

US00D898184S

(12) **United States Design Patent** (10) **Patent No.:** **US D898,184 S**
Miller (45) **Date of Patent:** **** Oct. 6, 2020**

(54) **BREAST PUMP VALVE**
(71) Applicant: **Handi-Craft Company**, St. Louis, MO (US)
(72) Inventor: **Charles Miller**, Barnhart, MO (US)
(73) Assignee: **Handi-Craft Company**, St. Louis, MO (US)

(**) Term: **15 Years**
(21) Appl. No.: **29/678,508**

(22) Filed: **Jan. 29, 2019**
(51) **LOC (12) Cl.** **24-02**
(52) **U.S. Cl.**
USPC **D24/109**; D24/129; D23/233
(58) **Field of Classification Search**
USPC D24/107-108, 111, 127, 129, 188, 185, D24/121, 109; D23/233
CPC A61M 1/06; A61M 1/062
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS

4,929,229	A	5/1990	Larsson	
5,330,437	A *	7/1994	Durman	A61M 39/06 137/846
5,415,632	A	5/1995	Samson	
5,971,952	A	10/1999	Medo	
6,090,065	A *	7/2000	Giles	A61M 1/062 604/315
6,110,140	A	8/2000	Silver	
6,139,521	A	10/2000	Larsson	
6,270,474	B1	8/2001	Nuesch	
6,299,594	B1	10/2001	Silver	
6,461,324	B1	10/2002	Schlenso	
D468,015	S *	12/2002	Horppu	D24/129
6,497,677	B2	12/2002	Silver	
6,673,036	B1	1/2004	Britto	

D488,377	S *	4/2004	Shih	D9/443
6,837,265	B2	1/2005	Porter et al.	
6,840,918	B1	1/2005	Britto et al.	
7,255,681	B1	8/2007	Silver et al.	
7,569,031	B2	8/2009	Britto et al.	
7,641,629	B2	1/2010	Yuen et al.	
7,727,182	B2	6/2010	Silver	
7,749,188	B2	7/2010	Tashiro et al.	
7,789,865	B2	9/2010	Myers et al.	
7,806,855	B2 *	10/2010	Kliegman	A61M 1/06 604/73
7,875,000	B2	1/2011	Krebs et al.	
8,070,716	B2	12/2011	Sutrina et al.	
8,070,724	B2	12/2011	Attolini et al.	
8,100,854	B2	1/2012	Vogelin et al.	

(Continued)

FOREIGN PATENT DOCUMENTS

CH	692323	A5	5/2002
CN	202699867	U	1/2013

(Continued)

Primary Examiner — Lilyana Bekic
(74) *Attorney, Agent, or Firm* — Armstrong Teasdale LLP

