US00D594983S

(12) United States Design Patent

Price et al.

(10) Patent No.: US D594,983 S
(45) Date of Patent: ** Jun. 23, 2009

(54) **HANDLE ASSEMBLY FOR SURGICAL INSTRUMENT**

(75) Inventors: **Daniel W. Price**, Loveland, OH (US); **Galen C. Robertson**, Cincinnati, OH (US); **Cory G. Kimball**, Cincinnati, OH (US); **Scott A. Woodruff**, Loveland, OH (US); **Matthew C. Miller**, Cincinnati, OH (US); **Kip M. Rupp**, New Richmond, OH (US); **Carrie I. Fihe**, Cincinnati, OH (US); **Jane A. Sheetz**, Cincinnati, OH (US); **Carl J. Draginoff, Jr.**, Mason, OH (US)

(73) Assignee: **Ethicon Endo-Surgery, Inc.**, Cincinnati, OH (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/292,295**

(22) Filed: **Oct. 5, 2007**

(51) **LOC (9) Cl.** **24-02**
(52) **U.S. Cl.** **D24/145**; D24/133
(58) **Field of Classification Search** D24/133, D24/145
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,526,219 A 9/1970 Balamuth

(Continued)

FOREIGN PATENT DOCUMENTS

WO WO 01/54590 A1 8/2001

OTHER PUBLICATIONS

Technology Overview, printed from www.harmonicscalpel.com, Internet site, website accessed on Jun. 13, 2007, (3 pages).

(Continued)

Primary Examiner—Ian Simmons
Assistant Examiner—Christopher Lee

(57) **CLAIM**

The ornamental design for a handle assembly for surgical instrument, as shown and described.

DESCRIPTION

FIG. **1** is a left perspective view of a handle assembly for surgical instrument showing our new design;

FIG. **2** is a left side view thereof;

FIG. **3** is a right side view thereof;

FIG. **4** is a bottom side view thereof;

FIG. **5** is a top view thereof;

FIG. **6** is a rear view thereof;

FIG. **7** is a front view thereof;

FIG. **8** is a left perspective view of a modified embodiment of the design shown in FIGS. **1**–**7**;

FIG. **9** is a left side view thereof;

FIG. **10** is a right side view thereof;

FIG. **11** is a bottom side view thereof;

FIG. **12** is a top view thereof;

FIG. **13** is a rear view thereof;

FIG. **14** is a front view thereof;

FIG. **15** is a left perspective view of a second modified embodiment of the design shown in FIGS. **1**–**7**;

FIG. **16** is a left side view thereof;

FIG. **17** is a right side view thereof;

FIG. **18** is a bottom side view thereof;

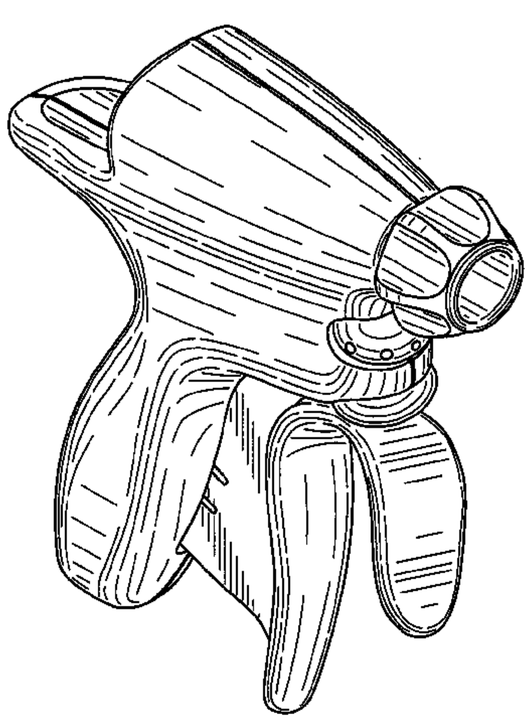
FIG. **19** is a top view thereof;

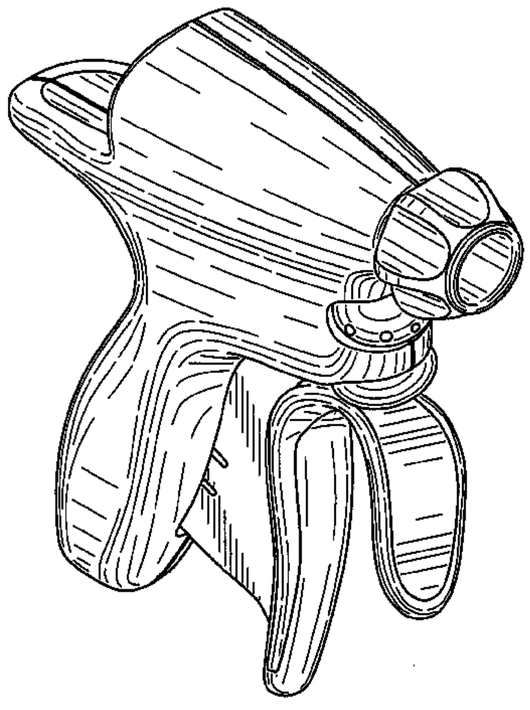
FIG. **20** is a rear view thereof; and,

FIG. **21** is a front view.

The broken lines in FIGS. **5**, **6**, **7**, **12**–**21** are for purposes of illustration only and form no part of the claimed design.

1 Claim, 15 Drawing Sheets





U.S. PATENT DOCUMENTS

3,636,943	A		1/1972	Balamuth	
3,862,630	A		1/1975	Balamuth	
D332,660	S	*	1/1993	Rawson et al.	D24/145
5,263,957	A		11/1993	Davison	
D347,474	S	*	5/1994	Olson	D24/145
5,322,055	A		6/1994	Davison et al.	
5,324,299	A		6/1994	Davison et al.	
5,366,466	A	*	11/1994	Christian et al.	606/174
D354,564	S	*	1/1995	Medema	D24/145
5,601,601	A	*	2/1997	Tal et al.	606/207
5,607,436	A	*	3/1997	Pratt et al.	606/143
D381,077	S	*	7/1997	Hunt	D24/145
5,690,269	A	*	11/1997	Bolanos et al.	227/176.1
5,810,859	A		9/1998	DiMatteo et al.	
5,954,736	A		9/1999	Bishop et al.	
5,968,060	A		10/1999	Kellogg	
D416,089	S	*	11/1999	Barton et al.	D24/145
5,989,274	A		11/1999	Davison et al.	
5,989,275	A		11/1999	Estabrook et al.	
6,066,132	A		5/2000	Chen et al.	
6,068,647	A		5/2000	Witt et al.	
6,086,584	A		7/2000	Miller	
6,113,594	A		9/2000	Savage	
6,152,902	A		11/2000	Christian et al.	
6,159,160	A		12/2000	Hsei et al.	
6,206,844	B1		3/2001	Reichel et al.	
6,214,023	B1		4/2001	Whipple et al.	
6,238,366	B1		5/2001	Savage et al.	
D444,365	S	*	7/2001	Bass et al.	D8/68
6,267,761	B1		7/2001	Ryan	
6,273,852	B1		8/2001	Lehe et al.	
6,274,963	B1		8/2001	Estabrook et al.	
6,277,115	B1		8/2001	Saadat	
6,278,218	B1		8/2001	Madan et al.	
6,283,981	B1		9/2001	Beaupre	
6,309,400	B2		10/2001	Beaupre	
6,319,221	B1		11/2001	Savage et al.	
6,325,811	B1		12/2001	Messerly	
6,328,751	B1		12/2001	Beaupre	
6,352,532	B1		3/2002	Kramer et al.	
6,387,109	B1		5/2002	Davison et al.	
6,423,073	B2		7/2002	Bowman	
6,423,082	B1		7/2002	Houser et al.	
6,432,118	B1		8/2002	Messerly	
6,436,115	B1		8/2002	Beaupre	
6,454,781	B1		9/2002	Witt et al.	
6,454,782	B1		9/2002	Schwemberger	
6,458,142	B1		10/2002	Faller et al.	
6,485,490	B2		11/2002	Wampler et al.	
6,491,708	B2		12/2002	Madan et al.	
6,500,188	B2		12/2002	Harper et al.	
6,524,316	B1		2/2003	Nicholson et al.	
6,543,456	B1		4/2003	Freeman	
6,561,983	B2		5/2003	Cronin et al.	
6,589,200	B1		7/2003	Schwemberger et al.	
6,663,941	B2		12/2003	Brown et al.	
6,676,660	B2		1/2004	Wampler et al.	
6,733,506	B1		5/2004	McDevitt et al.	
6,773,444	B2		8/2004	Messerly	
6,929,632	B2		8/2005	Nita et al.	
D509,589	S	*	9/2005	Wells	D24/145
D511,145	S		11/2005	Donofrio et al.	
6,976,969	B2		12/2005	Messerly	
6,977,495	B2		12/2005	Donofrio	
7,041,088	B2		5/2006	Nawrocki et al.	
7,074,219	B2		7/2006	Levine et al.	
7,077,039	B2		7/2006	Gass et al.	
7,077,853	B2		7/2006	Kramer et al.	
7,108,695	B2		9/2006	Witt et al.	
7,118,564	B2		10/2006	Ritchie et al.	
7,135,018	B2		11/2006	Ryan et al.	
7,135,030	B2		11/2006	Schwemberger et al.	
7,157,058	B2		1/2007	Marhasin et al.	
7,163,548	B2		1/2007	Stulen et al.	
7,331,410	B2		2/2008	Yong et al.	
7,380,695	B2	*	6/2008	Doll et al.	227/175.1
2001/0039419	A1		11/2001	Francischelli et al.	
2002/0156493	A1		10/2002	Houser et al.	
2003/0055443	A1		3/2003	Spotnitz	
2004/0030254	A1		2/2004	Babaev	
2004/0047485	A1		3/2004	Sherrit et al.	
2005/0049546	A1		3/2005	Messerly et al.	
2006/0084963	A1		4/2006	Messerly	
2007/0016236	A1		1/2007	Beaupre	
2007/0055228	A1		3/2007	Berg et al.	
2008/0234708	A1		9/2008	Houser et al.	
2008/0234709	A1		9/2008	Houser	
2008/0234710	A1		9/2008	Neurohr et al.	
2008/0234711	A1		9/2008	Houser et al.	

