



US00D811593S

(12) **United States Design Patent** (10) **Patent No.:** **US D811,593 S**
Callicrate et al. (45) **Date of Patent:** **** Feb. 27, 2018**

(54) **LIGATION DEVICE**
(71) Applicant: **No-Bull Enterprises LLC**, St. Francis, KS (US)
(72) Inventors: **Michael P. Callicrate**, St. Francis, KS (US); **Roy Allen Harbach**, Highlands Ranch, CO (US)

5,383,882 A 1/1995 Buess et al.
5,403,325 A 4/1995 Callicrate
5,417,684 A 5/1995 Jackson et al.
5,425,736 A 6/1995 Wadsworth
5,445,167 A 8/1995 Yoon et al.
5,517,728 A 5/1996 Woods
5,675,870 A 10/1997 Cooper

(Continued)

(73) Assignee: **No-Bull Enterprises, LLC**, St. Francis, KS (US)

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

(21) Appl. No.: **29/553,592**

(22) Filed: **Feb. 3, 2016**

(51) **LOC (11) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/143**

(58) **Field of Classification Search**
USPC D24/143, 127, 145, 108
CPC A61B 17/12009; A61B 17/12013; A61B 17/12; A61B 2017/12018
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,538,584 A * 11/1970 Carpenter A61L 317/1200 29/240
3,985,138 A * 10/1976 Jarvik A61B 17/12013 606/144
4,009,509 A 3/1977 McCormick
4,033,352 A 7/1977 van Reenen
4,128,100 A * 12/1978 Wendorff A61B 17/12009 606/141
4,691,704 A 9/1987 Wadsworth
5,188,637 A 2/1993 Wadsworth
5,217,030 A 6/1993 Yoon
5,236,434 A 8/1993 Callicrate
5,259,366 A 11/1993 Reydel et al.
5,281,238 A * 1/1994 Chin A61B 17/12013 606/113
5,282,825 A 2/1994 Muck et al.

OTHER PUBLICATIONS

Official Action for Canadian Patent Application No. 2,866,938, dated Feb. 2, 2016, 4 pages.

U.S. Appl. No. 15/014,369, filed Feb. 3, 2016, Callicrate et al. International Search Report for International (PCT) Patent Application No. PCT/US2011/028312, dated Jul. 22, 2011, 3 pages.

(Continued)

