



US00D858771S

(12) **United States Design Patent** (10) **Patent No.:** **US D858,771 S**
Kugler et al. (45) **Date of Patent:** **** Sep. 3, 2019**

(54) **APPARATUS FOR TREATING BODY TISSUE SPHINCTER**

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

(21) Appl. No.: **29/622,739**

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(56) **References Cited**

U.S. PATENT DOCUMENTS

281,371	A *	7/1883	Keller	A44C 5/08 59/79.3
4,708,140	A *	11/1987	Baron	A61B 17/12 606/158
6,432,040	B1 *	8/2002	Meah	A61F 2/004 600/37
7,695,427	B2	4/2010	Kugler et al.	
7,811,298	B2 *	10/2010	Birk	A61F 5/0033 600/31
8,187,164	B2	5/2012	Kugler et al.	
9,028,394	B2 *	5/2015	Honaryar	A61F 5/005 600/37
10,182,821	B2 *	1/2019	Lukin	A61B 17/11
2005/0120746	A1 *	6/2005	Winston	A44C 5/08 63/38
2005/0283235	A1 *	12/2005	Kugler	A61B 17/12009 623/14.13
2009/0125102	A1 *	5/2009	Cartledge	A61B 17/00234 623/2.11
2010/0099945	A1 *	4/2010	Birk	A61F 5/0056 600/37

(Continued)

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(57) **CLAIM**

The ornamental design for an apparatus for treating body tissue sphincter, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of an apparatus for treating body tissue sphincter, showing our new design; FIG. 2 is a front elevational view thereof; FIG. 3 is a back elevational view thereof; FIG. 4 is a left elevational view thereof; FIG. 5 is a right elevational view thereof; FIG. 6 is a top plan view thereof; and, FIG. 7 is a bottom plan view thereof.