OTHER PUBLICATIONS

Sherrit et al., "Novel Horn Designs for Ultrasonic/Sonic Cleaning Welding, Soldering, Cutting and Drilling," Proc. SPIE Smart Structures Conference, vol. 4701, Paper No. 34, San Diego, CA, pp. 353-360, Mar. 2002.

AST Products, Inc., "Principles of Video Contact Angle Analysis," 20 pages, (date unknown).

Lim et al., "A Review of Mechanism Used in Laparoscopic Surgical Instruments," Mechanism and Machine Theory, vol. 38, pp. 1133-1147, (2003).

Technology Overview, printed from www.harmonicscalpel.com, Internet site, website accessed on Jun. 13, 2007, (3 pages).

Sherrit et al., "Novel Horn Designs for Ultrasonic/Sonic Cleaning Welding, Soldering, Cutting and Drilling," Proc. SPIE Smart Structures Conference, vol. 4701, Paper No. 34, San Diego, CA, pp. 353-360, Mar. 2002.

AST Products, Inc., "Principles of Video Contact Angie Analysis," 20 pages, (date unknown).

Lim et al., "A Review of Mechanism Used in Laparoscopic Surgical Instruments," Mechanism and Machine Theory, vol. 38, pp. 1133-1147, (2003).

Gooch et al., "Recommended Infection-Control Practices for Dentistry, 1993," Published: May 28, 1993; [retrieved on Aug. 23, 2008]. Retrieved from the internet: URL: http//wonder.cdc.gov/wonder/prevguid/p0000191/p0000191.asp (15 pages).

U.S. Des. Appl. No. 29/327,737, filed Nov. 12, 2008.

U.S. Des. Appl. No. 11/881,602 filed Jul. 27, 2007.

U.S. Des. Appl. No. 11/888,081, filed Jul. 31, 2007.

U.S. Des. Appl. No. 11/881,636, filed Jul. 27, 2007.

U.S. Des. Appl. No. 11/881,645, filed Jul. 27, 2007.

U.S. Des. Appl. No. 11/881,654, filed Jul. 27, 2007.

U.S. Des. Appl. No. 11/888,171, filed Jul. 31, 2007.

U.S. Des. Appl. No. 11/881,662, filed Jul. 27, 2007.

U.S. Des. Appl. No. 11/888,222, filed Jul. 31, 2007.

U.S. Des. Appl. No. 12/245,158, filed Oct. 3, 2008.

U.S. Des. Appl. No. 11/998,543, filed Nov. 30, 2007.

U.S. Des. Appl. No. 11/998,758, filed Nov. 30, 2007.

U.S. Des. Appl. No. 12/181,816, filed Jul. 29, 2008.

