

US00D750788S

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

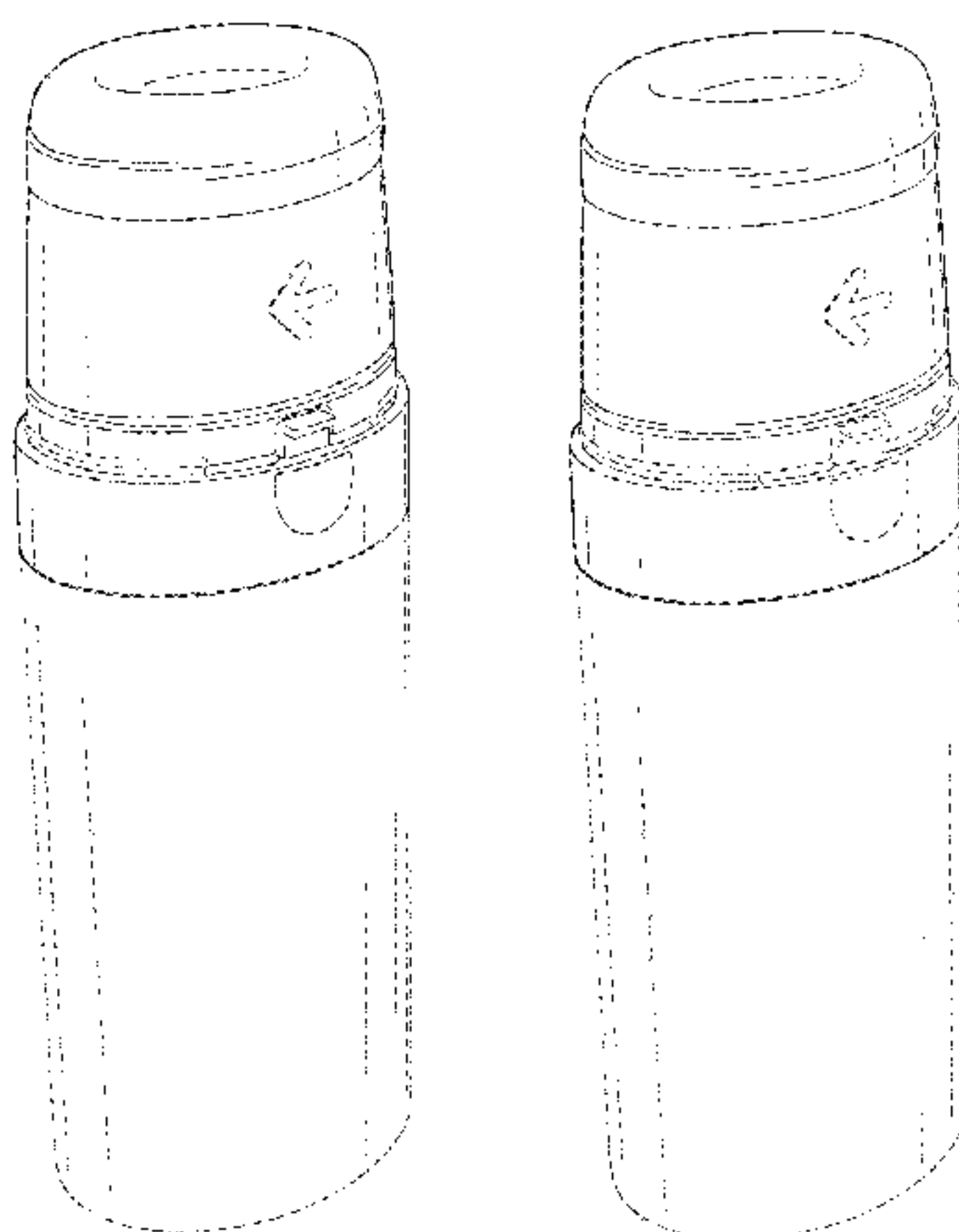
(10) **Patent No.:** **US D750,788 S**
(45) **Date of Patent:** **** Mar. 1, 2016**

- (54) **TOPICAL SPREADING APPLICATOR**
- (71) Applicant: **Acrux DDS Pty Ltd**, West Melbourne, Victoria (AU)
- (72) Inventors: **Shu Kuen Chang**, Evanston, IL (US); **Alain Regard**, Beynost (FR); **Anastasios G. Karahalios**, Chicago, IL (US); **Mark LaFever**, Indianapolis, IN (US)
- (73) Assignee: **ACRUX DDS PTY LTD**, Victoria (AU)
- (**) Term: **14 Years**
- (21) Appl. No.: **29/473,895**
- (22) Filed: **Nov. 26, 2013**
- (51) **LOC (10) Cl.** **24-02**
- (52) **U.S. Cl.**
USPC **D24/188; D9/440**
- (58) **Field of Classification Search**
USPC D9/435, 436, 440, 447, 667; D24/119, D24/127, 133, 185-192, 197, 200, 206, 207, D24/211, 231; D28/7; 222/1; 401/11, 172, 401/174, 227, 242, 261, 265; 604/82
CPC A45D 34/04; A61M 35/003
See application file for complete search history.

5,122,383 A	6/1992	Heiber et al.	
5,186,358 A *	2/1993	McVay	222/1
5,254,338 A	10/1993	Sakai et al.	
5,558,874 A	9/1996	Haber et al.	
5,567,073 A	10/1996	de Laforcade et al.	
5,568,669 A	10/1996	Godown	
5,613,958 A	3/1997	Kochinke et al.	
5,772,347 A	6/1998	Gueret	
5,780,050 A	7/1998	Jain et al.	
5,788,983 A	8/1998	Chien et al.	
5,792,469 A	8/1998	Tipton et al.	
D399,744 S *	10/1998	Gross	D9/447
5,847,363 A	12/1998	Debourg et al.	
5,904,151 A	5/1999	Gueret	
5,968,919 A	10/1999	Samour et al.	
6,010,716 A	1/2000	Saunal et al.	
6,211,250 B1	4/2001	Tomlinson et al.	
6,238,284 B1	5/2001	Dittgen et al.	
6,299,900 B1	10/2001	Reed et al.	
6,309,128 B1	10/2001	Griebel et al.	
6,315,482 B1	11/2001	Girardot et al.	
6,325,565 B1	12/2001	Girardot et al.	
6,503,894 B1	1/2003	Dudley et al.	
6,562,790 B2	5/2003	Chein et al.	
D477,664 S	7/2003	Wong	
D478,809 S	8/2003	Cummings	
D483,258 S	12/2003	Cummings	
6,666,216 B2	12/2003	Bourjal	
6,681,945 B1	1/2004	Harrold	
6,682,757 B1	1/2004	Wright	
D492,592 S	7/2004	Palomino, Jr.	
6,773,187 B2	8/2004	Gueret	
6,818,226 B2	11/2004	Reed et al.	
6,902,741 B1	6/2005	Grawe et al.	
6,916,486 B2	7/2005	Klose et al.	
6,916,487 B2	7/2005	Klose et al.	
6,923,983 B2	8/2005	Morgan et al.	
6,945,723 B1	9/2005	Gueret	
6,964,777 B2	11/2005	Klose et al.	
6,998,138 B2	2/2006	Chew et al.	
7,094,422 B2	8/2006	Chew et al.	
D535,893 S	1/2007	Shurtleff et al.	
7,344,328 B2	3/2008	McAuley	
7,387,789 B2	6/2008	Klose et al.	
7,438,203 B2	10/2008	Reed et al.	
7,441,974 B2	10/2008	Gueret	
7,828,166 B1	11/2010	Sprick	
7,927,034 B2	4/2011	Staniforth et al.	
7,955,016 B2	6/2011	Gueret	
D649,456 S *	11/2011	Baker et al.	D9/435
8,071,075 B2	12/2011	Reed et al.	
8,177,449 B2	5/2012	Bayly et al.	
D661,200 S *	6/2012	Subler	D9/667

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

1,573,224 A	3/1924	Condit
1,710,816 A	6/1928	Evans
1,925,019 A	8/1933	Wilson
1,982,833 A	12/1934	Schmerler
2,361,407 A	10/1944	McNair
2,608,705 A	8/1946	Duff
3,462,230 A	8/1969	Chester
3,685,913 A	8/1972	Pass
3,887,115 A	6/1975	Petterson
4,264,586 A	4/1981	Callingham
4,483,636 A	11/1984	Meyer
4,726,700 A	2/1988	Gray
4,739,778 A	4/1988	Christie
4,787,374 A	11/1988	De Yarman



(56)

References Cited

U.S. PATENT DOCUMENTS

D667,309	S *	9/2012	Delaney et al.	.....	D9/667
8,357,393	B2	1/2013	Morgan et al.		
8,419,307	B2	4/2013	Bayly et al.		
8,435,944	B2	5/2013	Di Pietro et al.		
D693,059	S *	11/2013	Tani	.....	D28/7
D693,919	S *	11/2013	Miu	.....	D24/107
D708,784	S *	7/2014	Kim	.....	D28/7
D727,567	S *	4/2015	Bunkley	.....	D28/7
2004/0009214	A1	1/2004	Klose et al.		
2004/0126355	A1	7/2004	Childers		
2005/0181032	A1	8/2005	Wilkins et al.		
2005/0186141	A1	8/2005	Gonda et al.		
2006/0116694	A1*	6/2006	Hogan et al.	.....	606/131
2006/0280783	A1	12/2006	Di Pietro et al.		
2007/0071803	A1	3/2007	Reed et al.		
2007/0275943	A1	11/2007	Morgan et al.		
2008/0131494	A1	6/2008	Reed et al.		
2008/0170904	A1*	7/2008	Bayly et al.	.....	401/265
2009/0098081	A1*	4/2009	MacDonald et al.	.....	424/78.07
2010/0166674	A1	7/2010	Morgan et al.		
2010/0322884	A1	12/2010	Di Pietro et al.		
2015/0023721	A1*	1/2015	Gieux et al.	.....	401/265

FOREIGN PATENT DOCUMENTS

DE	28 36 752	8/1978
DE	35 26 109 A1	1/1987
DE	197 28 447	7/1997
EP	0 549 049	5/1996
FR	2 581 569	11/1986
GB	1110824	4/1968
GB	1 158 412	7/1969
WO	WO 91/18535	12/1991
WO	WO 93/25168 A1	12/1993
WO	WO 99/24041 A1	5/1999
WO	WO 00/06464	2/2000
WO	WO 00/45795 A2	8/2000
WO	WO 01/76972 A1	10/2001
WO	WO 2004/009457 A1	1/2004
WO	WO 2005/039531 A1	5/2005
WO	WO 2005/051771	6/2005
WO	WO 2006/005135 A1	1/2006
WO	WO 2006/027278 A1	3/2006
WO	WO-2013/000778 A1	1/2013

OTHER PUBLICATIONS

Overall Learnings. Clarification on Current Concept Safety Level. Standard Child Safety Features to Leverage.
 Physicians' Desk Reference, Thomson PDR, 58th ed., pp. 711-713 and 3239-3241, 2004.
 Physicians' Desk Reference, Thomson PDR, 60th ed., pp. 722-724 and 3330-3334, 2006.
 Supplementary European Search Report issued on Mar. 29, 2011 in application No. 07701469.
 Notice of Allowance issued on Jan. 23, 2012 in U.S. Appl. No. 11/678,673 (U.S. Pat. No. 8,177,449).
 Office Action issued on Oct. 12, 2011 in U.S. Appl. No. 11/678,673 (U.S. Pat. No. 8,177,449).
 Office Action issued on Apr. 4, 2011 in U.S. Appl. No. 11/678,673 (U.S. Pat. No. 8,177,449).
 Office Action issued on Dec. 9, 2010 in U.S. Appl. No. 11/678,673 (U.S. Pat. No. 8,177,449).
 Office Action issued on Jul. 3, 2012 in U.S. Appl. No. 13/464,556 (U.S. Pat. No. 8,419,307).
 Notice of Allowance issued on Sep. 7, 2012 in U.S. Appl. No. 13/464,556 (U.S. Pat. No. 8,419,307).
 Notice of Allowance issued on Jan. 15, 2013 in U.S. Appl. No. 13/464,556 (U.S. Pat. No. 8,419,307).
 Maibach et al., "Regional Variation in Percutaneous Penetration in Man: Pesticides," Arch. Environ. Health, vol. 23, pp. 208-211, Sep. 1971.

