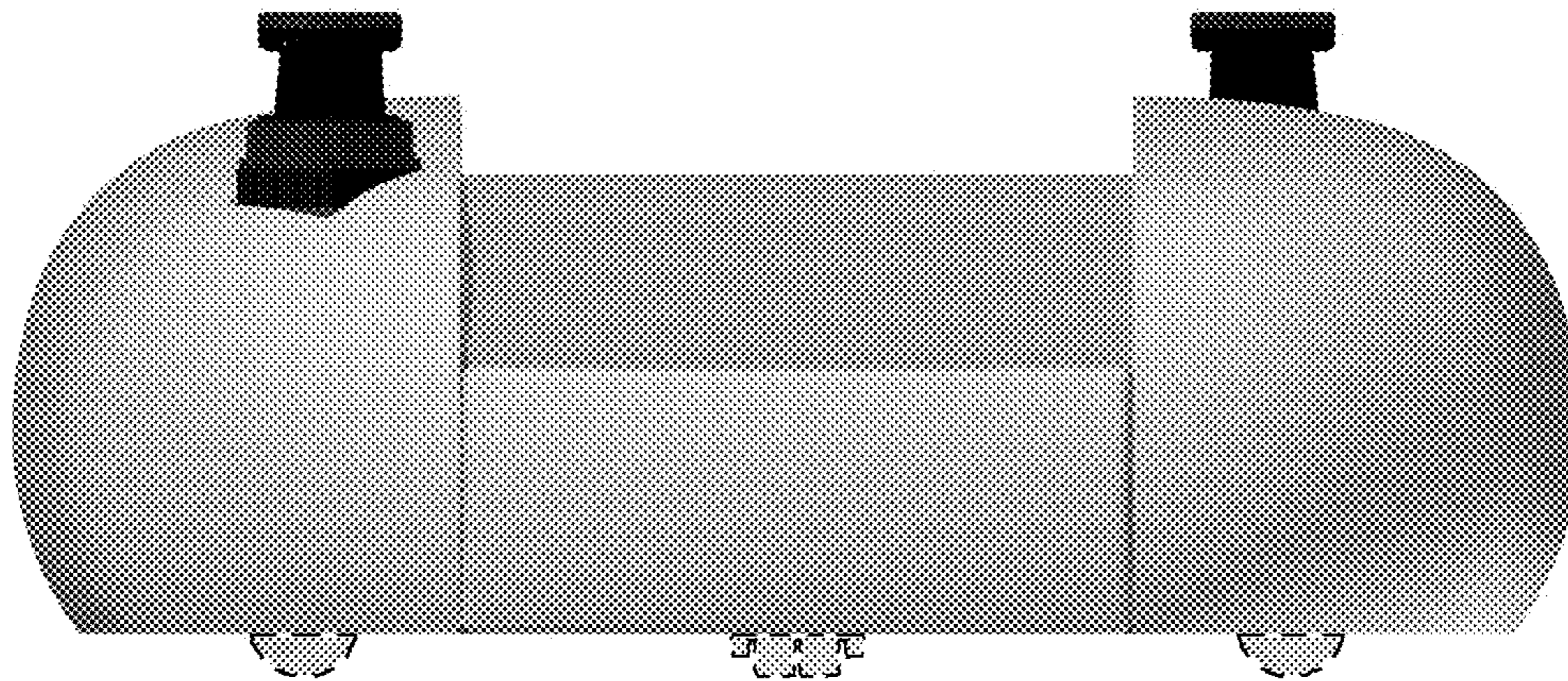


FIG. 2

