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(12) **United States Design Patent** (10) **Patent No.:** **US D926,984 S**
Schuessler et al. (45) **Date of Patent:** **** Aug. 3, 2021**

(54) **TISSUE EXPANSION DEVICE** 4,200,098 A 4/1980 Ayer et al.
4,332,634 A 6/1982 Aperavich
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(Continued)

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FOREIGN PATENT DOCUMENTS

EP 0029292 5/1981
EP 0324234 7/1989
(Continued)

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

OTHER PUBLICATIONS

(21) Appl. No.: **29/750,505**

“Tacky Gels for Healthcare Applications,” Silicone-Polymers, NuSil Silicone Technology, 2009, www.silicone-polymers.com/pdf2009/Tacky%20Gels%20for%20Healthcare%20Appli-cations.pdf, 3 pages.

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Related U.S. Application Data

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

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

(58) **Field of Classification Search**
USPC D24/155
CPC A61F 2/12
See application file for complete search history.

(57) **CLAIM**
The ornamental design for a tissue expansion device, as shown and described.

DESCRIPTION

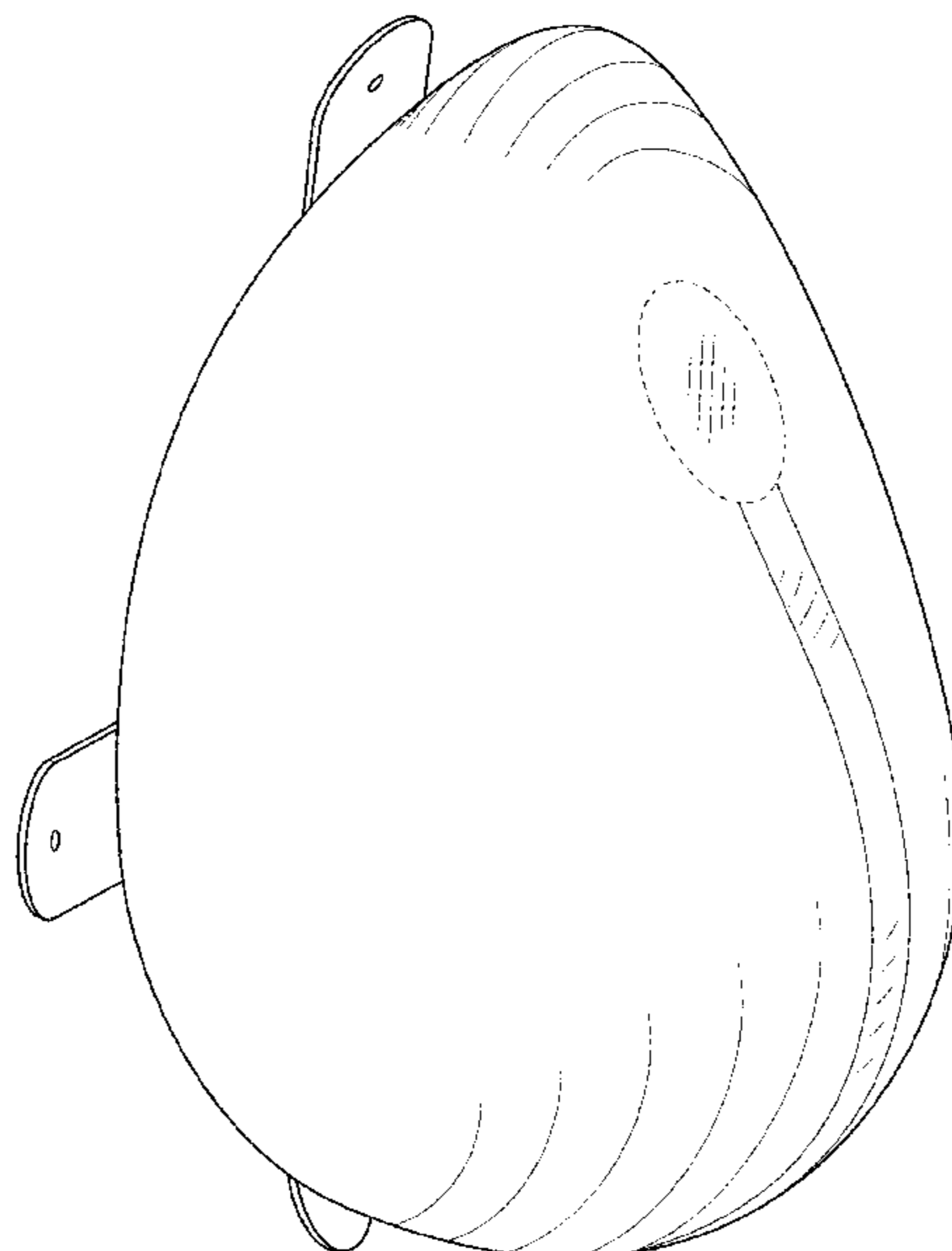
FIG. 1 is a front, top perspective view of a tissue expansion device;
FIG. 2 is a top plan view of the tissue expansion device of FIG. 1;
FIG. 3 is a bottom plan view of the tissue expansion device of FIG. 1;
FIG. 4 is a left side view of the tissue expansion device of FIG. 1, the right side view being in mirror image thereof;
FIG. 5 is a front plan view of the tissue expansion device of FIG. 1; and,
FIG. 6 is a rear plan view of the tissue expansion device of FIG. 1.
The broken lines shown in the figures are included for the purpose of illustration and form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,204,959 A 9/1965 Nichols
3,301,251 A 1/1967 Jackson
3,301,254 A 1/1967 Schickedanz
3,577,836 A 5/1971 Tamura
3,852,832 A 12/1974 McGhan et al.
3,919,724 A 11/1975 Sanders et al.
4,157,085 A 6/1979 Austad
4,190,040 A 2/1980 Schulte
4,195,639 A 4/1980 Lee