Wester et al., "Regional Variation in Percutaneous Absorption," Percutaneous Absorption Drugs-Cosmetics-Mechanisms-Methodology, 3rd Ed., 1999, pp. 107-116.
 E. Ben-Galim et al., "Topically Applied Testosterone and Phallic Growth. Its Effects in Male Children With Hypopituitarism and Microphallus", American Journal of Disease and Children (1960), (1980), vol. 134, pp. 296-298.
 Berti et al., "Transcutaneous drug delivery: a practical review," Mayo Clin. Proc., vol. 70, No. 6, pp. 581-586, Jun. 1995.
 Morgan et al., "Enhanced Transdermal Delivery of Sex Hormones with Metered-Dose Topical Aerosols from Discovery to Clinical Evaluation," Pharm. Res., vol. 14, p. S-101, Nov. 1997.
 Finnin et al., "Enhancement of Epidermal Penetration of NSAIDs by Padimate O, Octyl Slicylate and Octyl Methoxycinnamate," Pharm. Res., vol. 14, p. S-304, Abstract, Nov. 1997.
 Lee et al., "The Role of Corticosteroids in Dermatology," Austr. Prescr. vol. 21, pp. 9-11, Jan. 1998.
 Morgan et al., "Enhanced Skin Permeation of Sex Hormones with Novel Topical Spray Vehicles," J. Pharm. Sci., vol. 87, pp. 1213-1218, Oct. 1998.
 Wang et al., "Transdermal Testosterone Gel Improves Sexual Function Mood, Muscle Strength, and Body Composition Parameters in Hypogonadal Men," J. Clin. Endocrinology & Metabolism, vol. 85, pp. 2839-2853, Aug. 2000.
 Morgan, Timothy M., "Enhanced Transdermal Delivery of Sex Hormones in Swine with a Novel Topical Aerosol", Journal of Pharmaceutical Sciences, vol. 87, No. 10, pp. 1219-1225 (1998).
 Wang et al., "Pharmacokinetics of Transdermal Testosterone Gel in Hypogonadal Men: Application of Gel at One Site Versus Four Sites: A General Clinical Research Center Study," The Journal of Clinical Endocrinology & Metabolism, vol. 85, No. 3, pp. 964-969, 2000.
 Solvay Pharmaceuticals, "AndroGel® testosterone gel," prescribing information, Sep. 2009.
 Solvay Pharmaceuticals, "AndroGel® testosterone gel," medication guide, Sep. 2009.
 Auxilium Pharmaceuticals, "Testim® testosterone gel," prescribing information, Sep. 2009.
 Auxilium Pharmaceuticals, "Testim® testosterone gel," medication guide, Sep. 2009.
 Cutter, "Compounded Percutaneous Testosterone Gel: Use and Effects in Hypogonadal Men," JABFP, vol. 14, No. 1, pp. 22-32, Feb. 2001.
 Swerdloff et al., "Long-Term Pharmacokinetics of Transdermal Testosterone Gel in Hypogonadal Men," J. Endocrinology and Metabolism, vol. 85, pp. 4500-4510, Dec. 2000.
 US Office Action dated May 27, 2015, in U.S. Appl. No. 29/473,900.
 Notice of Allowance And Issue Fee(s) Due dated Oct. 21, 2015 in related U.S. Appl. No. 29/473,900.

* cited by examiner

Primary Examiner — Robert M Spear
 Assistant Examiner — Darcey E Heflin
 (74) Attorney, Agent, or Firm — Foley & Lardner LLP

(57)

CLAIM

We claim the ornamental design for a topical spreading applicator, as shown and described.

DESCRIPTION

FIG. 1 is an isometric view of a first embodiment of a topical spreading applicator of the claimed design;
 FIG. 2 is a front view of the topical spreading applicator shown in FIG. 1;
 FIG. 3 is a back view of the topical spreading applicator shown in FIG. 1;
 FIG. 4 is a left side view of the topical spreading applicator shown in FIG. 1;

FIG. 5 is a right side view of the topical spreading applicator shown in FIG. 1;

FIG. 6 is a top view of the topical spreading applicator shown in FIG. 1;

FIG. 7 is a bottom view of the topical spreading applicator shown in FIG. 1;

FIG. 8 is an isometric view of a second embodiment of the topical spreading applicator of the claimed design;

FIG. 9 is a front view of the topical spreading applicator shown in FIG. 8;

FIG. 10 is a back view of the topical spreading applicator shown in FIG. 8;

FIG. 11 is a left side view of the topical spreading applicator shown in FIG. 8;

FIG. 12 is a right side view of the topical spreading applicator shown in FIG. 8;

FIG. 13 is a top view of the topical spreading applicator shown in FIG. 8;

FIG. 14 is a bottom view of the topical spreading applicator shown in FIG. 8;

FIG. 15 is an isometric view of a third embodiment of the topical spreading applicator of the claimed design;

FIG. 16 is a front view of the topical spreading applicator shown in FIG. 15;

FIG. 17 is a back view of the topical spreading applicator shown in FIG. 15;

FIG. 18 is a left side view of the topical spreading applicator shown in FIG. 15;

FIG. 19 is a right side view of the topical spreading applicator shown in FIG. 15;

FIG. 20 is a top view of the topical spreading applicator shown in FIG. 15;

FIG. 21 is a bottom view of the topical spreading applicator shown in FIG. 15;

FIG. 22 is an isometric view of a fourth embodiment of the topical spreading applicator of the claimed design;

FIG. 23 is a front view of the topical spreading applicator shown in FIG. 22;

FIG. 24 is a back view of the topical spreading applicator shown in FIG. 22;

FIG. 25 is a left side view of the topical spreading applicator shown in FIG. 22;

FIG. 26 is a right side view of the topical spreading applicator shown in FIG. 22;

FIG. 27 is a top view of the topical spreading applicator shown in FIG. 22; and,

FIG. 28 is a bottom view of the topical spreading applicator shown in FIG. 22.

In the drawings, the broken lines depict environmental subject matter only and form no part of the claimed design.