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(57) **CLAIM**

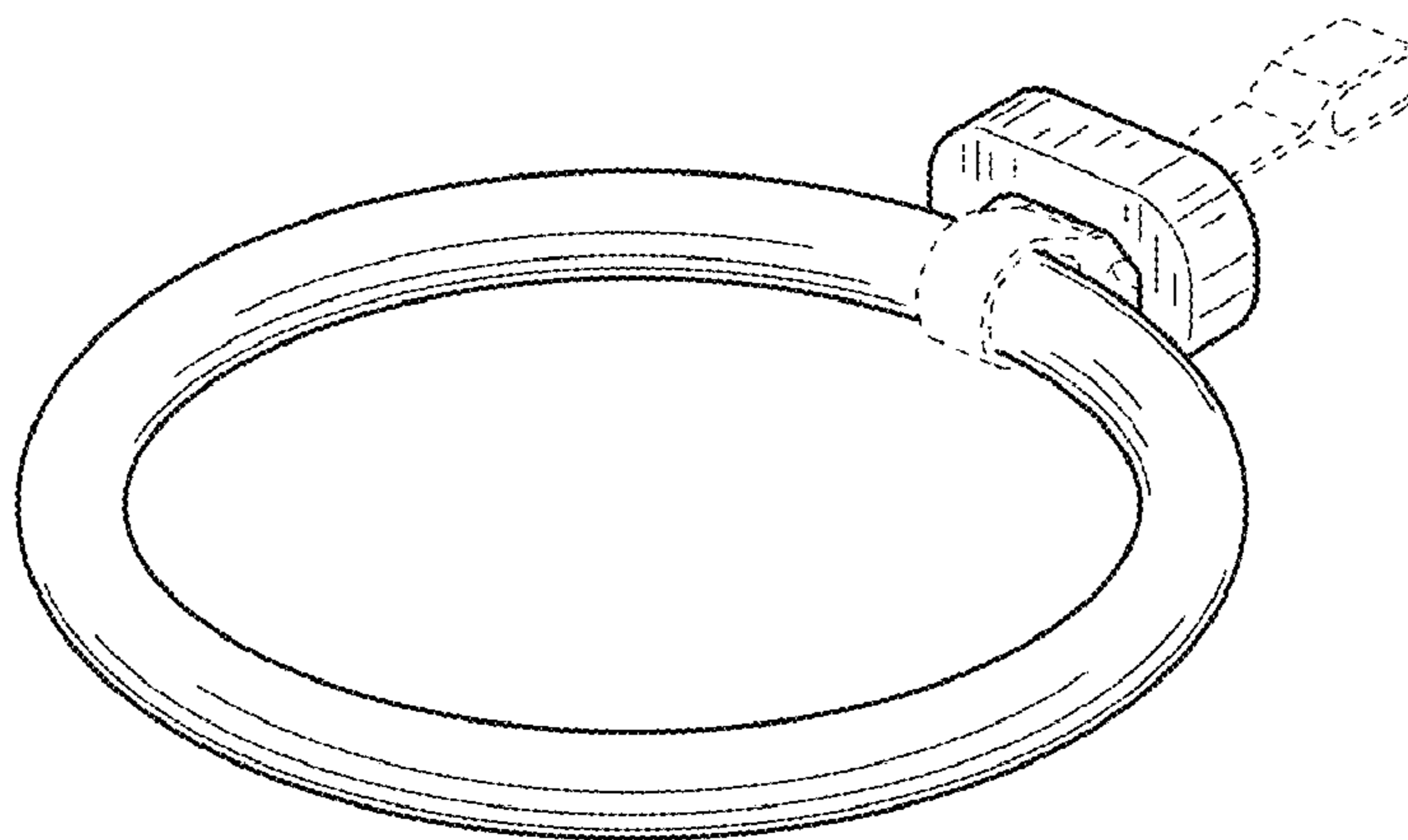
The ornamental design for a ligation device, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of the ligation device; FIG. 2 is a top plan view of the ligation device of FIG. 1; FIG. 3 is a bottom plan view of the ligation device of FIG. 1; FIG. 4 is a right elevation view of the ligation device of FIG. 1; FIG. 5 is a left elevation view of the ligation device of FIG. 1; FIG. 6 is a rear elevation view of the ligation device of FIG. 1; and, FIG. 7 is a front elevation view of the ligation device of FIG. 1.

The broken lines showing portions of the ligation device are provided to illustrate environment only, and form no part of the claimed design.

1 Claim, 3 Drawing Sheets



(56)