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,455,691 A	6/1984	Van Aken Redinger et al.	7,914,578 B2	3/2011	Vardi
4,605,412 A	8/1986	LaForest et al.	7,976,859 B2	7/2011	Beisang et al.
4,636,213 A	1/1987	Pakiam	8,021,418 B2	9/2011	Gcrberding et al.
4,650,487 A	3/1987	Chaglassian	8,027,712 B2	9/2011	Sioshansi et al.
4,662,357 A	5/1987	Pierce et al.	8,066,758 B2	11/2011	Bogert et al.
4,685,447 A	8/1987	Iversen et al.	8,070,809 B2	12/2011	Schuessler
4,738,657 A	4/1988	Hancock et al.	8,202,259 B2	6/2012	Sheetz et al.
4,773,909 A	9/1988	Chaglassian	8,320,993 B2	11/2012	Sirimanne et al.
4,823,815 A	4/1989	Watson et al.	8,343,205 B2	1/2013	Sugimoto et al.
4,840,615 A	6/1989	Hancock et al.	8,377,127 B2	2/2013	Schuessler
4,889,744 A	12/1989	Quaid	8,382,723 B2	2/2013	Powers et al.
4,908,029 A	3/1990	Bark et al.	8,398,710 B2	3/2013	Forsell
4,960,425 A	10/1990	Yan et al.	8,454,690 B2	6/2013	McClellan
4,969,906 A	11/1990	Kronman	8,463,357 B2	6/2013	Piran et al.
5,005,591 A	4/1991	Austad	8,506,627 B2	8/2013	Van Epps et al.
5,019,101 A	5/1991	Purkait et al.	8,609,004 B2	12/2013	Schuessler
5,022,942 A	6/1991	Yan et al.	8,636,797 B2	1/2014	Chitre et al.
5,026,394 A	6/1991	Baker	8,670,633 B2	3/2014	Boyden et al.
5,066,303 A	11/1991	Bark et al.	8,690,943 B2	4/2014	Schuessler
5,074,878 A	12/1991	Bark et al.	8,784,486 B2	7/2014	Schuessler
5,084,061 A	1/1992	Gau et al.	8,821,574 B2	9/2014	Davodian
5,127,627 A	7/1992	Wiser	8,852,276 B2	10/2014	Del Vecchio
5,133,753 A	7/1992	Bark et al.	8,875,714 B2	11/2014	Boyden et al.
5,141,508 A	8/1992	Bark et al.	8,920,486 B2	12/2014	Park
5,171,269 A	12/1992	Bark	8,968,400 B2	3/2015	Schuessler
5,282,857 A	2/1994	Perry et al.	9,138,311 B2	9/2015	Van Epps et al.
5,340,352 A	8/1994	Nakanishi et al.	9,241,773 B2	1/2016	Bolan et al.
5,425,762 A	6/1995	Muller	9,380,998 B2	7/2016	Sirimanne et al.
5,447,535 A	9/1995	Muller	9,387,068 B2	7/2016	Schuessler
5,456,716 A	10/1995	Iversen et al.	9,393,106 B2	7/2016	Van Epps et al.
5,480,430 A	1/1996	Carlisle et al.	9,399,122 B2	7/2016	Mosharrafa et al.
5,496,368 A	3/1996	Wiese	9,463,087 B2	10/2016	Hristov et al.
5,525,275 A	6/1996	Iversen et al.	9,480,584 B2	11/2016	Park
5,536,264 A	7/1996	Hsueh et al.	9,532,888 B2	1/2017	Dugan et al.
5,549,672 A	8/1996	Maddock et al.	9,603,698 B2	3/2017	Kerr et al.
5,571,183 A	11/1996	Kazcm	9,630,366 B2	4/2017	Schuessler
5,589,176 A	12/1996	Scare, Jr.	9,636,210 B2	5/2017	Hristov et al.
5,632,774 A	5/1997	Babian	9,669,117 B2	6/2017	Campbell et al.
5,658,329 A	8/1997	Purkait	9,682,186 B2	6/2017	Powers et al.