1 Claim, 24 Drawing Sheets

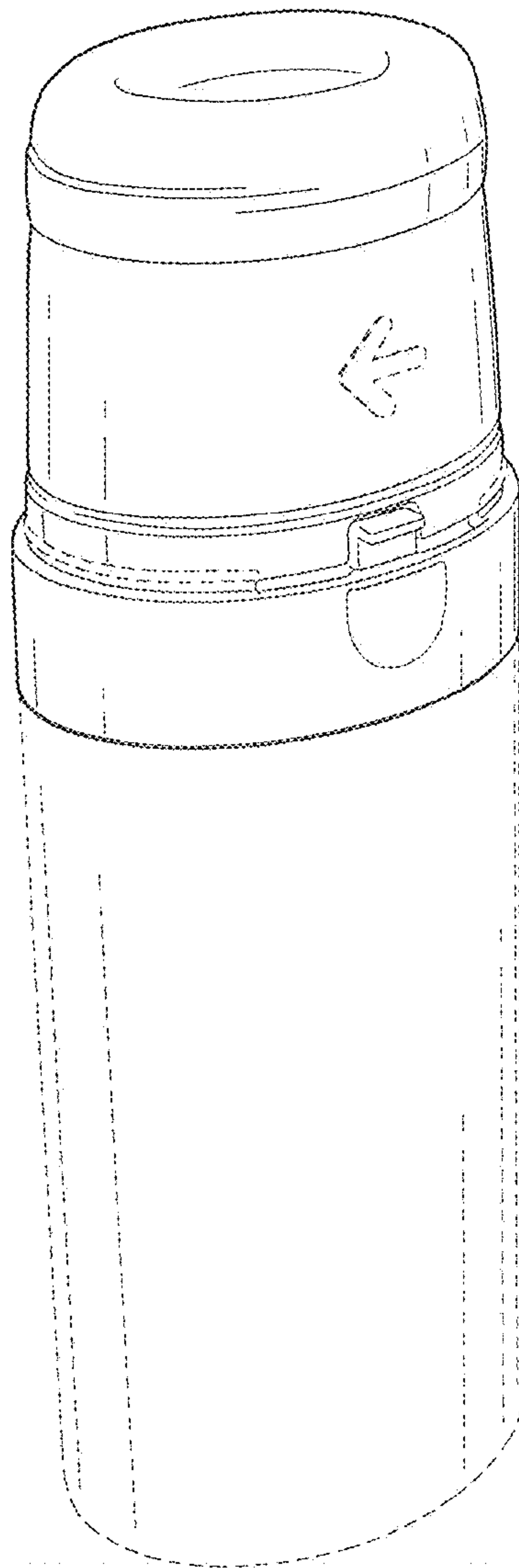


Fig. 1

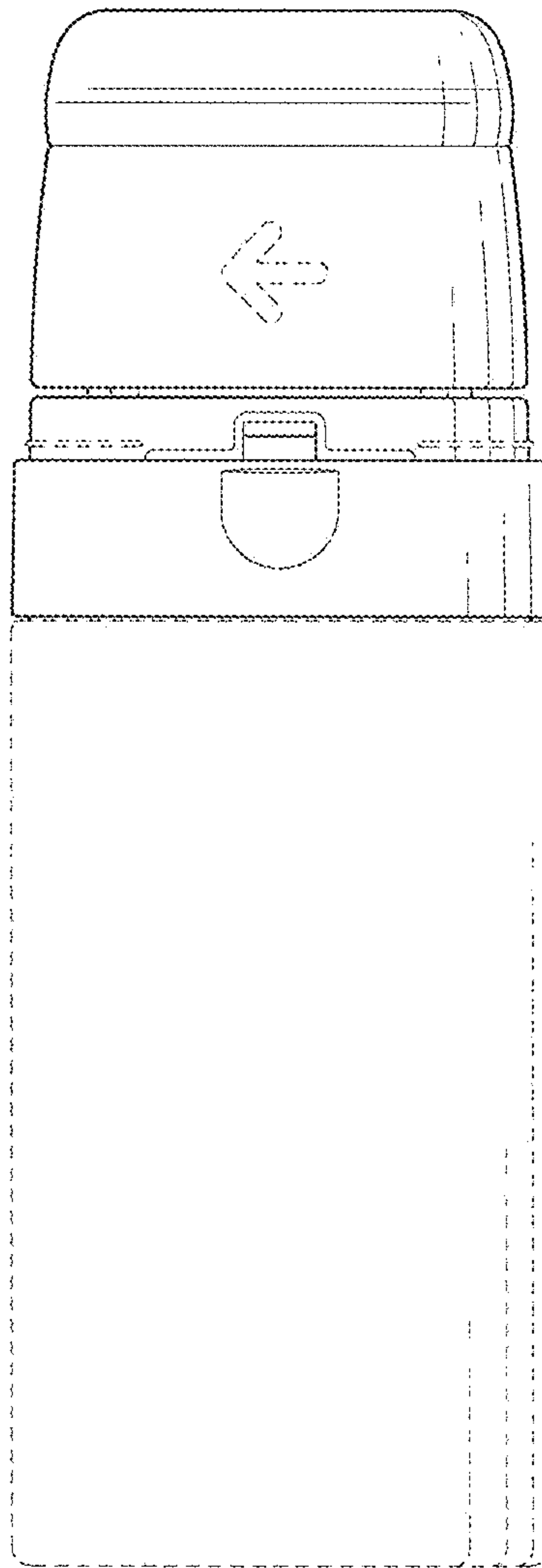


Fig. 2

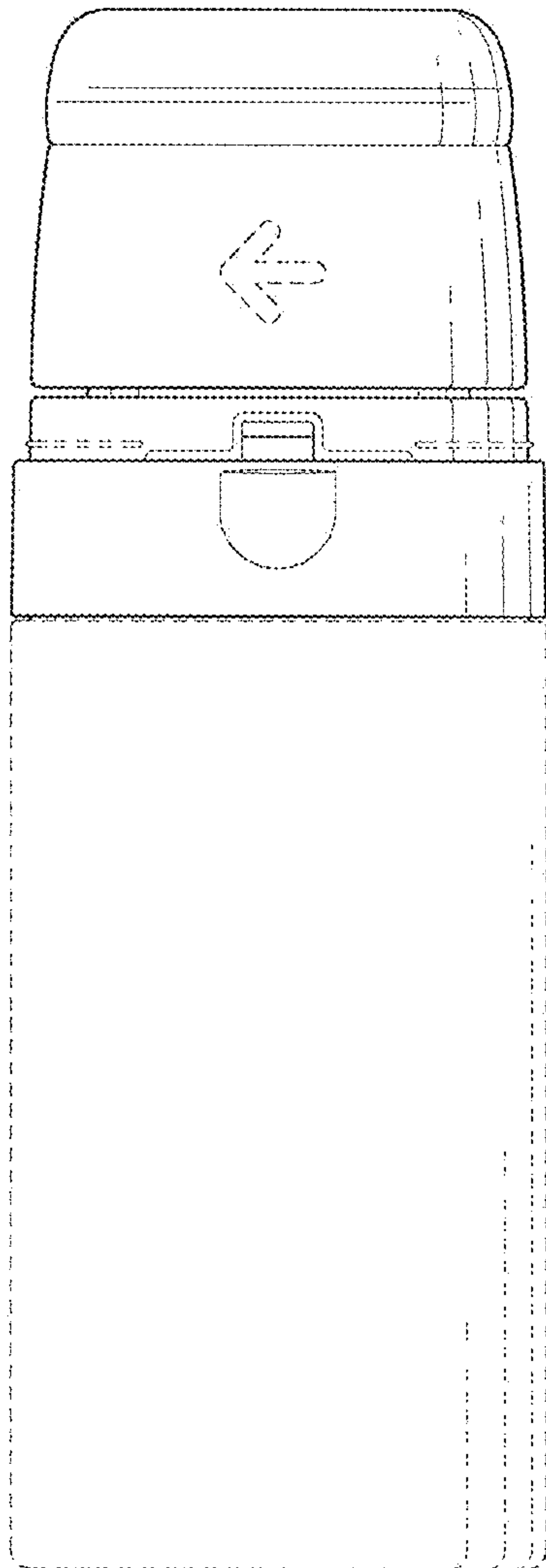


Fig. 3

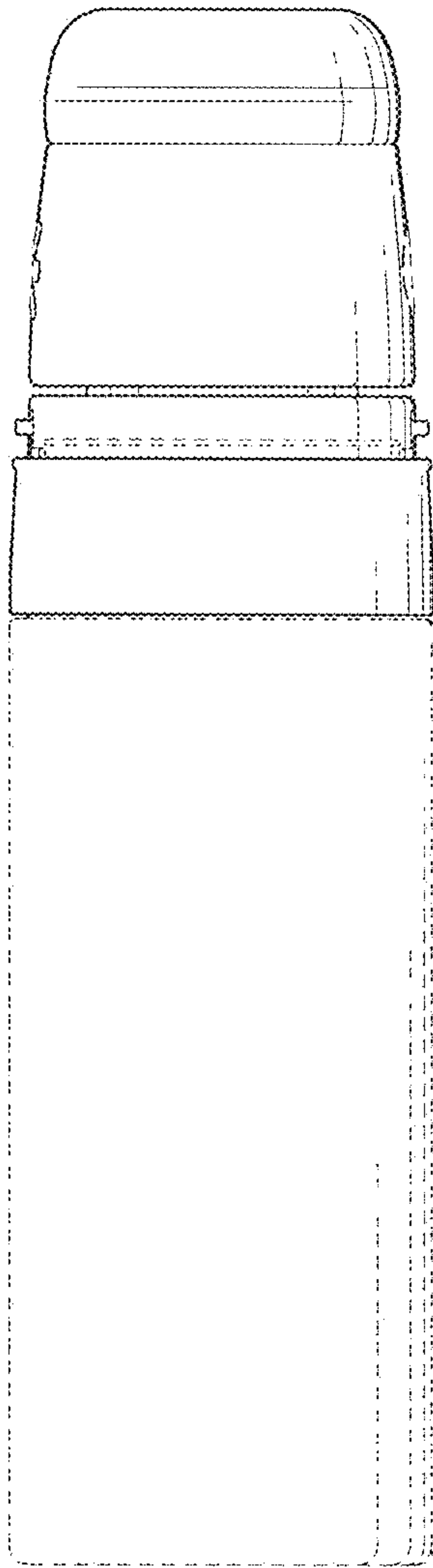


Fig. 4