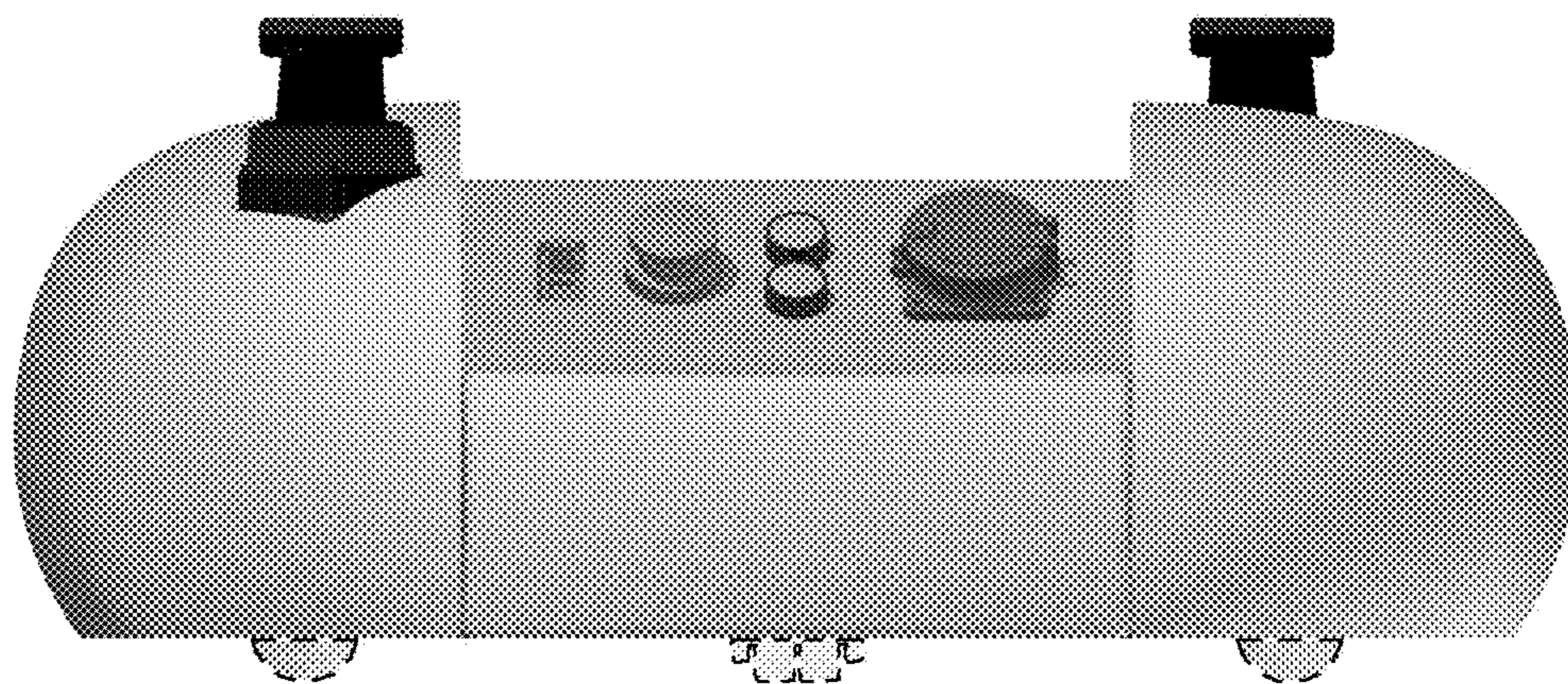


FIG. 3

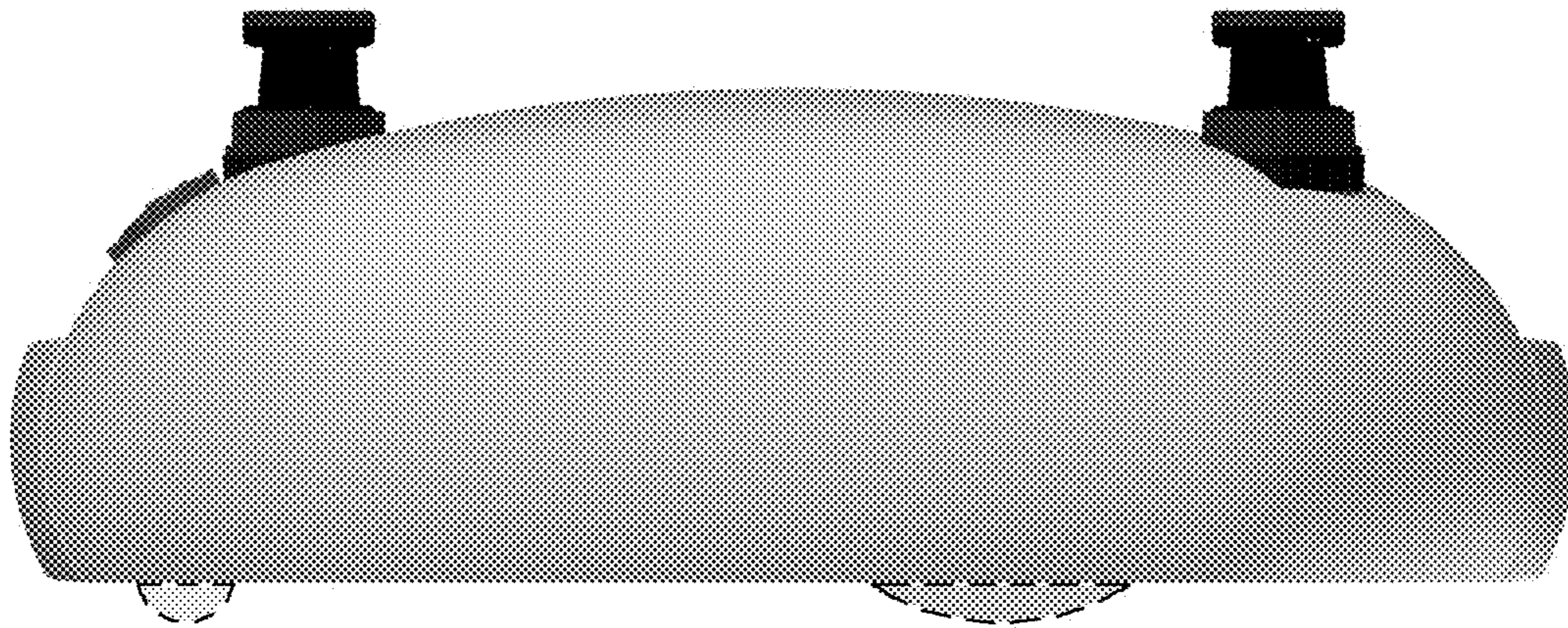


