



US00D910249S

(12) **United States Design Patent** (10) **Patent No.:** **US D910,249 S**
Hedlund (45) **Date of Patent:** **** Feb. 9, 2021**

- (54) **MILKER UNIT SHORT MILK TUBE MILK CLAW END CONNECTOR** 5,482,004 A * 1/1996 Chowdhury A01J 5/08 119/14.52
- 5,493,995 A * 2/1996 Chowdhury A01J 5/044 119/14.47
- (71) Applicant: **GEA Farm Technologies, Inc.,** 5,572,947 A * 11/1996 Larson A01J 5/044 119/14.51
Naperville, IL (US)
- (72) Inventor: **Nathan Hedlund,** Galesville, WI (US) 6,164,243 A * 12/2000 Larson A01J 5/08 119/14.49
- (73) Assignee: **GEA Farm Technologies, Inc.,** 6,427,624 B1 * 8/2002 Briggs A01J 5/08 119/14.01
Naperville, IL (US)

(Continued)

- (**) Term: **15 Years**
- (21) Appl. No.: **29/652,259**
- (22) Filed: **Jun. 30, 2020**

Primary Examiner — Susan Moon Lee
(74) *Attorney, Agent, or Firm* — Smith Law Office; Jeffrey W. Smith

(57) **CLAIM**

The ornamental design for a milker unit short milk tube milk claw end connector, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a milker unit short milk tube milk claw end connector showing the design; FIG. 2 is an isolated perspective view thereof; FIG. 3 is a front elevational view thereof and is a mirror image of the rear elevational view thereof; FIG. 4 is a right side elevational view thereof, and is a mirror image of the left side elevational view thereof; FIG. 5 is a bottom end view thereof; FIG. 6 is a perspective view of a milker unit short milk tube milk claw end connector showing an alternate design; FIG. 7 is an isolated perspective view thereof; FIG. 8 is a front elevational view thereof and is a mirror image of the rear elevational view thereof; FIG. 9 is a right side elevational view thereof, and is a mirror image of the left side elevational view thereof; and, FIG. 10 is a bottom end view thereof. A teat cup liner and the short milk tube are shown in broken lines for illustrative purposes only, and form no part of the claimed design.

Related U.S. Application Data

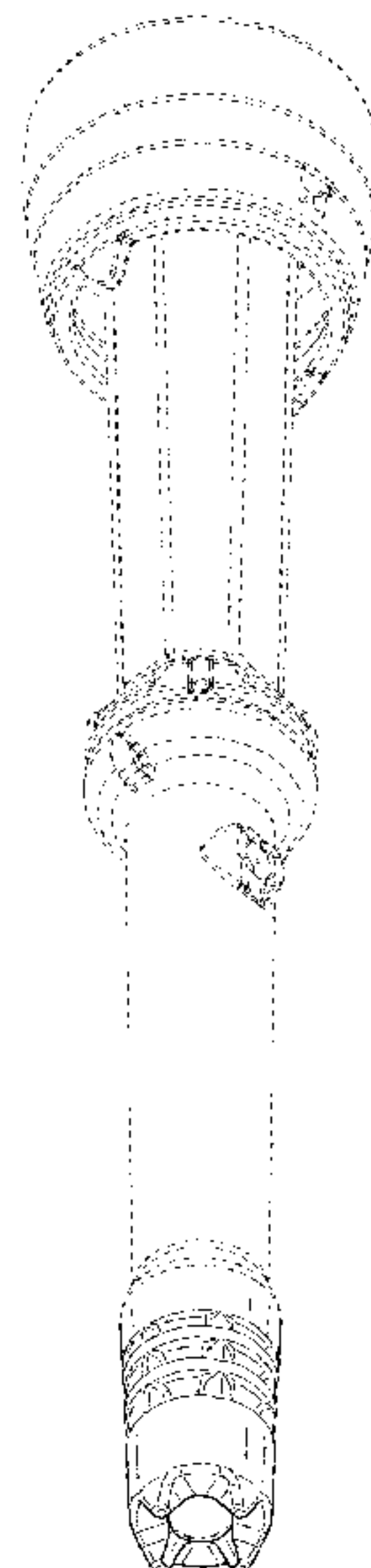
- (63) Continuation-in-part of application No. 16/544,458, filed on Aug. 19, 2019.
- (51) **LOC (13) Cl.** **30-99**
- (52) **U.S. Cl.** **D30/199**
USPC
- (58) **Field of Classification Search**
USPC D30/199, 121; 119/14.54, 14.55, 14.36, 119/14.39, 14.37
CPC A01J 5/041; A01J 5/00; A01J 5/003; A01J 5/0075; A01J 5/01; A01J 5/017-044; A01J 5/06-16; A01J 3/00; A01J 7/00; A01J 7/005; A01K 1/12; A01K 1/123; A01K 1/126
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 4,324,201 A * 4/1982 Larson A01J 5/041 119/14.51
- 4,530,307 A * 7/1985 Thompson A01J 5/08 119/14.49