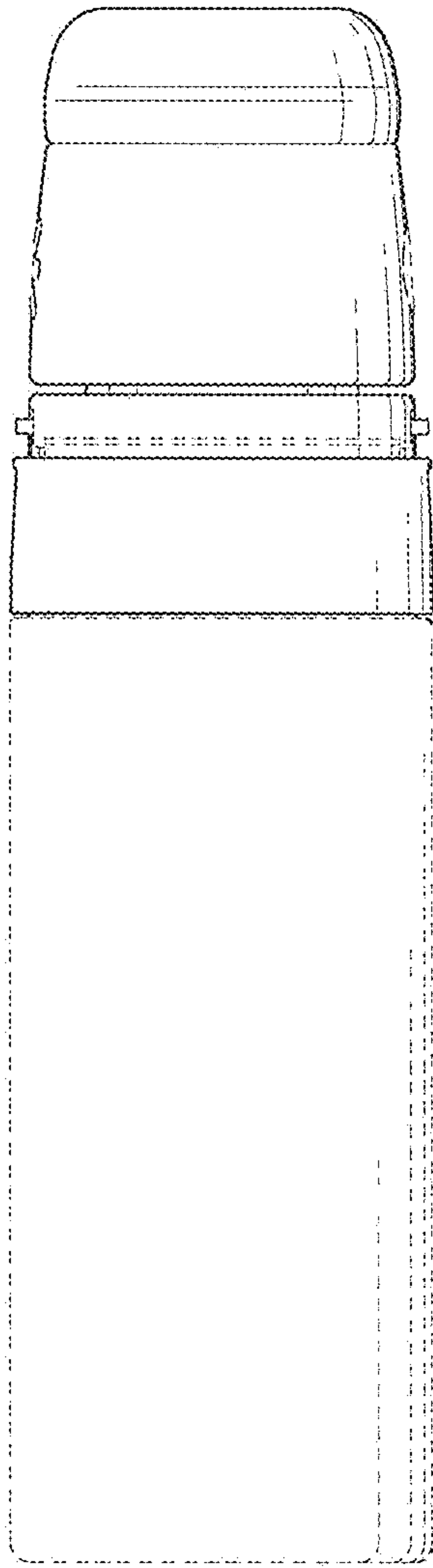


Fig. 5

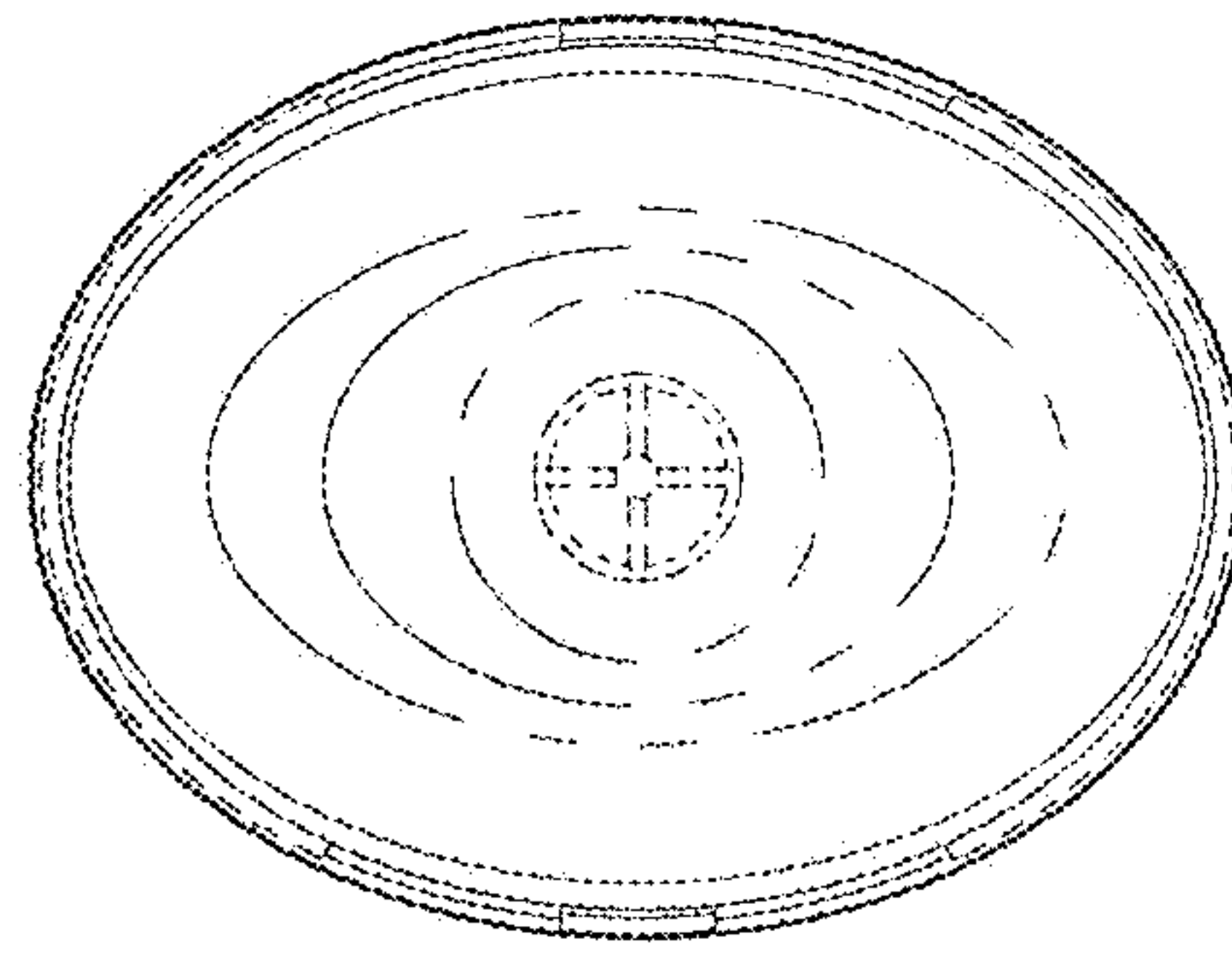


Fig. 6

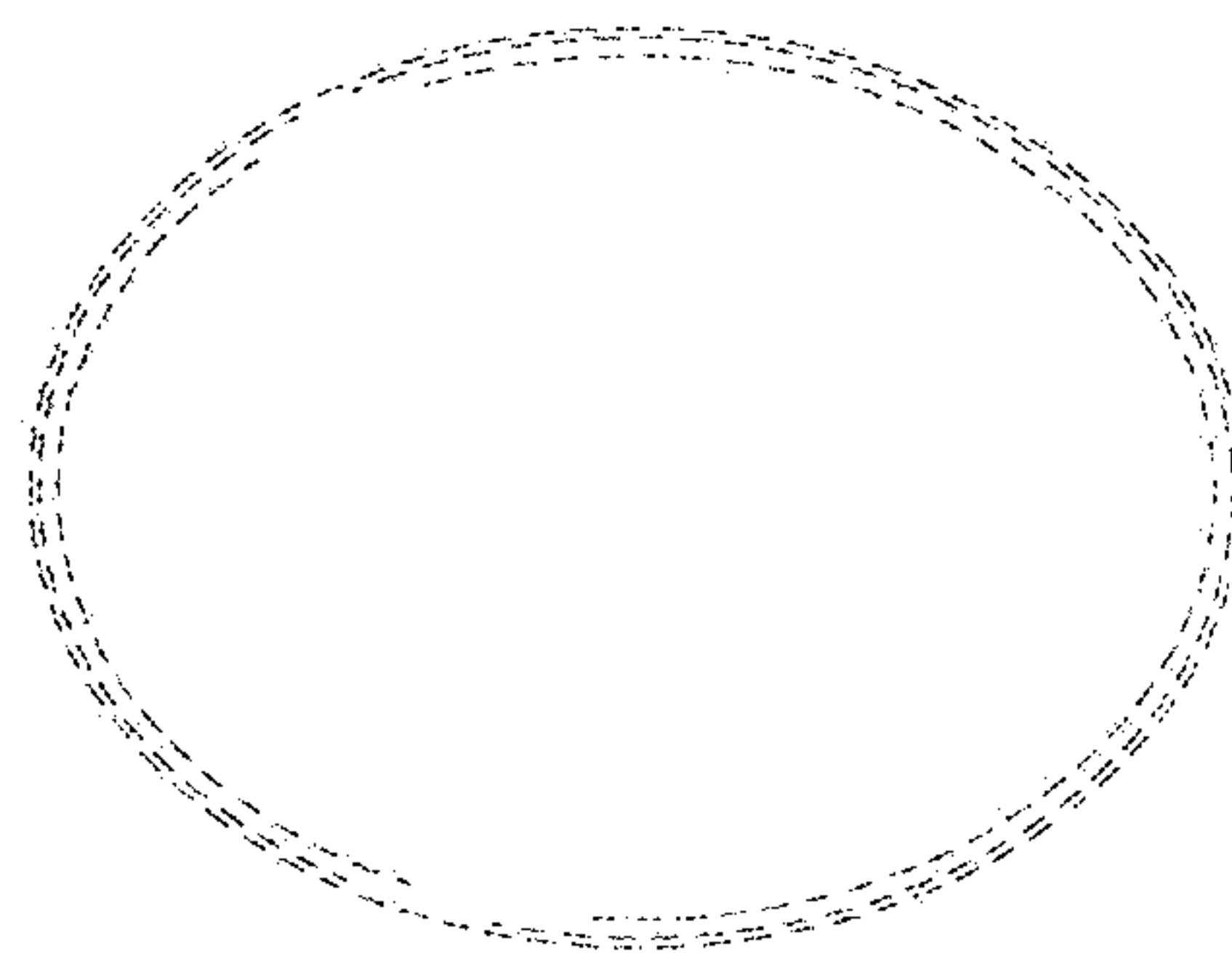


Fig. 7

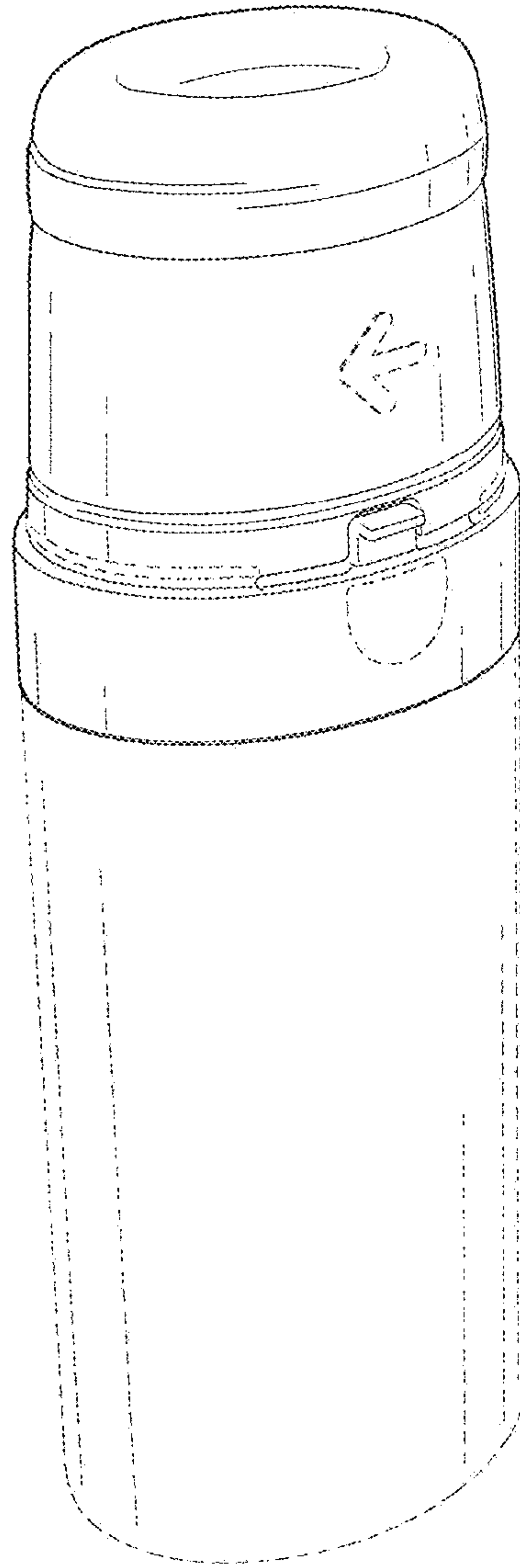


Fig. 8

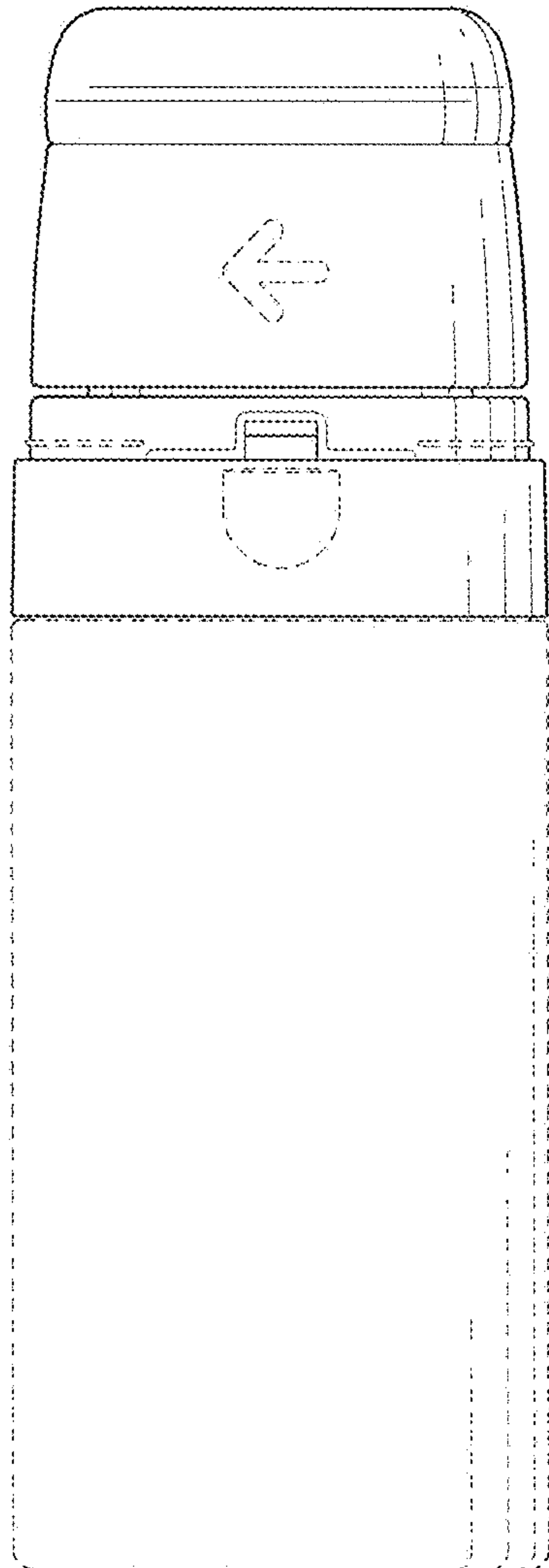


Fig. 9