References Cited

OTHER PUBLICATIONS

U.S. PATENT DOCUMENTS

5,676,146	A	10/1997	Scarborough	
5,681,329	A	10/1997	Callicrate	
5,693,059	A	12/1997	Yoon	
5,722,123	A	3/1998	Davignon et al.	
5,810,845	A	9/1998	Yoon	
5,843,095	A	12/1998	Callicrate	
5,855,586	A	1/1999	Habara et al.	
5,902,309	A	5/1999	Wadsworth	
5,919,233	A *	7/1999	Knopf	A61F 2/0063 128/898
5,997,553	A	12/1999	Callicrate	
6,270,507	B1	8/2001	Callicrate	
6,409,738	B2	6/2002	Callicrate	
6,613,060	B2	9/2003	Adams et al.	
7,017,237	B2	3/2006	Magno, Jr.	
7,371,242	B2	5/2008	Wadsworth et al.	
7,909,839	B2 *	3/2011	Fields	A61B 17/12009 606/151
8,118,819	B2	2/2012	Miyamoto et al.	
8,702,728	B2	4/2014	Callicrate et al.	
8,715,302	B2 *	5/2014	Ibrahim	A61B 17/12013 606/144
9,144,428	B2 *	9/2015	Binmoeller	A61B 17/12013
9,271,735	B2	3/2016	Callicrate et al.	
2002/0072757	A1	6/2002	Ahmed et al.	
2003/0236541	A1	12/2003	Callicrate et al.	
2004/0215215	A1	10/2004	McClellan et al.	
2005/0080433	A1	4/2005	Porter	
2007/0062012	A1	3/2007	Caison	
2007/0234524	A1	10/2007	Witt	
2008/0255614	A1	10/2008	Menoudakos	

Written Opinion for International (PCT) Patent Application No. PCT/US2011/028312, dated Jul. 22, 2011, 5 pages.

International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2011/028312, dated Sep. 27, 2012, 7 pages.

Official Action for Australia Patent Application No. 2011226642, dated Jun. 14, 2013, 4 pages.

Official Action for Australia Patent Application No. 2014250645, dated Feb. 22, 2016, 6 pages.

Official Action for Canadian Patent Application No. 2,792,907, dated Aug. 22, 2013, 3 pages.

Official Action for U.S. Appl. No. 13/046,392, dated Oct. 25, 2012 6 pages Restriction Requirement.

Official Action for U.S. Appl. No. 13/046,392, dated Apr. 30, 2013 7 pages Restriction Requirement.

Official Action for U.S. Appl. No. 13/046,392, dated Jul. 26, 2013 11 pages.

Notice of Allowance for U.S. Appl. No. 13/046,392, dated Dec. 10, 2013. 13 pages.

Restriction Requirement for U.S. Appl. No. 13/583,939 , dated Apr. 16, 2015 7 pages.

Official Action for U.S. Appl. No. 13/583,939 , dated Jul. 9, 2015 8 pages.

Notice of Allowance for U.S. Appl. No. 13/583,939 , dated Oct. 28, 2015 10 pages.

U.S. Appl. No. 13/046,392, filed Mar. 11, 2011.

U.S. Appl. No. 13/583,939, filed Sep. 11, 2012.

U.S. Appl. No. 15/014,369, filed Feb. 3, 2016.