1 Claim, 10 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

6,742,475 B1 *	6/2004	McLeod	.....	A01J 5/044	9,801,351 B2 *	10/2017	Auburger	.....	A01J 5/06
				119/14.47	9,883,652 B2 *	2/2018	Torgerson	.....	A01J 7/025
6,895,892 B2 *	5/2005	Sellner	.....	A01J 5/04	9,930,863 B2 *	4/2018	Torgerson	.....	A01J 7/022
				119/14.54	10,499,610 B2 *	12/2019	Torgerson	.....	A01J 5/06
7,578,260 B2 *	8/2009	Shin	.....	A01J 5/08	10,785,952 B2 *	9/2020	Hedlund	.....	A01J 5/08
				119/14.01	2004/0060520 A1 *	4/2004	Sellner	.....	A01J 5/04
D624,715 S *	9/2010	Auburger	.....	D30/199					119/14.54
8,113,145 B2 *	2/2012	Sellner	.....	A01J 5/08	2006/0005772 A1 *	1/2006	Shin	.....	A01J 5/08
				119/14.47					119/14.52
8,567,346 B1 *	10/2013	Alveby	.....	A01J 5/08	2008/0072825 A1 *	3/2008	Petersson	.....	A01J 5/08
				119/14.49					119/14.47
8,813,681 B2 *	8/2014	Chowdhury	.....	A01J 5/08	2008/0276871 A1 *	11/2008	Auburger	.....	A01J 5/08
				119/14.47					119/14.49
9,288,962 B2 *	3/2016	Priest	.....	A01J 5/08	2014/0123903 A1 *	5/2014	Priest	.....	A01J 5/08
9,408,367 B2 *	8/2016	Alveby	.....	A01J 5/08					119/14.47
9,439,391 B2 *	9/2016	Kochman	.....	A01J 5/08	2014/0190416 A1 *	7/2014	Kochman	.....	A01J 5/08
9,504,226 B2 *	11/2016	Buck	.....	A01J 5/007					119/14.47
9,510,555 B2 *	12/2016	Chowdhury	.....	A01J 5/08	2015/0114298 A1 *	4/2015	Alveby	.....	A01J 5/16
9,545,079 B2 *	1/2017	Torgerson	.....	A01J 7/04					119/14.02
9,770,006 B2 *	9/2017	Torgerson	.....	A01J 7/04	2016/0007559 A1 *	1/2016	Andersson	.....	A01J 5/044
									119/14.46
					2018/0228117 A1 *	8/2018	Gruter	.....	A01J 5/06