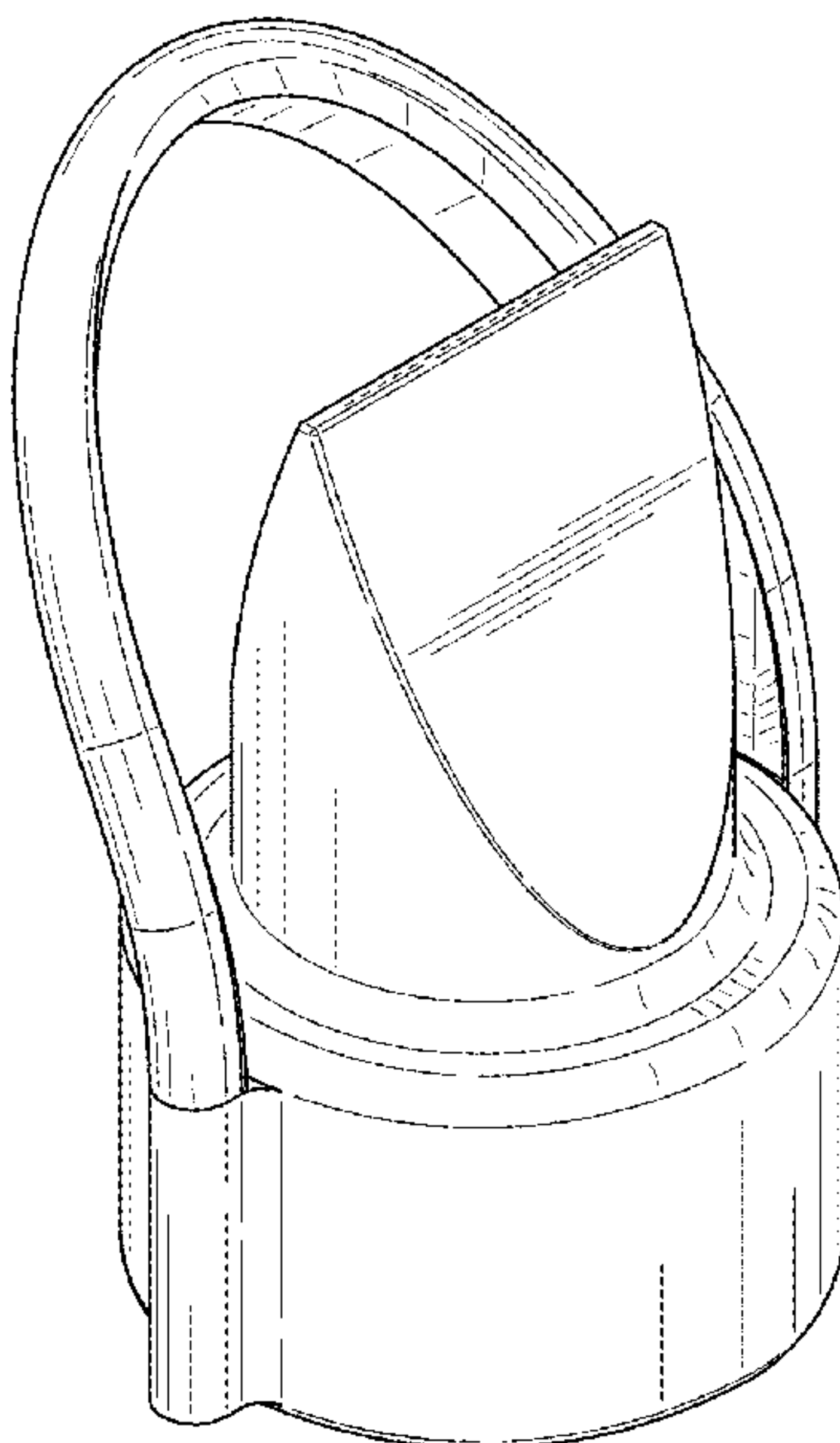
(57) **CLAIM**

I claim the ornamental design for a breast pump valve, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a breast pump valve of my new design.
FIG. 2 is a front view thereof.
FIG. 3 is a back 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; and,
FIG. 7 is a bottom view thereof.
The broken lines in the drawings depict portions of the breast pump valve that form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

8,187,219 B1 5/2012 Chiang
 D676,956 S * 2/2013 Kirchner D24/109
 D682,989 S * 5/2013 Eagle A61M 15/0086
 D23/233
 8,529,501 B2 9/2013 Wach et al.
 8,591,458 B2 11/2013 Britto et al.
 8,678,244 B2 3/2014 Yang et al.
 D715,404 S * 10/2014 Clarke D23/233
 9,789,988 B2 10/2017 Wilson et al.
 10,016,547 B2 7/2018 Pollen et al.
 10,183,102 B2 * 1/2019 Kim A61M 1/06
 2005/0159701 A1 * 7/2005 Conaway A61M 1/066
 604/74
 2005/0228342 A1 10/2005 Yuen et al.
 2008/0167605 A1 7/2008 Torvik
 2010/0179472 A1 7/2010 Weston
 2010/0292636 A1 * 11/2010 Renz A61M 1/066
 604/74
 2010/0324477 A1 * 12/2010 Paterson A61M 1/0072
 604/74
 2011/0266245 A1 11/2011 Lau
 2012/0022445 A1 * 1/2012 Jones A61M 1/062
 604/74
 2012/0116299 A1 5/2012 Tack
 2012/0192977 A1 * 8/2012 Tsao F16K 15/144
 137/843
 2013/0046234 A1 2/2013 Van Eijkelenborg et al.
 2013/0140260 A1 6/2013 Dunn et al.
 2013/0226147 A1 8/2013 Silver et al.

2014/0052056 A1 * 2/2014 Garbez A61M 1/064
 604/74
 2014/0052058 A1 2/2014 Britto et al.
 2015/0217033 A1 * 8/2015 Pollen A61M 1/06
 604/74
 2017/0080135 A1 3/2017 Chen
 2018/0008758 A1 1/2018 Garbez et al.
 2018/0093024 A1 4/2018 Analytis et al.
 2018/0104396 A1 * 4/2018 Park A61M 1/062
 2019/0143014 A1 * 5/2019 Ochiai A61M 1/064
 604/74
 2019/0175801 A1 * 6/2019 Levine A61M 1/064
 2019/0209747 A1 * 7/2019 Analytis A61M 1/062
 2020/0078503 A1 * 3/2020 Bartlett A61M 1/066
 2020/0078504 A1 * 3/2020 Bartlett A61M 1/062