* cited by examiner

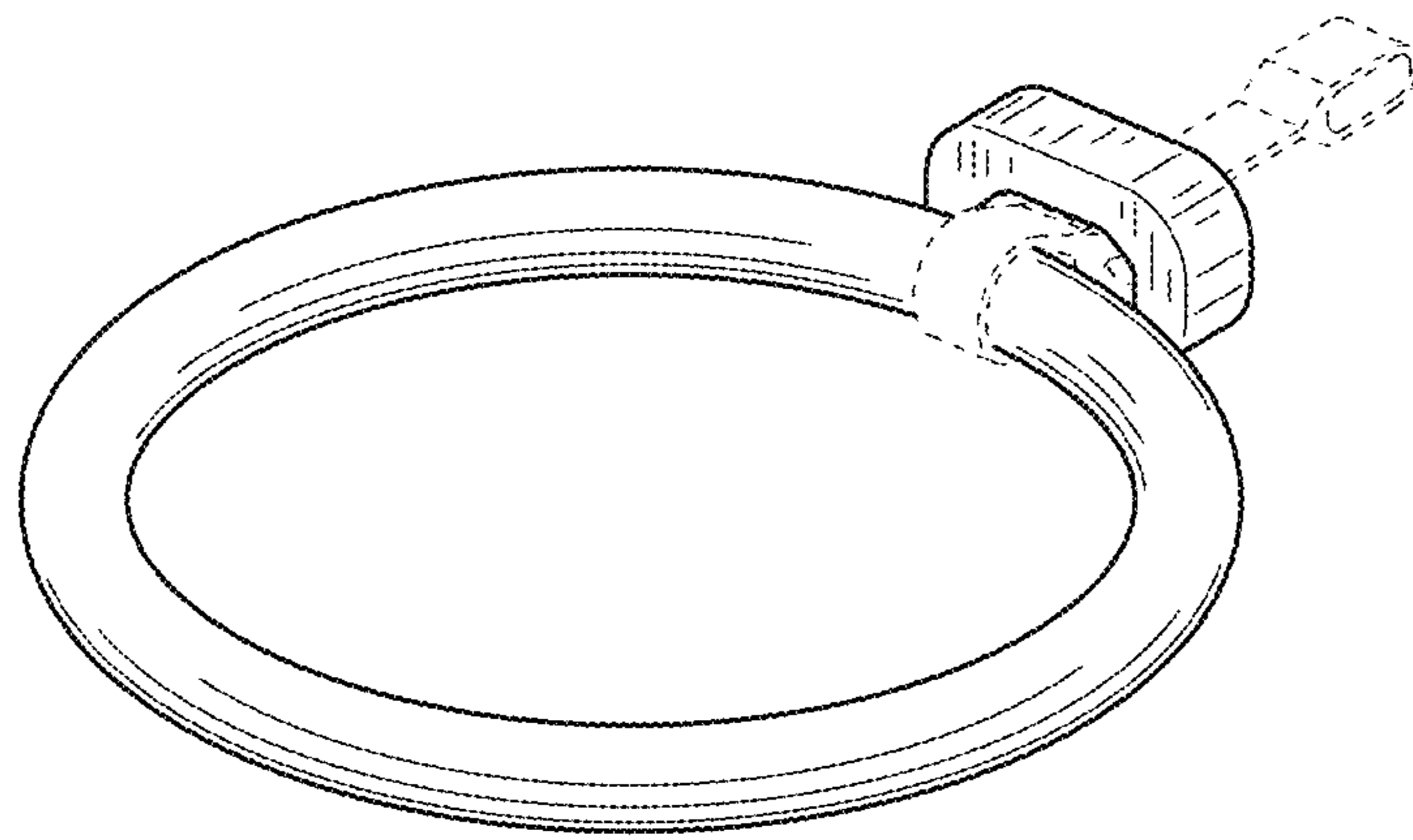


FIG. 1

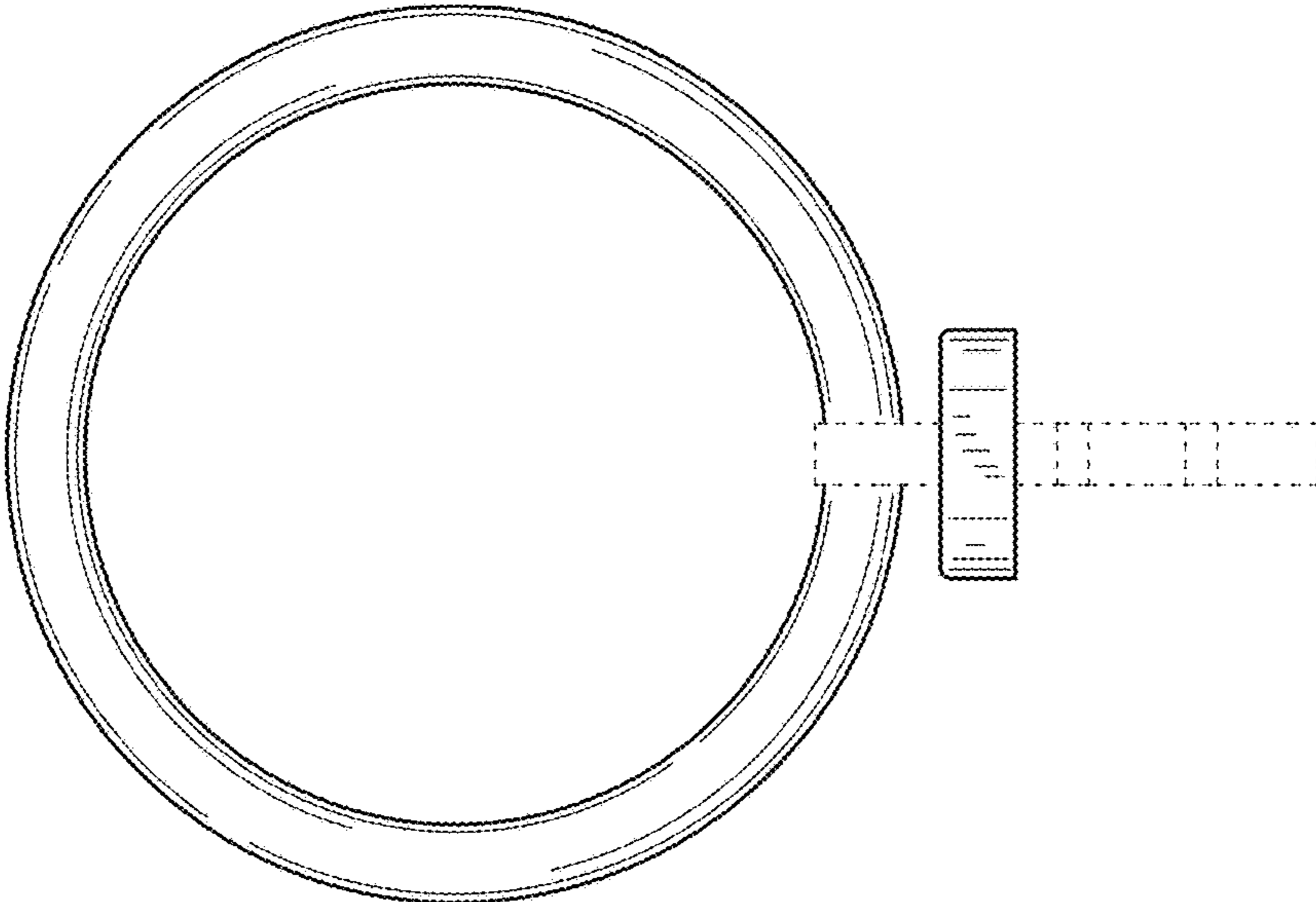