* cited by examiner

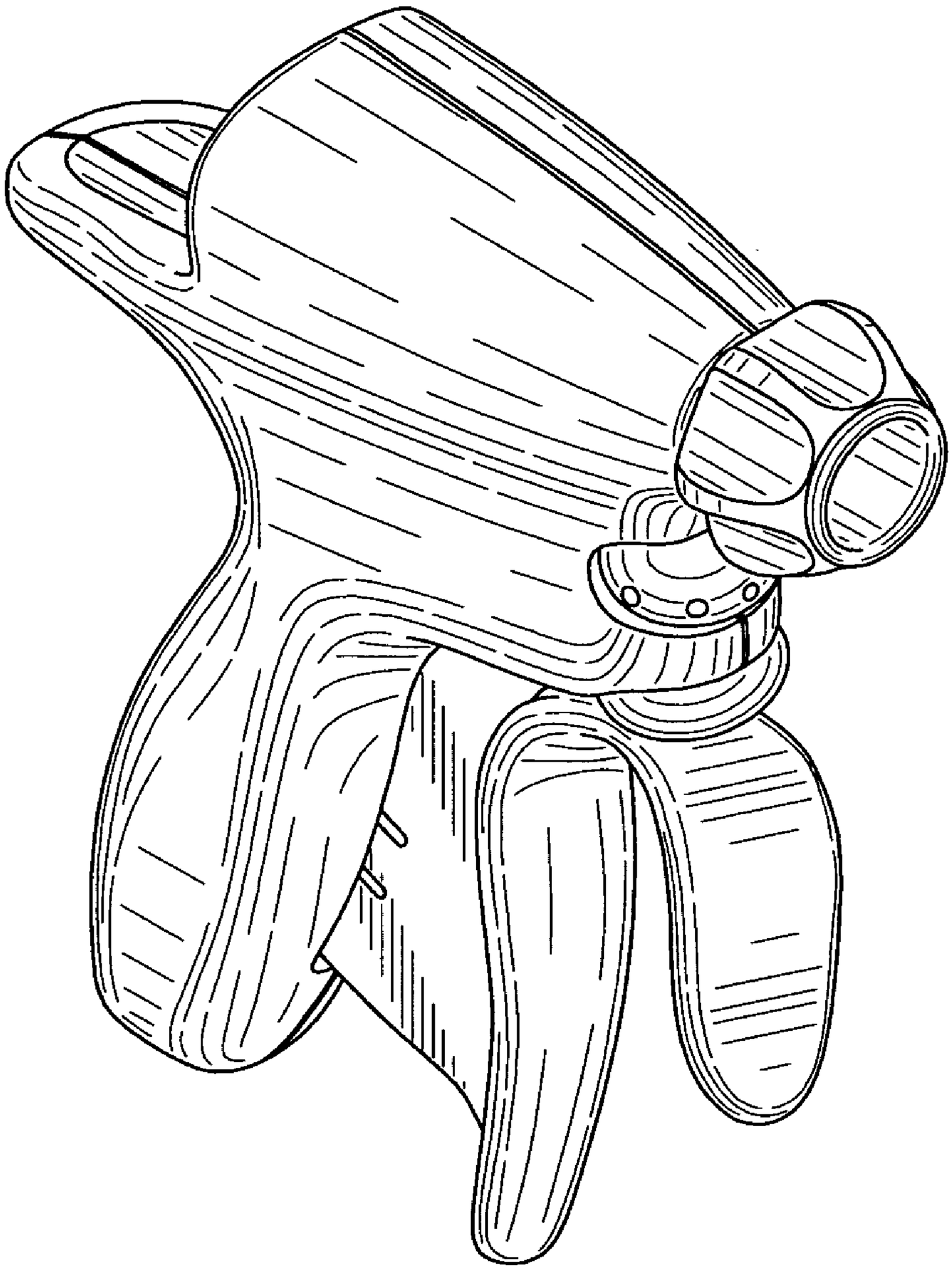


FIG. 1

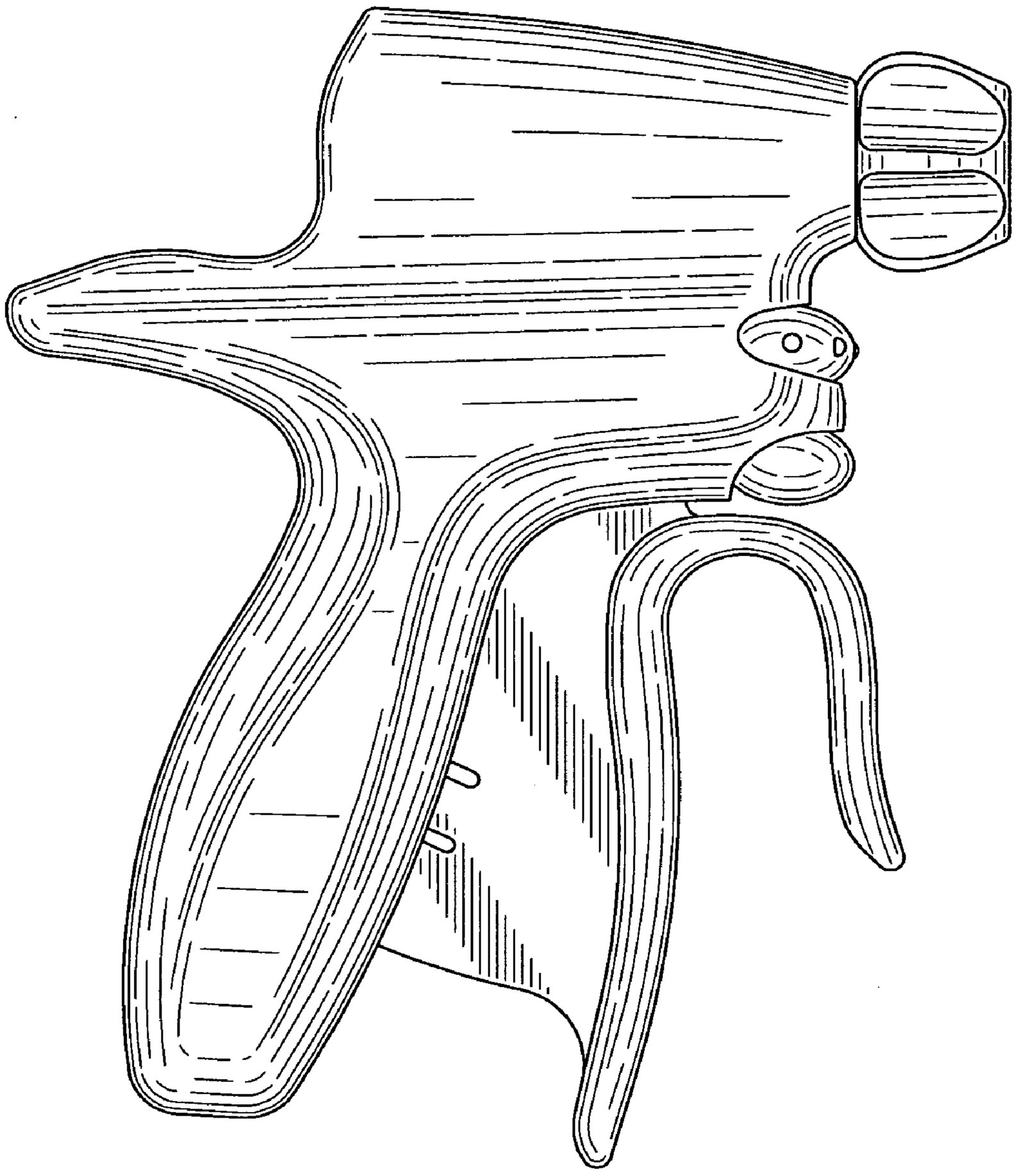


FIG. 2

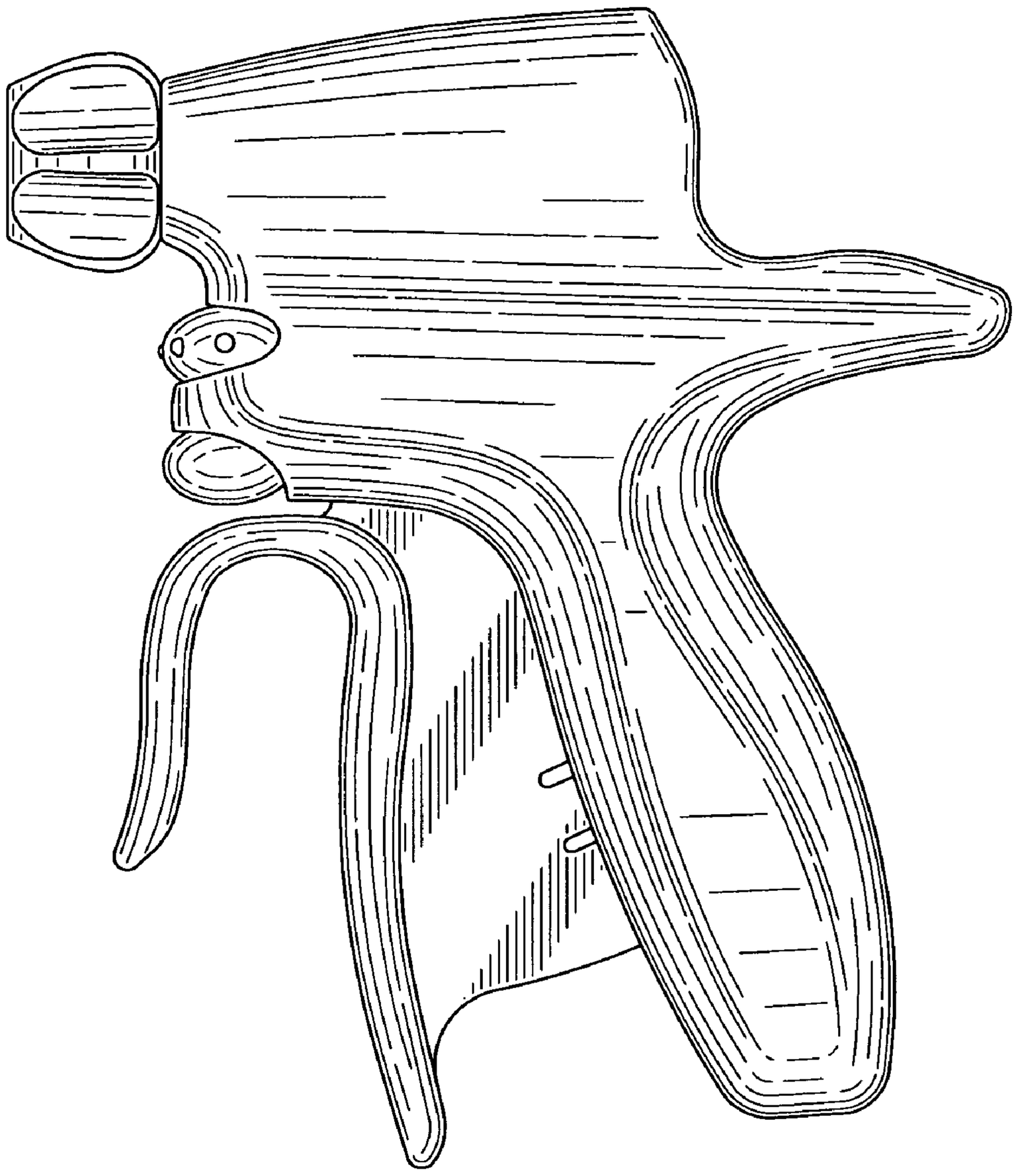


FIG. 3

