



US00D976341S

(12) **United States Design Patent** (10) **Patent No.:** **US D976,341 S**
Whalen et al. (45) **Date of Patent:** **** Jan. 24, 2023**

(54) **HANDLEBAR PORTIONS OF A DAP UNWEIGHTING SYSTEM**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **Boost Treadmills, LLC**, Palo Alto, CA (US)

CN 104800047 A 7/2015
JP 2001112686 A 4/2001
(Continued)

(72) Inventors: **Sean Tremaine Whalen**, Mountain View, CA (US); **Thomas Jack Waldo Allen**, Palo Alto, CA (US); **Robert Tremaine Whalen**, Los Altos, CA (US)

OTHER PUBLICATIONS

Showa Denki Taiwan, “**てらすウォーカー**, 取扱説明書・注意書” (“Terasu Walker, Instruction Manual”), May 14, 2015, Taiwan.
(Continued)

(73) Assignee: **Boost Treadmills, LLC**, Palo Alto, CA (US)

Primary Examiner — Ryan Harvey
(74) *Attorney, Agent, or Firm* — KandareIP, LLC; Anthony Kandare

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

(21) Appl. No.: **29/807,225**

(22) Filed: **Sep. 9, 2021**

(51) **LOC (14) Cl.** **21-02**

(52) **U.S. Cl.**
USPC **D21/669**; D21/694

(58) **Field of Classification Search**
USPC D21/668, 669, 662, 694, 678, 686, 697; 128/202.12, 205.26; 482/5, 27, 54, 57, 482/111; D14/356, 388
CPC A63B 22/02; A63B 21/00181; A63B 2225/60; A63B 2208/03; A63B 22/0023; A63B 2208/053; A63B 2208/056; A63B 22/0605; A63B 22/0664; A63B 2220/56; A63B 69/0064; A63B 23/04; A61H 3/008; A61H 1/0214; A61H 2201/1261; A61H 1/0262
See application file for complete search history.

(57) **CLAIM**

The ornamental design for handlebar portions of a DAP unweighting system, as shown and described.

DESCRIPTION

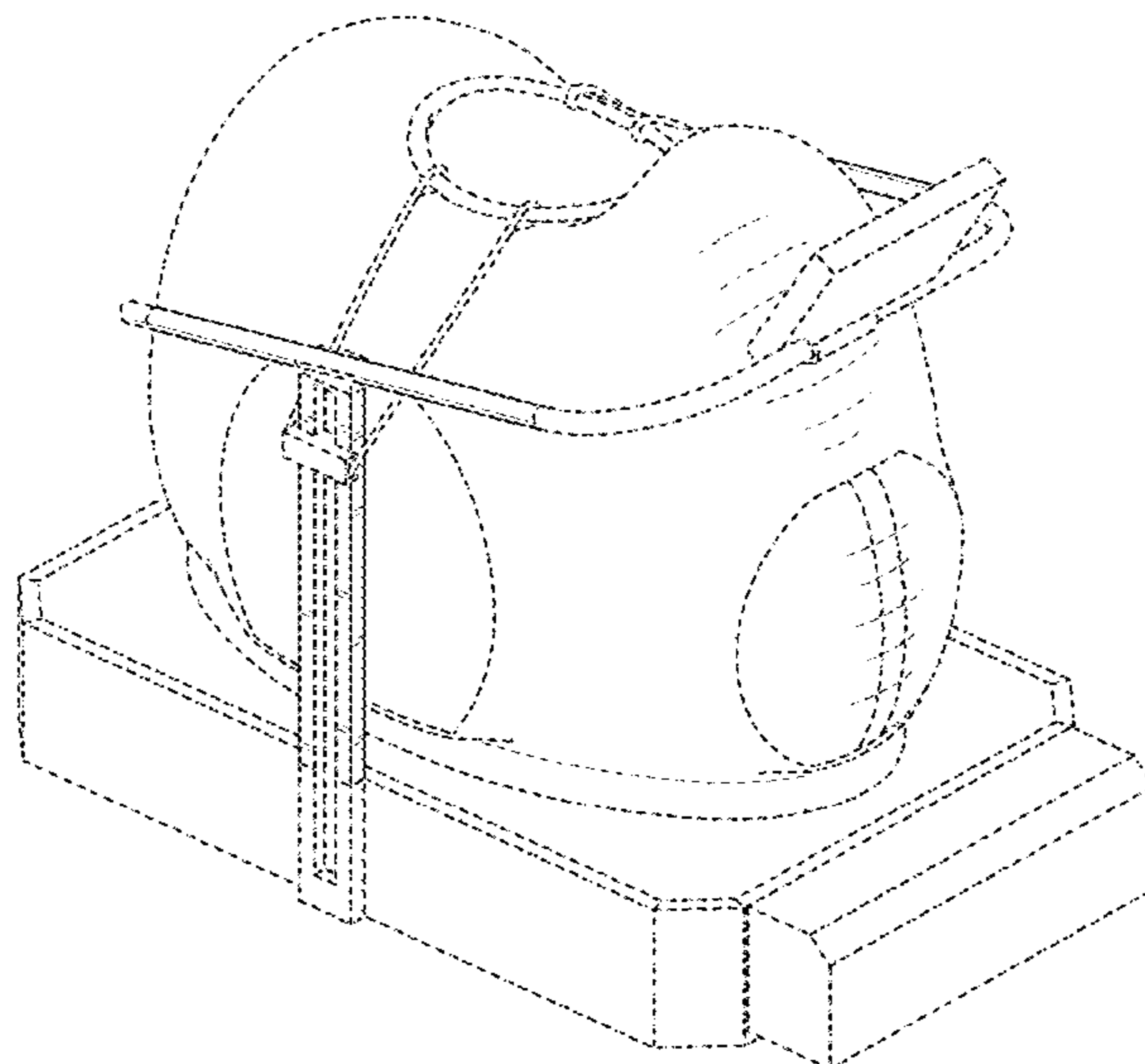
FIG. 1 is a front perspective view of handlebar portions of a DAP unweighting system showing our new design; FIG. 2 is a front view thereof; FIG. 3 is a rear view thereof; FIG. 4 is a right side view thereof; FIG. 5 is a left side view thereof; FIG. 6 is a top view thereof; FIG. 7 is a bottom view thereof; and, FIG. 8 is a front perspective view thereof depicted with an example user in a usage condition. The broken lines immediately adjacent to the shaded area define the bounds of the claimed design and form no part thereof. The evenly-spaced broken line showing of the remainder of the differential air pressure unweighting system and the dash-dot-dash broken line showing of the example user form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,095,561 A * 6/1978 Ruetenik A01K 15/027 119/700
D259,367 S * 5/1981 Talbot D21/669
(Continued)