1 Claim, 5 Drawing Sheets

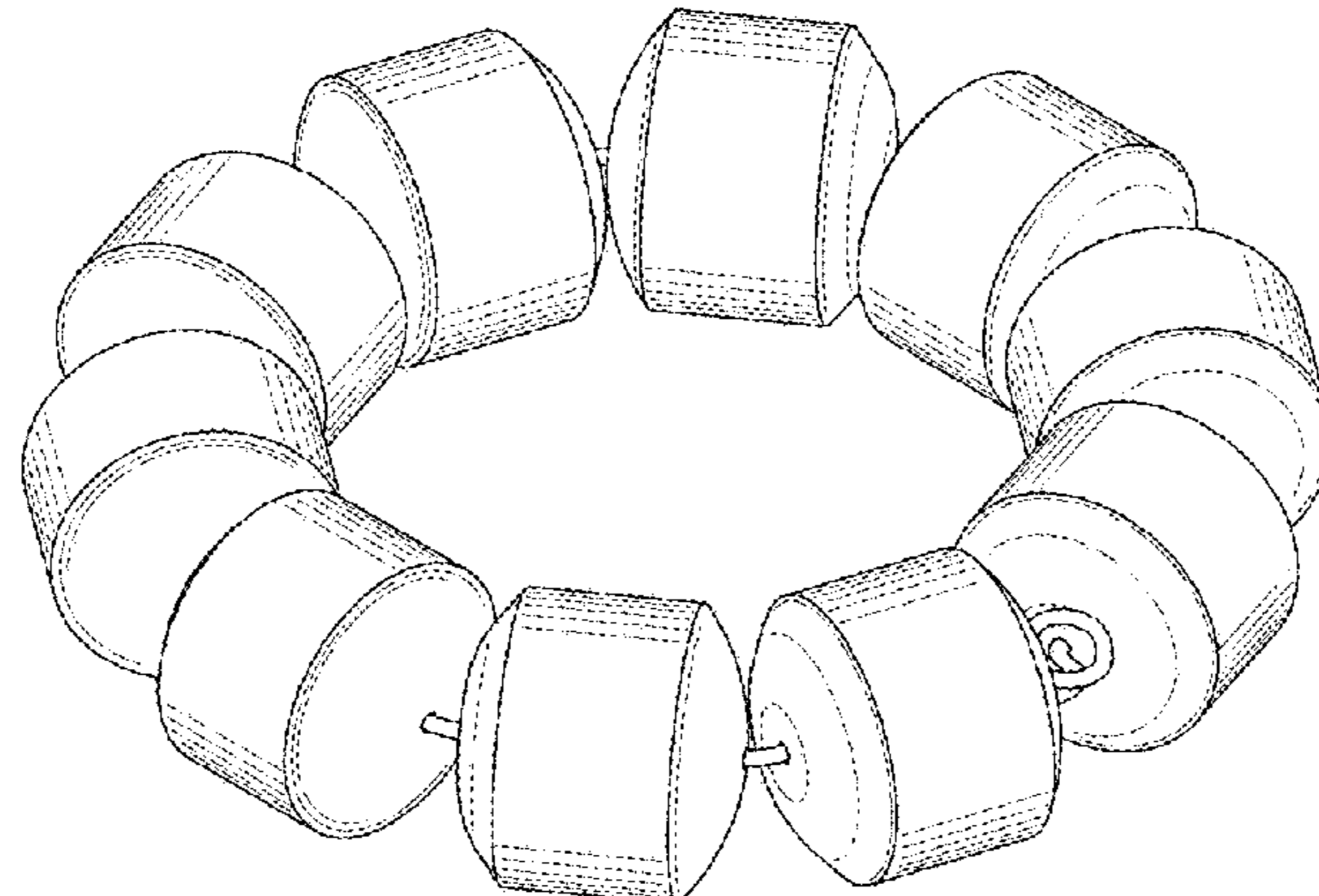
Related U.S. Application Data

(60) Continuation-in-part of application No. 14/445,723, filed on Jul. 29, 2014, which is a division of application No. 13/403,441, filed on Feb. 23, 2012, now abandoned, which is a division of application No. 12/610,633, filed on Nov. 2, 2009, now Pat. No. 8,187,164, which is a continuation of application No. 11/147,801, filed on Jun. 7, 2005, now Pat. No. 7,695,427.

(51) **LOC (12) Cl.** **24-03**

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

(58) **Field of Classification Search**
USPC D24/155
CPC A61F 2/00; A61F 2/04; A61F 2/24
See application file for complete search history.



(56)

References Cited

U.S. PATENT DOCUMENTS

2011/0034762 A1* 2/2011 Paganon A61F 5/0033
600/37
2012/0150214 A1 6/2012 Kugler et al.
2014/0336696 A1 11/2014 Kugler et al.