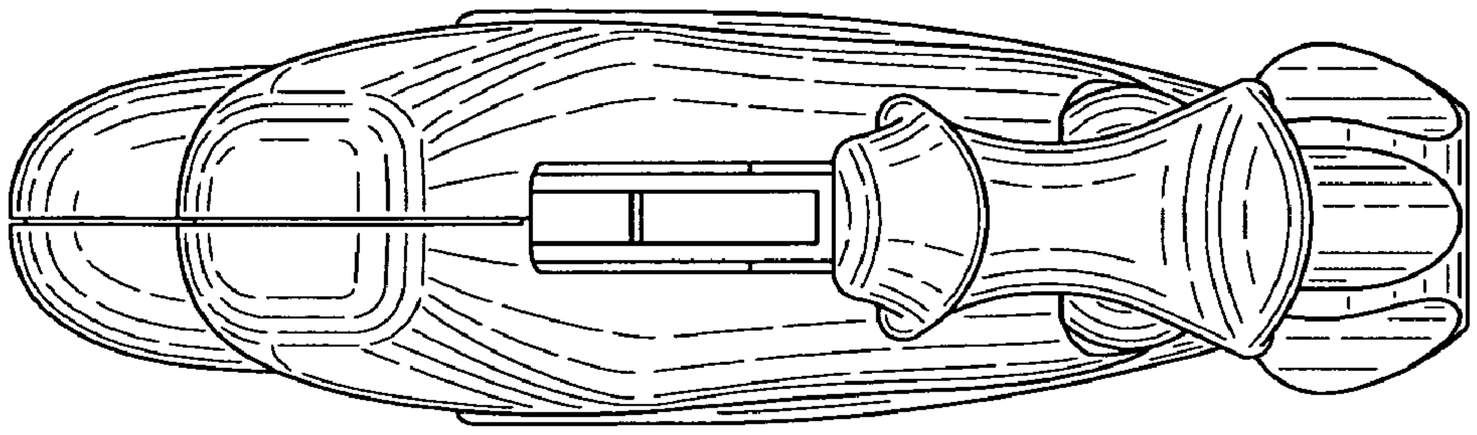


FIG. 4

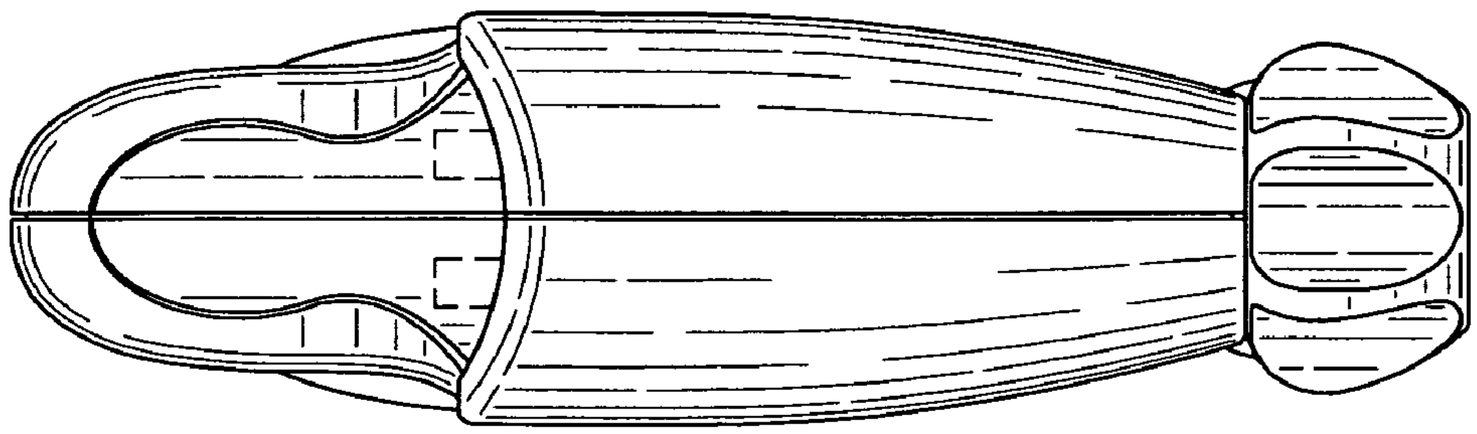


FIG. 5

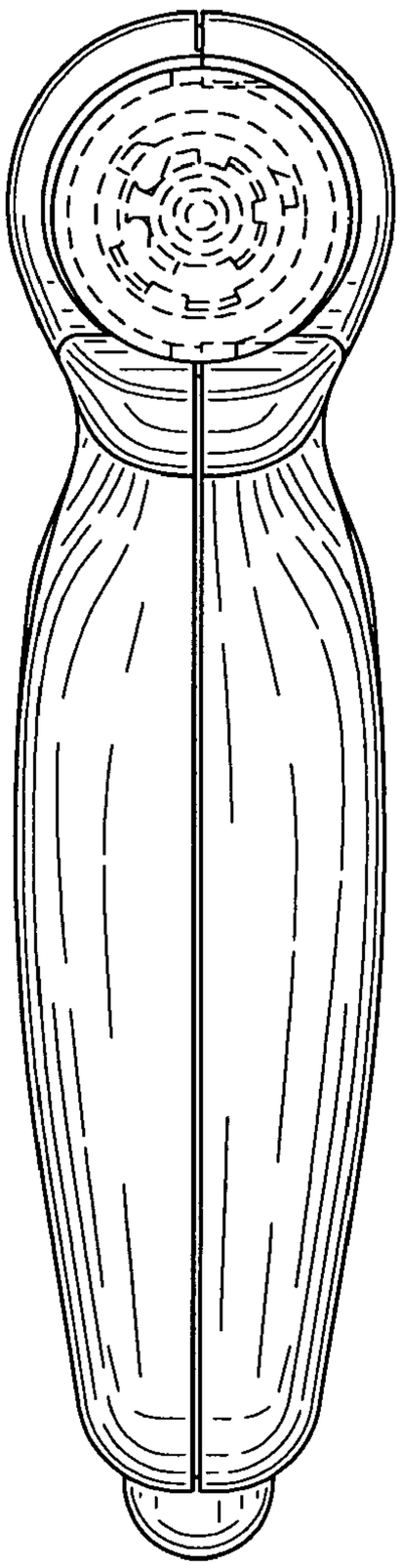


FIG. 6

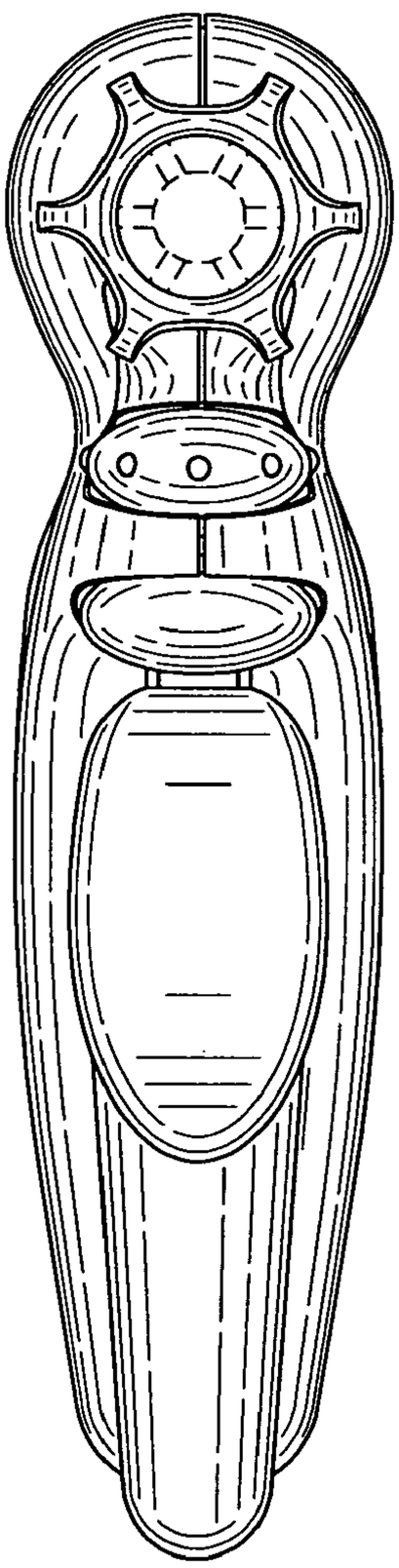


