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

(10) **Patent No.:** **US D814,028 S**  
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(54) **RETRACTOR BLADE**  
(71) Applicant: **NUVASIVE, INC.**, San Diego, CA (US)

3,384,077 A 5/1968 Gauthier  
3,509,873 A 5/1970 Karlin  
3,522,799 A 8/1970 Gauthier  
3,724,449 A 4/1973 Gauthier  
(Continued)

(72) Inventors: **Niall Casey**, San Diego, CA (US);  
**James Coleman Lee**, San Diego, CA (US);  
**Ali A Shoroghi**, San Diego, CA (US);  
**Gurvinder S Deol**, Raleigh, NC (US);  
**Bradley Alan Heiges**, Savannah, GA (US);  
**Nitin Khanna**, Chicago, IL (US);  
**Troy B Woolley**, Erie, CO (US)

**FOREIGN PATENT DOCUMENTS**

CA 1142826 3/1983  
CN 201341901 11/2009  
(Continued)

(73) Assignee: **NuVasive, Inc.**, San Diego, CA (US)  
(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/595,296**  
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**OTHER PUBLICATIONS**

eBay. <URL: <http://www.ebay.com/itm/253126402732>.> Sep. 28, 2017. Codman 13-1061 Meyerding Retractor Blade.\*

*Primary Examiner* — Bridget L Eland  
*Assistant Examiner* — Lauren McVey  
(74) *Attorney, Agent, or Firm* — Rory Schermerhorn; NuVasive, Inc.

**Related U.S. Application Data**

(60) Division of application No. 29/530,069, filed on Jun. 12, 2015, now Pat. No. Des. 789,630, which is a continuation of application No. 13/601,966, filed on Aug. 31, 2012, now Pat. No. 9,113,853.

(51) **LOC (11) Cl.** ..... **24-02**  
(52) **U.S. Cl.**  
USPC ..... **D24/135**  
(58) **Field of Classification Search**  
USPC ..... D24/135, 136, 133  
CPC . A61B 17/02; A61B 17/0206; A61B 17/0218;  
A61B 2017/2837  
See application file for complete search history.

(57) **CLAIM**

The ornamental design for a retractor blade, substantially as shown and described.