5,674,279 A	10/1997	Wright et al.	9,700,404 B2	7/2017	Martin et al.
5,674,285 A	10/1997	Quaid	9,700,405 B2	7/2017	Davila et al.
5,775,507 A	3/1998	Petrick	9,713,524 B2 *	7/2017	Glicksman A61B 90/02
5,895,423 A	4/1999	Becker et al.	9,724,189 B2	8/2017	Forsell
5,964,803 A	10/1999	Iversen et al.	9,750,600 B2	9/2017	Mayo Martin
6,022,376 A	2/2000	Assell et al.	9,775,704 B2	10/2017	Bergheim et al.
6,074,421 A	6/2000	Murphy	D803,401 S *	11/2017	Limem D24/155
6,146,418 A	11/2000	Berman	9,814,566 B1	11/2017	Cree
6,203,570 B1	3/2001	Baeke	9,848,972 B2	12/2017	Van Epps
6,214,045 B1	4/2001	Corbitt, Jr. et al.	9,884,150 B2	2/2018	Jho et al.
6,214,331 B1	4/2001	Vanderhoff et al.	9,918,829 B2	3/2018	Van Epps et al.
6,228,116 B1	5/2001	Ledergerber	D816,220 S *	4/2018	Limem D24/155
6,231,712 B1	5/2001	Torres	D816,221 S *	4/2018	Limem D24/155
6,232,372 B1	5/2001	Brothers et al.	D836,778 S *	12/2018	Limem D24/155
6,287,293 B1	9/2001	Jones et al.	10,182,904 B2	1/2019	Gliner et al.
6,371,904 B1	4/2002	Sirimanne et al.	D856,517 S *	8/2019	Spiegel D24/155
6,588,432 B1	7/2003	Rehder et al.	D857,895 S *	8/2019	Limem D24/155
6,602,452 B2	8/2003	Schuessler	D870,289 S *	12/2019	Limem D24/155
6,605,116 B2	8/2003	Falcon et al.	2001/0052141 A1	12/2001	Andersen
6,692,527 B1	2/2004	Bellin et al.	2002/0106953 A1	8/2002	Kim et al.
6,692,528 B2	2/2004	Ward et al.	2003/0093151 A1	5/2003	Zhang
6,733,512 B2	5/2004	McGhan	2003/0134067 A1	7/2003	Garcelli
6,743,254 B2	6/2004	Guest et al.	2003/0144734 A1	7/2003	Dreschnack et al.
6,755,861 B2	6/2004	Nakao	2003/0149481 A1	8/2003	Guest et al.
6,913,765 B2	7/2005	Li et al.	2003/0171768 A1	9/2003	McGhan
6,955,690 B1	10/2005	Cao	2003/0205846 A1	11/2003	Bellin et al.
6,962,739 B1	11/2005	Kim et al.	2003/0233150 A1	12/2003	Bourne et al.
7,018,692 B2	3/2006	Kim et al.	2005/0170221 A1	8/2005	Kim et al.
7,058,439 B2	6/2006	Eaton et al.	2007/0059375 A1	3/2007	Bourne et al.
7,081,135 B2	7/2006	Smith et al.	2007/0156230 A1	7/2007	Dugan et al.
7,238,193 B2	7/2007	Gedebou	2007/0196454 A1	8/2007	Stockman et al.
7,645,475 B2	1/2010	Prewett	2007/0198085 A1	8/2007	Benslimane
7,702,378 B2	4/2010	Bolan et al.	2008/0027273 A1 *	1/2008	Gutterman A61B 17/84 600/37
7,771,462 B1	8/2010	Davidson et al.	2008/0027534 A1	1/2008	Edwin et al.
7,785,302 B2	8/2010	Sheetz et al.	2008/0063716 A1	3/2008	Moro et al.
7,810,223 B2	10/2010	Hemerick	2008/0312739 A1	12/2008	Agerup et al.
			2009/0012372 A1	1/2009	Burnett et al.
			2009/0030515 A1	1/2009	Schuessler et al.
			2009/0048684 A1	2/2009	Lesh