FIG. 7

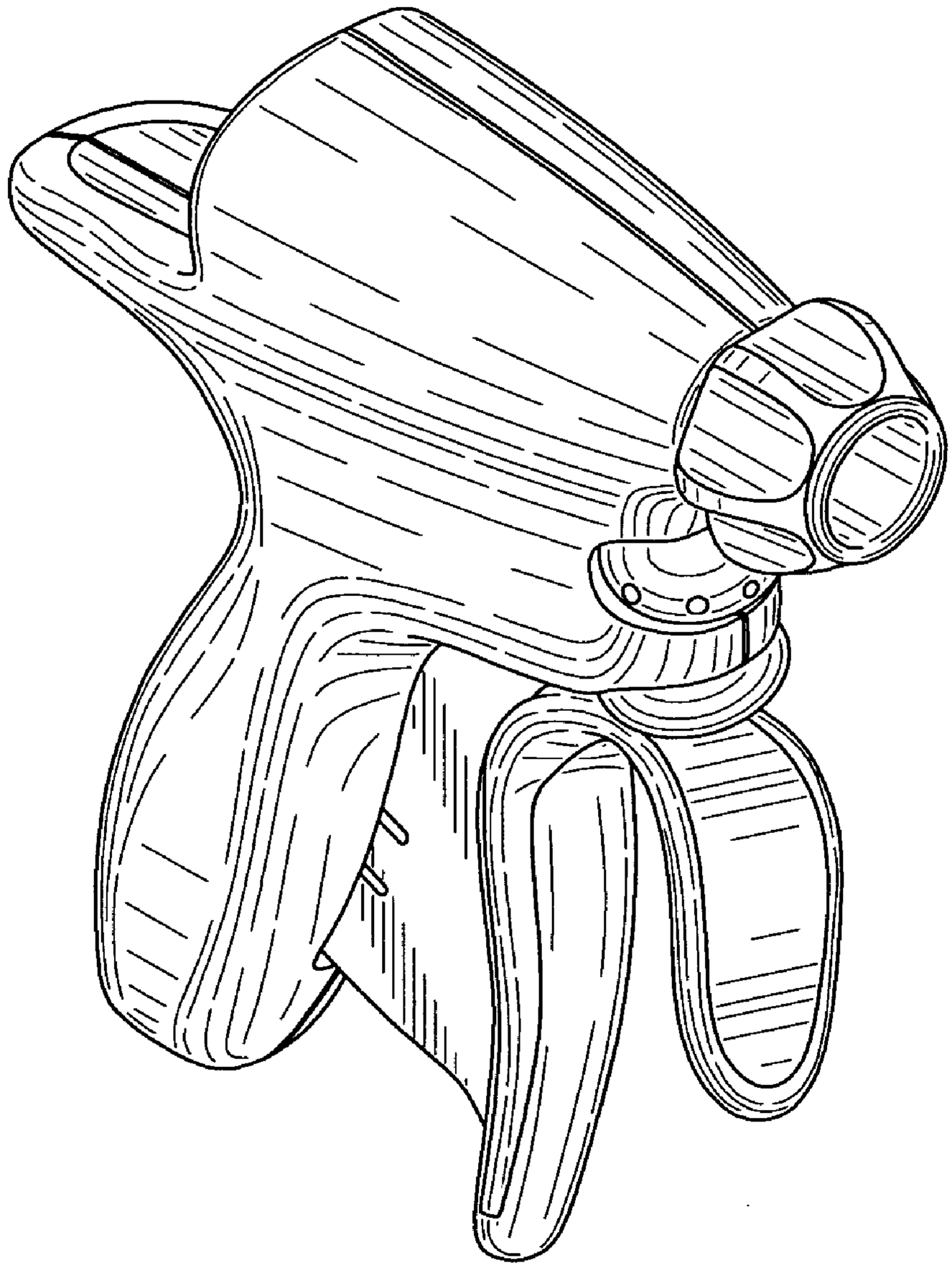


FIG. 8

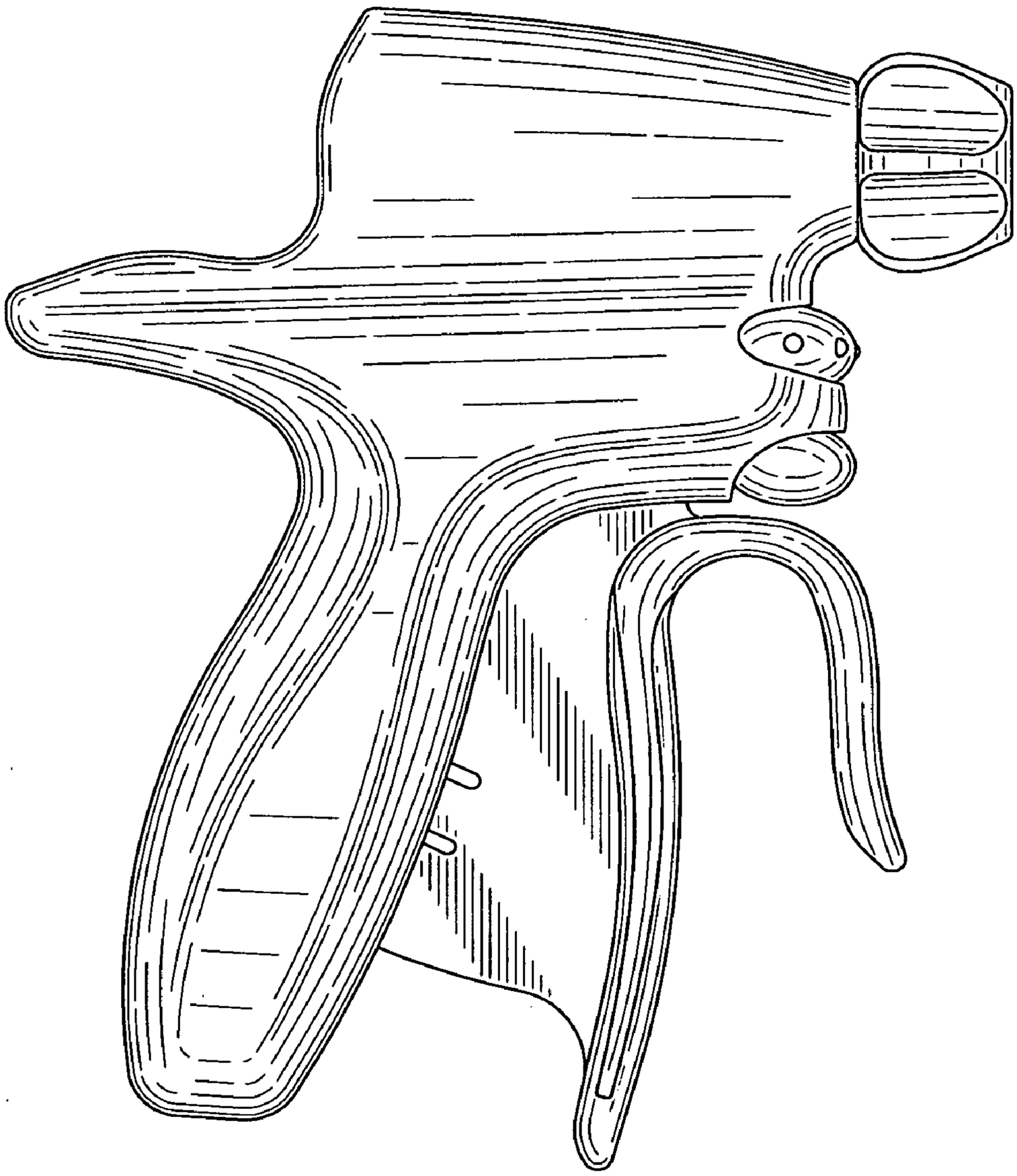


FIG. 9

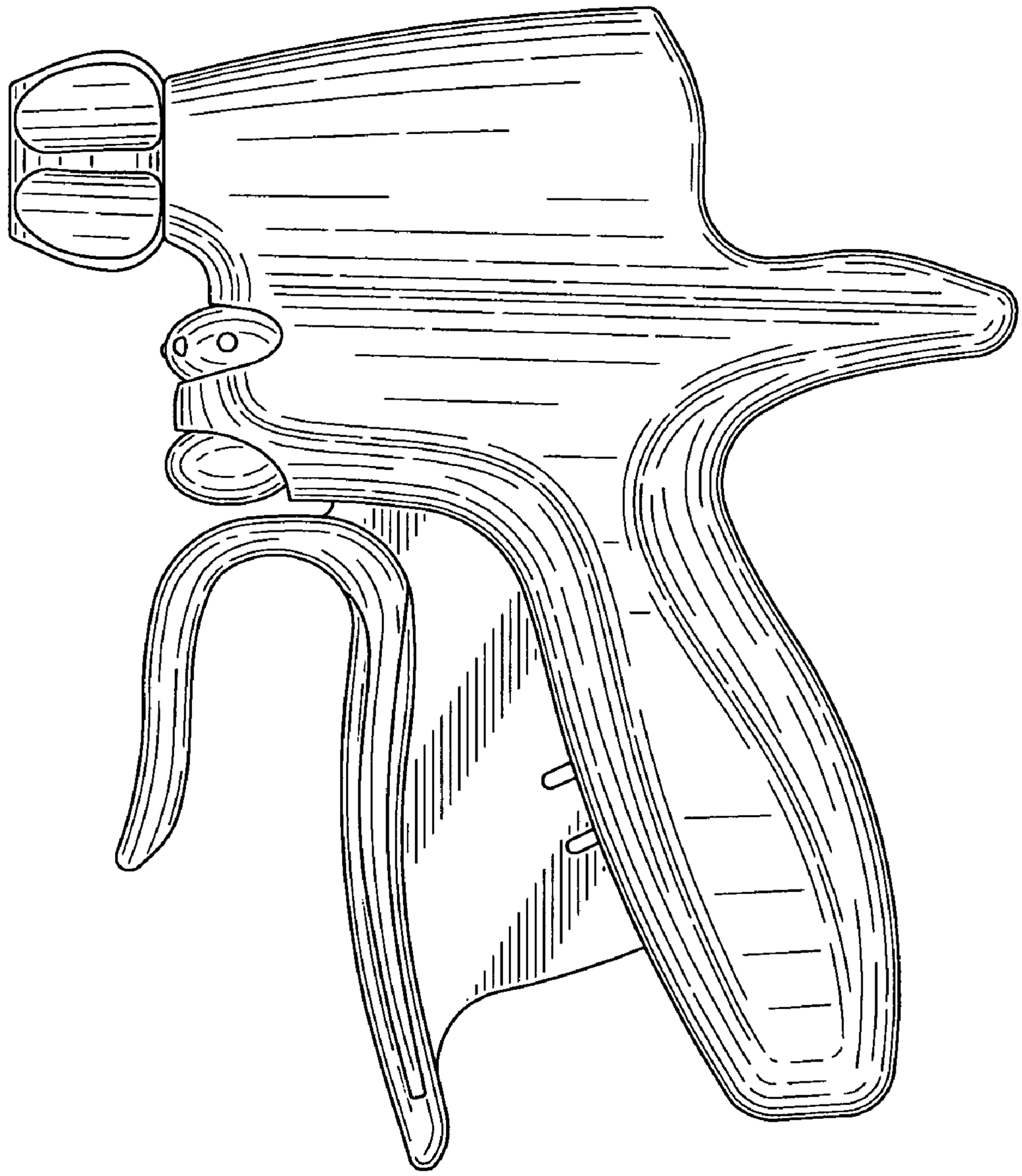


FIG. 10