**DESCRIPTION**

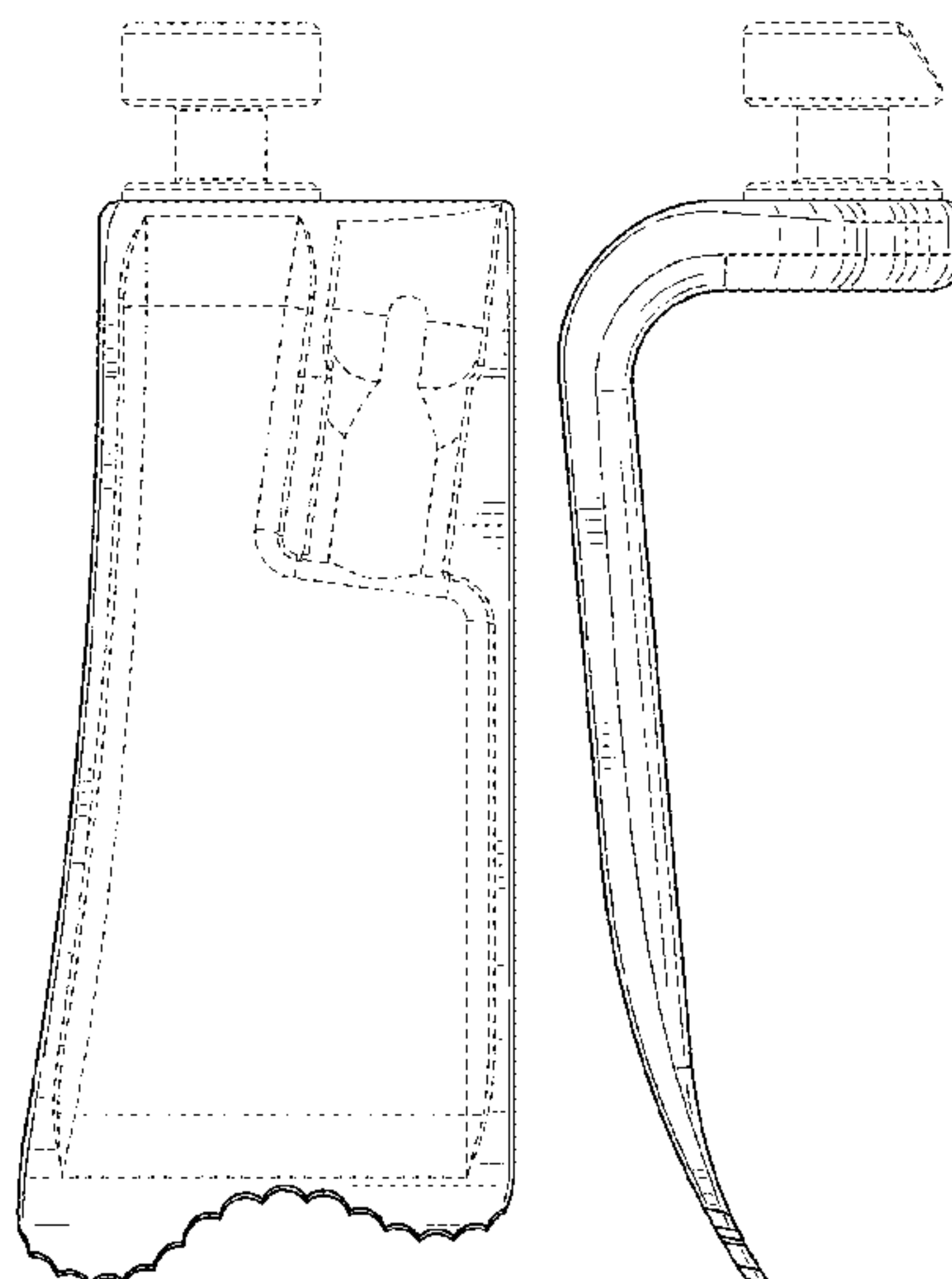
FIG. 1 is a front perspective view of a retractor blade, showing our new design;  
FIG. 2 is a back perspective view of the retractor blade of FIG. 1;  
FIG. 3 is a front view of the retractor blade of FIG. 1;  
FIG. 4 is a back view of the retractor blade of FIG. 1;  
FIG. 5 is a right side view of the retractor blade of FIG. 1; and,  
FIG. 6 is a left side view of the retractor blade of FIG. 1. The broken lines immediately adjacent the claim represent the bounds of the claimed design while all other broken lines are directed to environment and are for illustrative purposes only; the broken lines form no part of the claimed design.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

1,223,812 A 4/1917 Listiak  
1,456,116 A 5/1923 Bessesen  
2,807,259 A 9/1957 Guerriero  
3,030,948 A 4/1962 Loeffler

**1 Claim, 3 Drawing Sheets**



# US D814,028 S

(56)