* cited by examiner

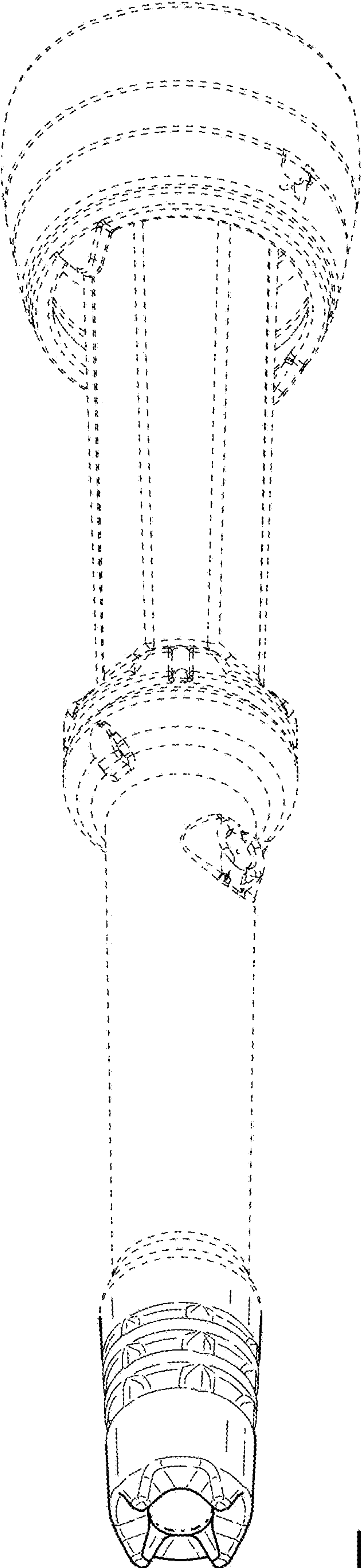


FIG. 1