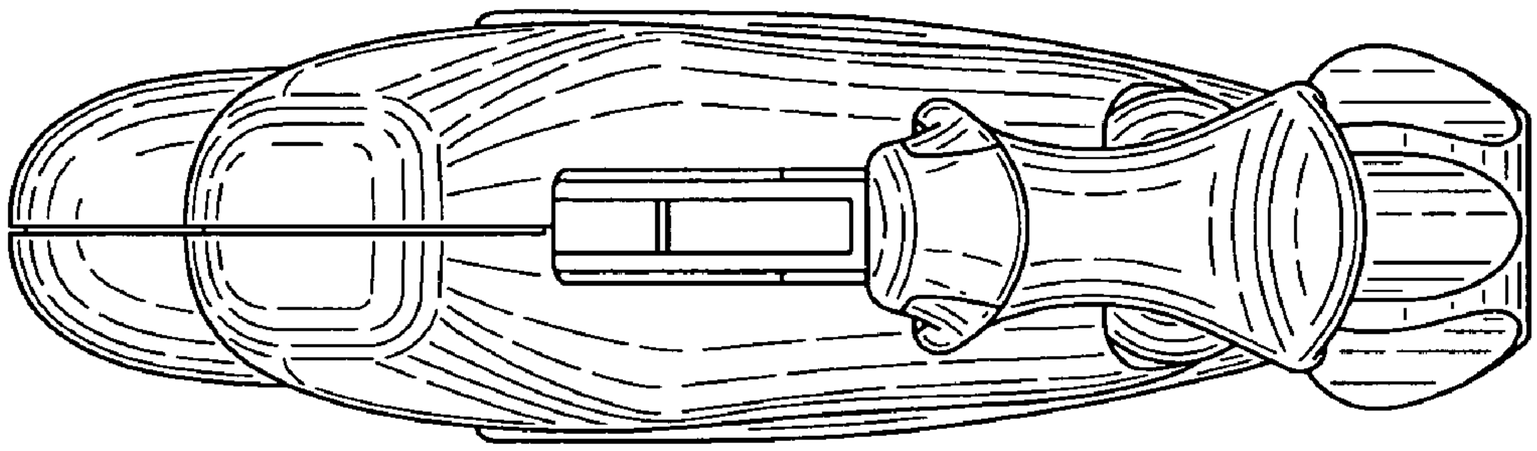


FIG. 11

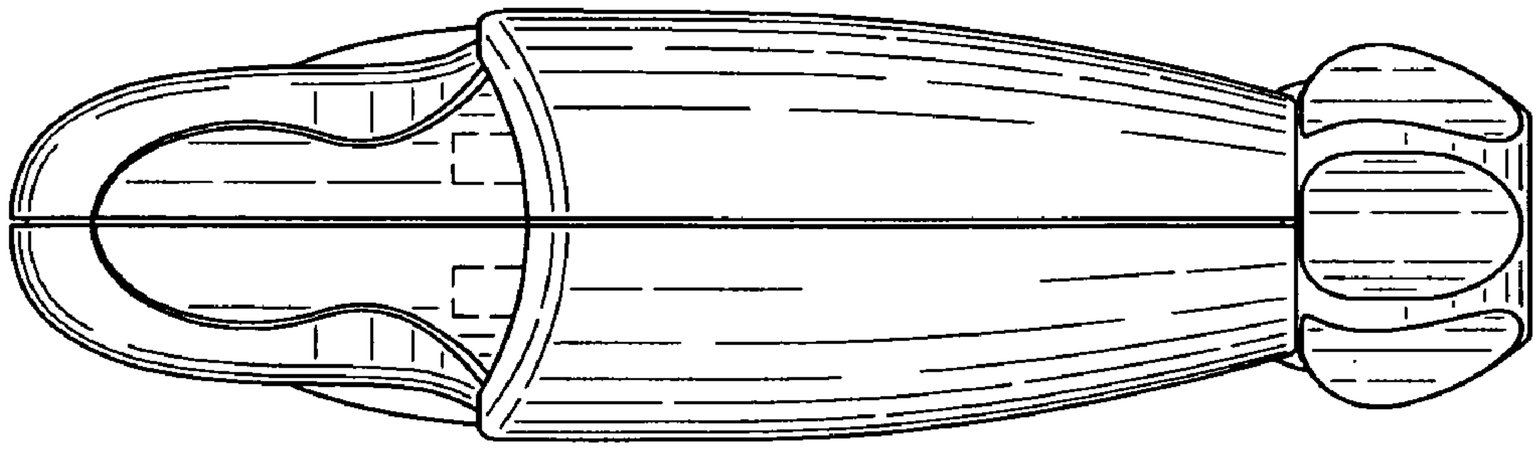


FIG. 12

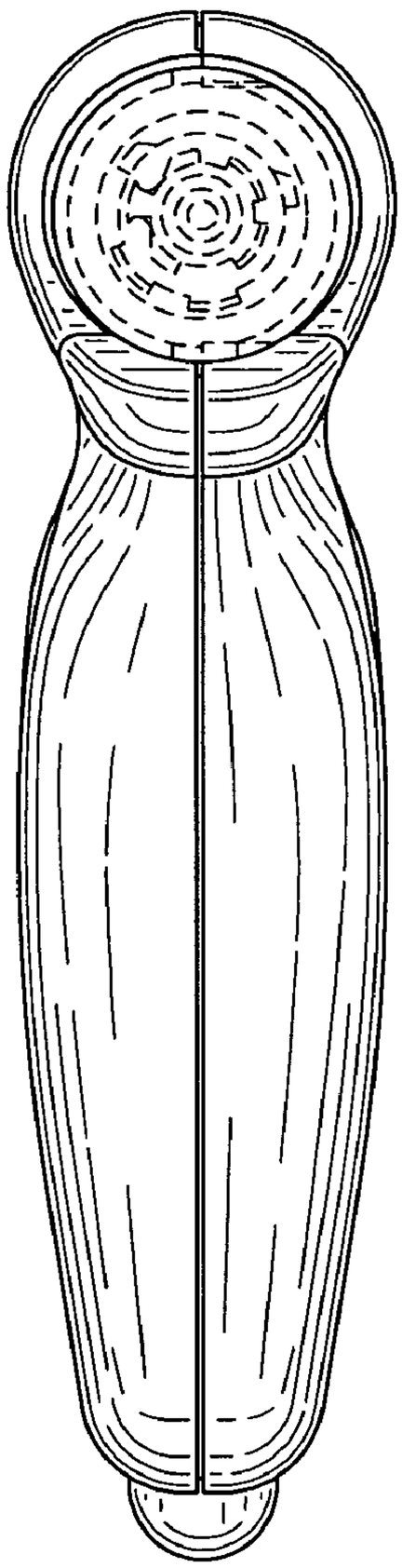


FIG. 13

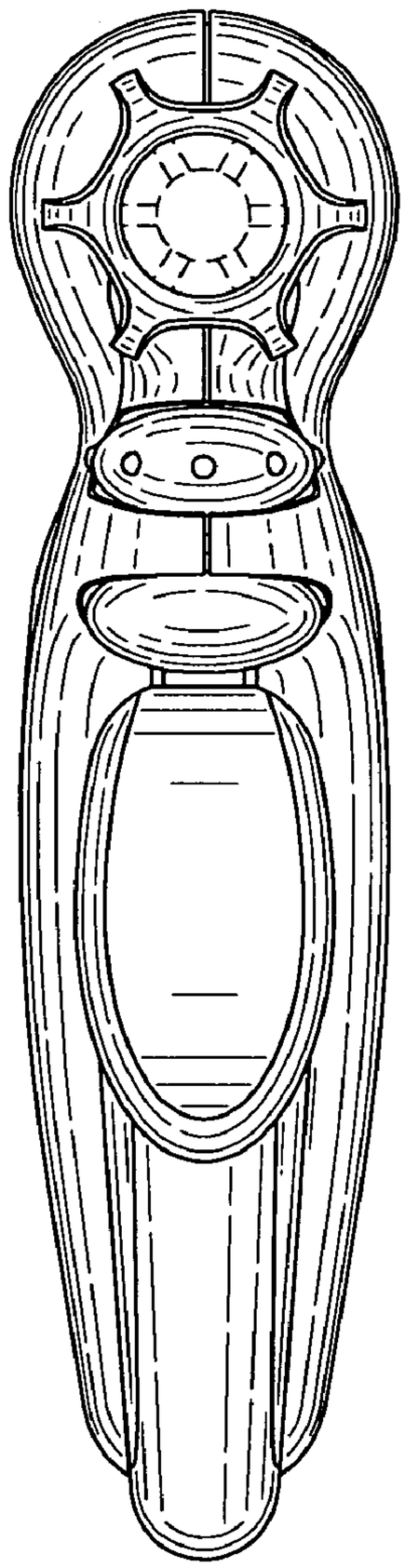