FIG. 2

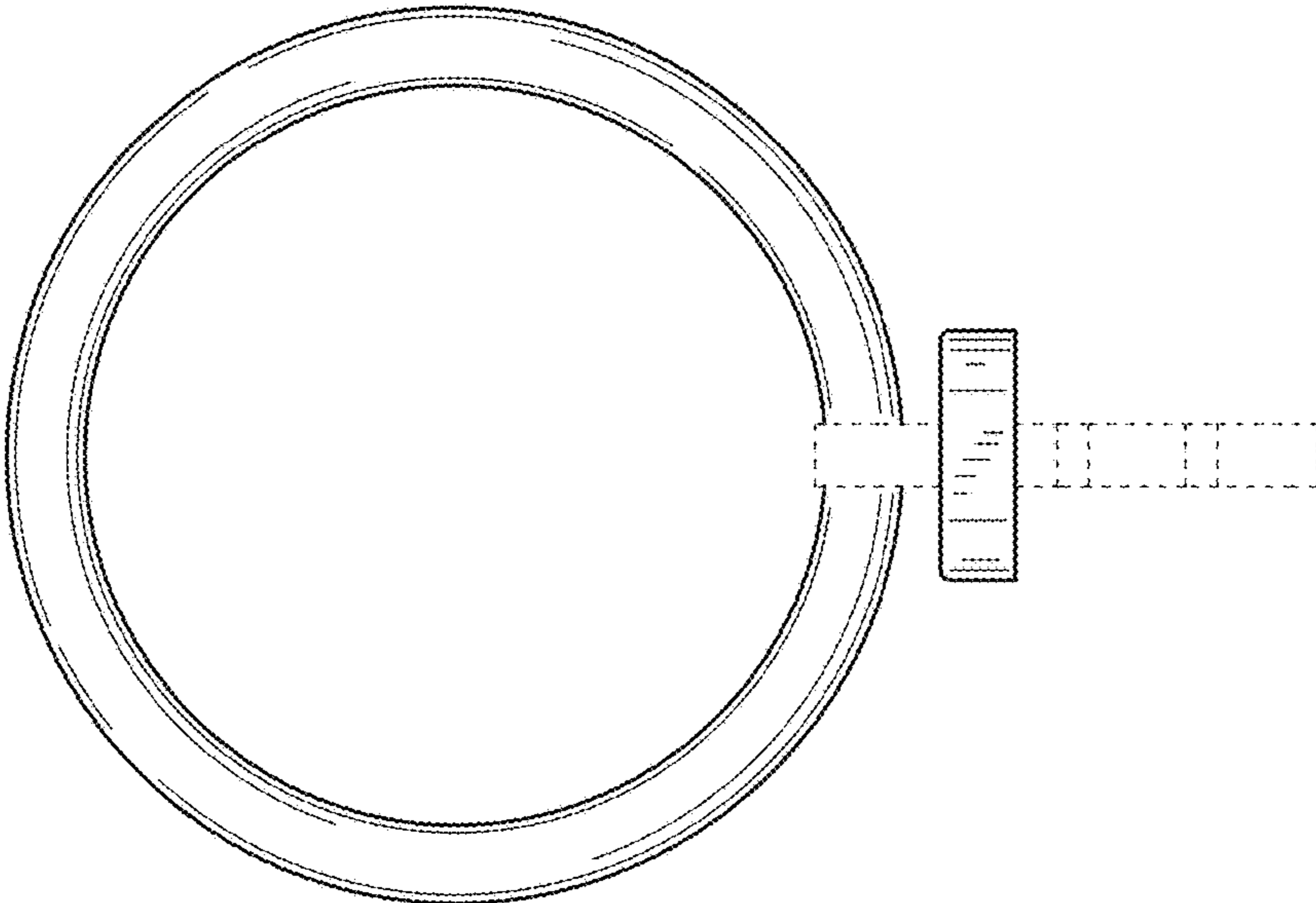


FIG. 3