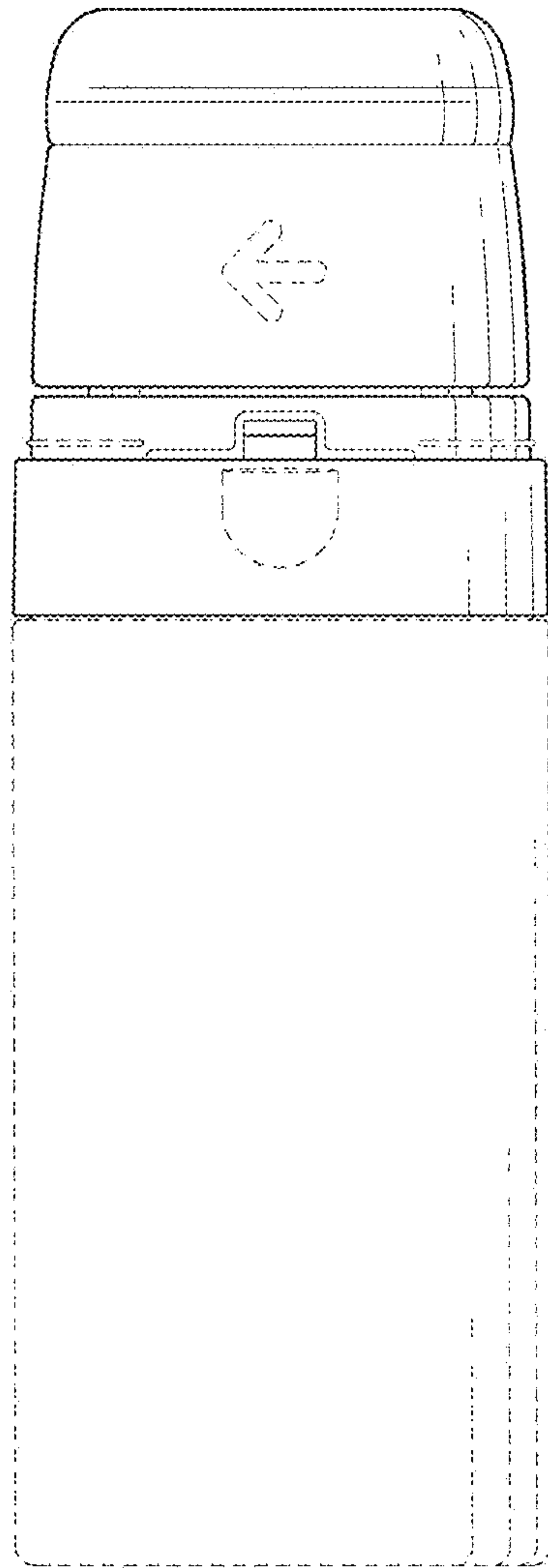


Fig. 10

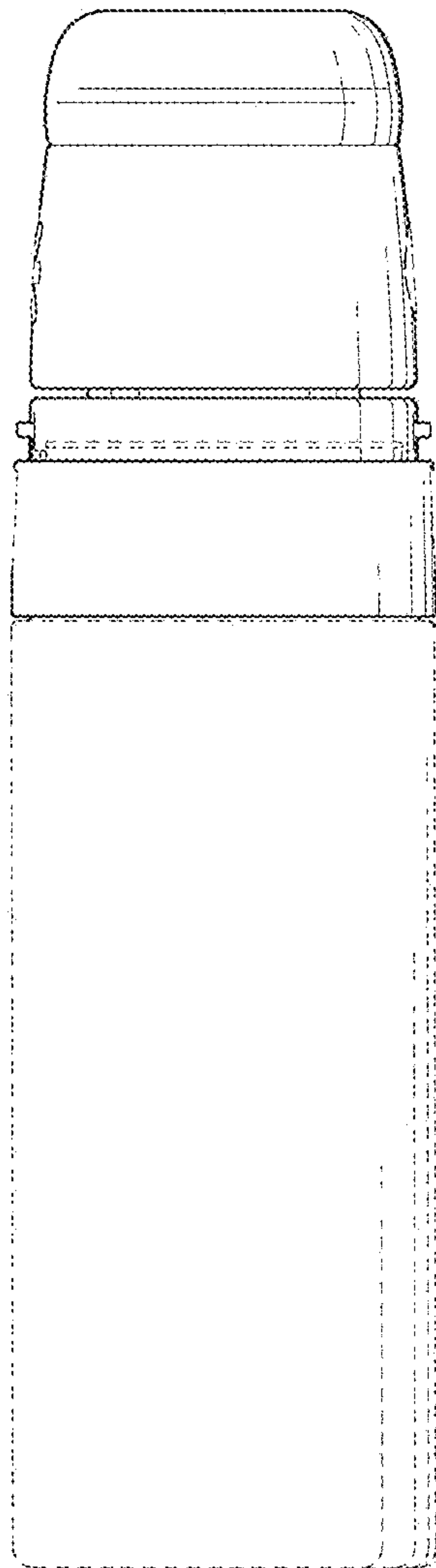


Fig. 11

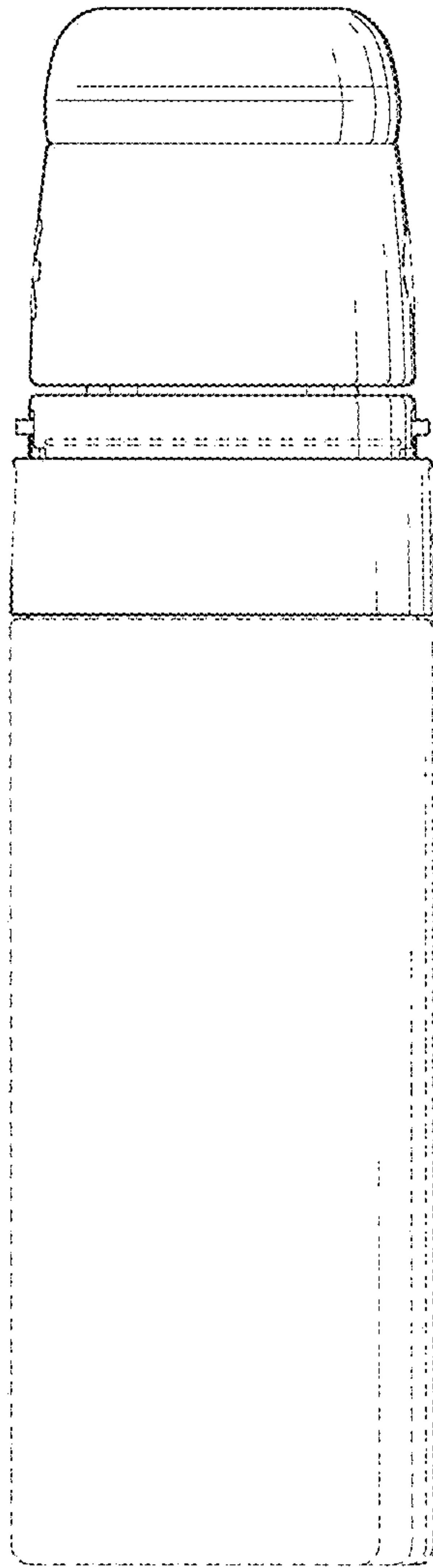


Fig. 12

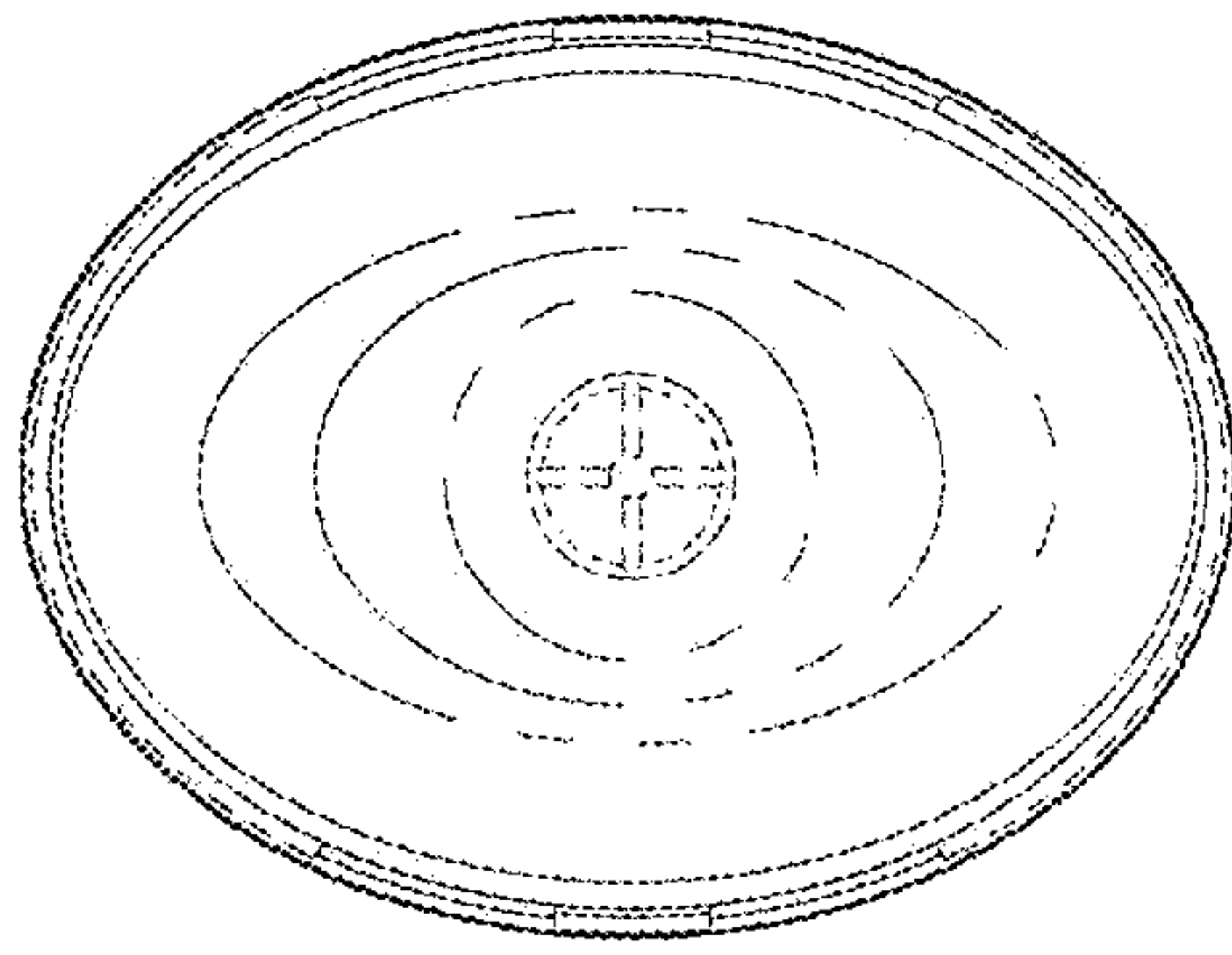


Fig. 13

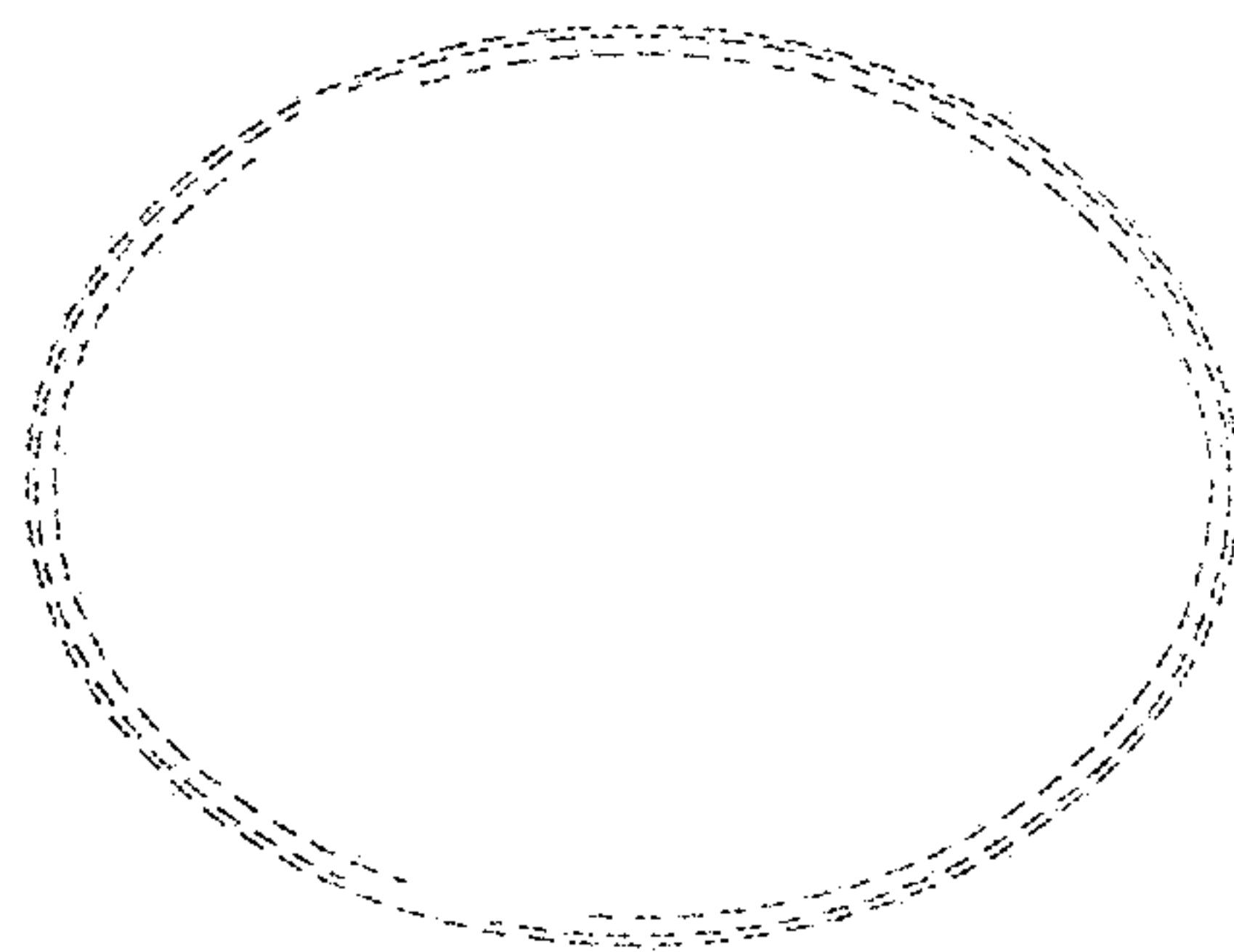


