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(12) **United States Design Patent** (10) **Patent No.:** **US D933,241 S**
Liang et al. (45) **Date of Patent:** **** Oct. 12, 2021**

(54) **UROFLOWMETER**

FOREIGN PATENT DOCUMENTS

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CN 2221776 Y 3/1996
CN 105769223 A 7/2016

(Continued)

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OTHER PUBLICATIONS

Drive Medical. "Drive Medical Folding Steel Bedside Commode, Grey." obtained Nov. 12, 2018 from <https://www.amazon.com/Drive-Medical-Folding-Bedside-Commode/dp/B001HP7AQE/ref=sr_1_3?s=industrial&ie=UTF8&qid=1539732631&sr=1-3&keywords=commode>, 8 pages.

(Continued)

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

(57) **CLAIM**

(21) Appl. No.: **29/707,607**

The ornamental design for a uroflowmeter, as shown and described.

(22) Filed: **Sep. 30, 2019**

DESCRIPTION

Related U.S. Application Data

(63) Continuation of application No. 29/682,876, filed on Mar. 8, 2019.

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

(52) **U.S. Cl.**
USPC **D24/186; D24/122**

(58) **Field of Classification Search**
USPC D24/107, 121, 122, 129, 186, 216, 223, D24/224, 231; D10/96, 102

(Continued)

FIG. 1 shows a front perspective view of a uroflowmeter; FIG. 2 shows a right elevation view of the uroflowmeter of FIG. 1; FIG. 3 shows a left elevation view of the uroflowmeter of FIG. 1; FIG. 4 shows a front elevation view of the uroflowmeter of FIG. 1; FIG. 5 shows a rear elevation view of the uroflowmeter of FIG. 1; FIG. 6 shows a top view of the uroflowmeter of FIG. 1; and, FIG. 7 shows a bottom view of the uroflowmeter of FIG. 1. The dash-dot-dash lines represent the bounds of the claim, and the remaining broken lines illustrate portions of the uroflowmeter that form no part of the claimed design; none of the broken lines form a part of the claimed design.