FOREIGN PATENT DOCUMENTS

EP 0739220 A1 10/1996
 EP 0969886 A1 1/2000
 EP 1034807 A1 9/2000
 EP 0739229 B1 8/2002
 EP 1586340 B1 6/2011
 WO 1990000413 A1 1/1990
 WO 1995018639 A1 7/1995
 WO 9829150 A1 7/1998
 WO 1999020927 A1 4/1999
 WO 2004058330 A1 7/2004
 WO 2008144951 A1 12/2008
 WO 2009006627 A2 1/2009
 WO 2009006627 A3 4/2009
 WO 2016176790 A1 11/2016
 WO 2018009449 A1 1/2018

* cited by examiner

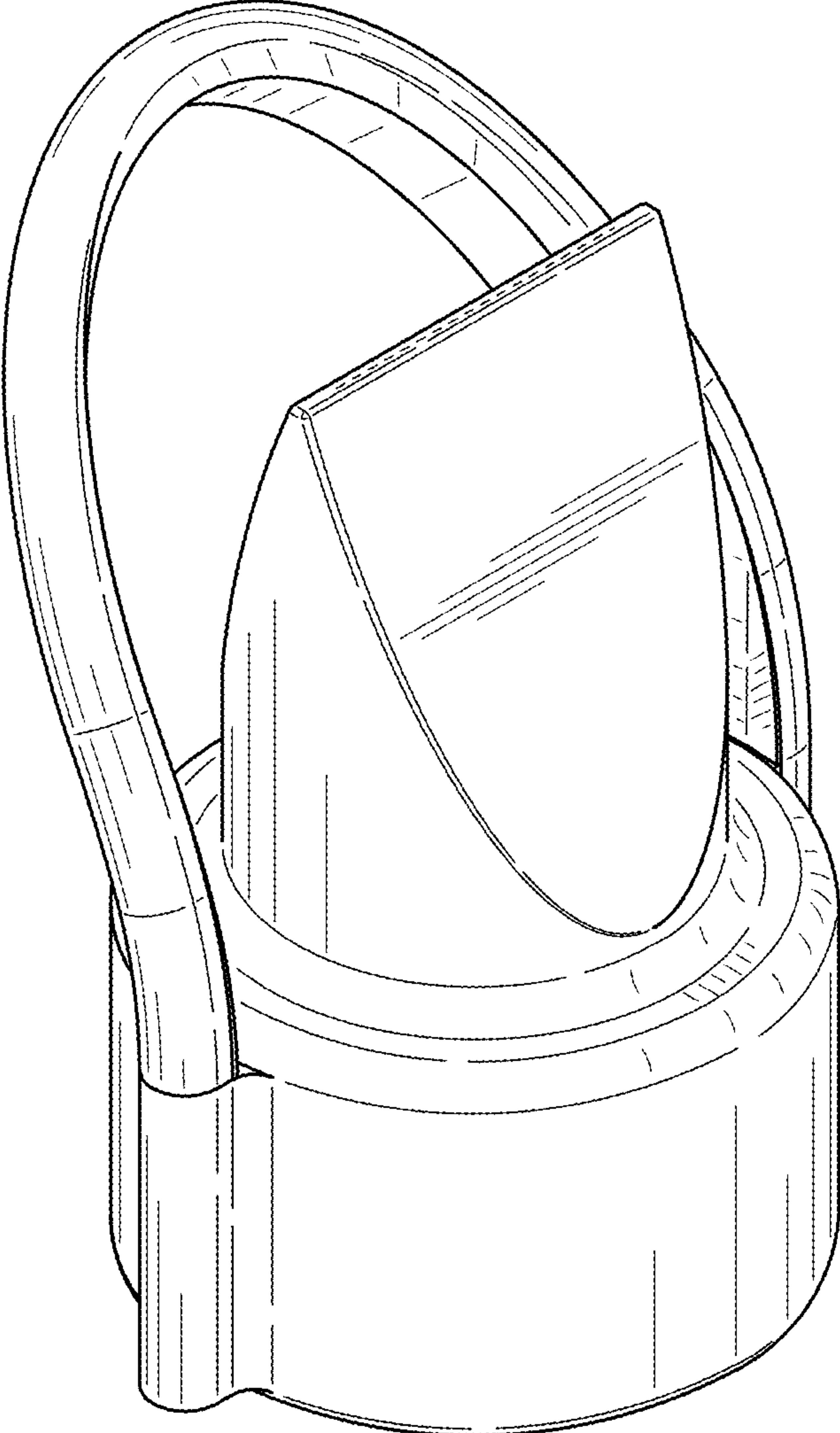


FIG. 1

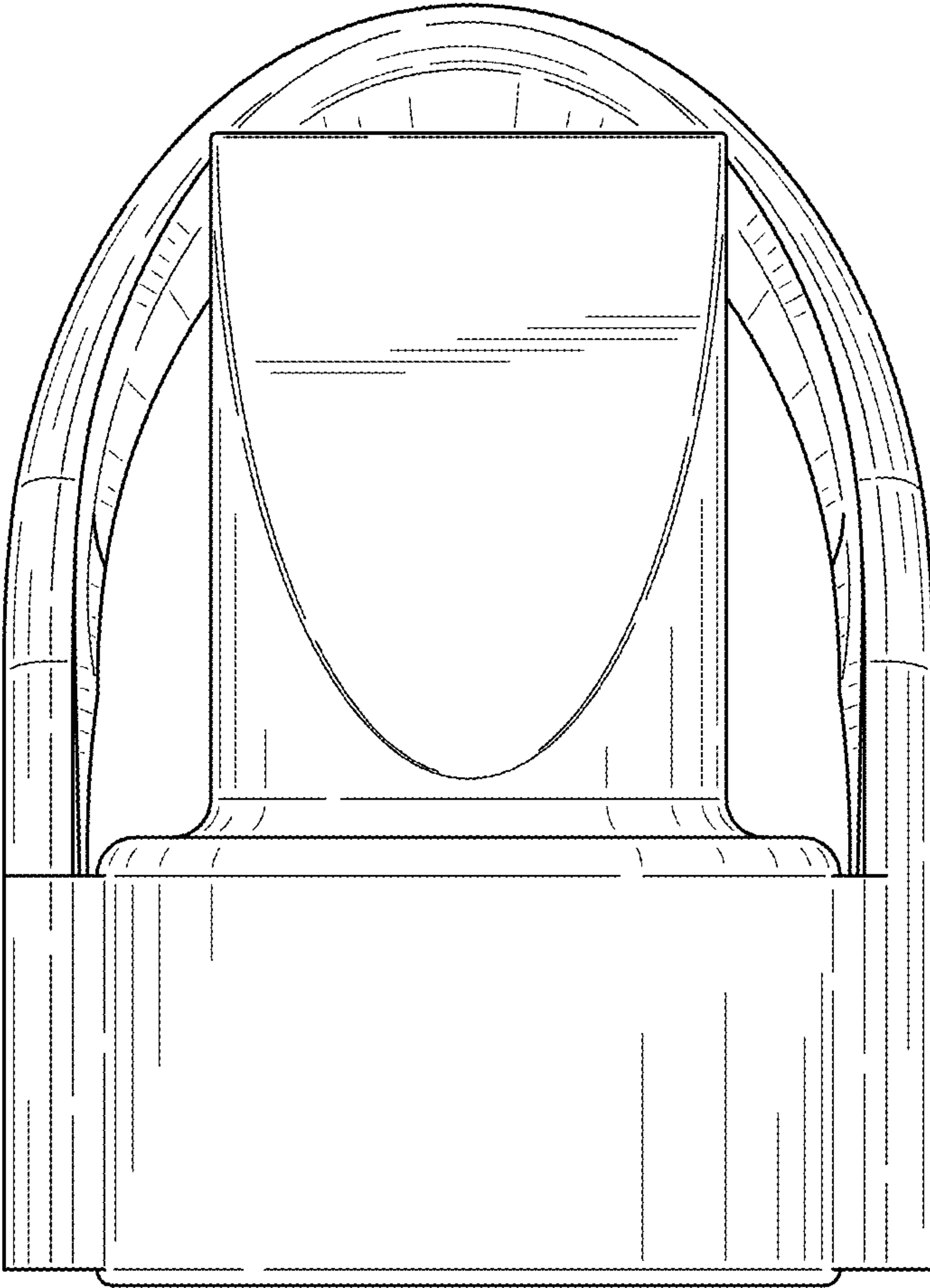


FIG. 2