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,332,217 A * 6/1982 Davis A61D 11/00
119/700
4,576,376 A * 3/1986 Miller A63B 22/02
482/111
4,614,337 A * 9/1986 Schonenberger A63B 22/02
482/54
4,759,544 A * 7/1988 Diaz A63B 22/16
482/57
4,776,581 A * 10/1988 Shepherdson A63B 22/02
D24/188
4,776,582 A 10/1988 Ramhorst
D304,222 S * 10/1989 Keller D21/669
4,938,469 A * 7/1990 Crandell A63B 22/025
4/492
5,108,088 A * 4/1992 Keller A63B 22/02
482/4
5,109,837 A * 5/1992 Gamow A62B 31/00
128/200.24
5,133,339 A * 7/1992 Whalen A63B 21/00181
482/52
5,207,622 A 5/1993 Wilkinson et al.
5,295,929 A * 3/1994 Weisz A63B 22/02
482/111
D347,912 S * 6/1994 Golden D21/669
D350,421 S * 9/1994 Brubaker D30/160
D355,003 S * 1/1995 Edwards D21/694
D355,660 S * 2/1995 Holmes D21/828
D363,067 S * 10/1995 Holmes D14/356
D370,508 S * 6/1996 Drennan D21/669
D370,509 S * 6/1996 Gillott D21/669
D374,046 S * 9/1996 Drennan D21/669
D384,712 S * 10/1997 Scott D21/668
D420,713 S * 2/2000 Afilani D21/669
D424,139 S * 5/2000 Gwin D21/669
6,352,078 B1 * 3/2002 Harvey A61G 10/026
128/200.24
6,666,831 B1 * 12/2003 Edgerton A63B 69/0064
600/595
D495,384 S 8/2004 Rolfes
D497,961 S 11/2004 Rolfes
6,837,186 B1 * 1/2005 Terao A01K 15/027
119/701
D515,153 S * 2/2006 Rolfes D21/697
D531,238 S * 10/2006 Hoggan D21/697
7,141,007 B2 * 11/2006 Egger A63B 22/0605
482/57
D534,973 S * 1/2007 Flick D21/669
D538,863 S * 3/2007 Hoggan D21/694
D558,936 S * 1/2008 Tamura D30/160
7,536,977 B1 * 5/2009 Williams A01K 15/027
119/700
7,762,930 B2 7/2010 Egger
7,837,597 B2 11/2010 Reyes et al.
8,075,453 B1 12/2011 Wilkinson

8,272,998 B2 * 9/2012 Macartney A01K 15/027
119/702
8,464,716 B2 6/2013 Kuehne et al.
D695,856 S 12/2013 Jacobs et al.
8,840,572 B2 9/2014 Whalen et al.
8,900,098 B2 12/2014 Egan
D725,721 S * 3/2015 Azoulay D21/662
D726,845 S 4/2015 Hubler et al.
D728,045 S 4/2015 Hubler et al.
D739,902 S 9/2015 Hubler et al.
9,272,175 B2 3/2016 Egan
D787,516 S * 5/2017 Goetgeluk D21/324
9,642,764 B2 5/2017 Kuehne et al.
10,004,056 B2 6/2018 Whalen et al.
D837,312 S * 1/2019 Lisi D21/669
D844,160 S * 3/2019 Bajard D24/204
D848,685 S * 5/2019 Song D21/669
D870,730 S * 12/2019 Wang D21/828
D870,827 S * 12/2019 Wang D14/388
D876,557 S * 2/2020 Tajima D21/678
10,843,036 B2 11/2020 Bayerlein et al.
D915,529 S 4/2021 Johnson et al.
D955,486 S * 6/2022 Wang D21/325
2007/0054783 A1 * 3/2007 Egger A63B 24/00
601/1
2007/0109259 A1 * 5/2007 Liu G06F 3/011
345/156
2014/0111424 A1 * 4/2014 Goetgeluk A63B 69/0064
345/156
2014/0113775 A1 * 4/2014 Egan A63B 23/02
482/54
2014/0194252 A1 7/2014 Arimoto et al.
2015/0378239 A1 12/2015 Zhou et al.
2016/0008650 A1 * 1/2016 Jue A63B 21/4009
482/54
2016/0038071 A1 * 2/2016 Williams A61B 5/6888
482/52
2017/0128769 A1 5/2017 Long et al.
2018/0157318 A1 * 6/2018 Wang A63B 71/0054
2019/0099315 A1 * 4/2019 Kuehne A63B 22/0235
2019/0255381 A1 * 8/2019 Bayerlein A63B 22/025
2019/0392939 A1 12/2019 Basta et al.
2020/0384309 A1 12/2020 Long et al.
2021/0187348 A1 6/2021 Phillips et al.