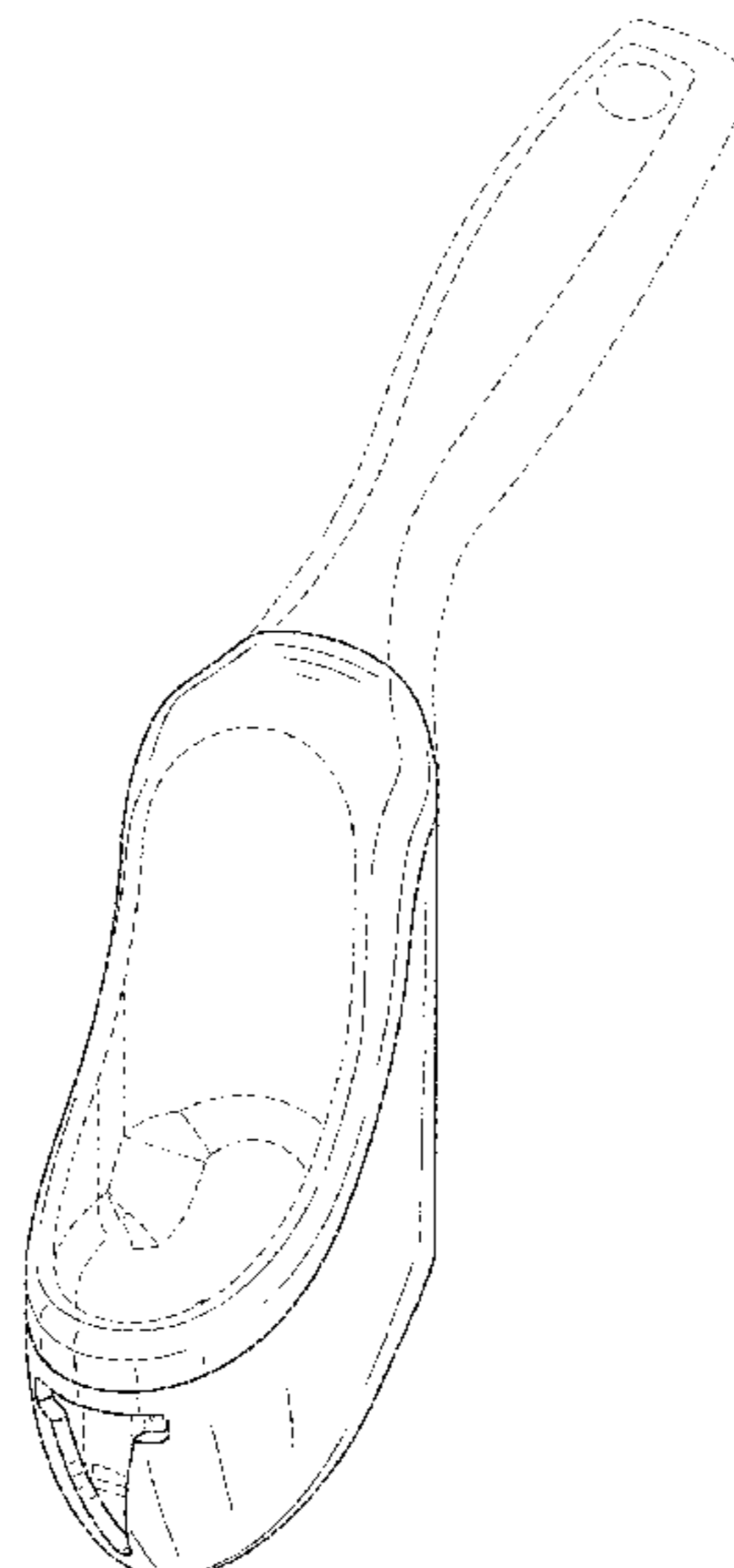
(56) **References Cited**

U.S. PATENT DOCUMENTS

2,648,981 A 8/1953 Drake
3,172,130 A 3/1965 Lange

(Continued)

1 Claim, 4 Drawing Sheets



(58) **Field of Classification Search**
 CPC A61B 10/007; A61B 5/205; A61B 5/207;
 A61B 5/208
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,219,276	A	11/1965	Norris	
3,859,854	A	1/1975	Dye et al.	
3,871,230	A	3/1975	Dye et al.	
3,884,072	A	5/1975	Cheng	
3,929,412	A	12/1975	Villari	
3,931,972	A	1/1976	Fabian	
4,051,431	A	9/1977	Wurster	
4,085,616	A	4/1978	Patel et al.	
4,131,016	A	12/1978	Layton	
4,238,448	A	12/1980	Layton et al.	
4,343,316	A	8/1982	Jespersen	
4,554,687	A	11/1985	Carter et al.	
4,619,273	A	10/1986	Iosif	
D296,360	S *	6/1988	Oelberg	D24/186
4,832,046	A	5/1989	Parrish	
4,891,993	A	1/1990	Barker	
5,046,510	A	9/1991	Ams et al.	
5,062,304	A	11/1991	Van et al.	
5,176,148	A	1/1993	Wiest et al.	
D340,768	S	10/1993	Jabour	
5,377,101	A	12/1994	Rollema	
5,422,076	A	6/1995	Jones	
D378,129	S *	2/1997	Wexler	D24/122
D422,851	S	4/2000	Joergensen	
D425,365	S	5/2000	Chien	
D436,801	S	1/2001	Wonderley	
6,398,742	B1	6/2002	Kim	
D460,328	S	7/2002	De Groote et al.	
D461,105	S	8/2002	Law	
6,651,259	B1	11/2003	Hartman et al.	
D492,995	S	7/2004	Rue et al.	
D494,279	S *	8/2004	Cogan	D24/216
6,889,563	B2	5/2005	Tomita et al.	
6,904,809	B1	6/2005	Aundal	
6,931,943	B1	8/2005	Aundal	
D545,621	S	7/2007	Hood	
D551,032	S	9/2007	Lion et al.	
D552,431	S	10/2007	Chou	
D572,089	S	7/2008	Teys et al.	
7,416,542	B2	8/2008	Aundal	
D598,251	S	8/2009	Ikoma et al.	
7,606,617	B2	10/2009	Wariar	
7,739,907	B2	6/2010	Boiarski	
D619,246	S	7/2010	Hazeres	
7,819,020	B2	10/2010	Jacobi et al.	
7,892,217	B2	2/2011	Boiarski	
8,141,420	B2	3/2012	Hirao	
D659,558	S	5/2012	Johnson et al.	
8,231,552	B2	7/2012	Shahar et al.	
8,424,376	B2	4/2013	Boiarski	
D681,392	S	5/2013	Dichraff et al.	
D688,370	S *	8/2013	Desai	D24/122
8,500,705	B2	8/2013	Kim	
8,544,341	B2	10/2013	Grumbles et al.	
D709,185	S *	7/2014	Queiroli	D24/122
8,813,551	B2	8/2014	Boiarski	
9,021,878	B2	5/2015	Grinstein et al.	
D736,043	S	8/2015	Lee et al.	
D770,613	S *	11/2016	Roberts	D24/122
9,642,737	B2	5/2017	Seres et al.	
9,775,556	B2	10/2017	Dimino et al.	
D823,652	S	7/2018	Dooley et al.	
10,034,659	B2	7/2018	Siller Gonzalez et al.	
D842,985	S *	3/2019	Heckerman	D24/122
D862,999	S	10/2019	Riedel et al.	
D871,137	S	12/2019	Brouillac	
D876,183	S	2/2020	Yee	
D889,918	S	7/2020	Hubert	
D893,947	S	8/2020	Pulk	