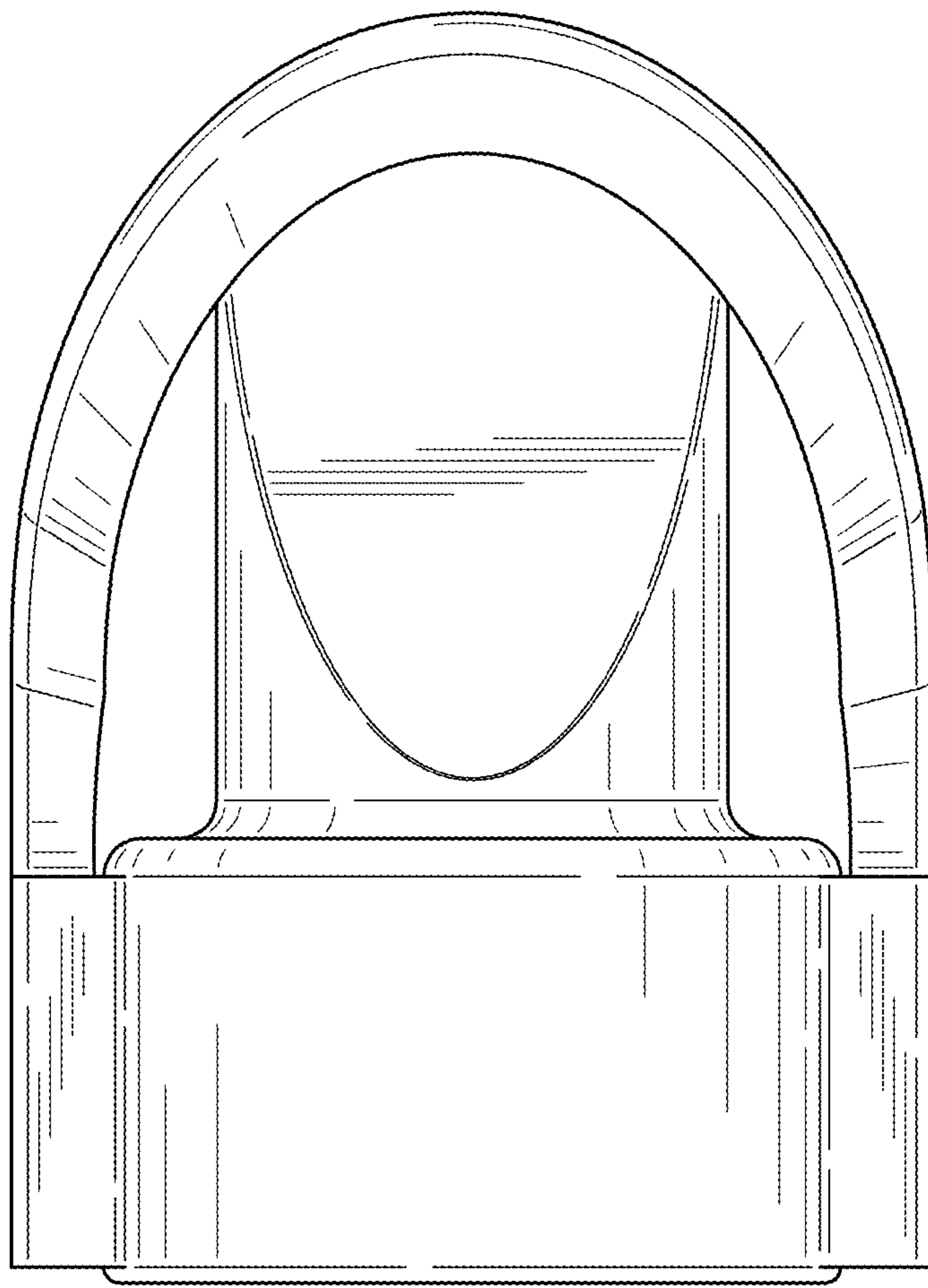


FIG. 3

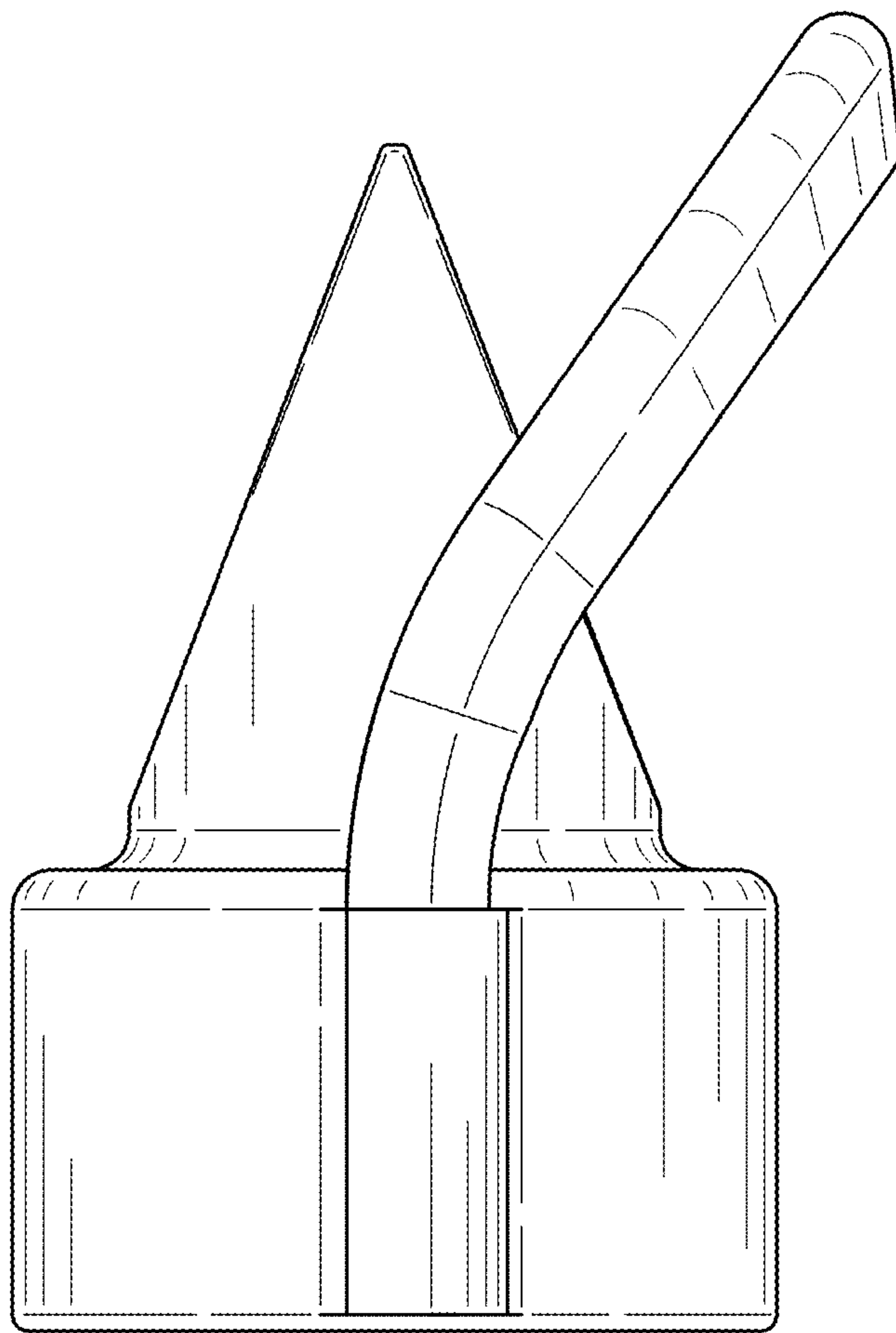


FIG. 4

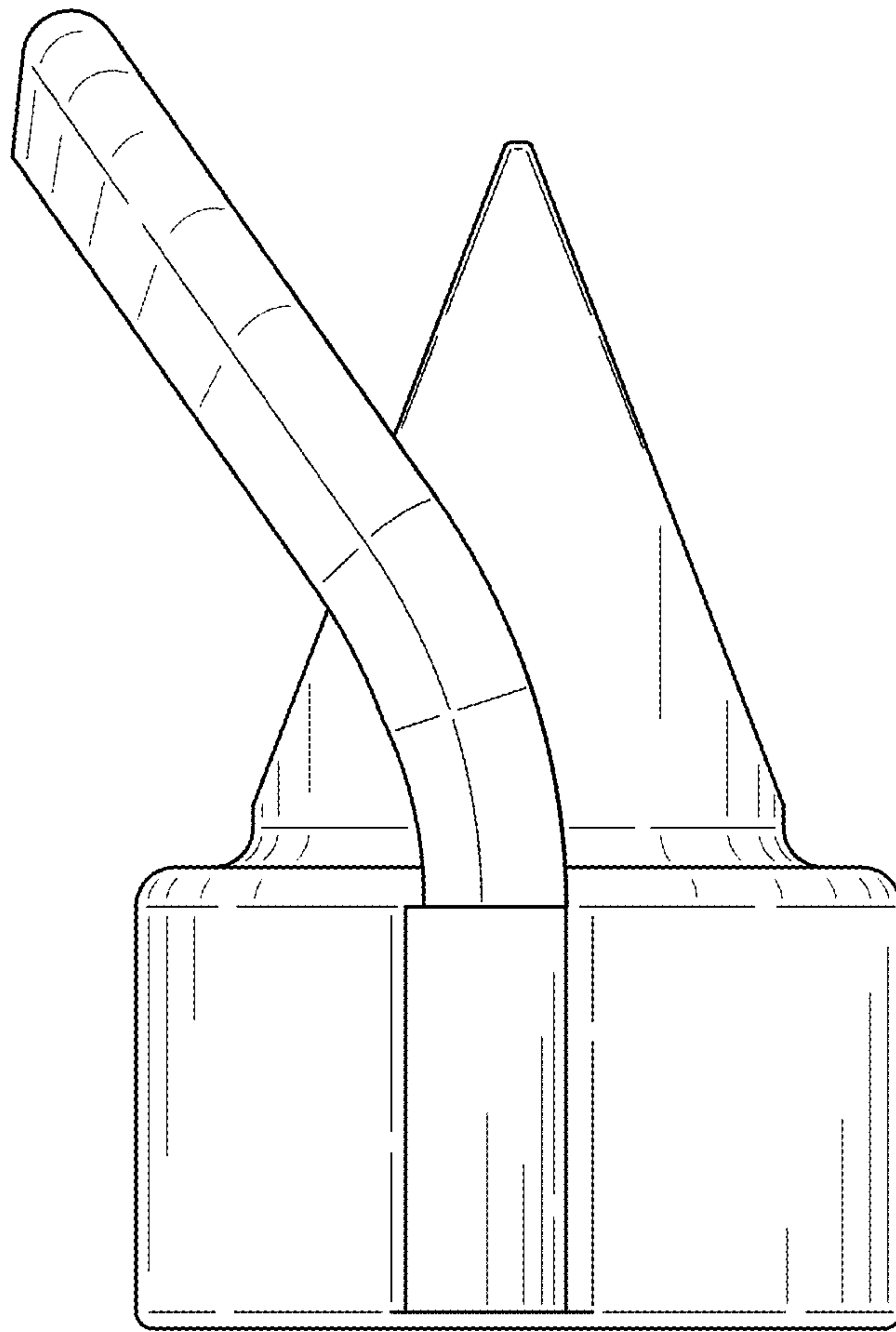