Fig. 14

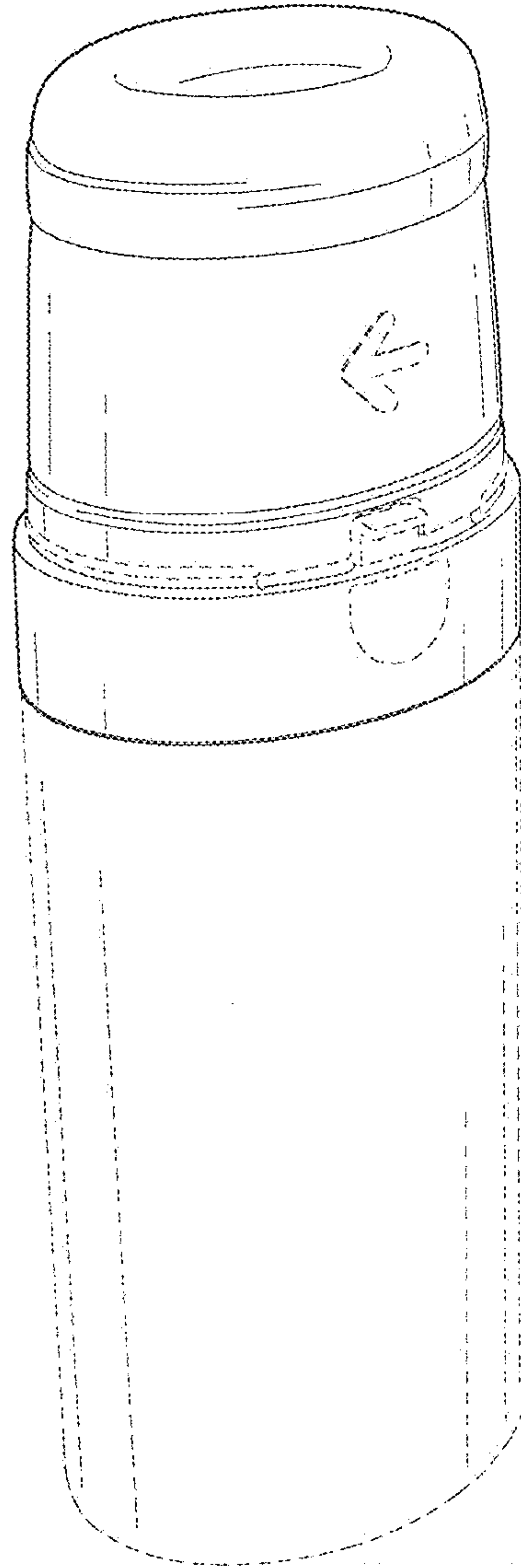


Fig. 15

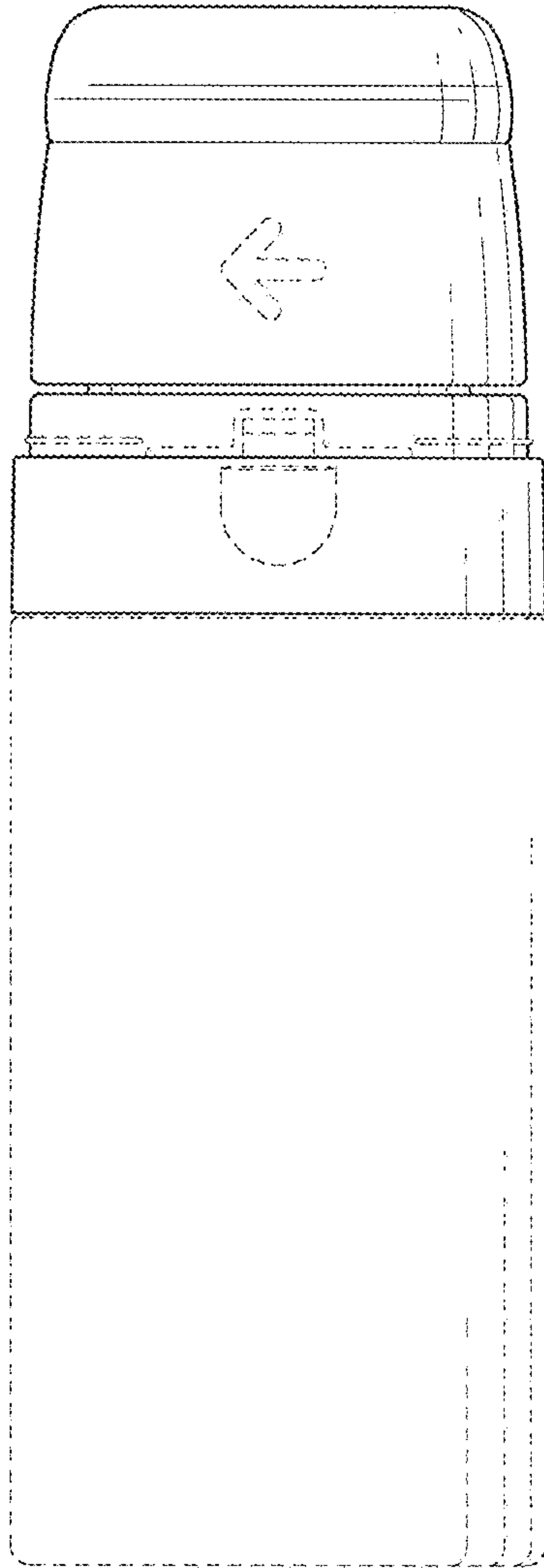


Fig. 16

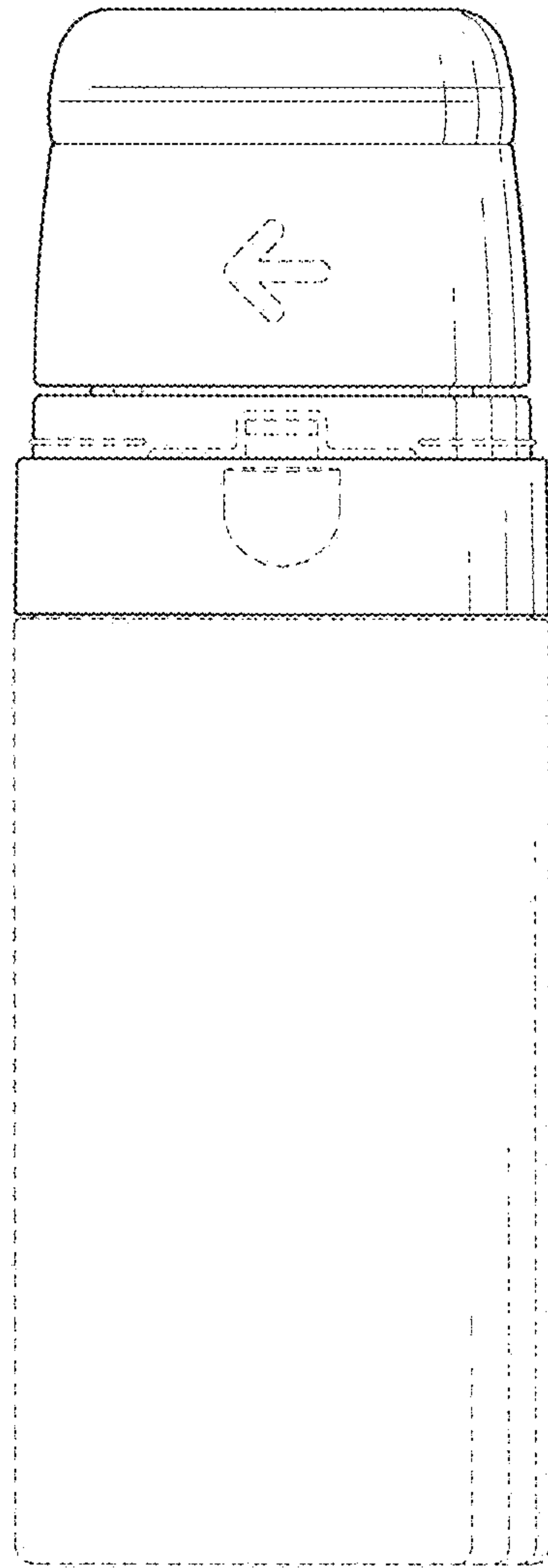


Fig. 17

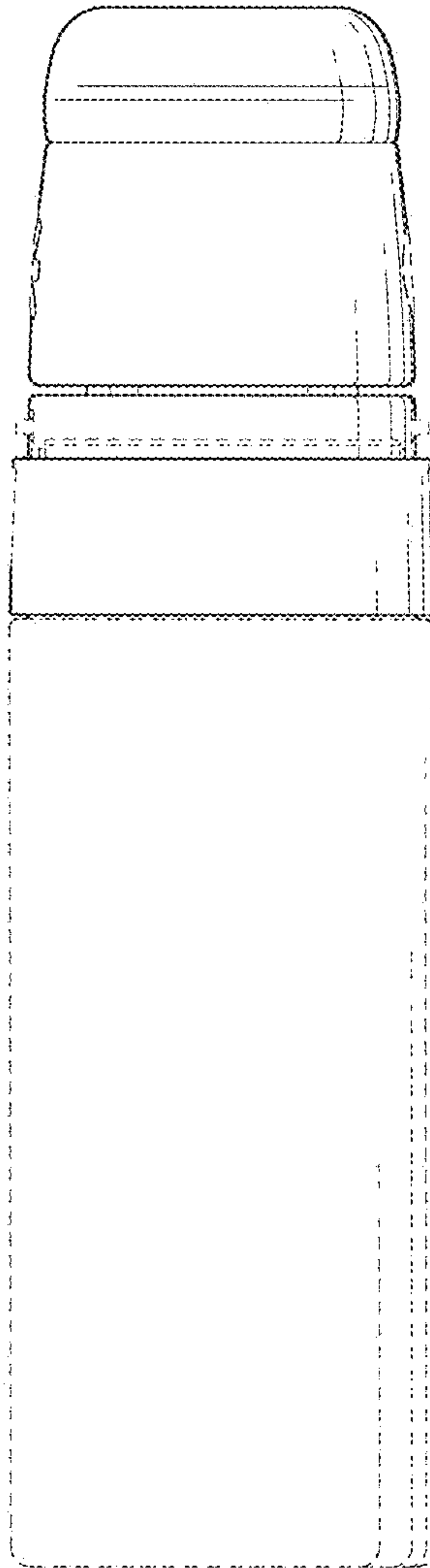


Fig. 18

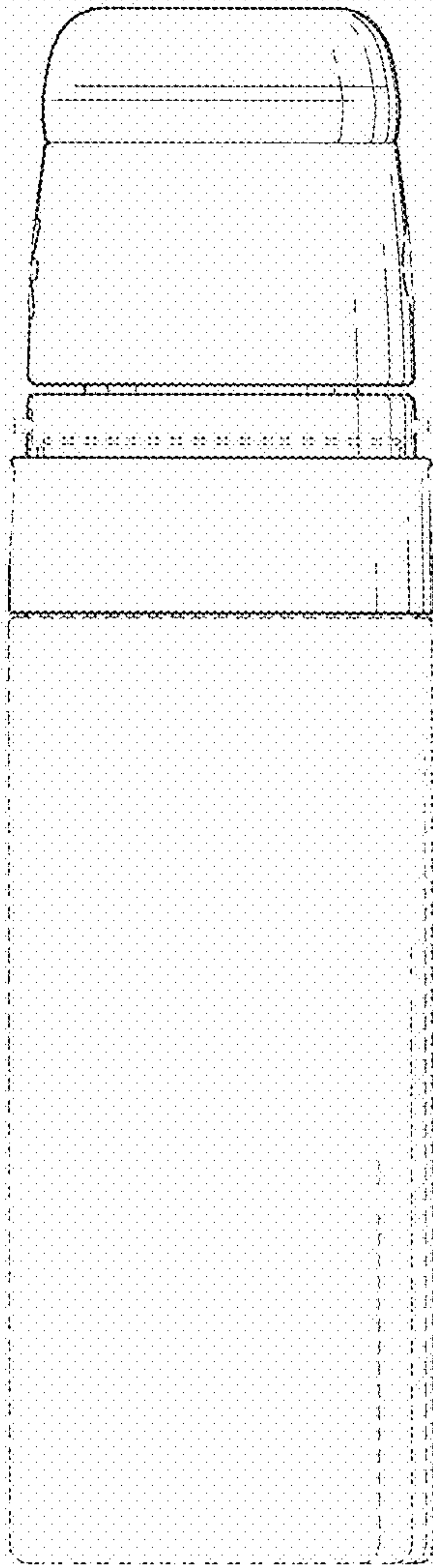