FOREIGN PATENT DOCUMENTS

JP 2002360644 A 12/2002
JP D1395000 8/2010

OTHER PUBLICATIONS

Showa Denki Taiwan, "Showa For Medical", Oct. 16, 2014, Taiwan.
Federal Laboratory Consortium for Technology Transfer, Newslink,
"Assistive Technology 'Miracles' at VA Centers of Excellence," vol.
15, No. 12, Nov. 1999.

* cited by examiner

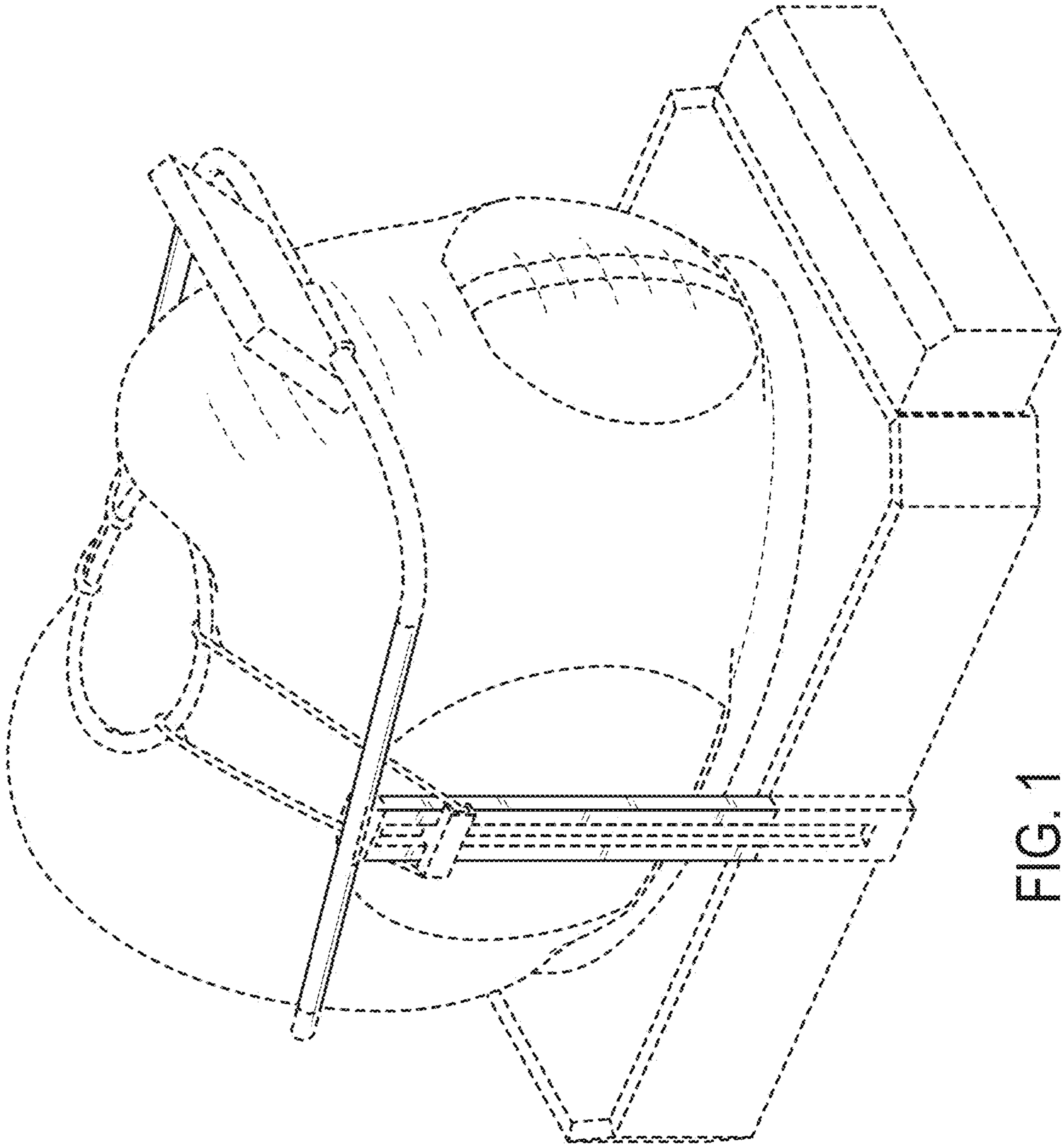