2005/0261605	A1	11/2005	Shemer et al.	
2008/0312556	A1	12/2008	Dijkman	
2008/0312557	A1	12/2008	Cho et al.	
2011/0000309	A1	1/2011	Griffiths et al.	
2012/0109008	A1	5/2012	Charlez et al.	
2016/0029942	A1	2/2016	Paulsen et al.	
2016/0051176	A1	2/2016	Ramos et al.	
2017/0020433	A1	1/2017	Hotaling et al.	
2017/0086728	A1	3/2017	Hidas	
2017/0105670	A1	4/2017	Holt et al.	
2017/0135622	A1	5/2017	Shimokawa et al.	
2017/0307423	A1	10/2017	Pahwa et al.	
2018/0085008	A1	3/2018	Hall et al.	
2018/0303465	A1 *	10/2018	Lyon	B01D 29/13
2019/0365306	A1	12/2019	Laing et al.	
2019/0365307	A1 *	12/2019	Laing	G06F 9/542
2019/0365308	A1 *	12/2019	Laing	A61B 5/208

FOREIGN PATENT DOCUMENTS

CN	106037766	A	10/2016
DE	3007855	A1	9/1981
DE	19733630	A1	2/1999
DE	102014008760	A1	1/2015
EM	005840378-0001		11/2018
EM	005840378-0002		11/2018
EM	005840378-0003		11/2018
EM	005840436-0001		11/2018
EM	005840436-0002		11/2018
EM	005840436-0003		11/2018
EP	2303124	B1	8/2012
EP	2741671	B1	1/2016
EP	2716219	B1	3/2017
EP	2564778	B1	4/2018
JP	3729732	B2	10/2005
KR	20110030826	A	3/2011
RU	2034516	C1	5/1995
RU	2071724	C1	1/1997
RU	2643110	C1	1/2018
WO	9925246	A1	5/1999
WO	2009035599	A1	3/2009
WO	2009142508	A1	11/2009
WO	2014141234	A1	9/2014
WO	2016056571	A1	4/2016
WO	2017036952	A1	3/2017
WO	2017149272	A1	9/2017
WO	2018036664	A1	3/2018
WO	2018051244	A1	3/2018

OTHER PUBLICATIONS

Specimen Collection Unit. "Specimen Collection Unit, QTY of 1." obtained Nov. 12, 2018 from <<https://www.amazon.com/Specimen-Collection-Unit-QTY-1/dp/B002ZUCVP0#feature-bullets-btf>>, 6 pages.

Bestmedical. "Uroflowmeter: Portable & wireless." obtained Nov. 12, 2018 from <<http://www.best-medical.nl/uroflowmeter/>>, 6 pages., Jan. 1, 2016.

MDTI. "Uflow meter Male Urine Peak Flow Device." obtained Nov. 12, 2018 from <<https://www.mdti.co.uk/uflow->>, 2 pages., Jan. 1, 2017.