FIG. 4

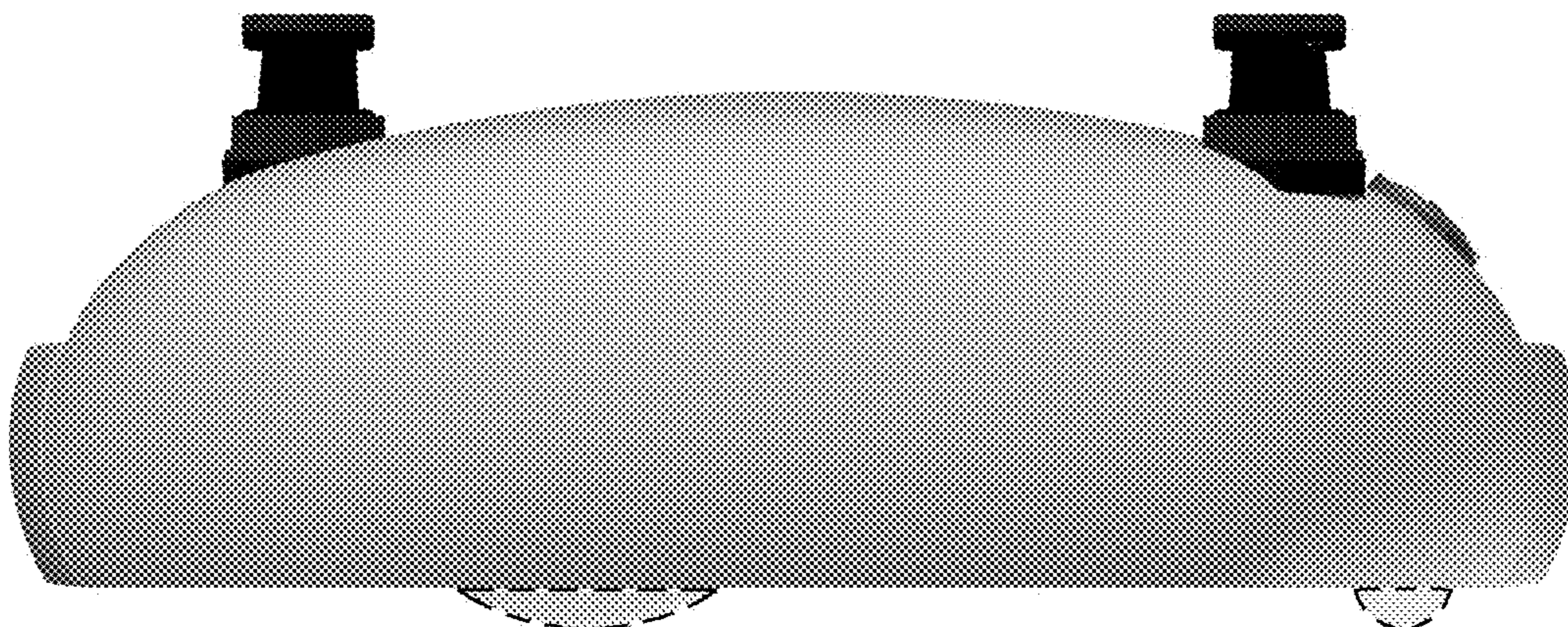