FIG. 1

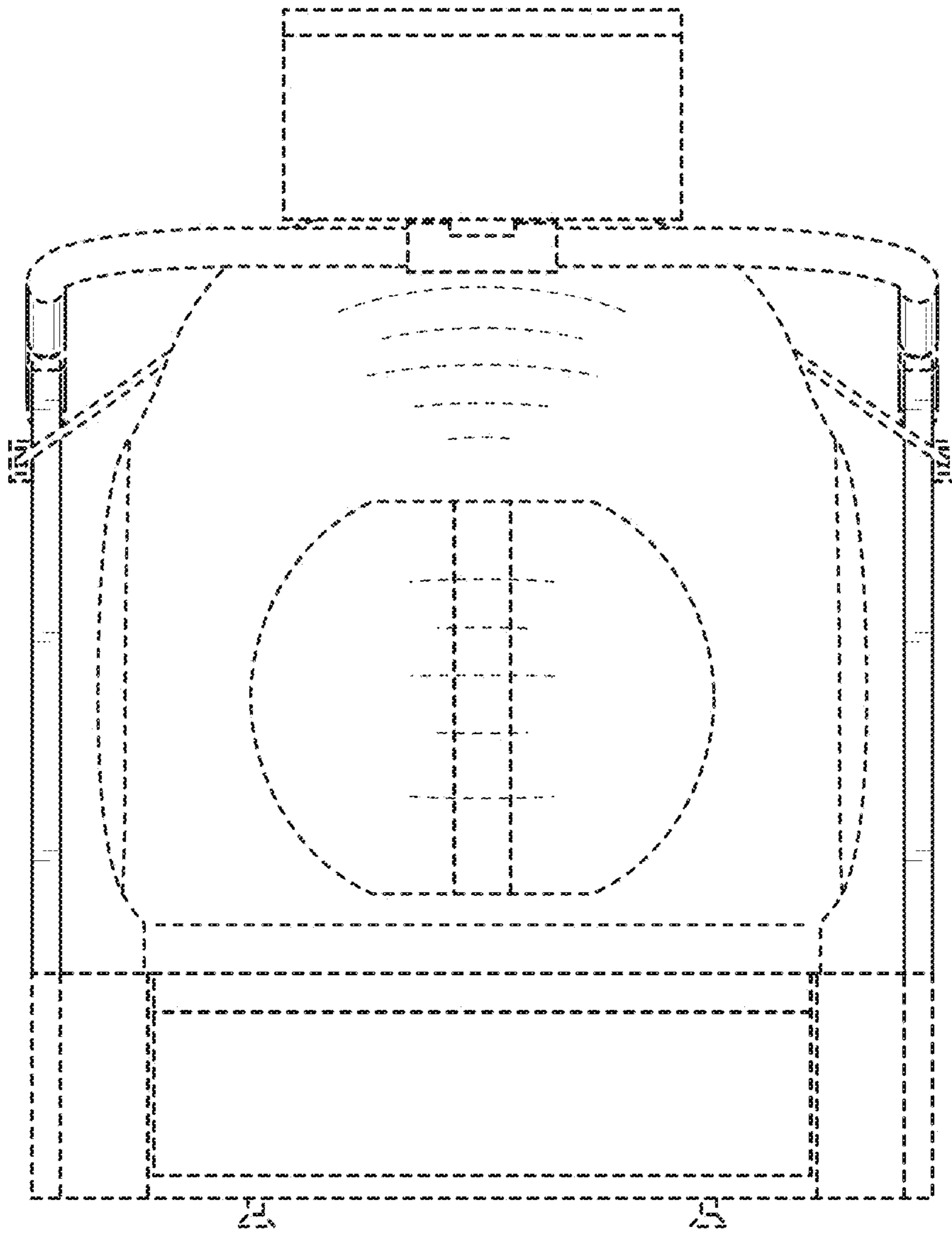


FIG. 2

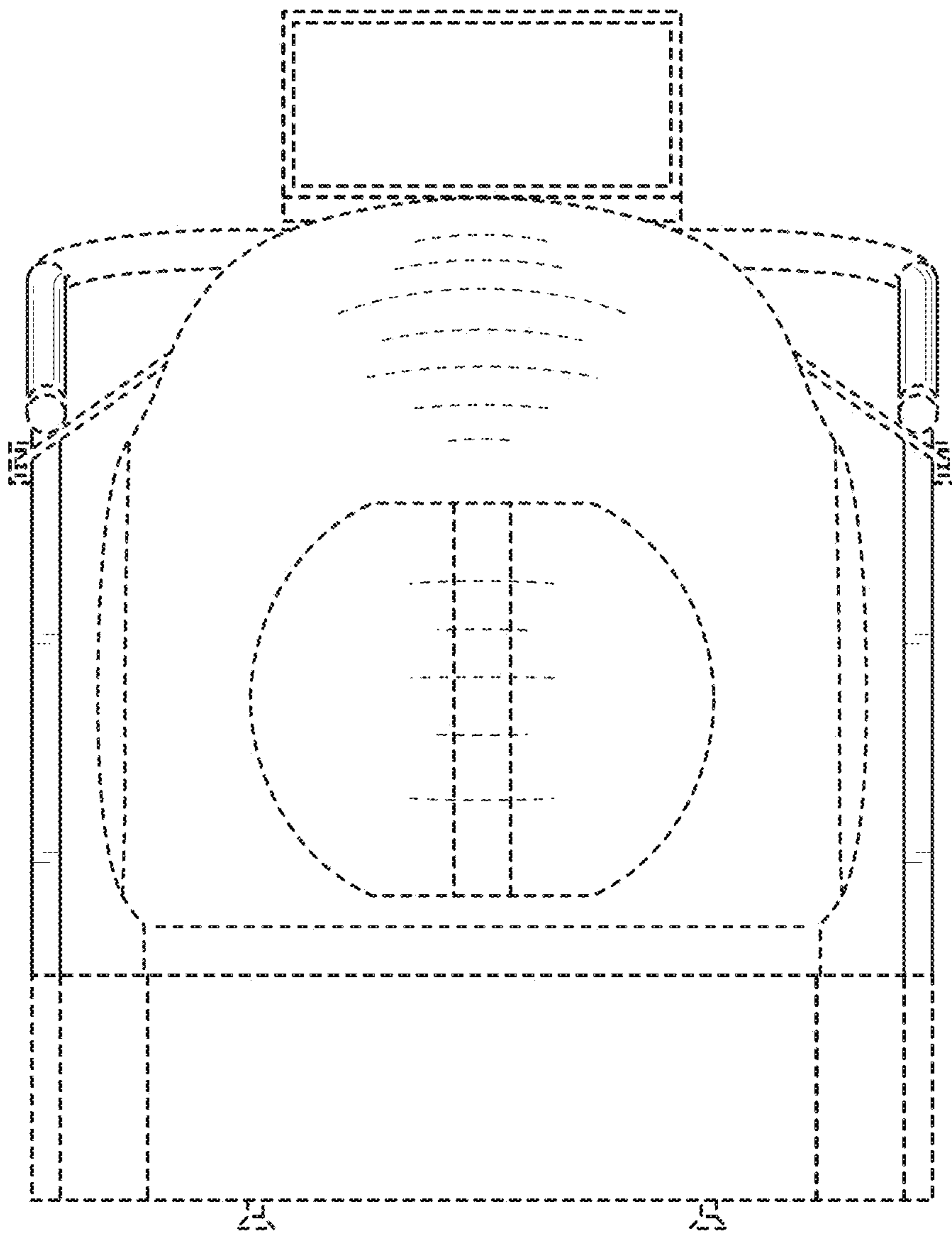


FIG. 3