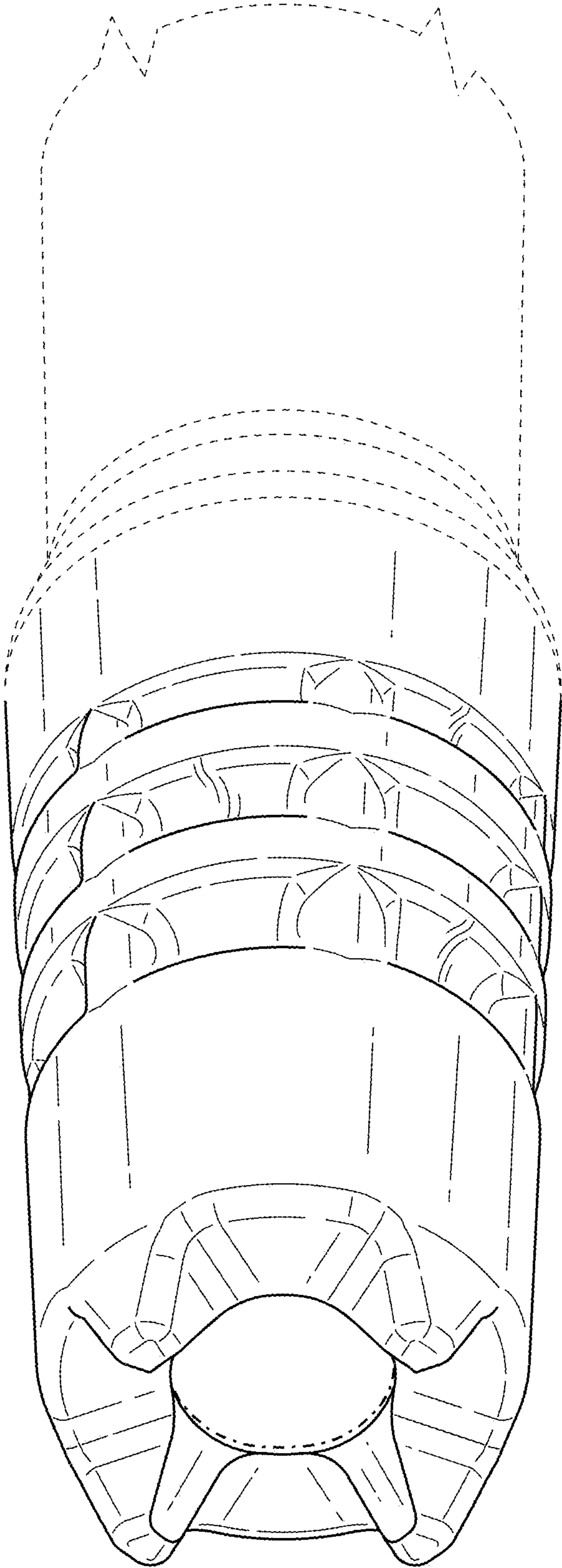


FIG. 2

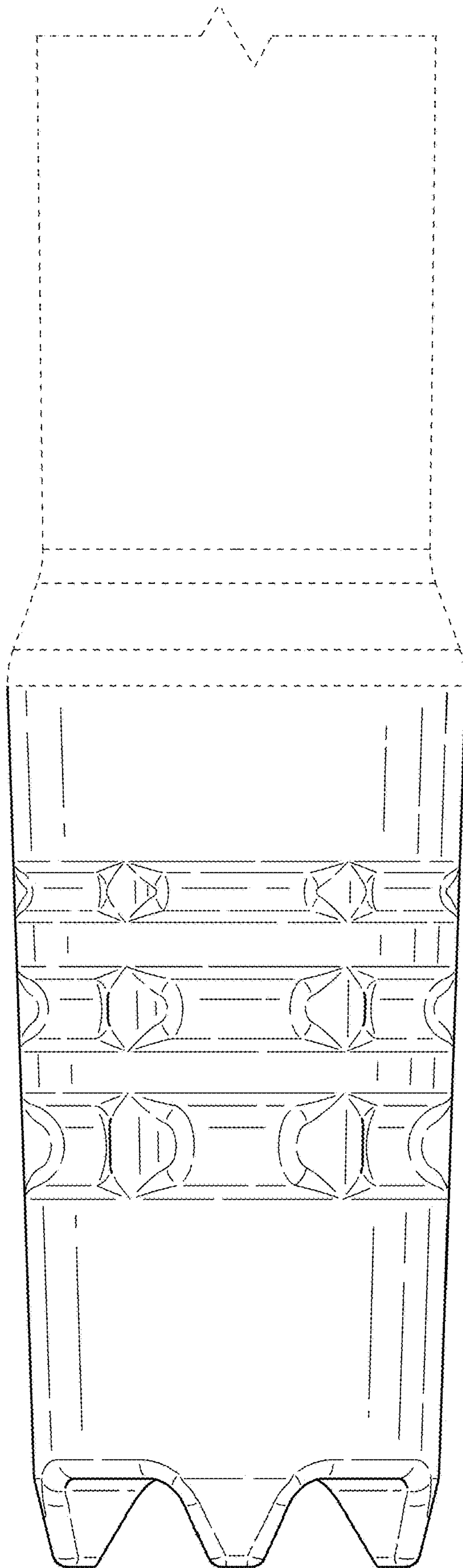


FIG. 3