Fig. 19

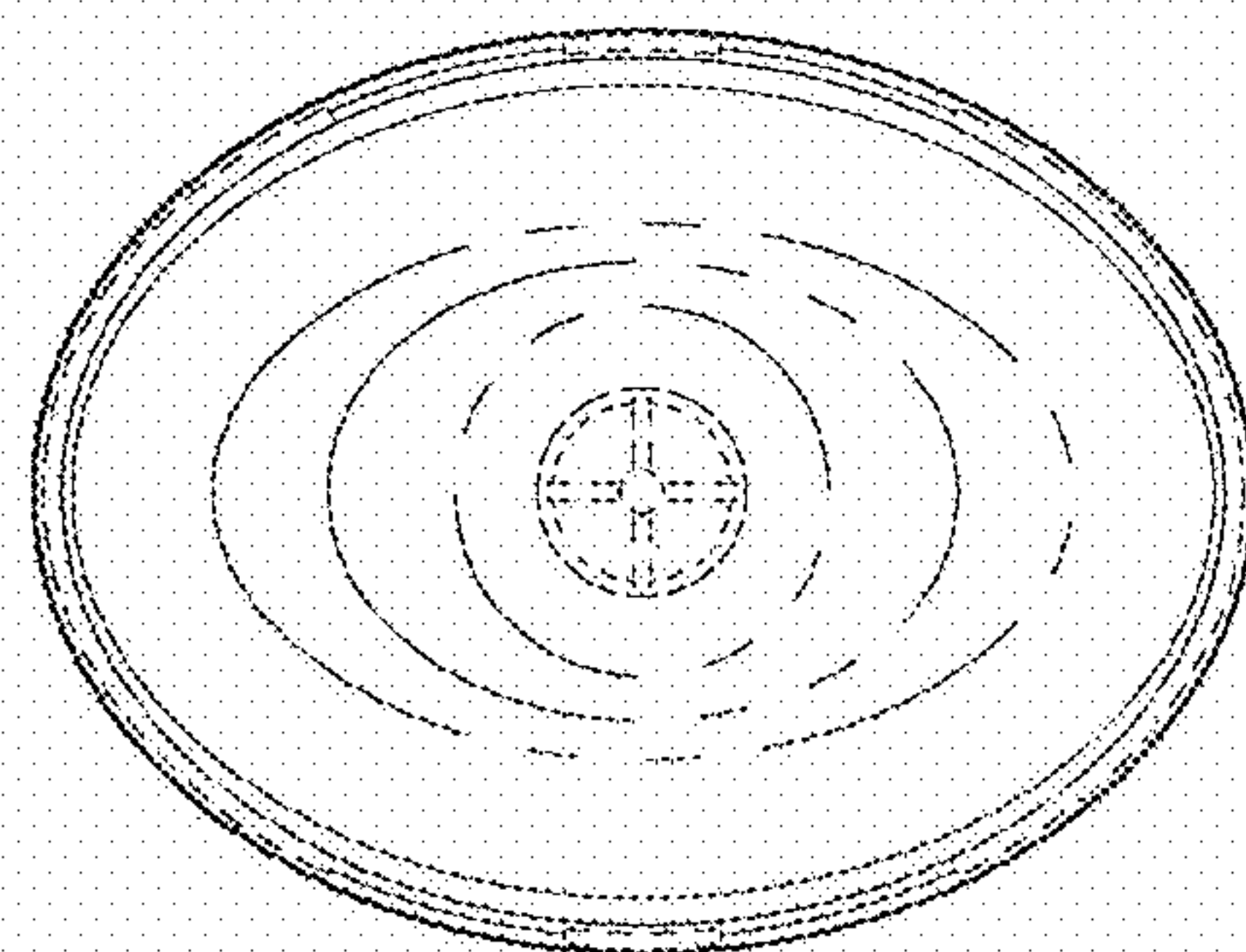


Fig. 20

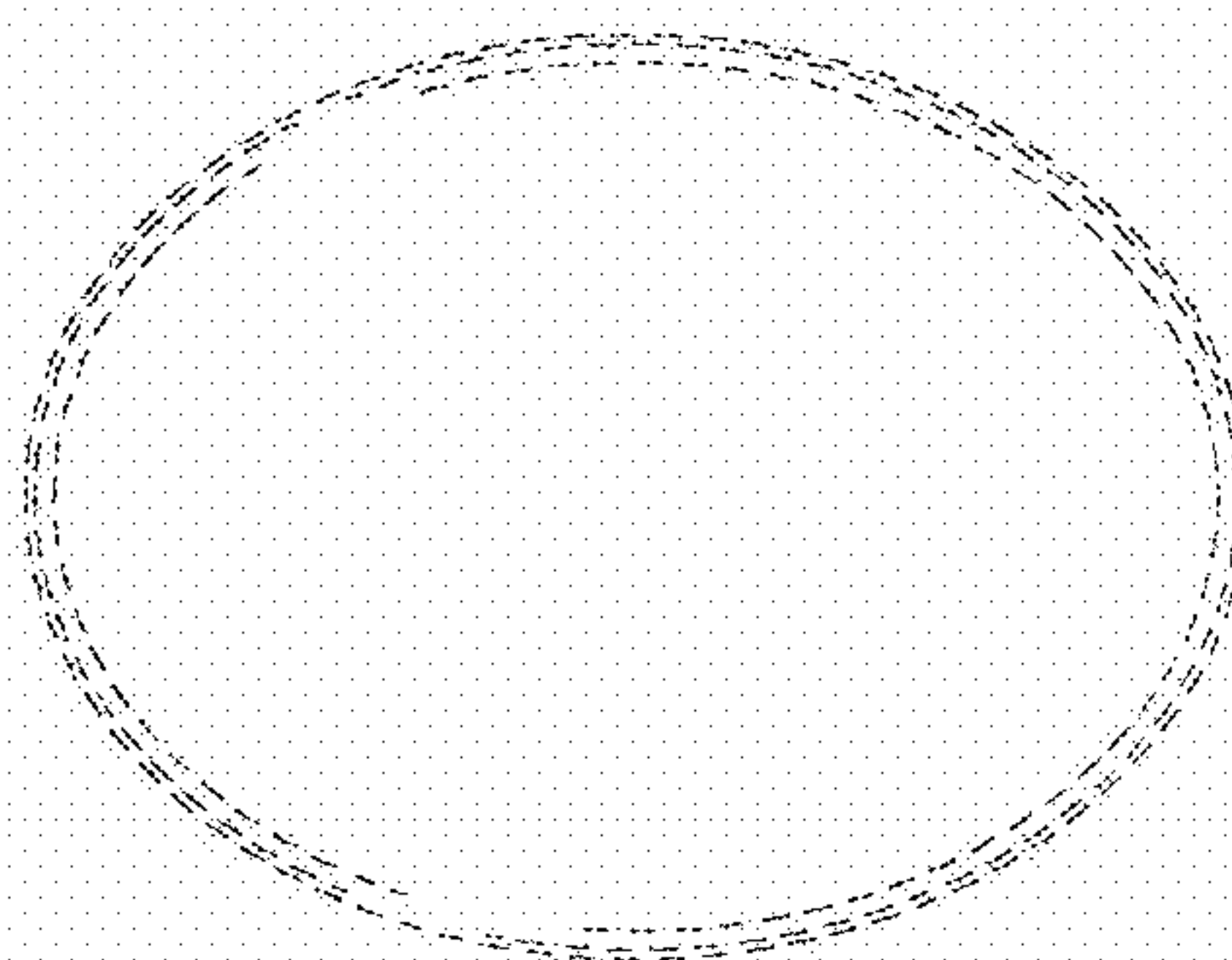


Fig. 21

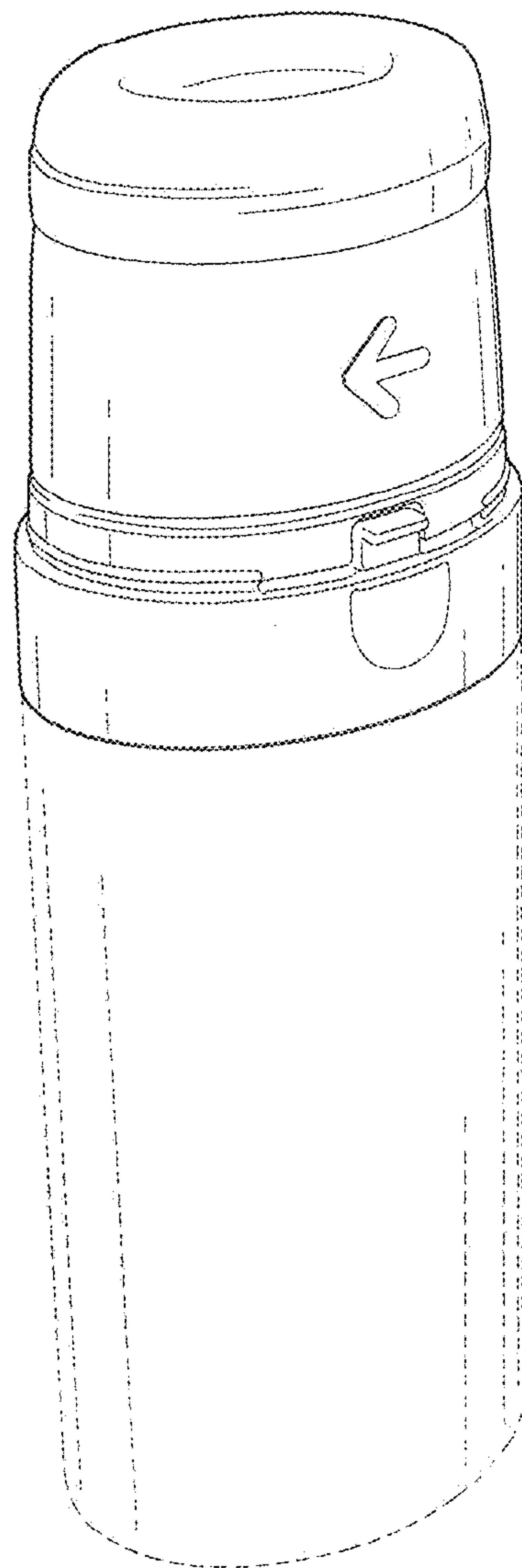


Fig. 22

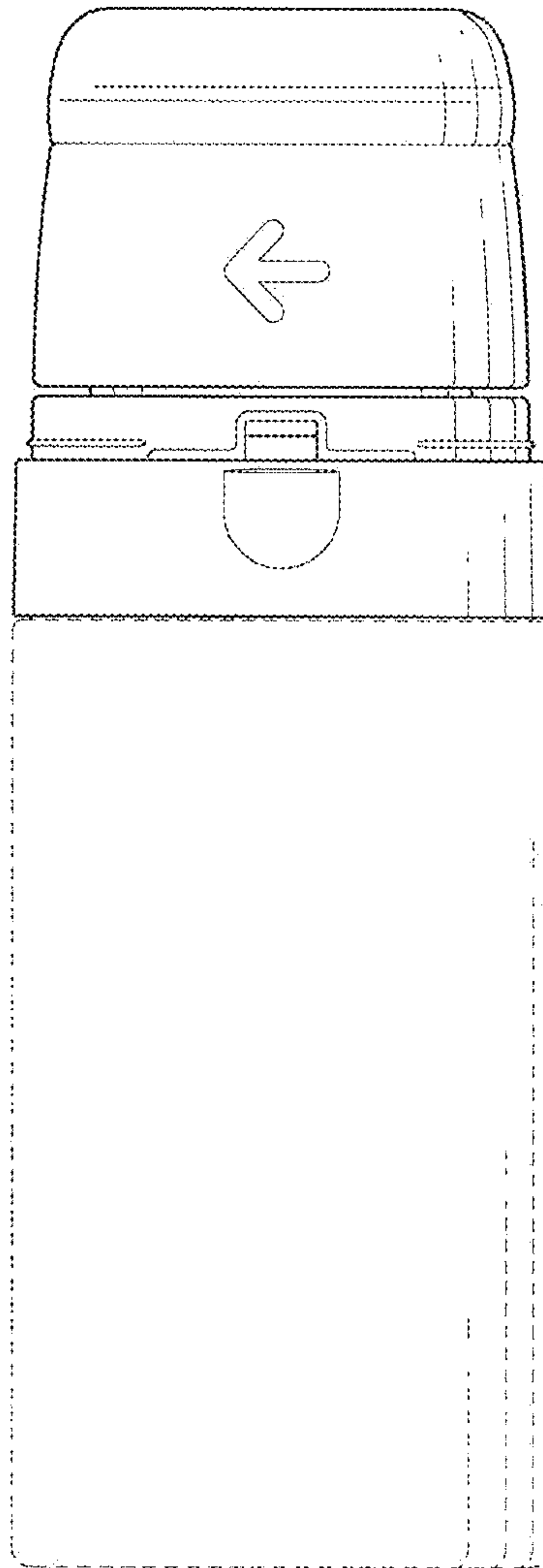


Fig. 23