Albyn Medical Product Detail. "SmartFlow: SmartFlow brings together high specifications and ease-of-use." Obtained Nov. 12, 2018 from <<http://www.albynmedical.com/products/ProductDetail.aspx?ID=8>>, 2 pages., Jan. 1, 2018.

Laborie. "Uroflowmetry: Uroflowmeters designed for practical, everyday studies, available in a range of configurations to meet different demands." obtained Nov. 12, 2018 from <<https://www.laborie.com/category/urology-urogynecology/uroflowmetry/>>, 6 pages., Jan. 1, 2018.

Minze Health. "Homeflow." obtained Nov. 12, 2018 from <<https://minzehealth.com/products/homeflow/>>, 8 pages., Jan. 1, 2018.

Chun, Kwonsoo et al., "Noninvasive Medical Tools for Evaluating Voiding Pattern in Real Life." International Neurology Journal, 2017, S10-16., Jan. 1, 2017.

PCT, "International Search Report and Written Opinion", Application No. PCT/US2019/021292, dated May 8, 2019, 11 pages.

(56)

References Cited

OTHER PUBLICATIONS

PCT, "International Search Report and Written Opinion", Application No. PCT/US19/21421, dated May 31, 2019, 16 pages.

* cited by examiner

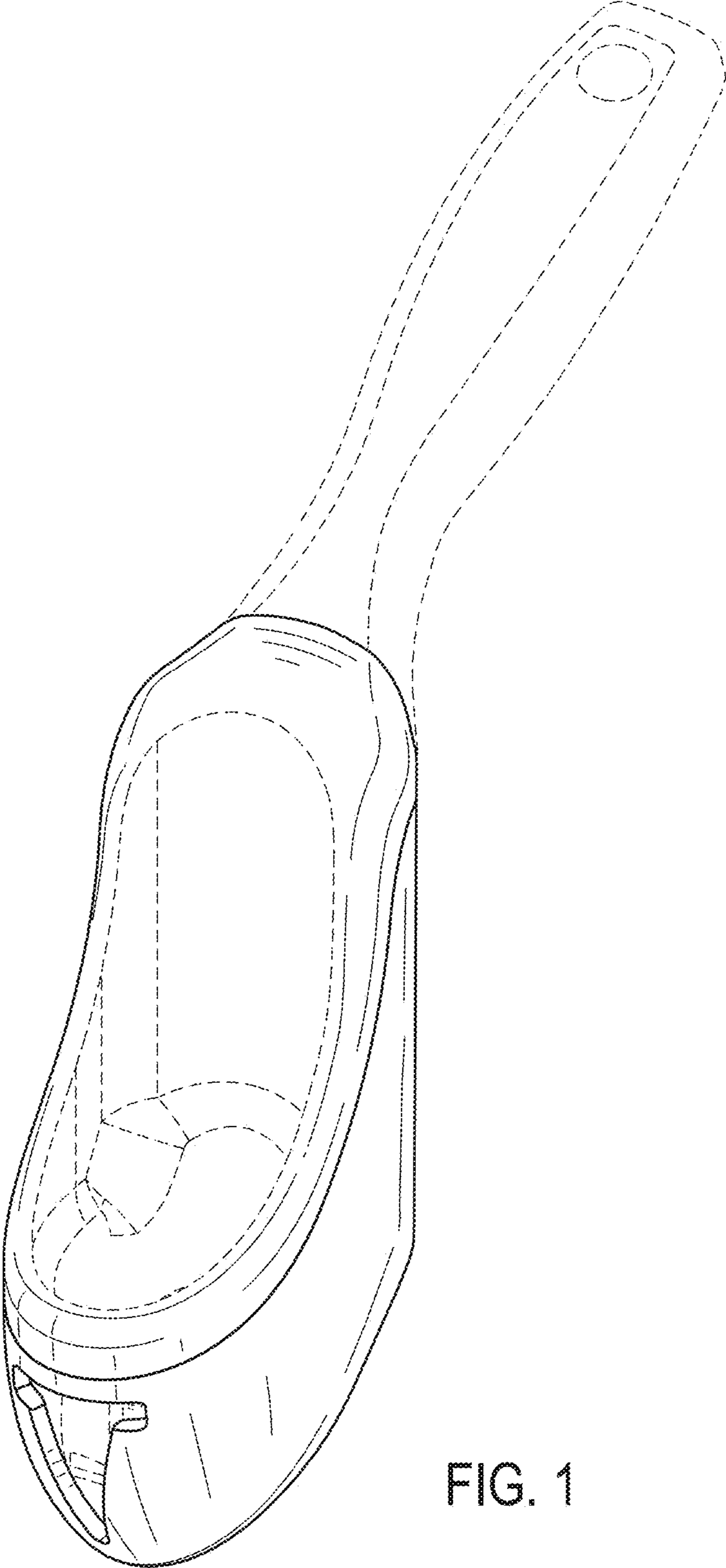


FIG. 1