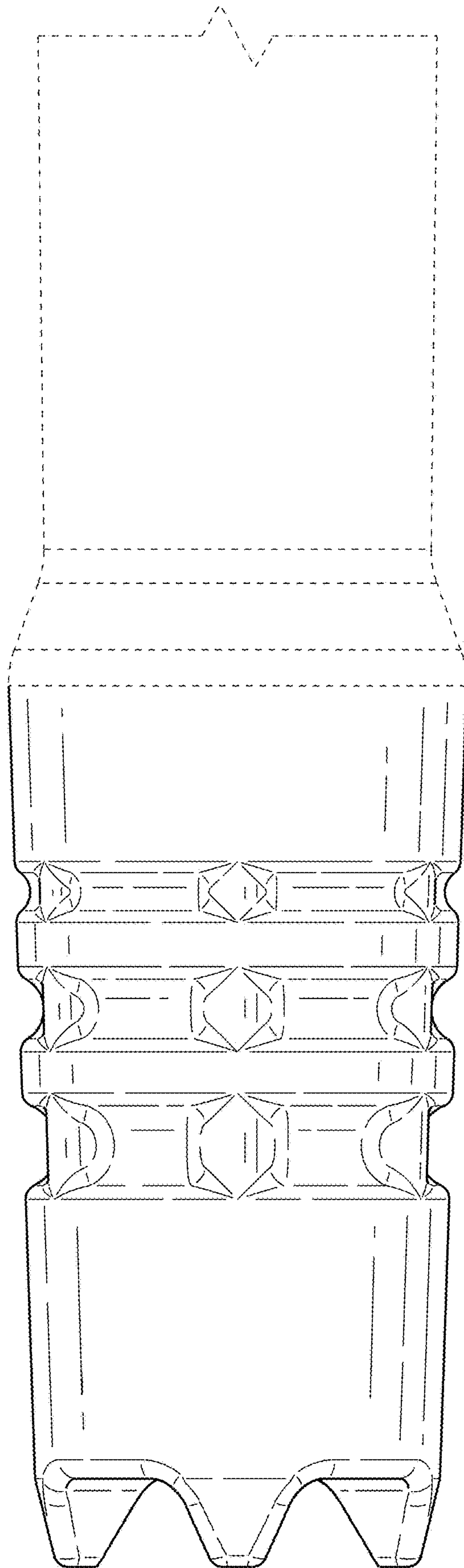


FIG. 4

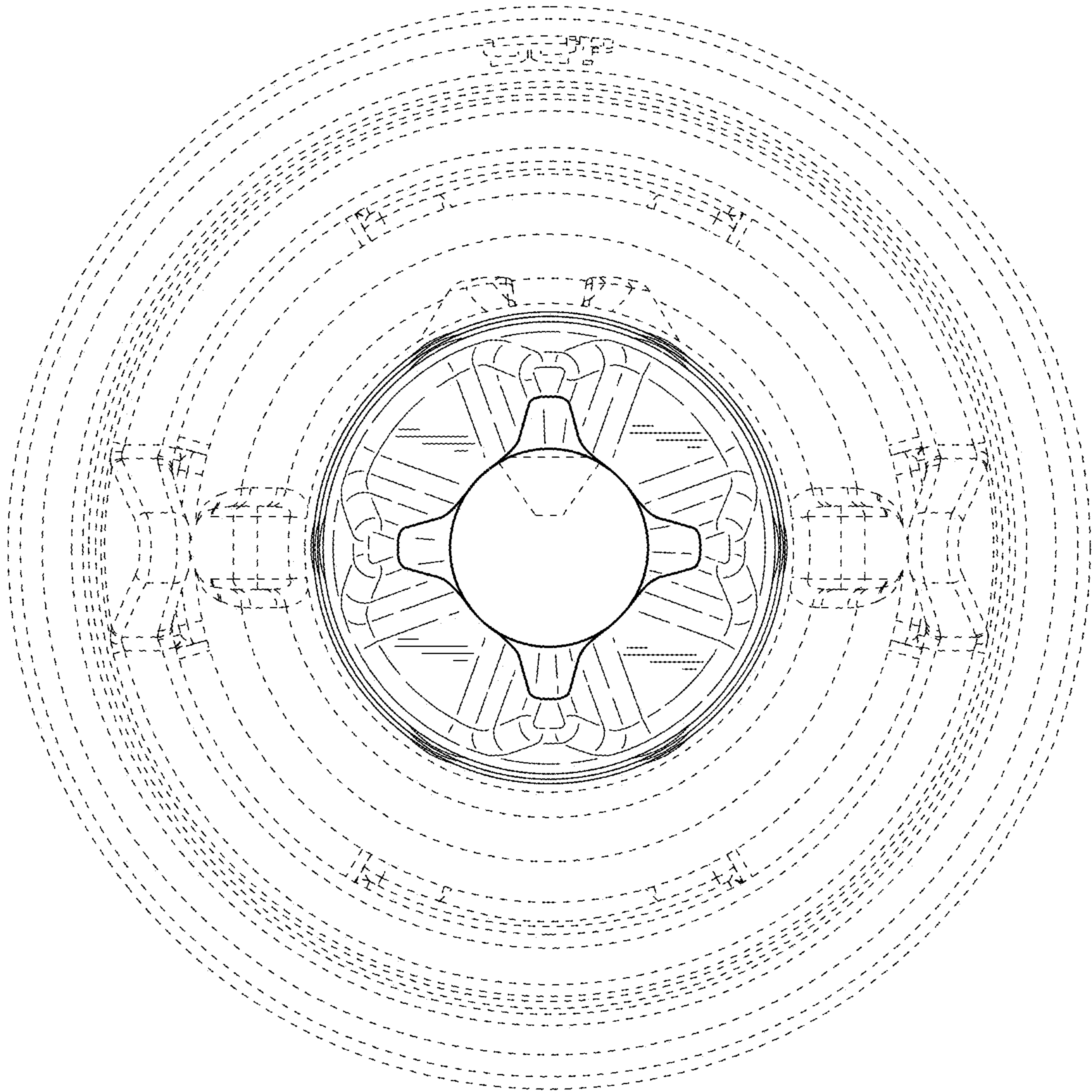