* cited by examiner

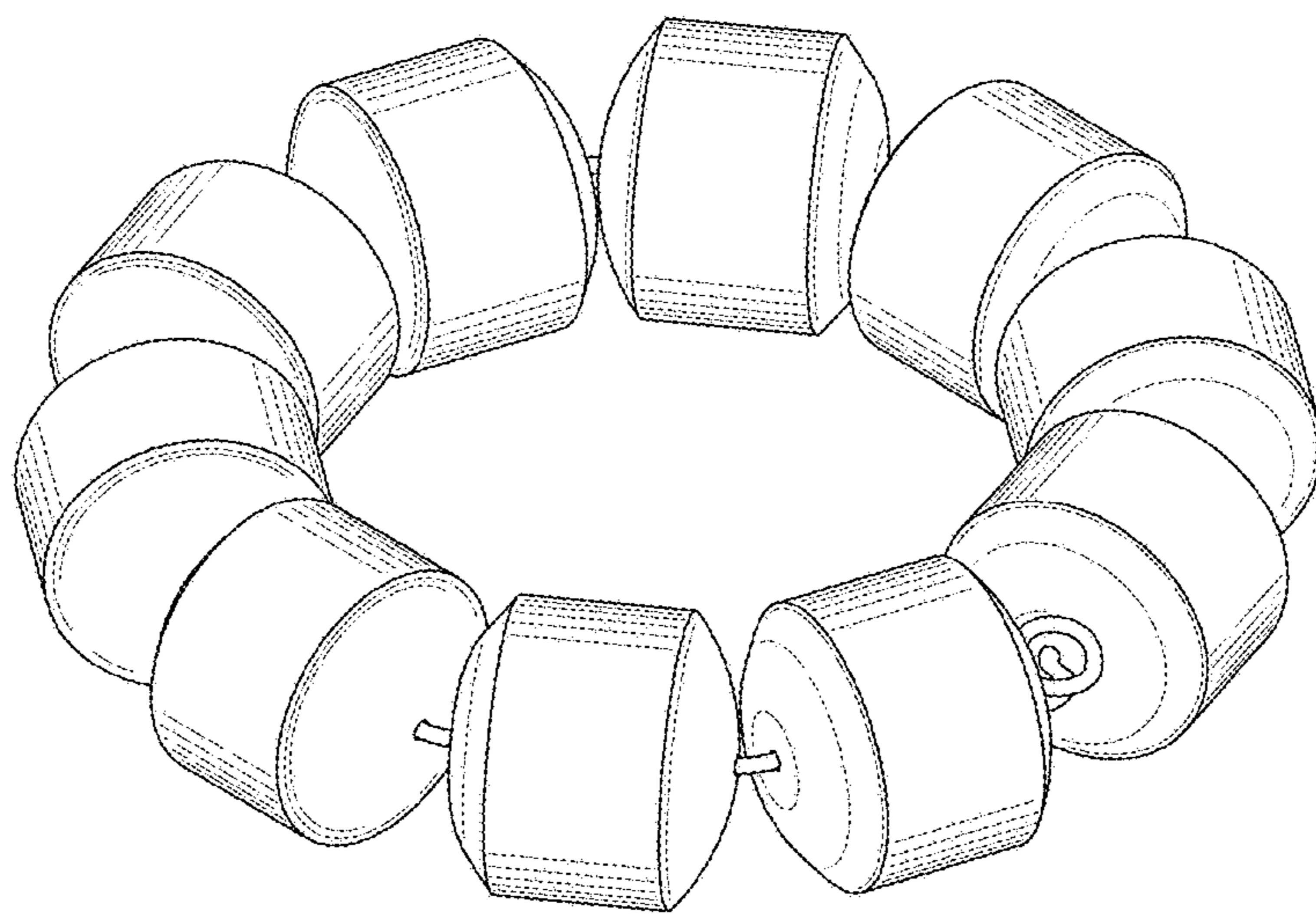


FIG. 1

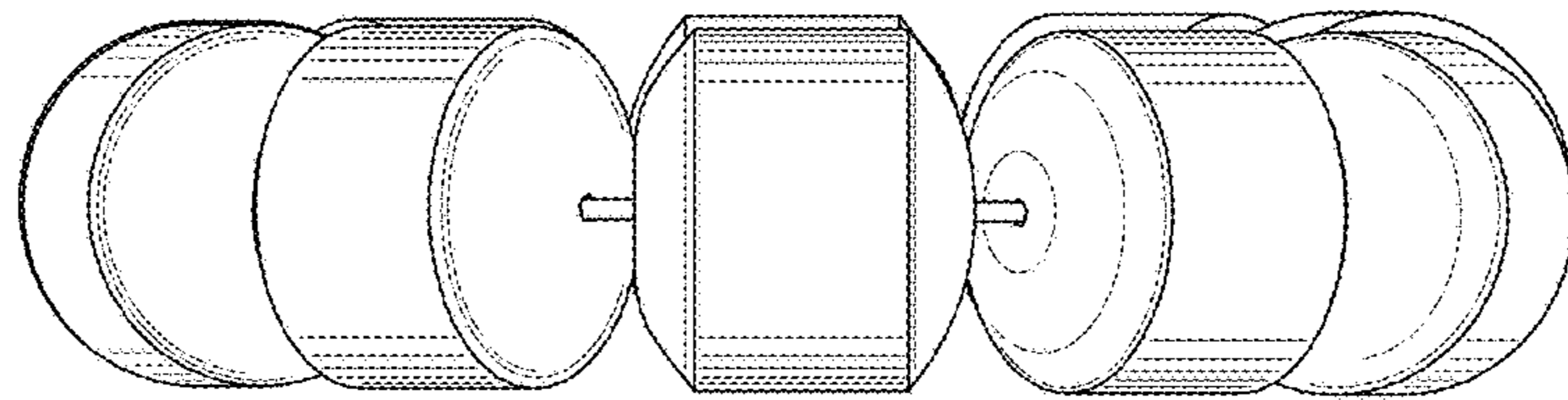