## References Cited

### U.S. PATENT DOCUMENTS

3,749,088	A	7/1973	Kohlmann	7,214,186	B2	5/2007	Ritland
3,965,890	A	6/1976	Gauthier	7,235,048	B2	6/2007	Rein
186,637	A	1/1977	Tanner	7,294,104	B2	11/2007	Person
4,024,859	A	5/1977	Slepyan	7,374,534	B2	5/2008	Dalton
4,116,232	A	9/1978	Rabban	7,396,328	B2	7/2008	Penenberg
4,151,837	A	5/1979	Millard	D575,398	S *	8/2008	Lash ..... D24/135
4,156,424	A	5/1979	Burgin	7,455,639	B2	11/2008	Ritland
4,165,746	A	8/1979	Burgin	7,473,223	B2	1/2009	Fetzer
4,457,300	A	7/1984	Budde	7,473,269	B1	1/2009	Hynes
4,461,284	A	7/1984	Fackler	7,537,565	B2	5/2009	Bass
4,686,972	A	8/1987	Kurland	7,569,014	B2	8/2009	Bass
4,702,230	A	10/1987	Pelta	7,588,537	B2	9/2009	Bass
4,747,394	A	5/1988	Watanabe	7,654,954	B1	2/2010	Phillips
4,747,395	A	5/1988	Brief	7,722,618	B2	5/2010	Estes
4,817,587	A	4/1989	Janese	D617,456	S *	6/2010	Ott ..... D24/135
4,829,985	A	5/1989	Couetil	7,744,530	B2	6/2010	Person
4,852,552	A	8/1989	Chaux	7,753,844	B2	7/2010	Sharratt
4,881,525	A	11/1989	Williams	7,758,501	B2	7/2010	Frasier
4,934,352	A	6/1990	Sullivan	7,850,608	B2	12/2010	Hamada
5,052,373	A	10/1991	Michelson	7,909,829	B2	3/2011	Patel
D343,235	S *	1/1994	LeVahn ..... D24/135	7,909,848	B2	3/2011	Patel
5,468,241	A	11/1995	Metz-Stavenhagen	7,927,337	B2	4/2011	Keller
5,512,038	A	4/1996	O'Neal	7,931,589	B2	4/2011	Cohen
D369,860	S	5/1996	Koros	7,935,053	B2	5/2011	Karpowicz
5,733,290	A	3/1998	McCue	7,946,982	B2	5/2011	Hamada
5,772,583	A	6/1998	Wright	7,959,564	B2	6/2011	Ritland
5,795,291	A	8/1998	Koros	7,981,031	B2	7/2011	Frasier
5,846,192	A	12/1998	Teixido	D642,679	S *	8/2011	Raven, III ..... D24/135
5,865,730	A	2/1999	Fox	8,062,217	B2	11/2011	Boucher
5,882,298	A	3/1999	Sharratt	8,066,710	B2	11/2011	Estes
5,893,831	A	4/1999	Koros	D674,896	S *	1/2013	Bender ..... D24/135
5,902,233	A	5/1999	Farley	8,636,655	B1	1/2014	Childs
5,931,777	A	8/1999	Sava	8,900,137	B1 *	12/2014	Lovell ..... A61B 17/02
5,944,658	A	8/1999	Koros				600/210
5,967,974	A	10/1999	Nicholas	D726,909	S *	4/2015	Bennett ..... D24/136
5,984,865	A	11/1999	Farley	9,113,853	B1 *	8/2015	Casey ..... A61B 17/0206
5,993,385	A	11/1999	Johnston	D789,530	S *	6/2017	Casey ..... A61B 17/0206
6,042,540	A	3/2000	Johnston				D24/135
6,042,542	A	3/2000	Koros	2003/0069478	A1 *	4/2003	Phillips ..... A61B 17/02
D430,294	S *	8/2000	Nathanson ..... D24/135				600/227
D430,668	S *	9/2000	Koros ..... D24/135	2005/0192486	A1	9/2005	Hamel
6,200,263	B1	3/2001	Person	2005/0240081	A1	10/2005	Eliachar
6,206,826	B1	3/2001	Mathews	2006/0183978	A1	8/2006	Howard
6,206,828	B1	3/2001	Wright	2006/0206009	A1	9/2006	Von Wald
6,213,941	B1	4/2001	Benetti	2007/0038033	A1	2/2007	Jones
6,224,545	B1	5/2001	Cocchia	2007/0073112	A1	3/2007	Holmes
6,234,961	B1	5/2001	Gray	2007/0083086	A1	4/2007	LeVahn
6,241,729	B1	6/2001	Estes	2007/0129608	A1	6/2007	Sandhu
6,264,396	B1	7/2001	Dobrovolny	2007/0208228	A1	9/2007	Pavento
6,296,609	B1	10/2001	Brau	2007/0238932	A1	10/2007	Jones
6,322,500	B1	11/2001	Sikora	2008/0071145	A1	3/2008	Bjork
6,340,345	B1	1/2002	Lees	2008/0114208	A1	5/2008	Hutton
6,416,465	B2	7/2002	Brau	2008/0146881	A1	6/2008	Alimi
6,506,151	B2	1/2003	Estes	2008/0249372	A1	10/2008	Reglos
6,524,238	B2	2/2003	Velikaris	2009/0012370	A1	1/2009	Gutierrez
6,602,190	B2	8/2003	Dobrovolny	2009/0012527	A1	1/2009	Mignucci
6,648,818	B2	11/2003	Cartier	2009/0076333	A1	3/2009	Bjork
6,685,632	B1	2/2004	Hu	2009/0076516	A1	3/2009	Lowry
6,692,434	B2	2/2004	Ritland	2009/0105547	A1	4/2009	Vayser
6,733,444	B2	5/2004	Phillips	2009/0124861	A1	5/2009	Fetzer
6,860,850	B2	3/2005	Phillips	2009/0227845	A1	9/2009	Lo
6,887,197	B2	5/2005	Phillips	2010/0081885	A1	4/2010	Wing
6,887,198	B2	5/2005	Phillips	2010/0113885	A1	5/2010	McBride
6,929,606	B2	8/2005	Ritland	2010/0217089	A1	8/2010	Farley
D510,768	S *	10/2005	Farley ..... D24/135	2010/0298647	A1	11/2010	Black
6,951,538	B2	10/2005	Ritland	2010/0298648	A1	11/2010	Gray
7,001,333	B2	2/2006	Hamel	2010/0312068	A1	12/2010	Dalton
7,014,609	B2	3/2006	Cartier	2011/0004067	A1	1/2011	Marchek
7,029,472	B1	4/2006	Fortin	2011/0034781	A1	2/2011	Loftus
7,056,287	B2	6/2006	Taylor	2011/0130793	A1	6/2011	Woolley
7,108,698	B2	9/2006	Robbins	2011/0137130	A1	6/2011	Thalgott
7,147,599	B2	12/2006	Phillips	2011/0144450	A1	6/2011	Paolitto
7,166,073	B2	1/2007	Ritland	2011/0172494	A1	7/2011	Bass
7,182,729	B2	2/2007	Abdelgany	2011/0201897	A1	8/2011	Bertagnoli
7,182,731	B2	2/2007	Nguyen	2011/0208008	A1	8/2011	Michaeli
				2011/0224497	A1	9/2011	Welman
				2011/0245836	A1	10/2011	Hamada
				2011/0257487	A1	10/2011	Thalgott
				2011/0301423	A1	12/2011	Koros