FIG. 14

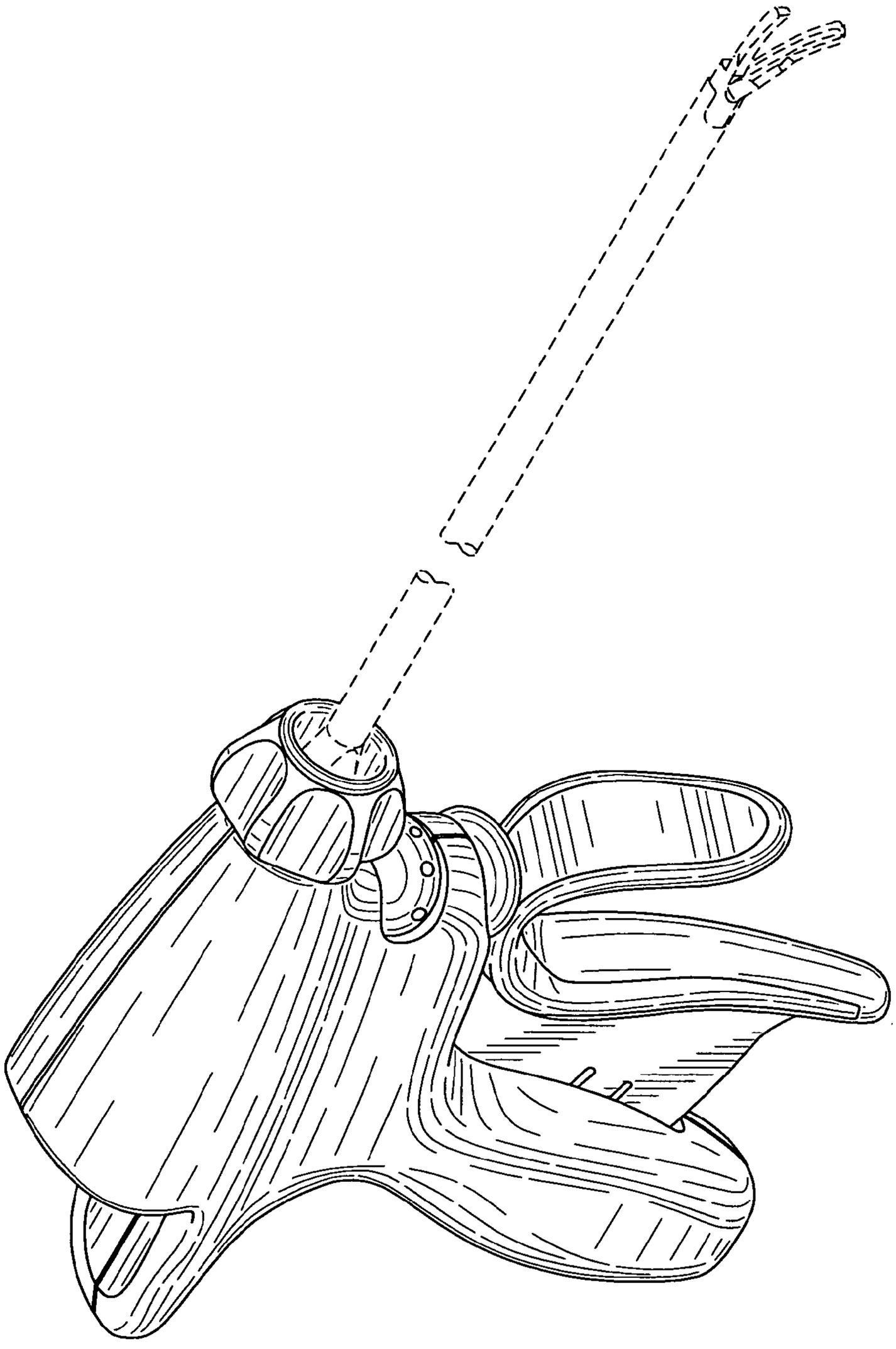


FIG. 15

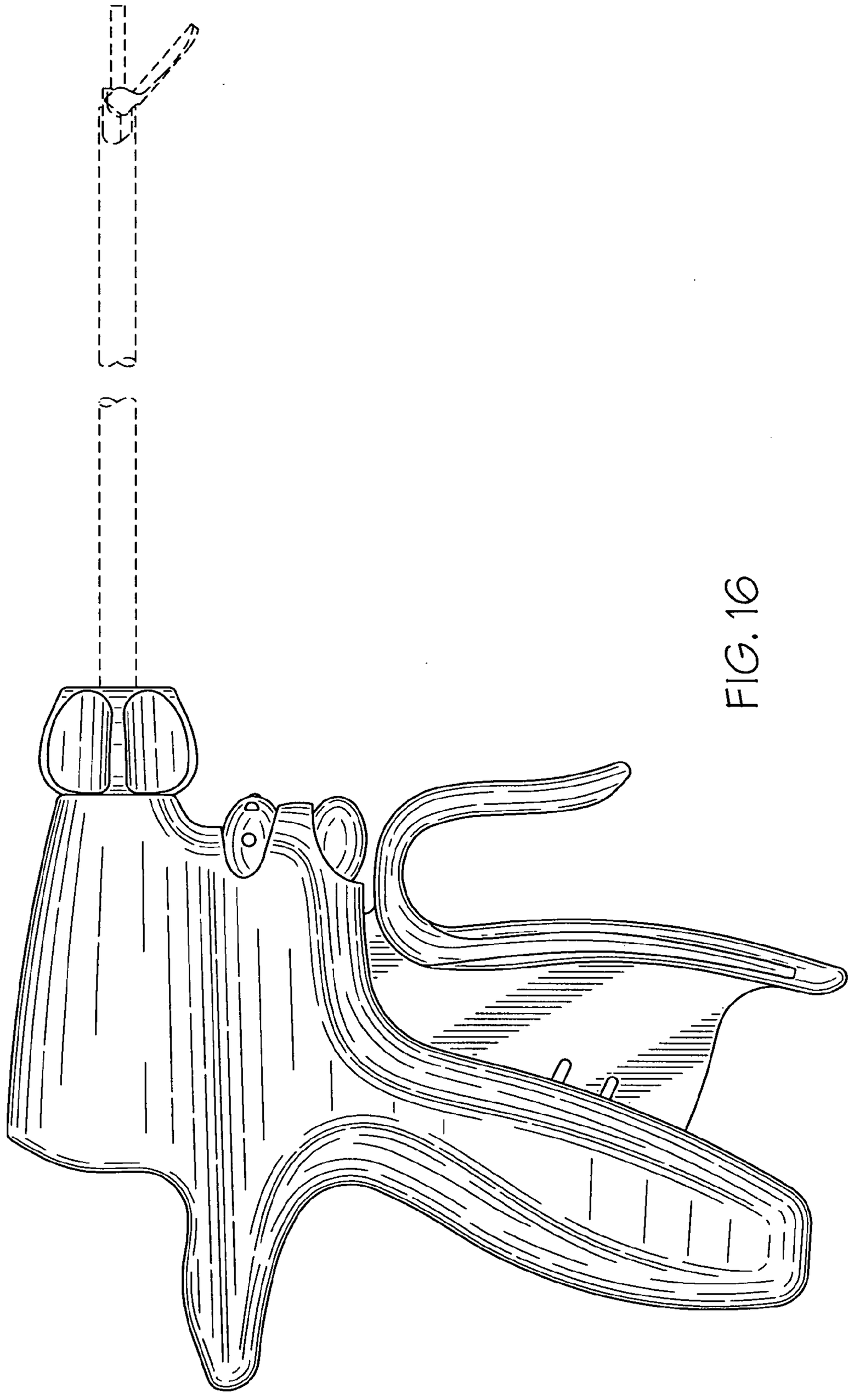


FIG. 16

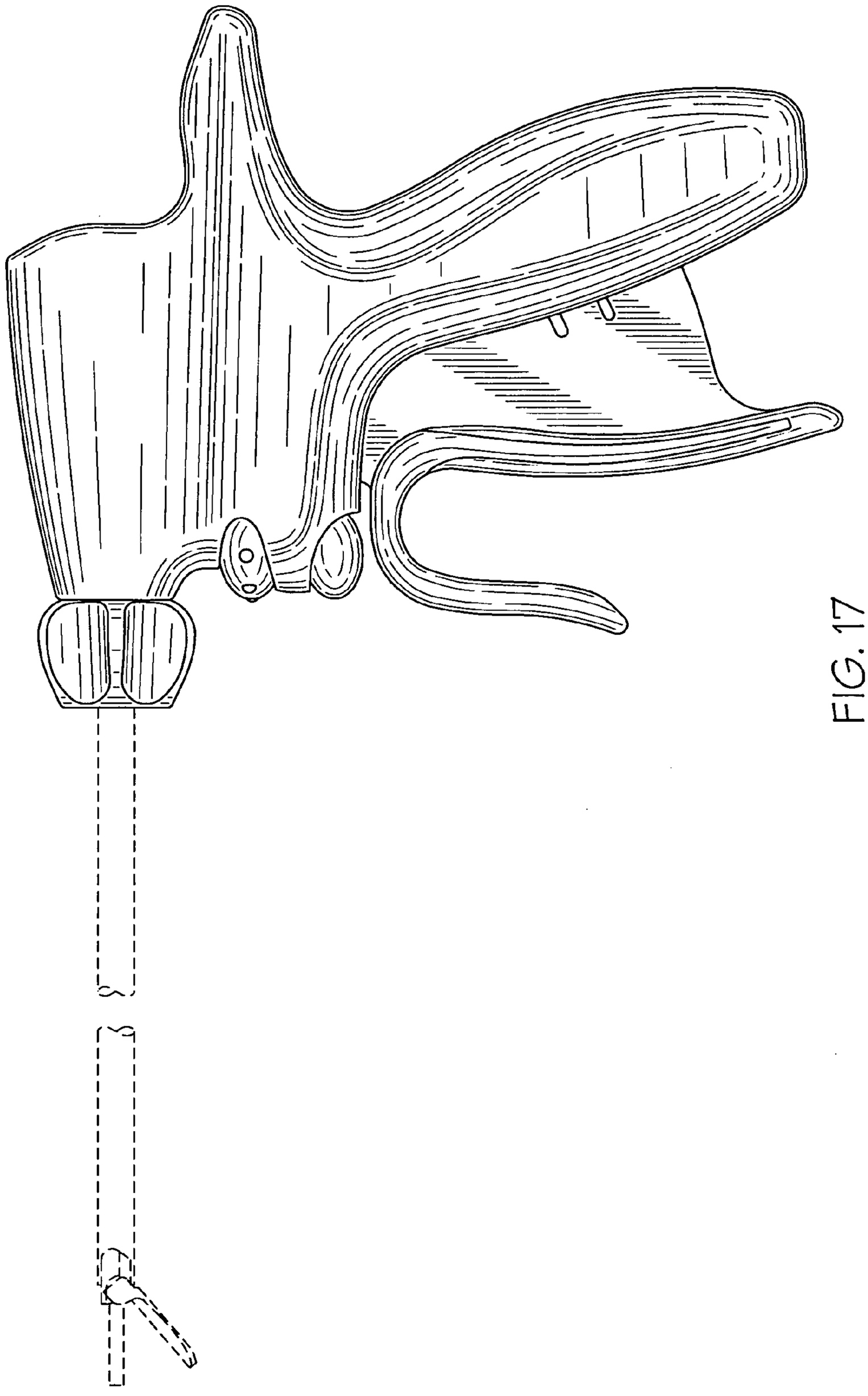


FIG. 17

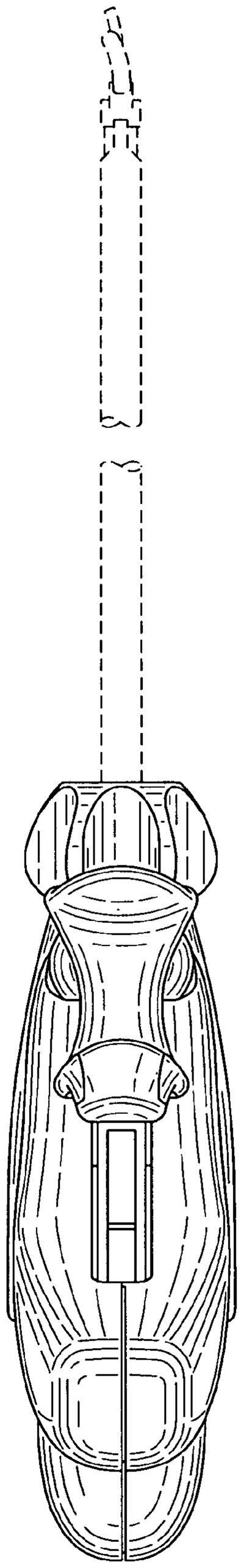