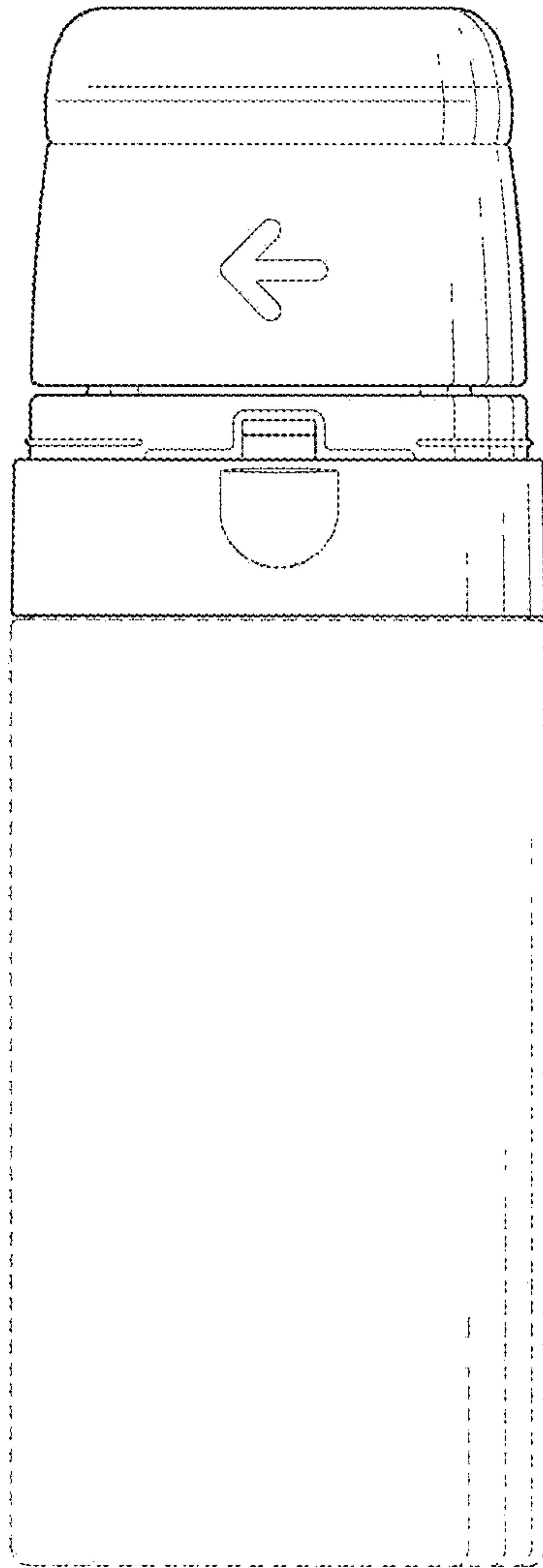


Fig. 24

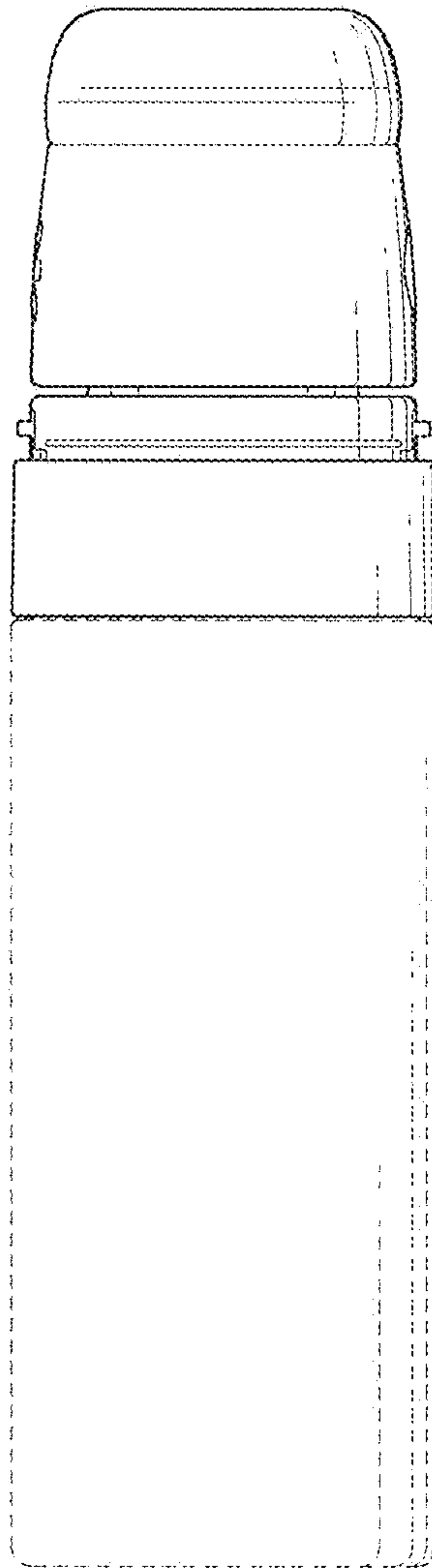


Fig. 25

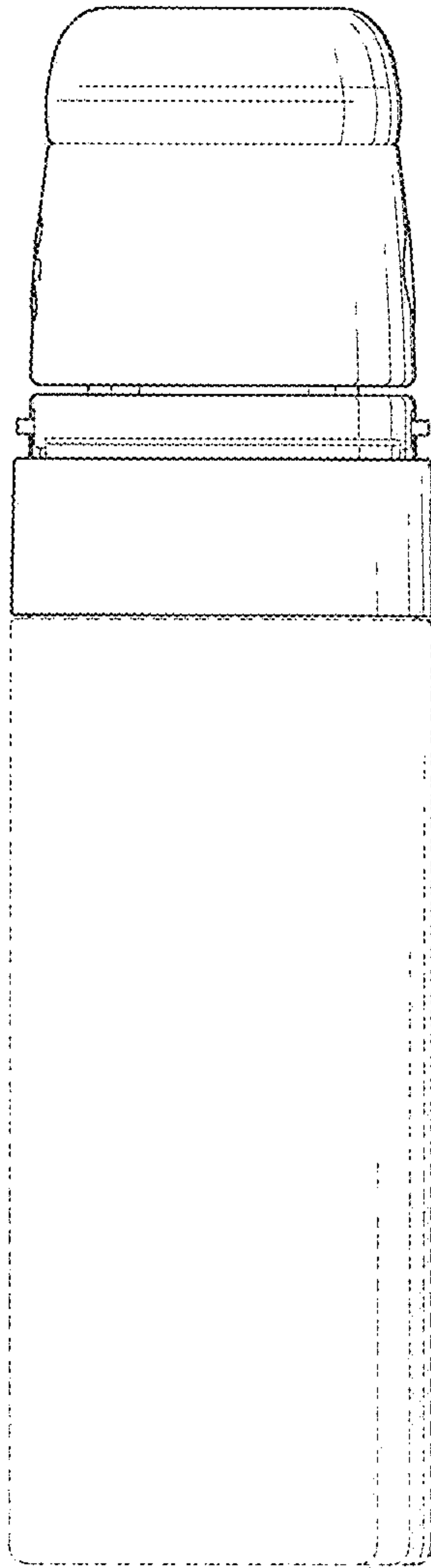


Fig. 26

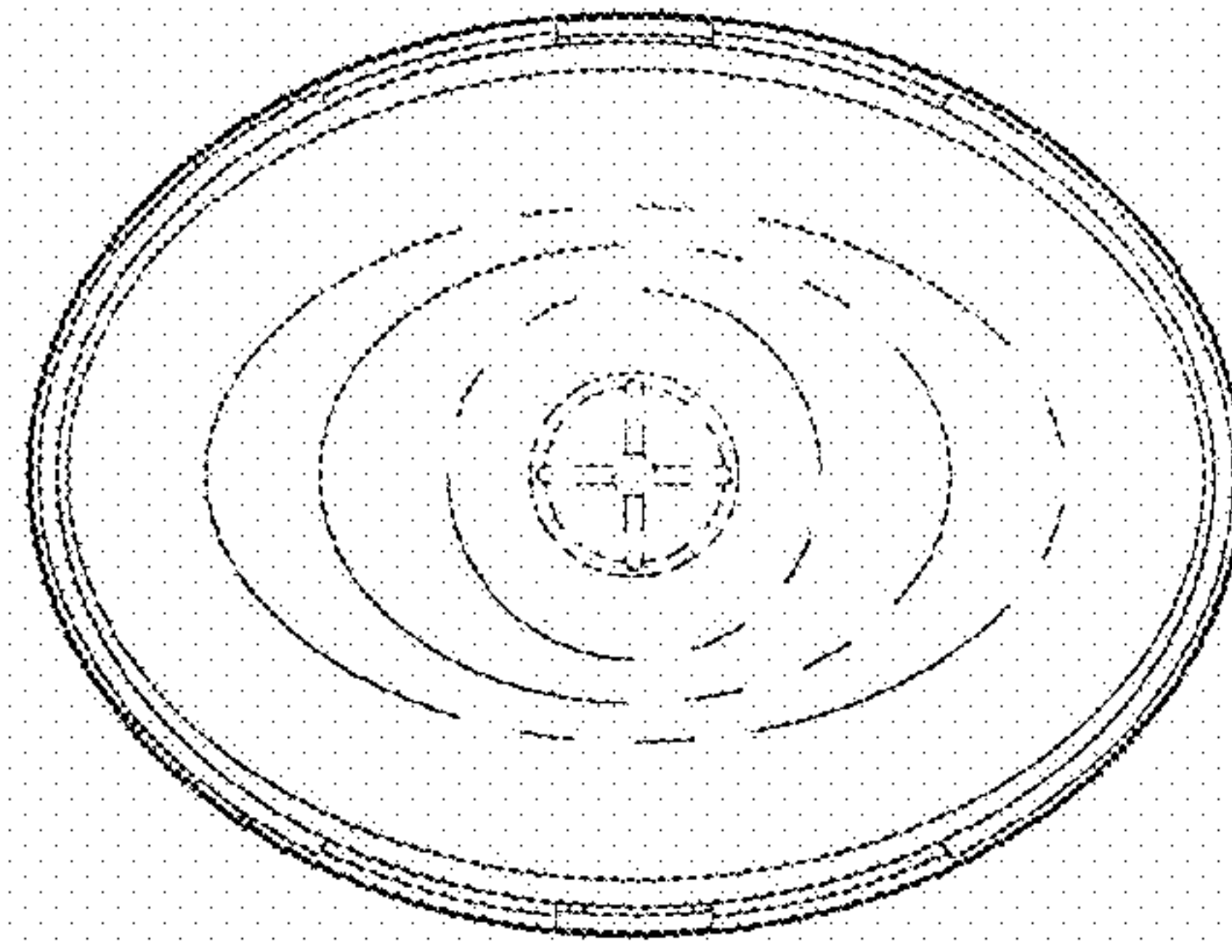


Fig. 27

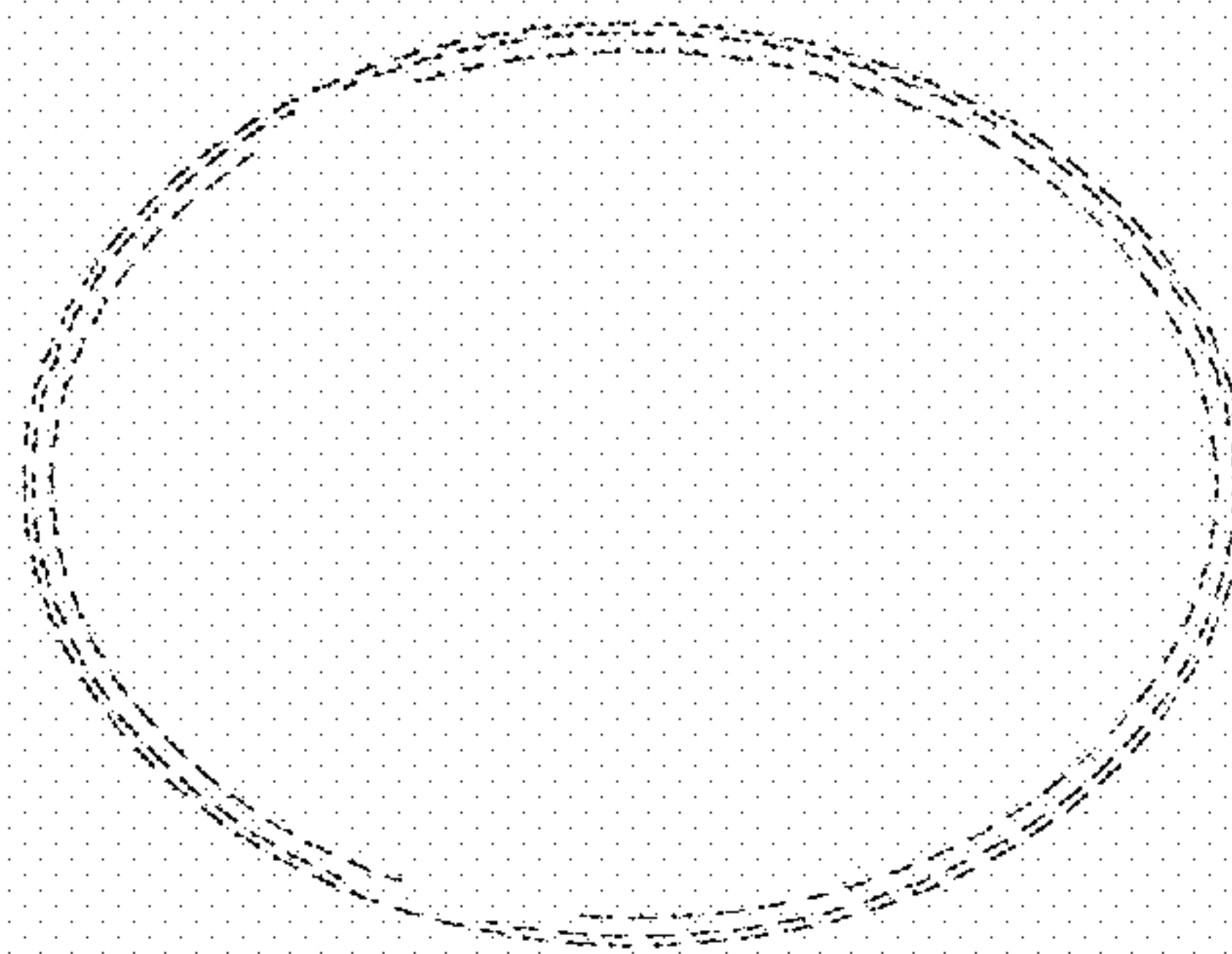


Fig. 28