FIG. 5

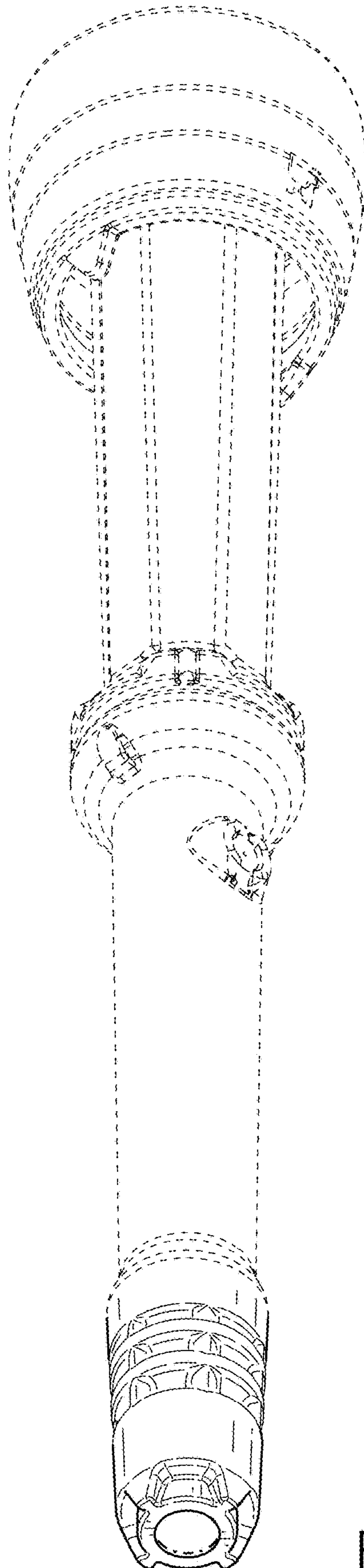


FIG. 6

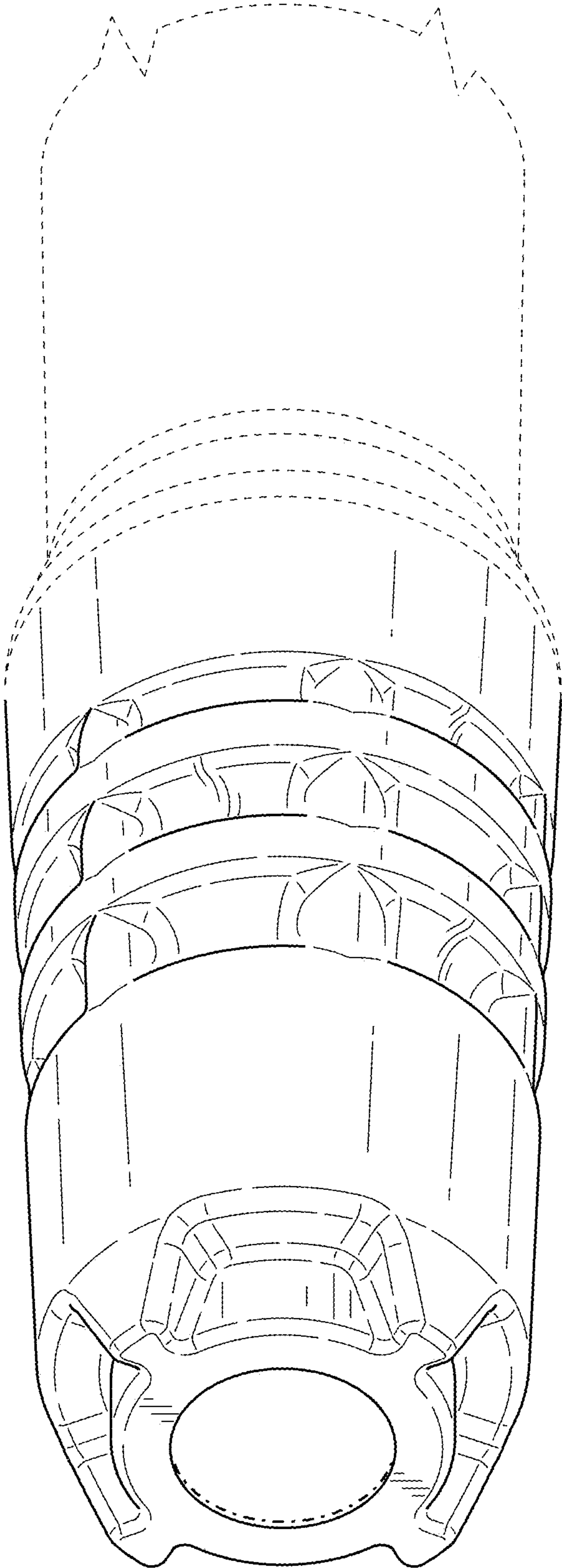