(56)

References Cited

U.S. PATENT DOCUMENTS

2009/0118756 A1 5/2009 Valencon et al.
 2009/0118829 A1 5/2009 Powell et al.
 2009/0198332 A1 8/2009 Becker
 2009/0198333 A1 8/2009 Becker
 2009/0202608 A1 8/2009 Alessi et al.
 2009/0270904 A1 10/2009 Birk et al.
 2009/0270985 A1 10/2009 Schuessler
 2009/0275974 A1 11/2009 Marchand et al.
 2009/0326654 A1 12/2009 Powell
 2010/0049316 A1 2/2010 Schuessler
 2010/0070042 A1 3/2010 Bryan et al.
 2010/0168853 A1 7/2010 Job
 2010/0217388 A1* 8/2010 Cohen A61F 2/0059
 623/8
 2011/0054407 A1 3/2011 Olroyd
 2011/0270391 A1 11/2011 Chitre et al.
 2011/0288639 A1 11/2011 Trilokekar et al.
 2011/0306827 A1 12/2011 Chitrc et al.
 2012/0061368 A1 3/2012 Frigerio et al.
 2012/0109080 A1 5/2012 Manesis et al.
 2012/0123537 A1 5/2012 Manesis et al.
 2012/0197393 A1 8/2012 Yu
 2012/0303120 A1 11/2012 Schuessler
 2013/0052142 A1 2/2013 Harder et al.
 2013/0131799 A1 5/2013 Schuessler
 2013/0131801 A1 5/2013 Schuessler
 2013/0171288 A1 7/2013 Harders
 2013/0245758 A1 9/2013 Chitre et al.
 2013/0304207 A1 11/2013 Schuessler
 2013/0325120 A1 12/2013 McClellan
 2014/0257481 A1 9/2014 Brooks et al.
 2015/0351900 A1* 12/2015 Glicksman A61B 90/94
 623/8
 2016/0000547 A1 1/2016 Aiden et al.
 2016/0074152 A1 3/2016 Chitrc et al.
 2016/0262835 A1 9/2016 Davila et al.
 2017/0014226 A1 1/2017 Fenaroli
 2017/0035999 A1 2/2017 Wijay
 2017/0042707 A1 2/2017 Park
 2017/0189165 A1 7/2017 Hristov et al.
 2017/0265990 A1 9/2017 Martin et al.

2017/0319328 A1 11/2017 Davila et al.
 2017/0348089 A1 12/2017 Becker
 2018/0036122 A1 2/2018 Bergheim et al.
 2018/0256276 A1 9/2018 Zamarripa et al.

FOREIGN PATENT DOCUMENTS

EP 0412703 2/1991
 EP 0422302 4/1991
 EP 0478279 4/1992
 EP 0710468 5/1996
 EP 0784987 7/1997
 EP 0872221 2/1999
 EP 1469799 5/2014
 EP 2531254 5/2015
 EP 2928412 3/2017
 EP 3348234 7/2018
 EP 3125824 10/2018
 EP 2996631 12/2019
 FR 587637 4/1925
 FR 895747 2/1945
 GB 2040688 9/1980
 GB 2392077 2/2004
 WO WO 92/20519 11/1992
 WO WO 95/01864 1/1995
 WO WO 02/10667 2/2002
 WO WO 2003/017868 3/2003
 WO WO 2003/057462 7/2003
 WO WO 2003/059617 7/2003
 WO WO 2004/021935 3/2004
 WO WO 2005/000165 1/2005
 WO WO 2008/016983 2/2008
 WO WO 2009/061672 5/2009
 WO WO 2011/084465 7/2011
 WO WO 2012/064683 5/2012
 WO WO 2013/045000 4/2013
 WO WO 2013/105083 7/2013
 WO WO 2014/118773 7/2014
 WO WO 2015/153066 10/2015
 WO WO 2015/179061 11/2015
 WO WO 2016/144475 9/2016
 WO WO 2018/097891 5/2018