FIG. 2

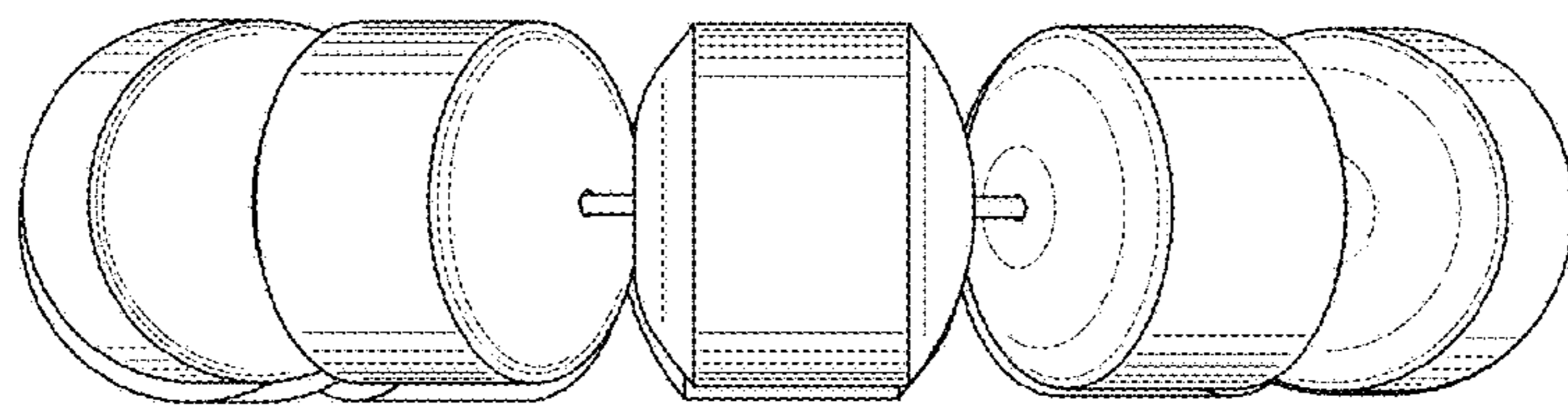


FIG. 3