FIG. 7

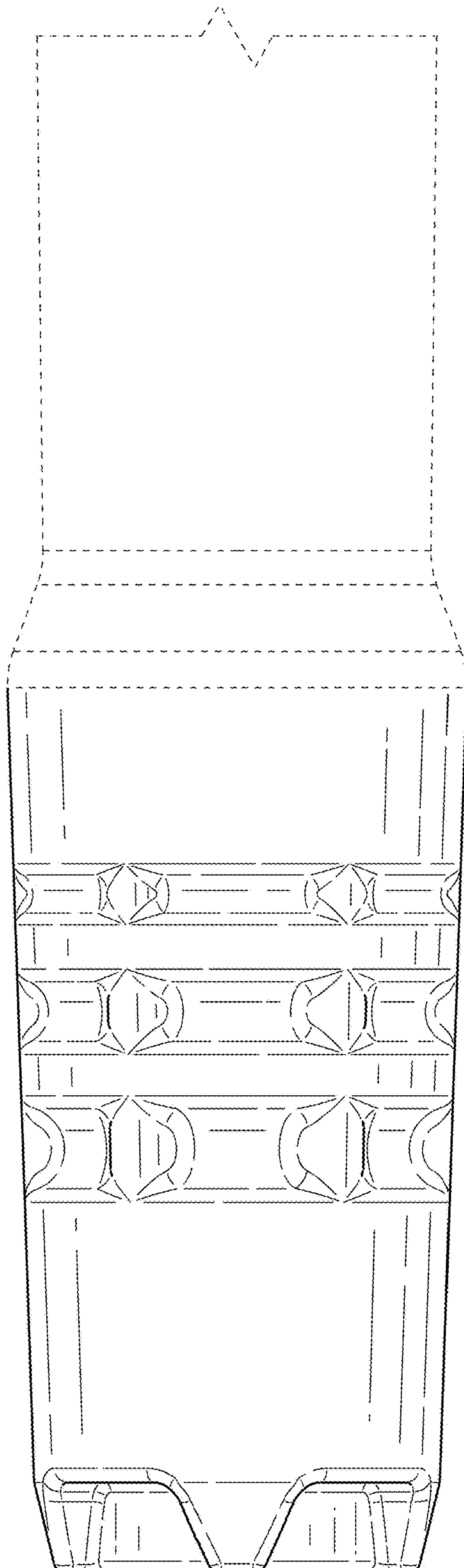


FIG. 8