(56)

**References Cited**

U.S. PATENT DOCUMENTS

2012/0083662 A1 4/2012 Hamada  
 2012/0130180 A1 5/2012 Pell  
 2012/0172670 A1 7/2012 Hamada  
 2012/0197300 A1 8/2012 Loftus  
 2012/0245432 A1 9/2012 Karpowicz  
 2012/0265021 A1 10/2012 Nottmeier  
 2012/0330106 A1 12/2012 Wright  
 2013/0046147 A1 2/2013 Nichter  
 2013/0123581 A1 5/2013 Fritzinger  
 2013/0158359 A1 6/2013 Predick  
 2013/0245383 A1 9/2013 Friedrich  
 2013/0261401 A1 10/2013 Hawkins  
 2013/0261402 A1 10/2013 Hawkins  
 2013/0303859 A1 11/2013 Nowak  
 2013/0345520 A1 12/2013 Hamada  
 2014/0024900 A1 1/2014 Capote  
 2014/0066718 A1 3/2014 Fiechter  
 2014/0066941 A1 3/2014 Mignucci

DE	29722605		2/1998	
EP	1949860		3/2010	
EP	2394584		12/2011	
FR	2788958		8/2000	
GB	1520832		8/1978	
JP	10277043		10/1998	
WO	WO-199838921		9/1998	
WO	WO-2004037070		5/2004	
WO	WO 2004047650		6/2004	
WO	WO-2007002405		1/2007	
WO	WO 2008131355	A1 *	10/2008	..... A61B 17/0206
WO	WO 2009055713	A1 *	4/2009	..... A61B 17/02
WO	WO-2010057980		5/2010	
WO	WO-2012005914		1/2012	
WO	WO 2012040206		3/2012	
WO	WO-2012093368		7/2012	
WO	WO-2012125975		9/2012	
WO	WO-2013000105		1/2013	
WO	WO-2013033630		3/2013	
WO	WO-2013052827		4/2013	