FIG. 18

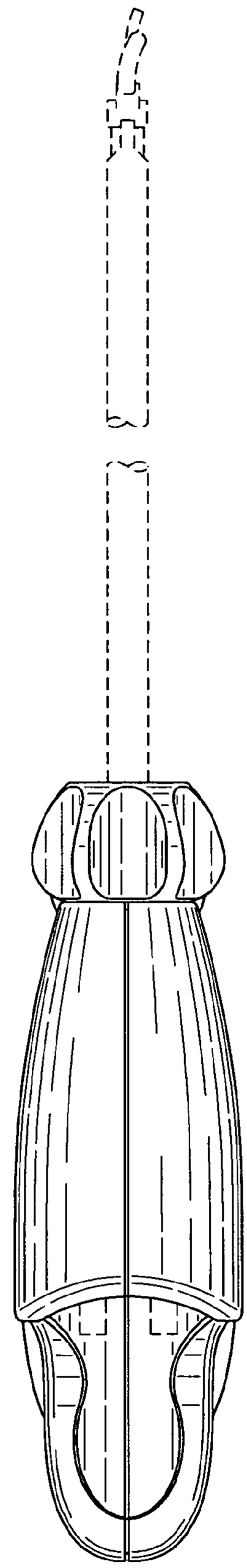


FIG. 19

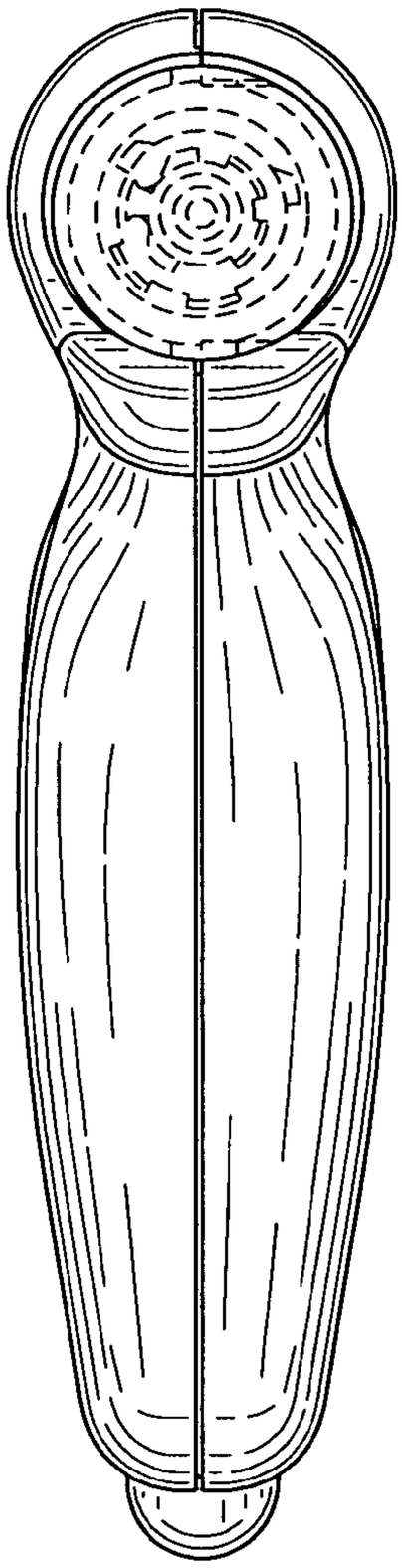


FIG. 20

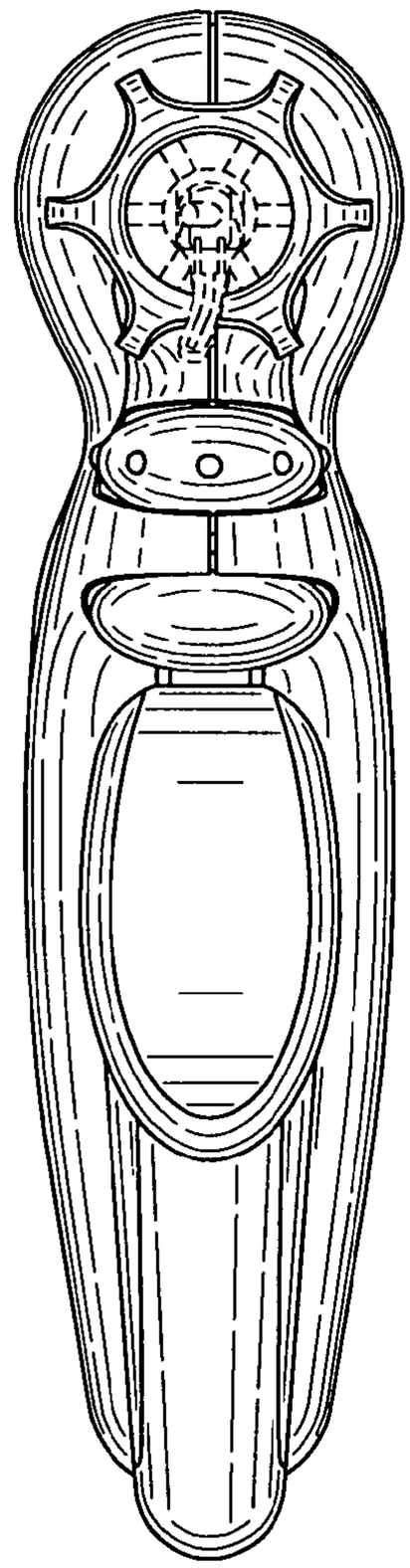


FIG. 21