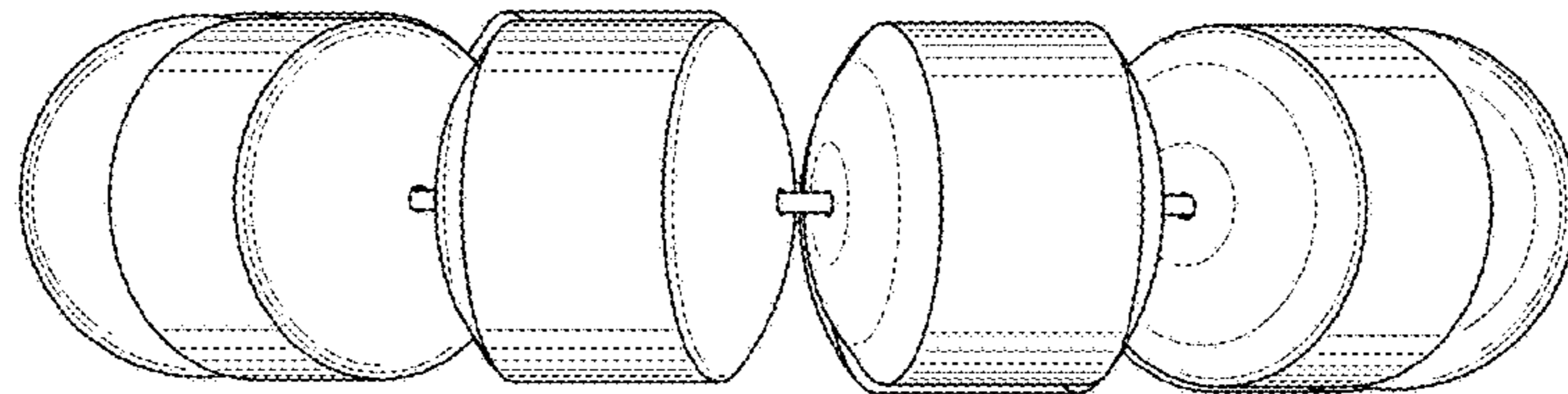


FIG. 4

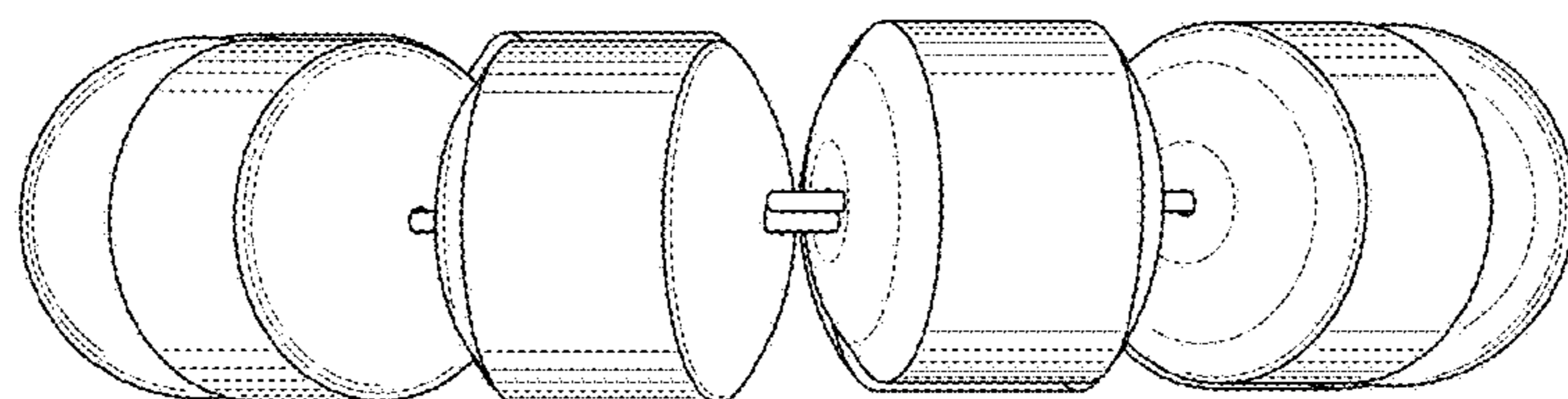


FIG. 5