FOREIGN PATENT DOCUMENTS

CN 201537102 8/2010

\* cited by examiner

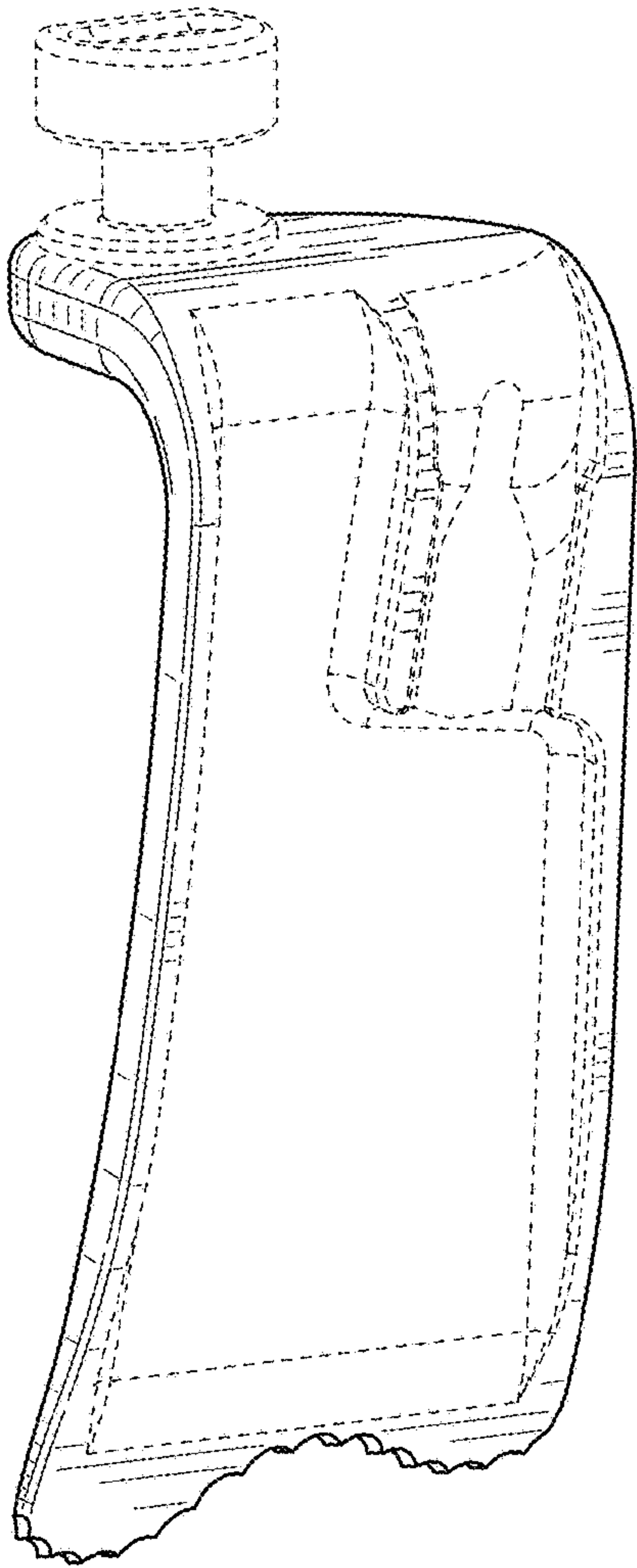