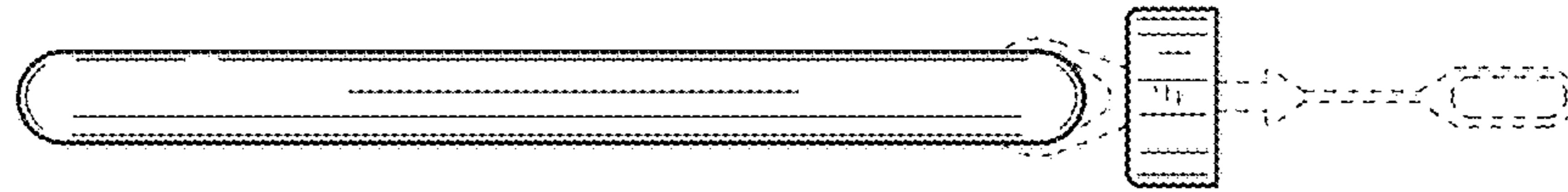


FIG. 4

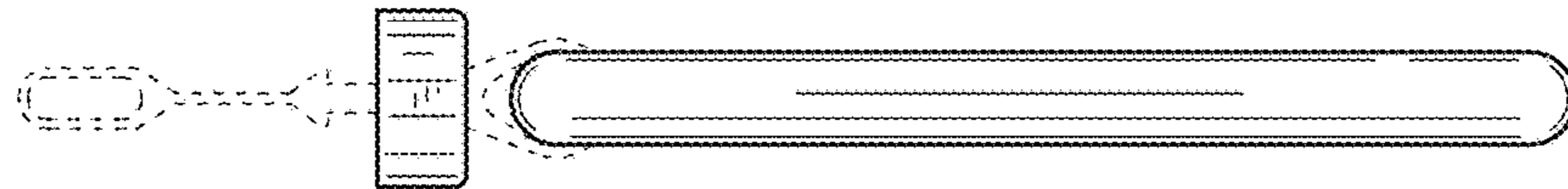


FIG. 5