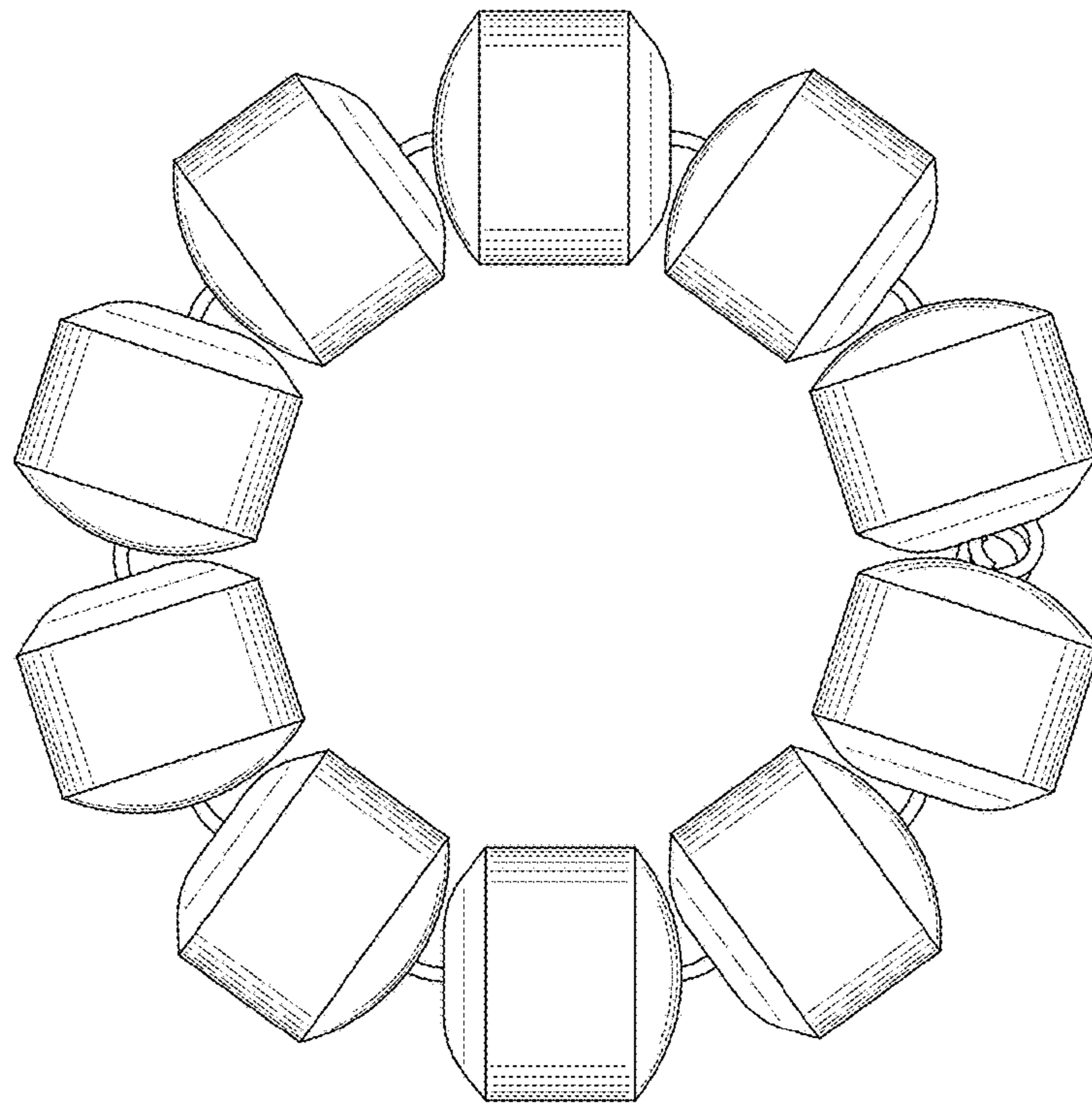


FIG. 6

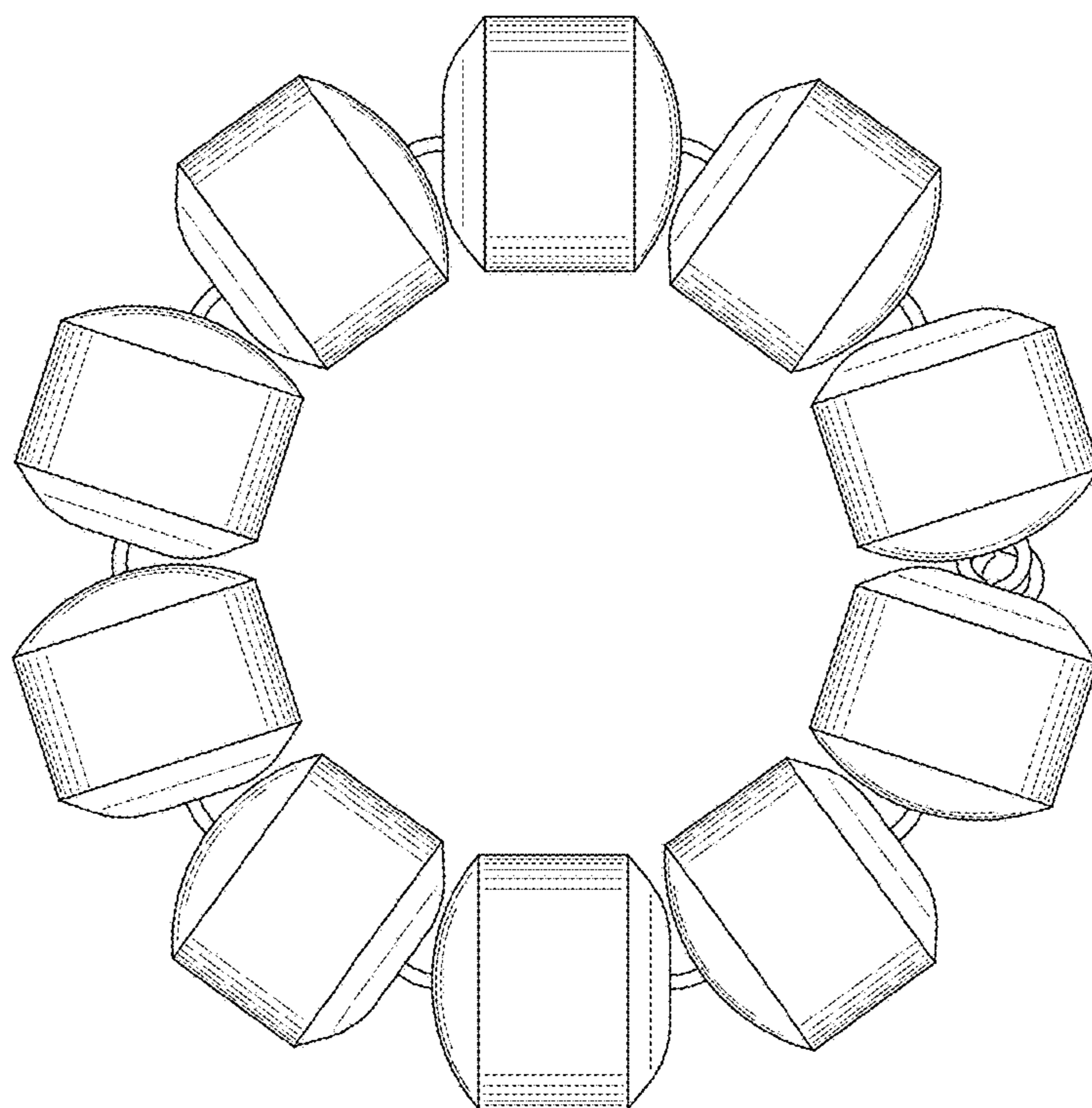


FIG. 7