* cited by examiner

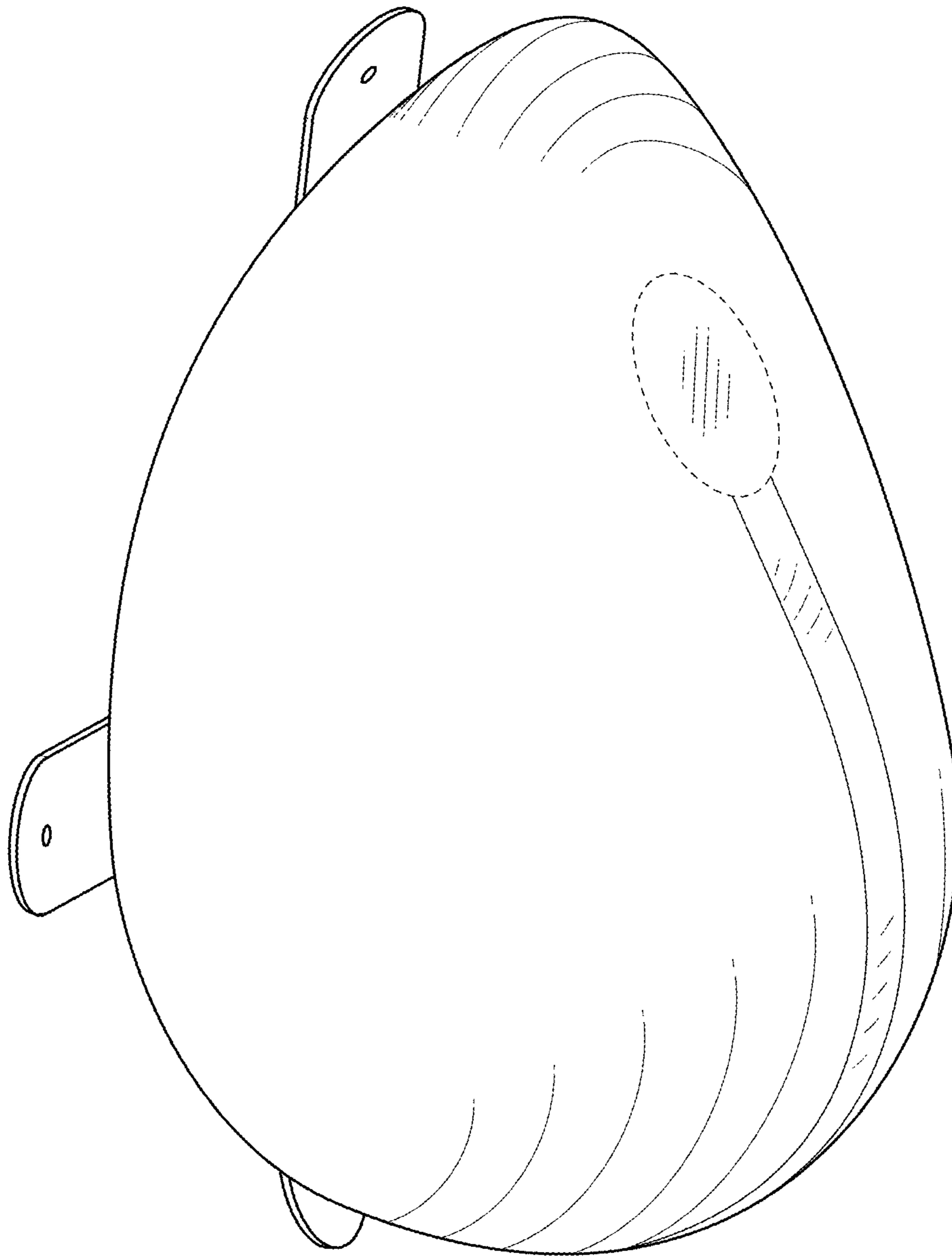


FIG. 1