FIG. 1

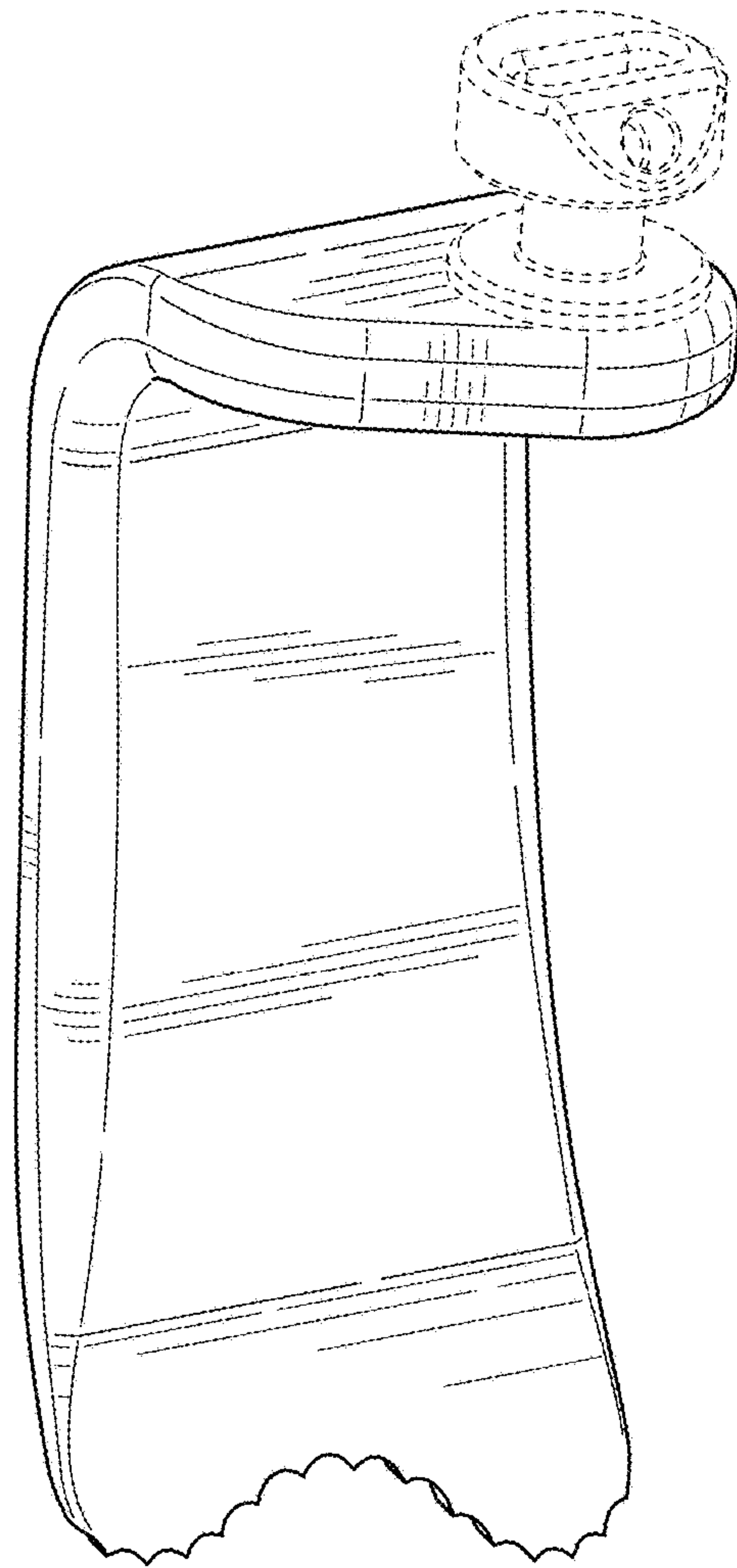


FIG. 2