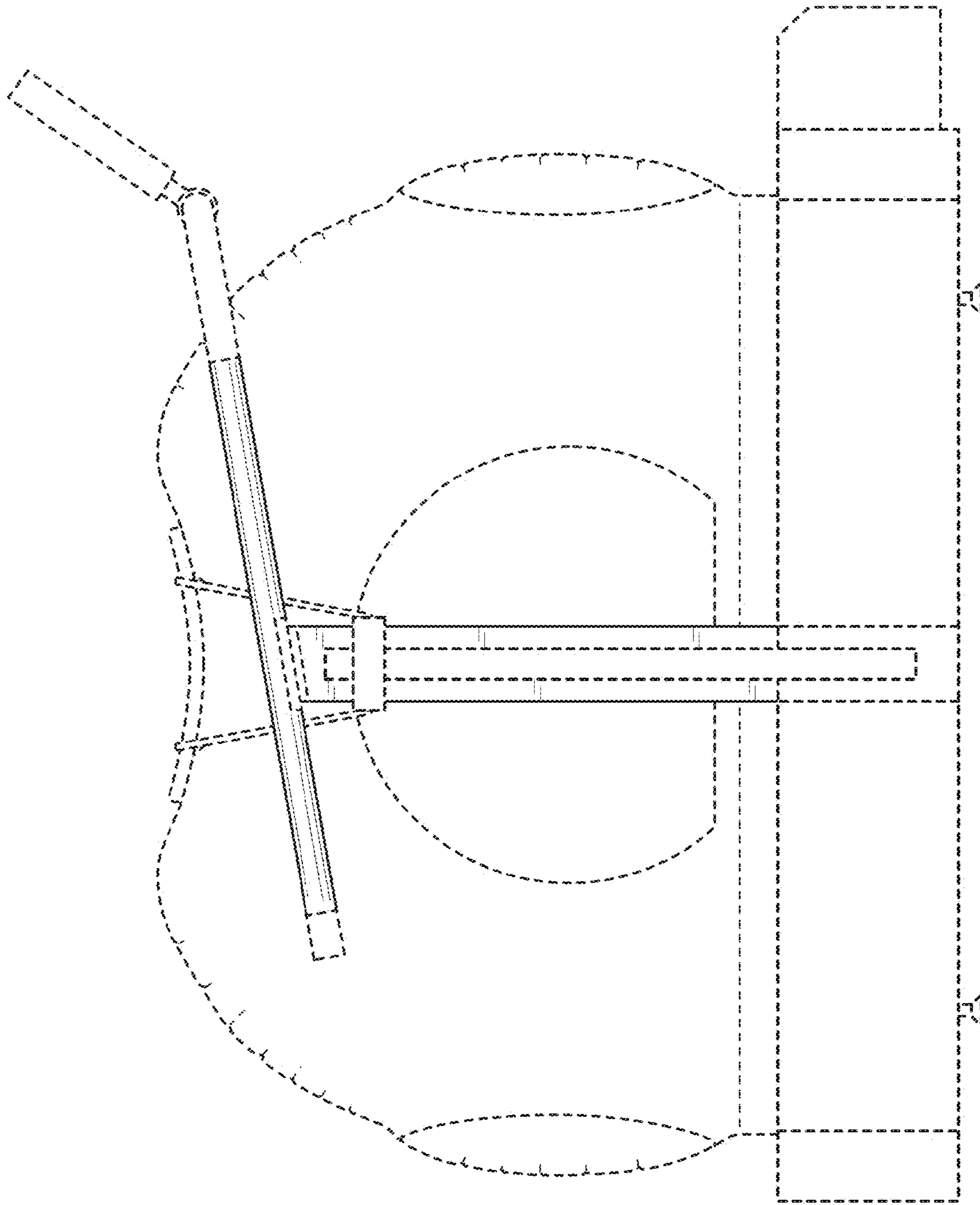


FIG. 4

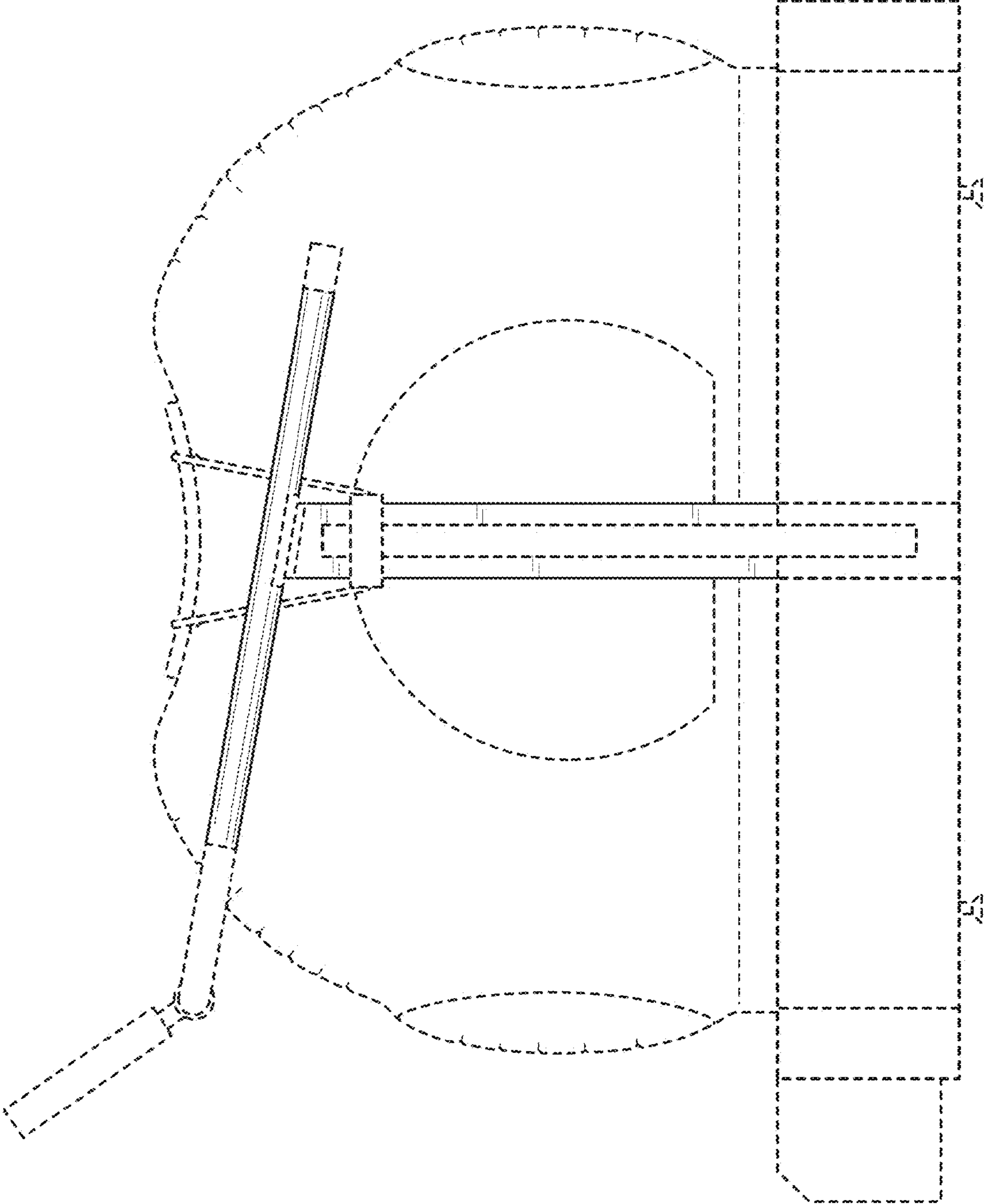


FIG. 5

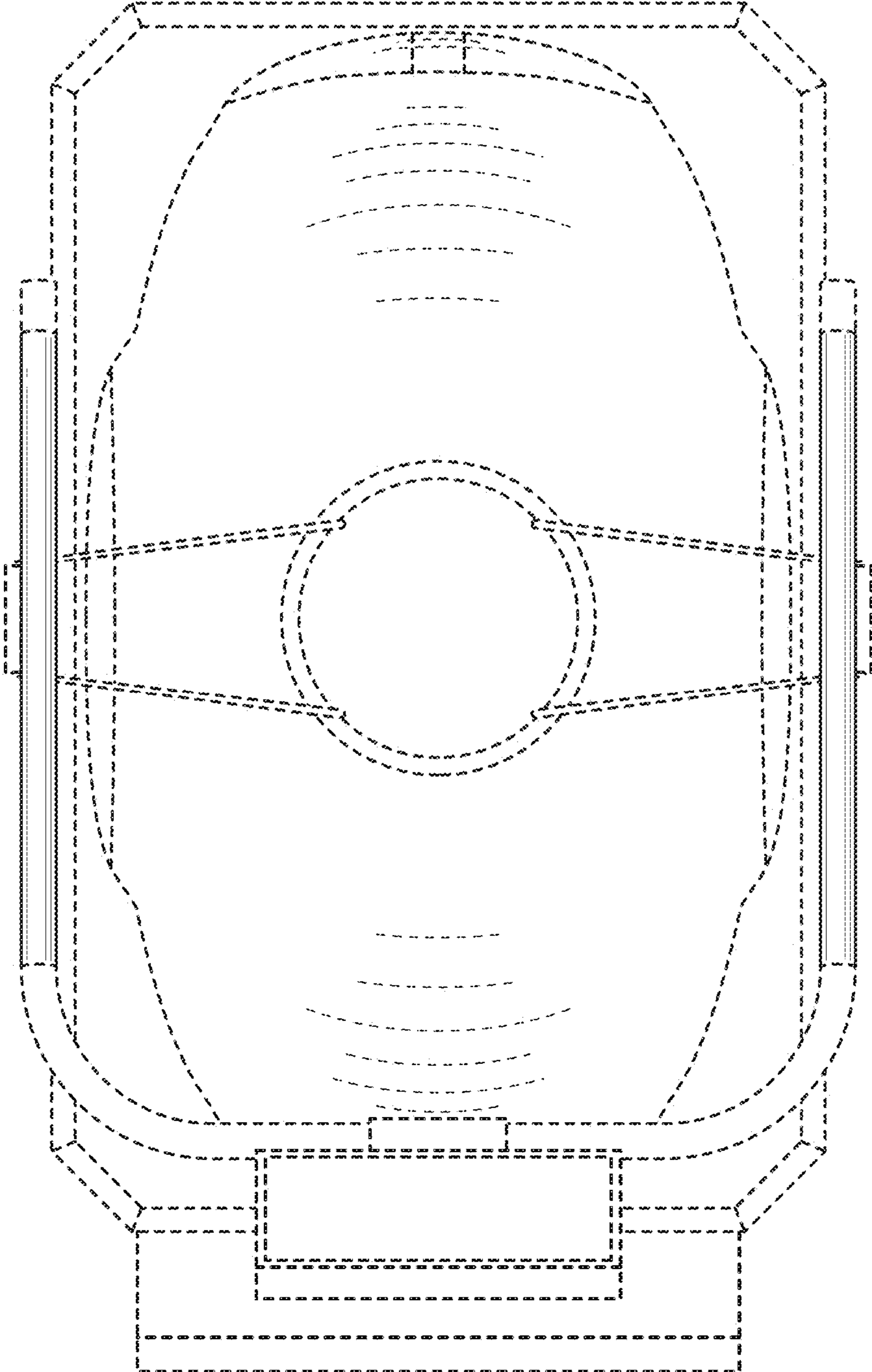