FIG. 5

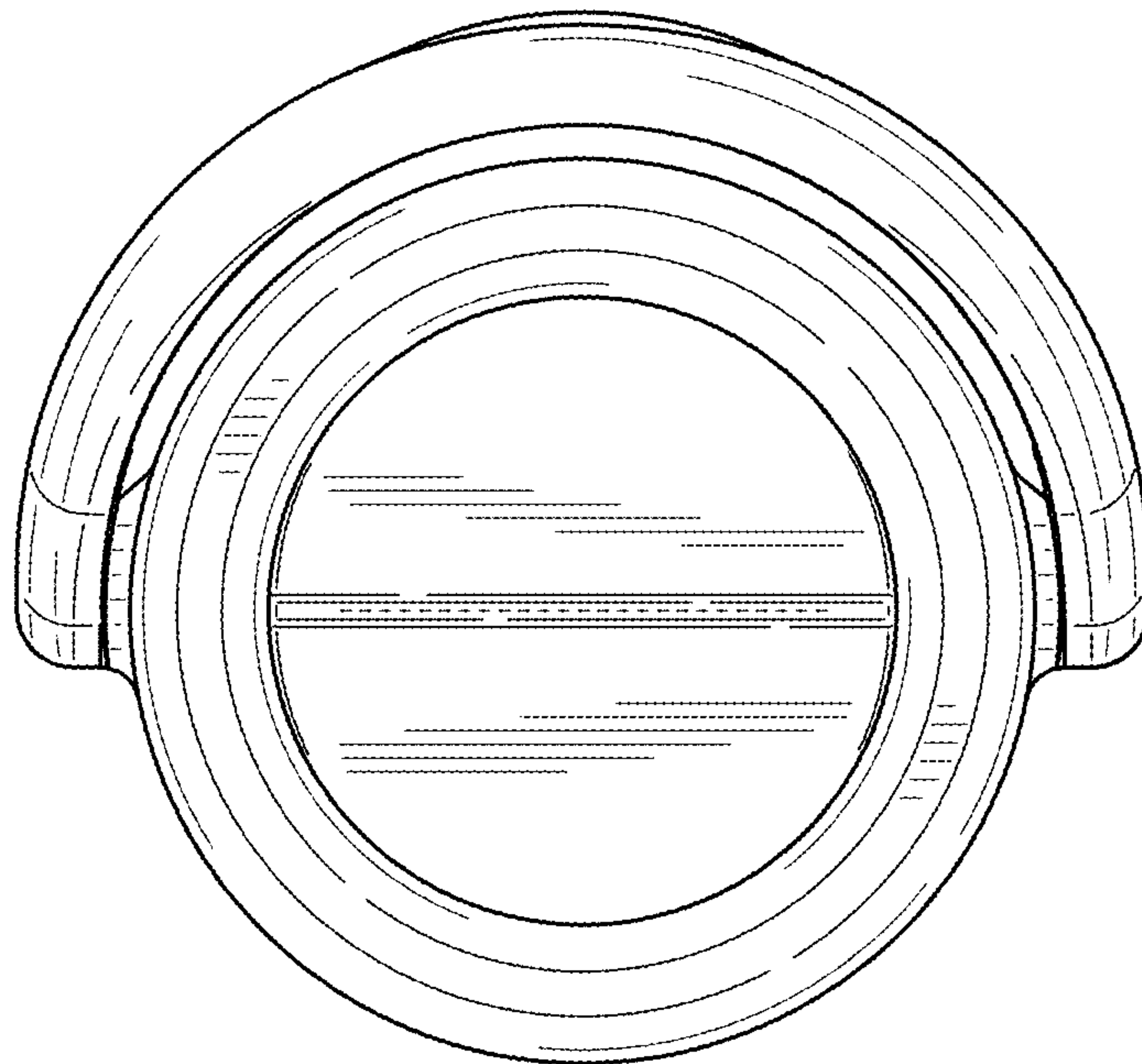


FIG. 6

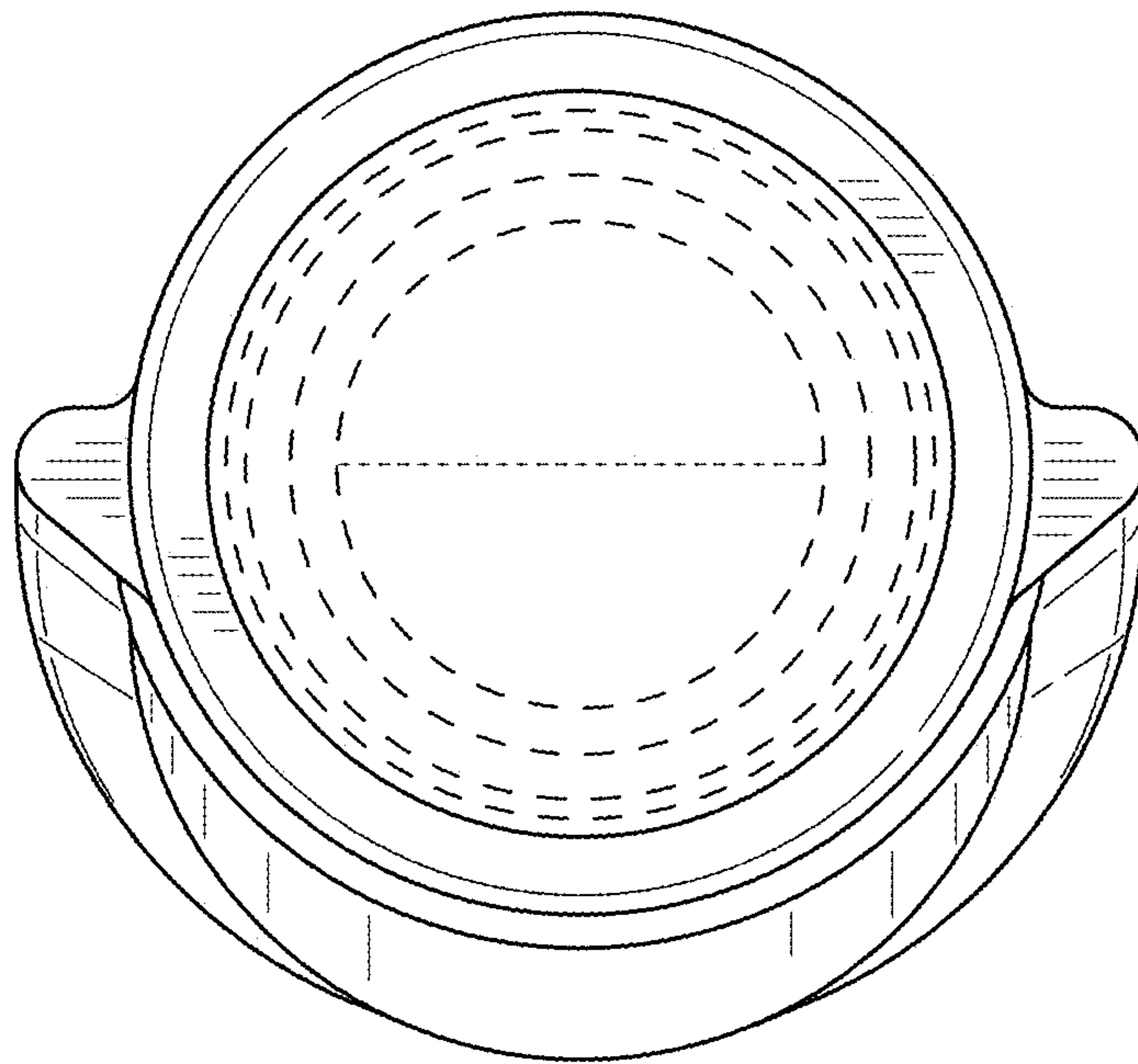


FIG. 7