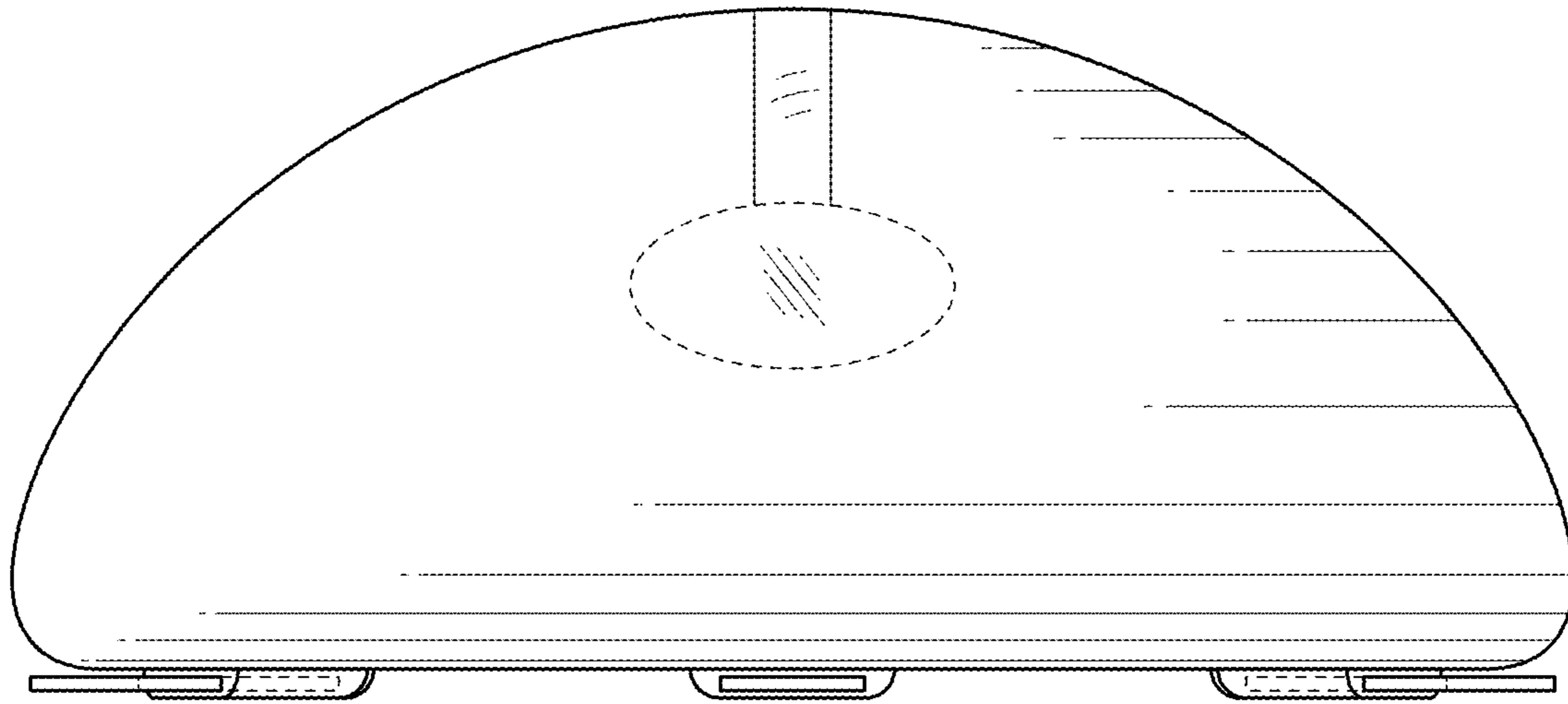


FIG. 2

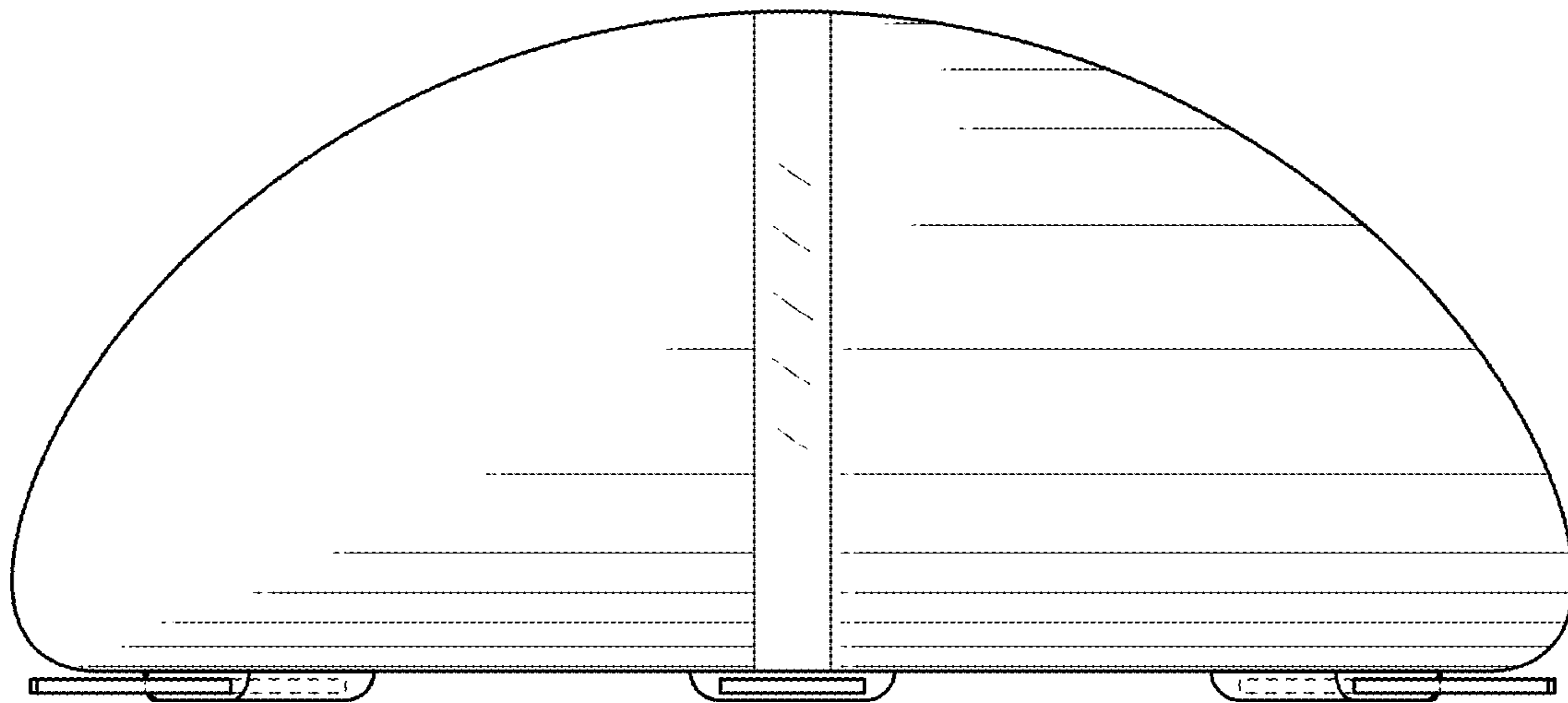