FIG. 6

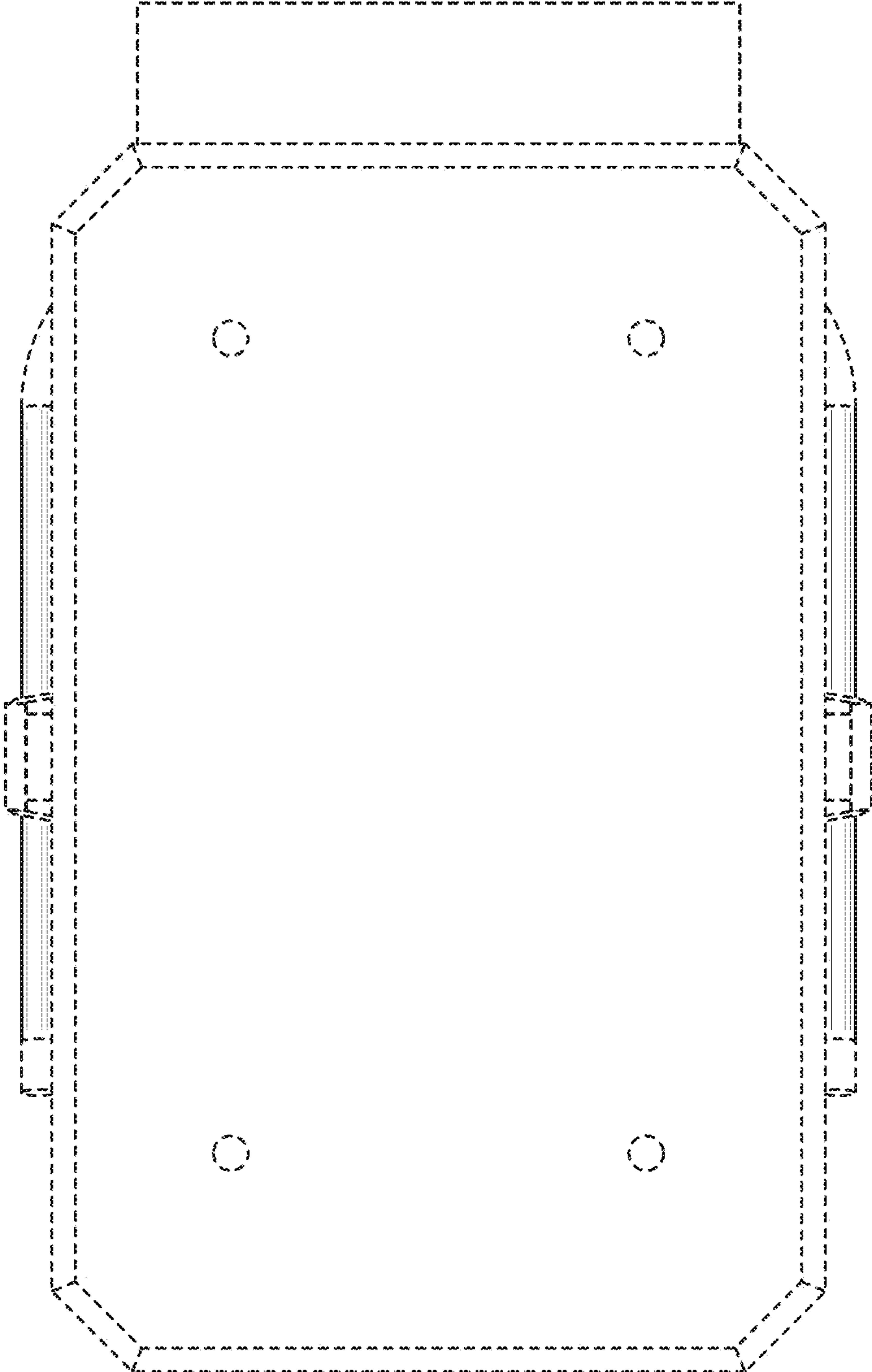


FIG. 7

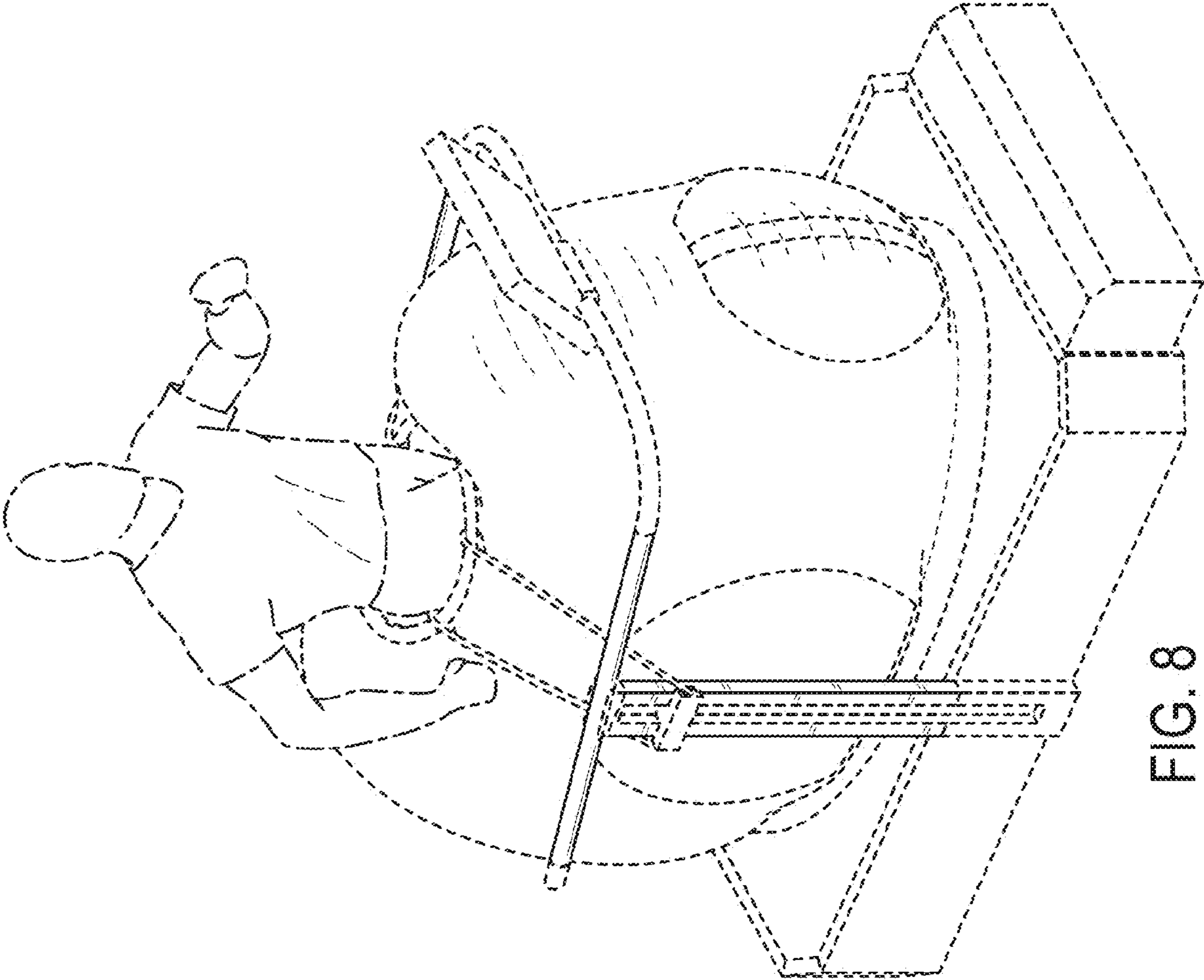


FIG. 8