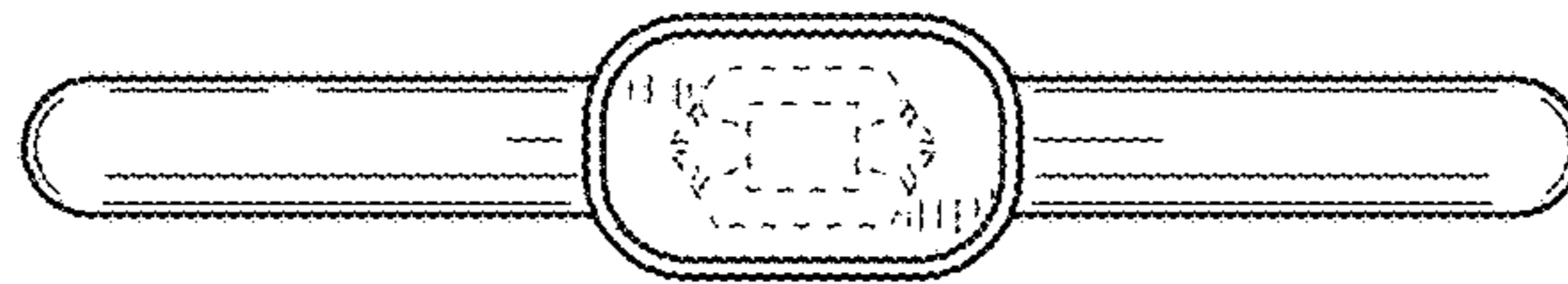


FIG. 6

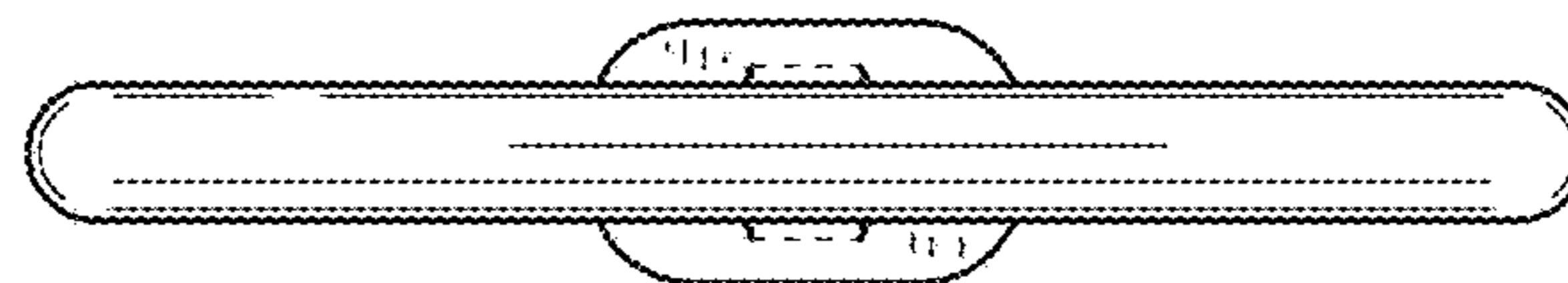


FIG. 7