FIG. 3

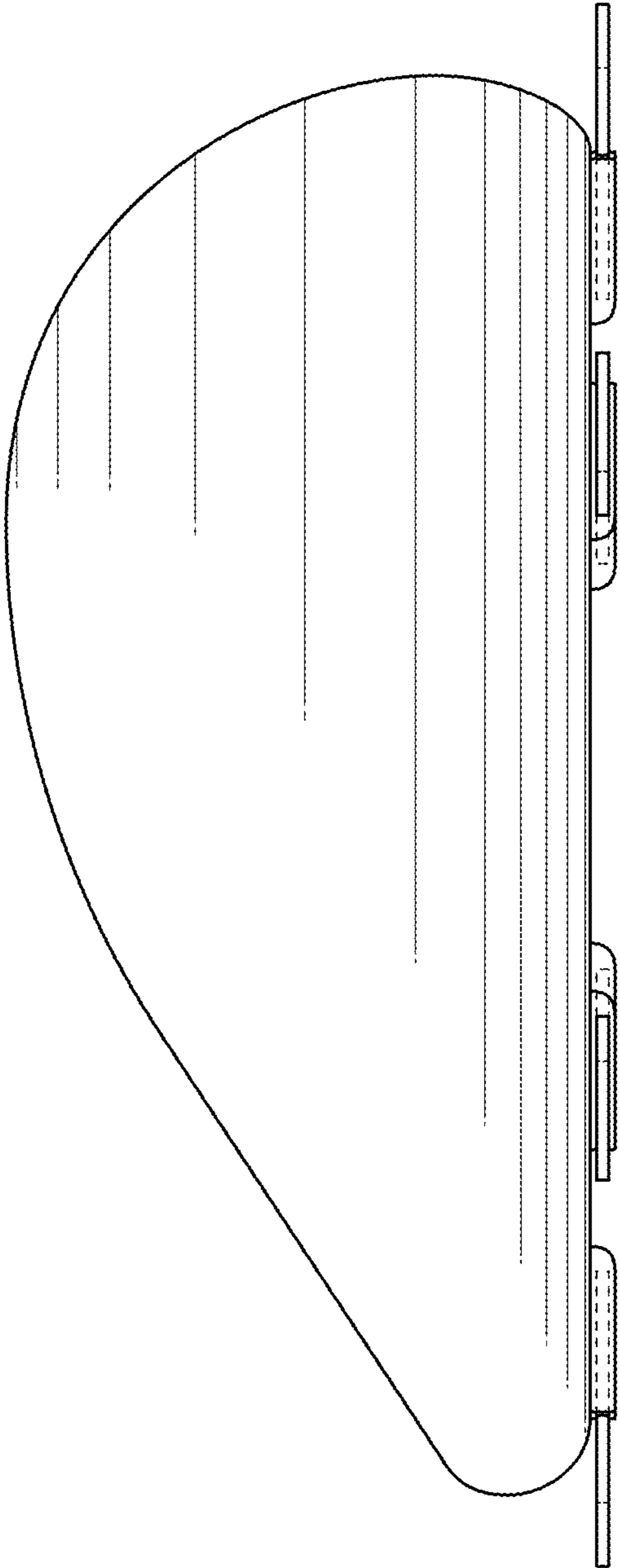


FIG. 4