FIG. 5



FIG. 6

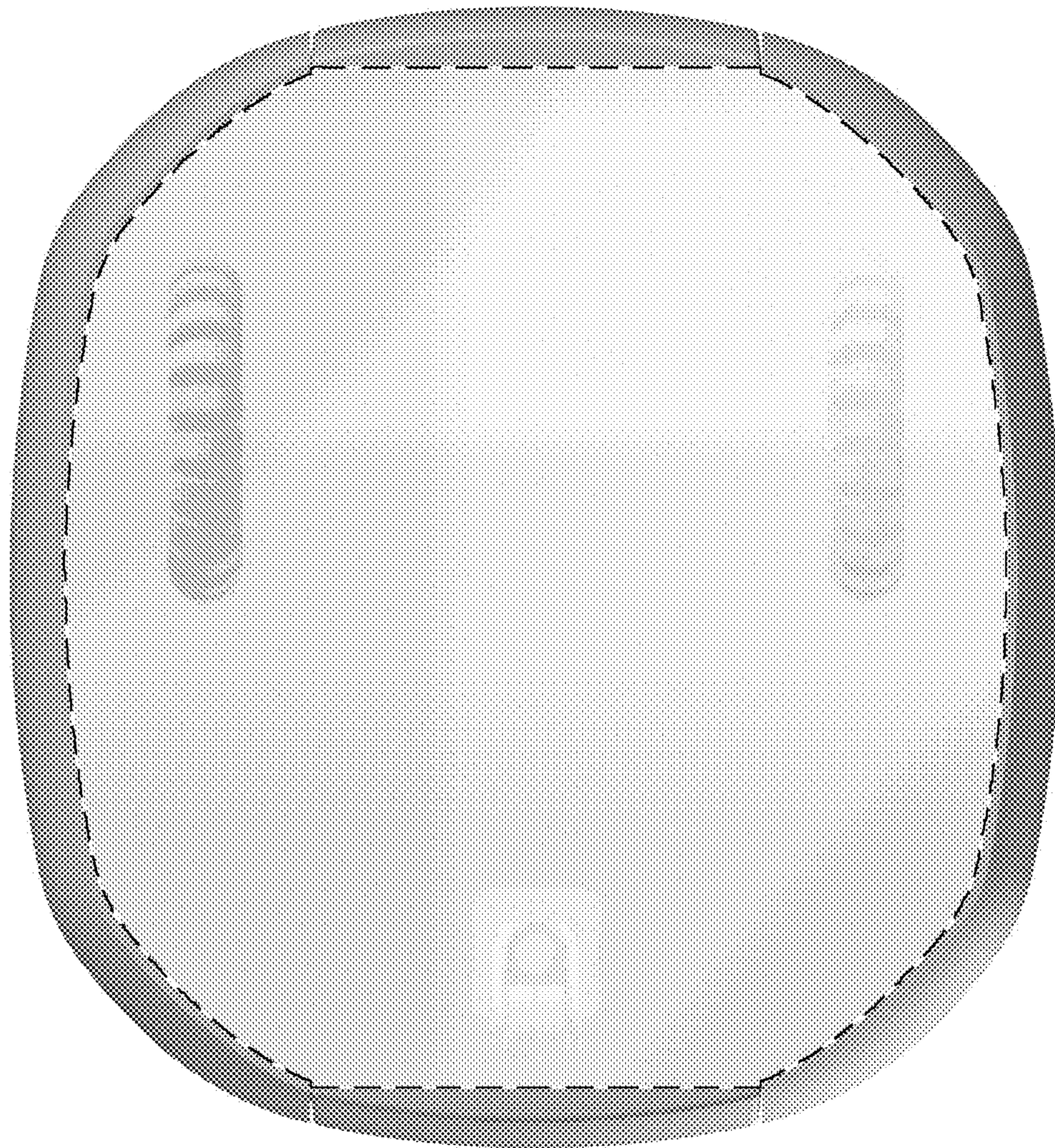


FIG. 7