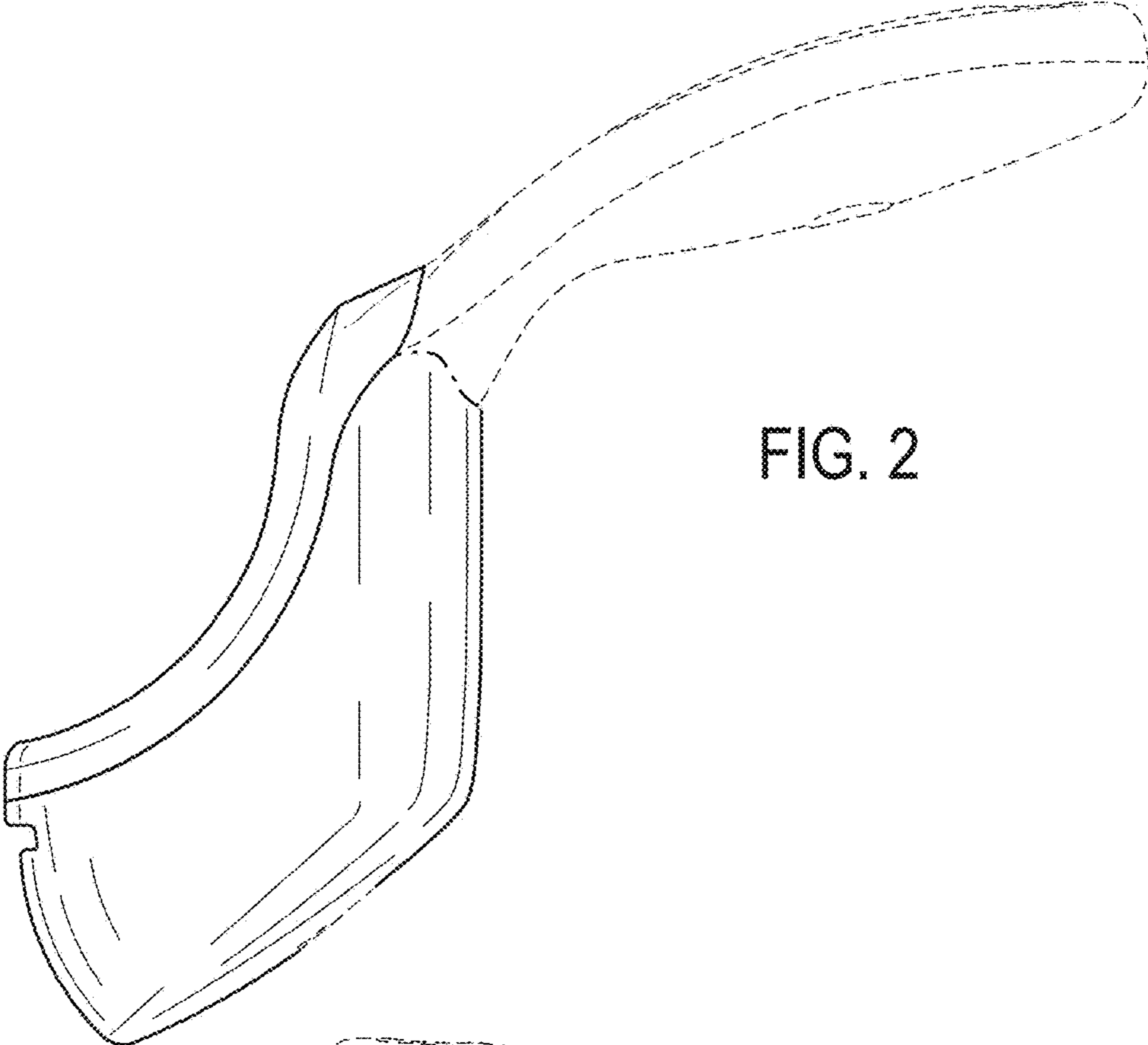


FIG. 2

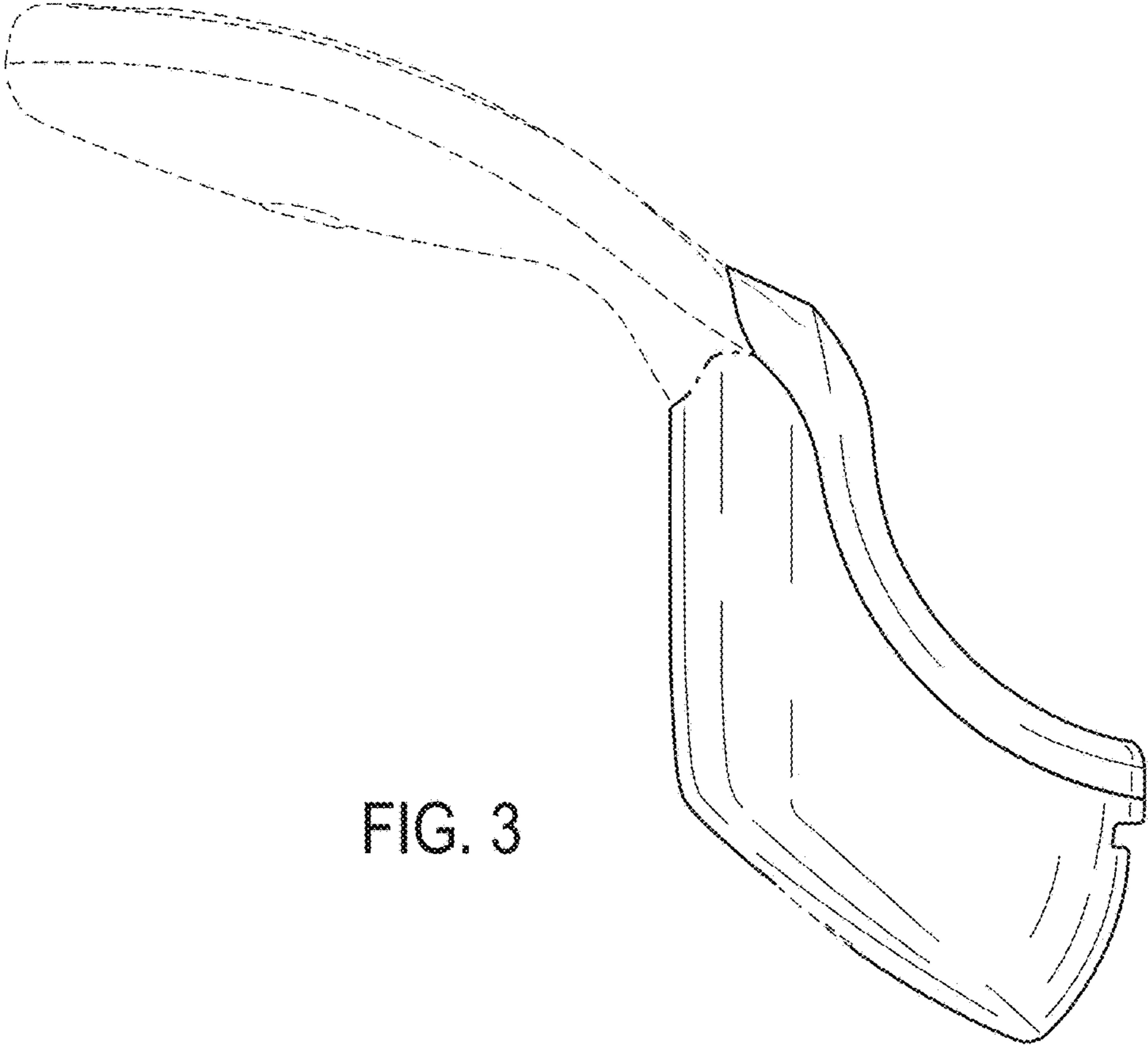


FIG. 3

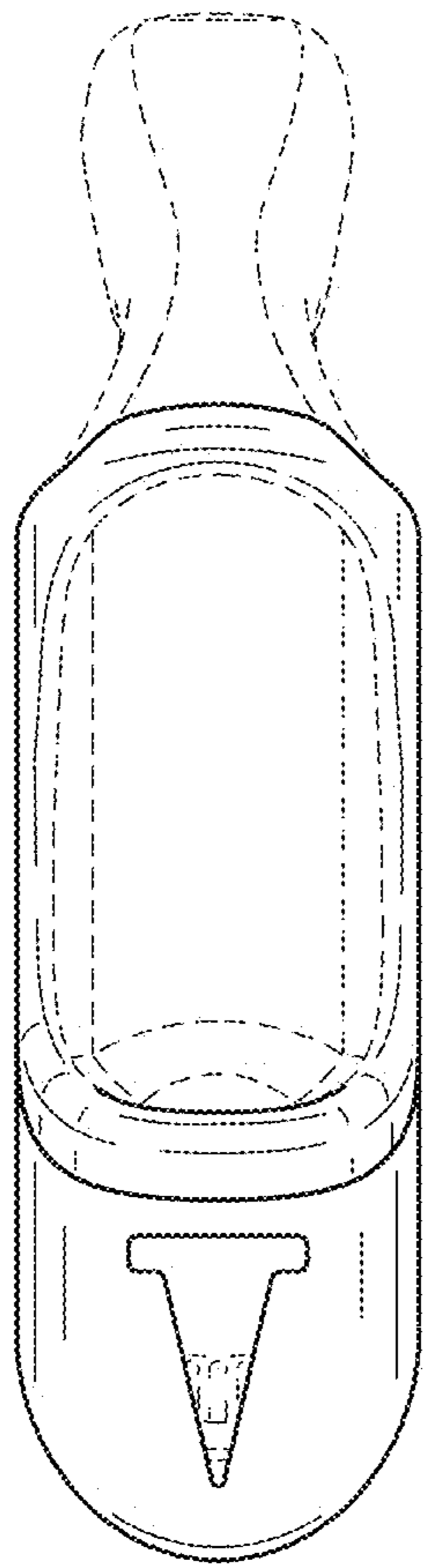


FIG. 4

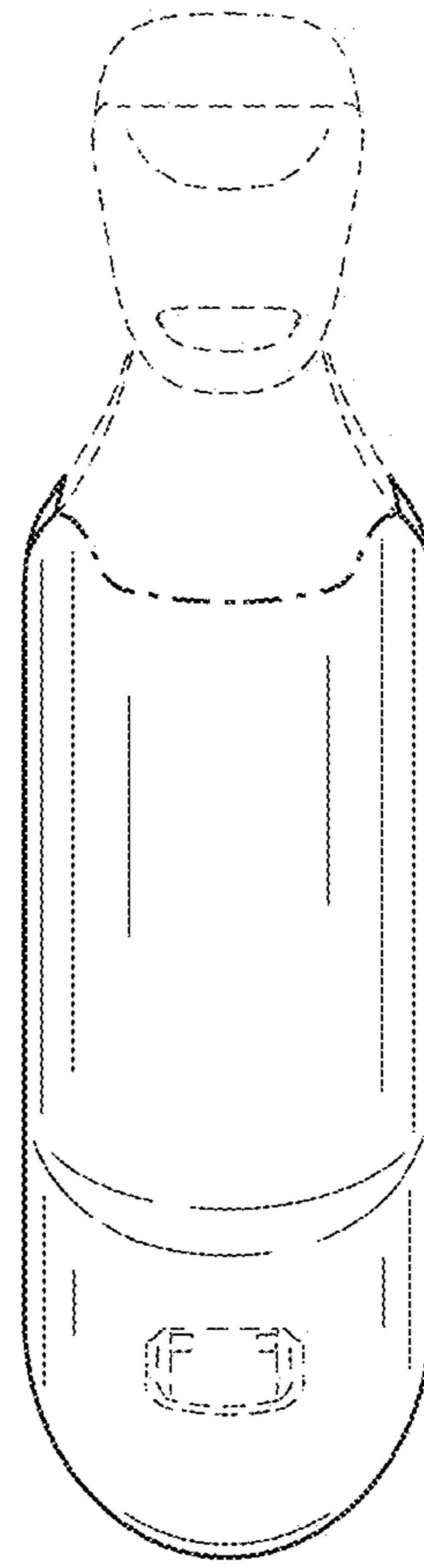


FIG. 5

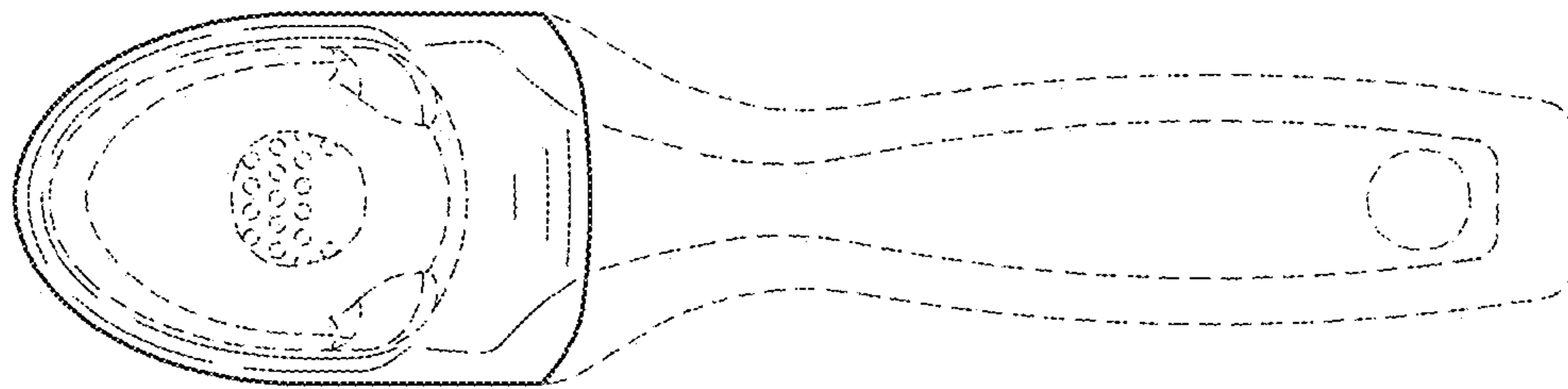


FIG. 6

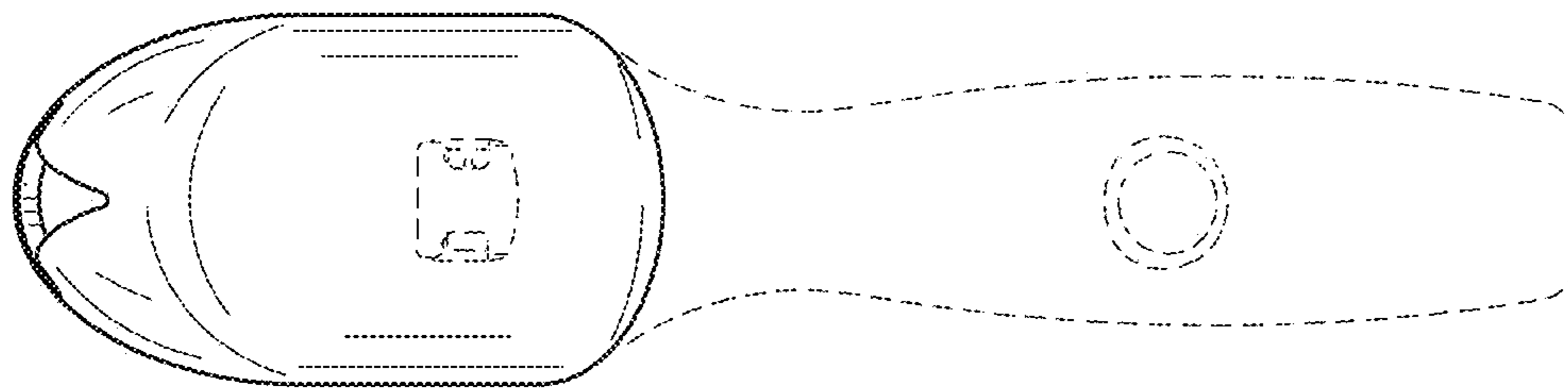


FIG. 7