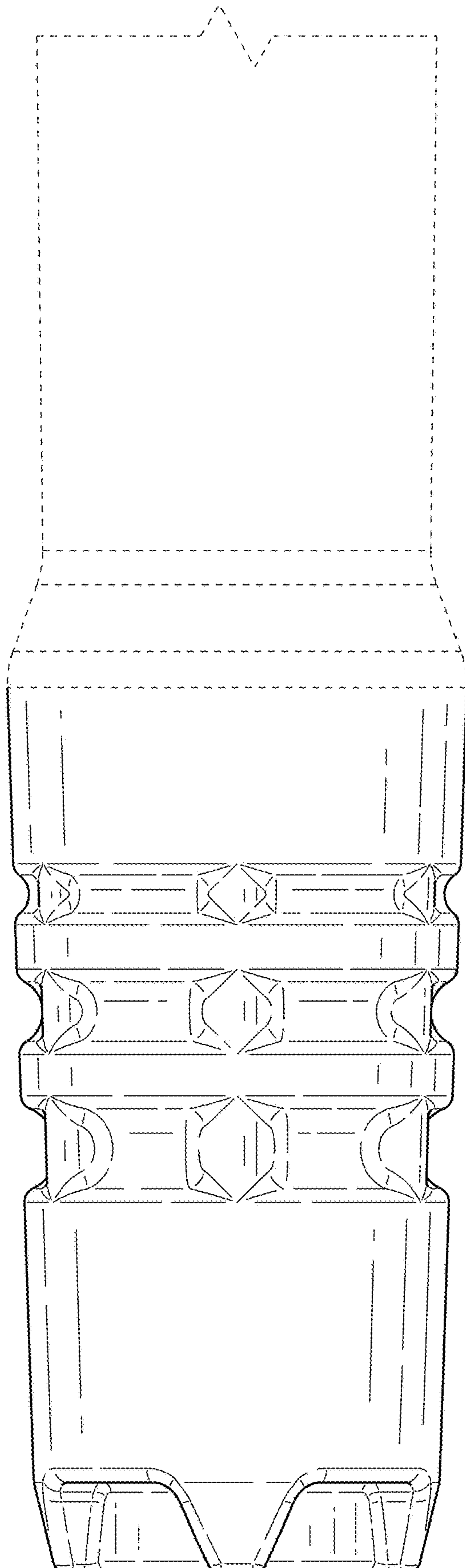


FIG. 9

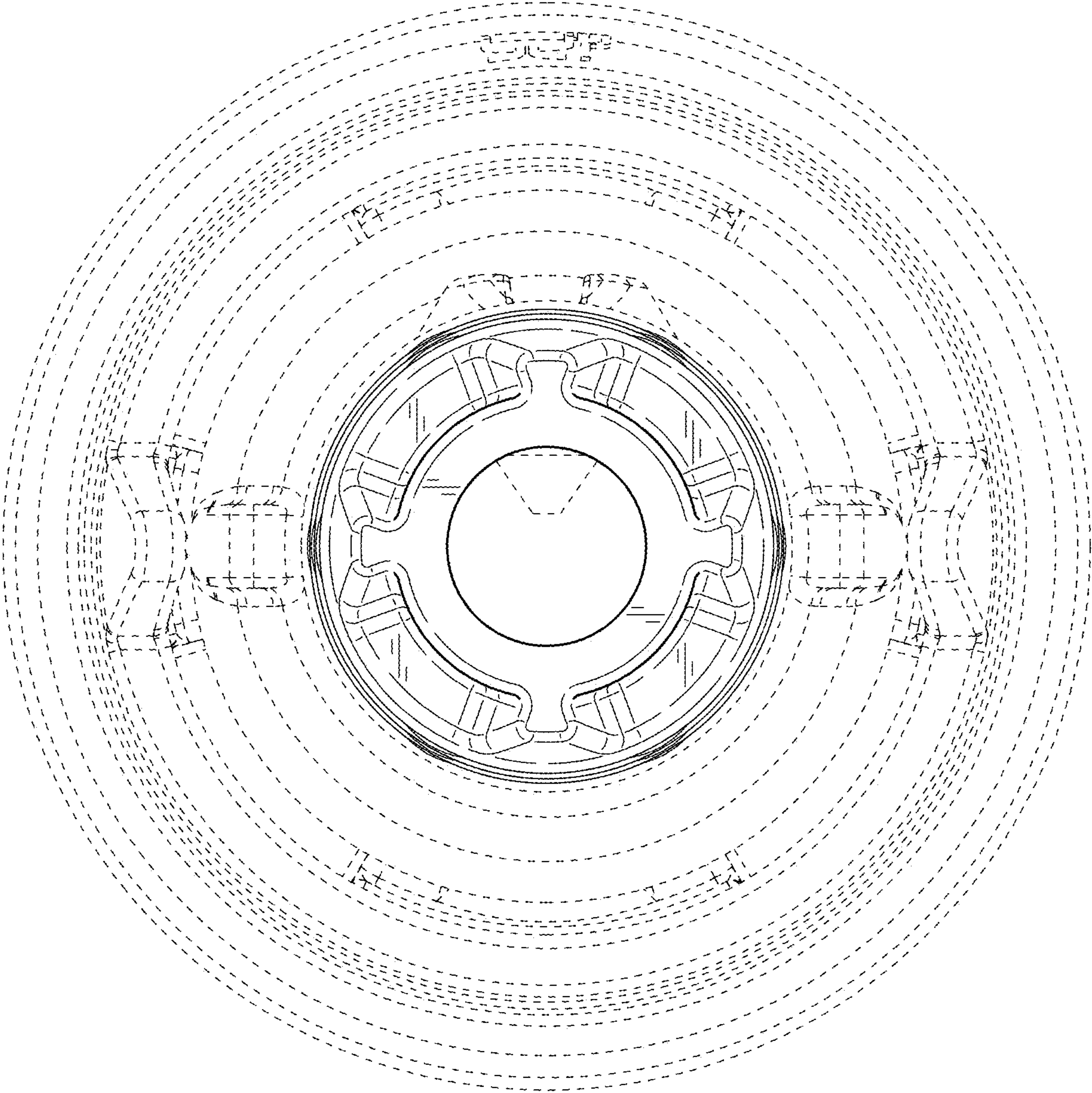


FIG. 10