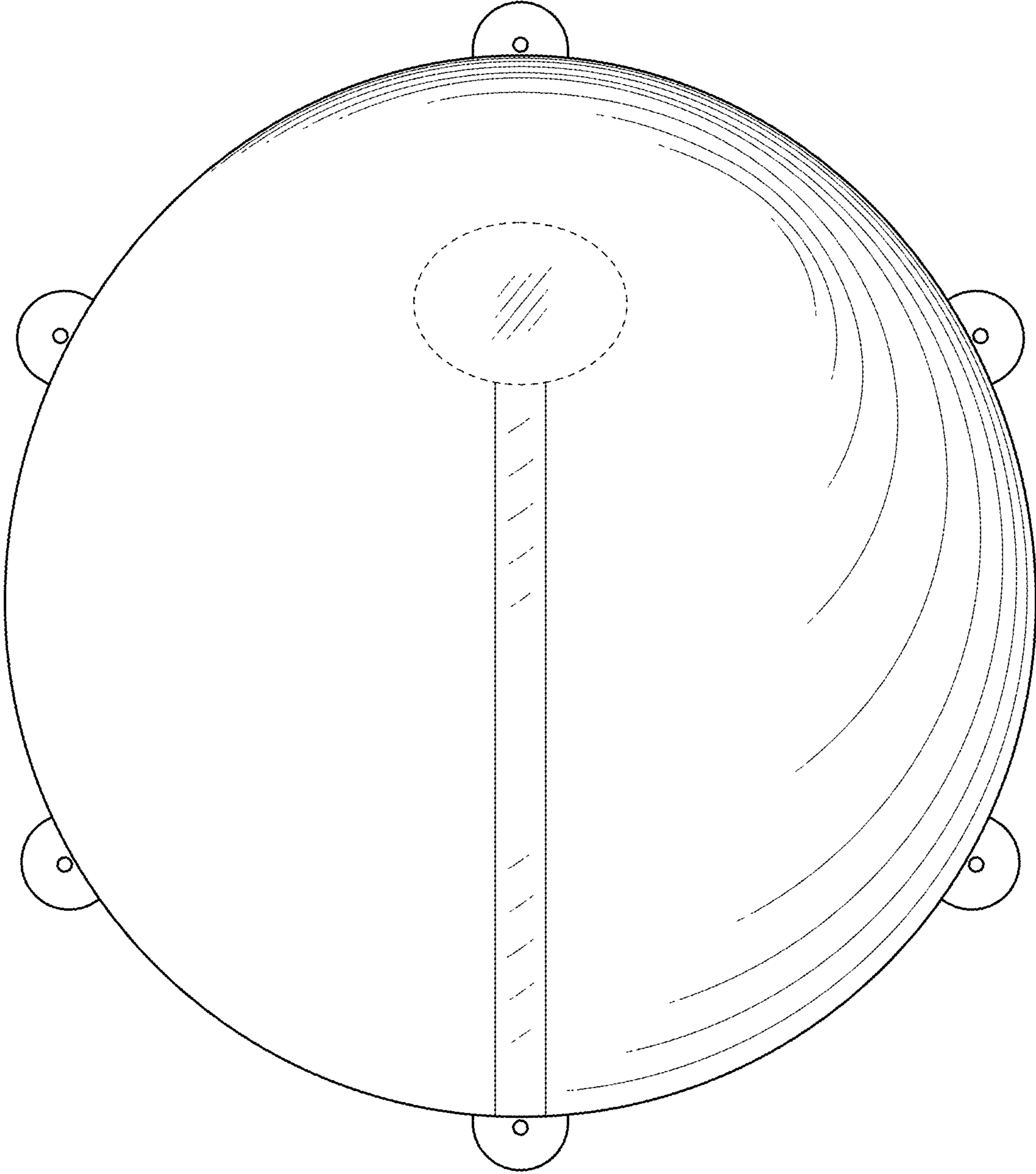


FIG. 5

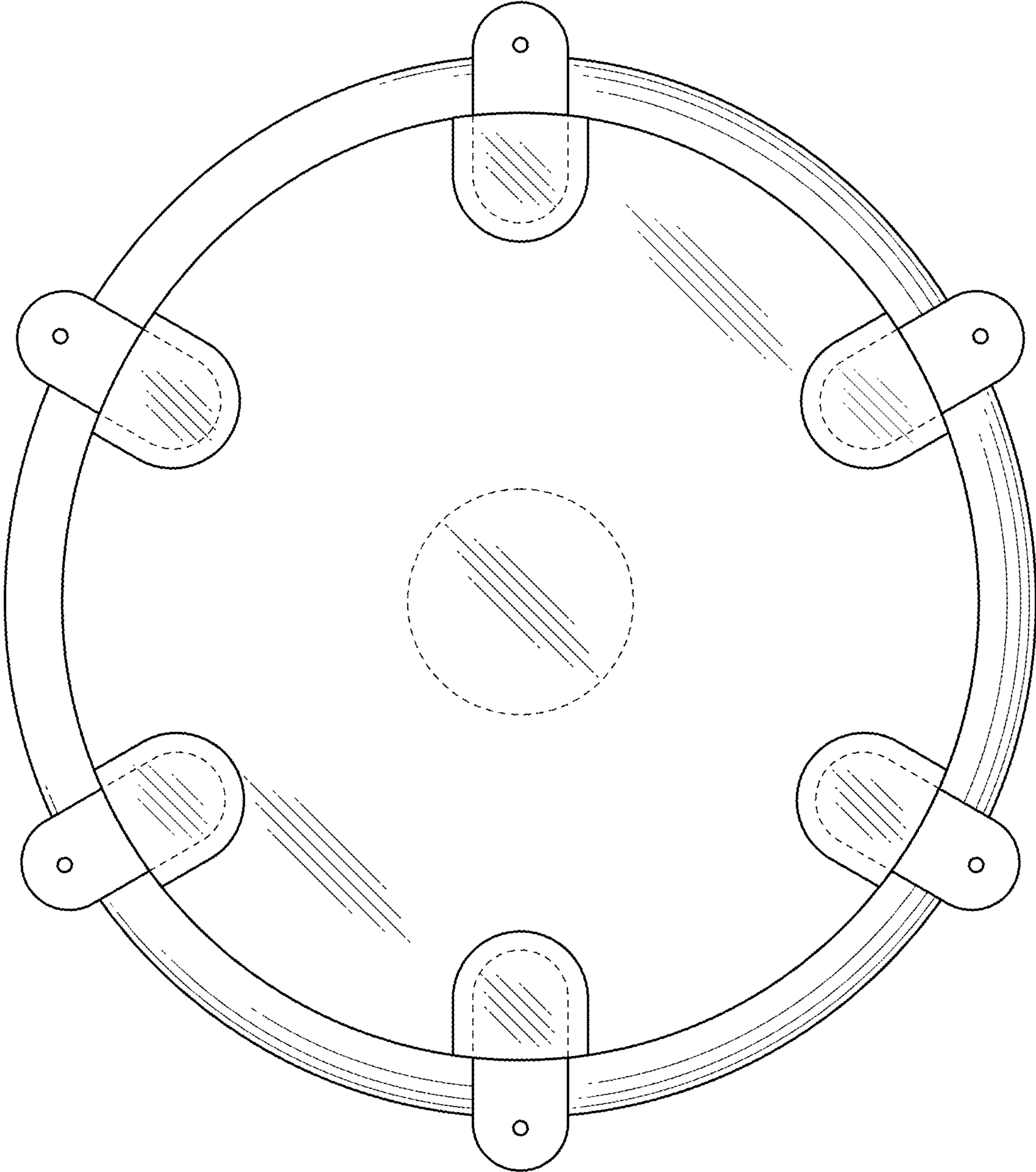


FIG. 6