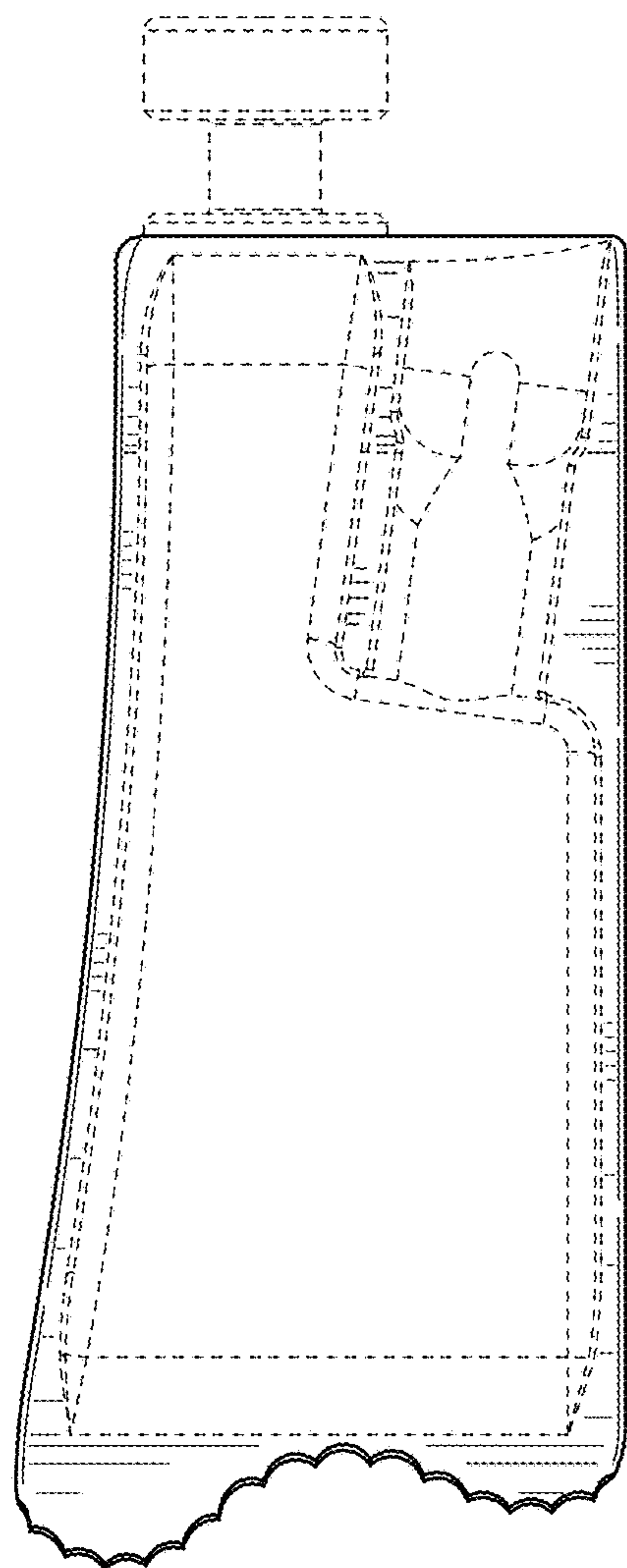


FIG. 3

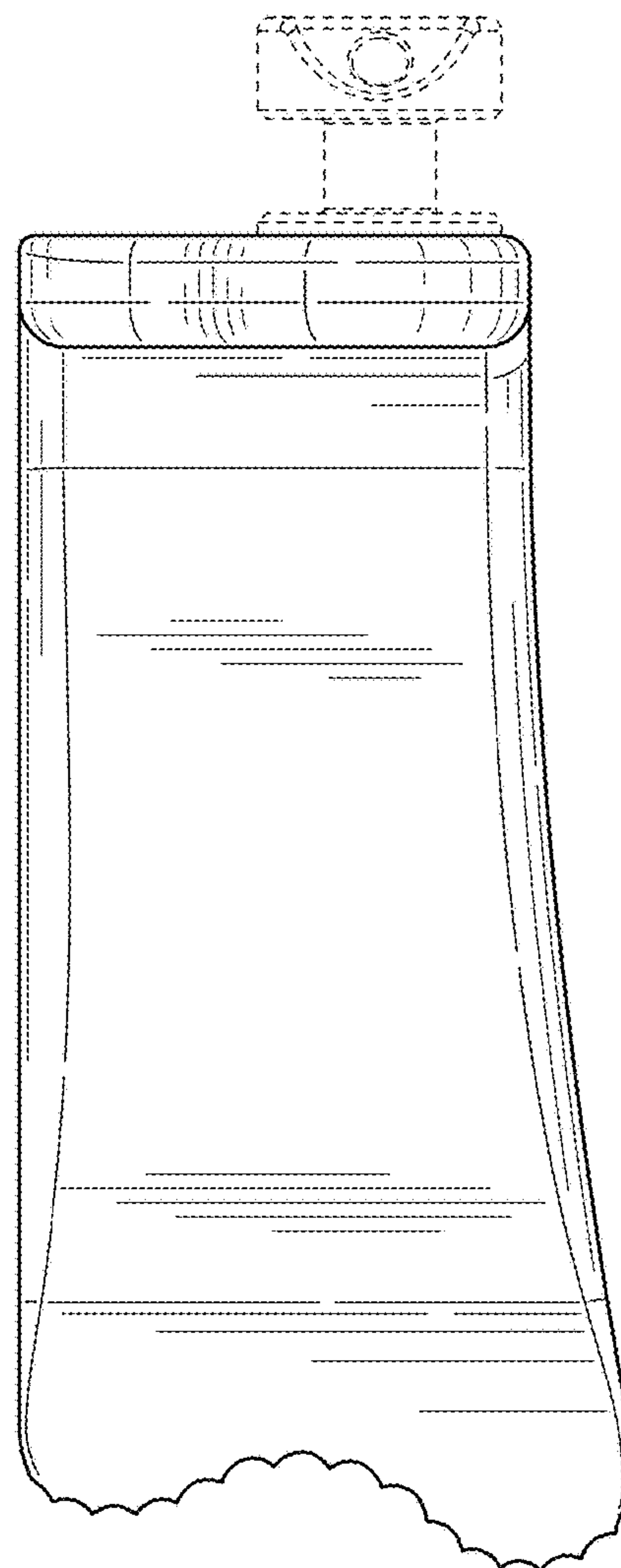


FIG. 4

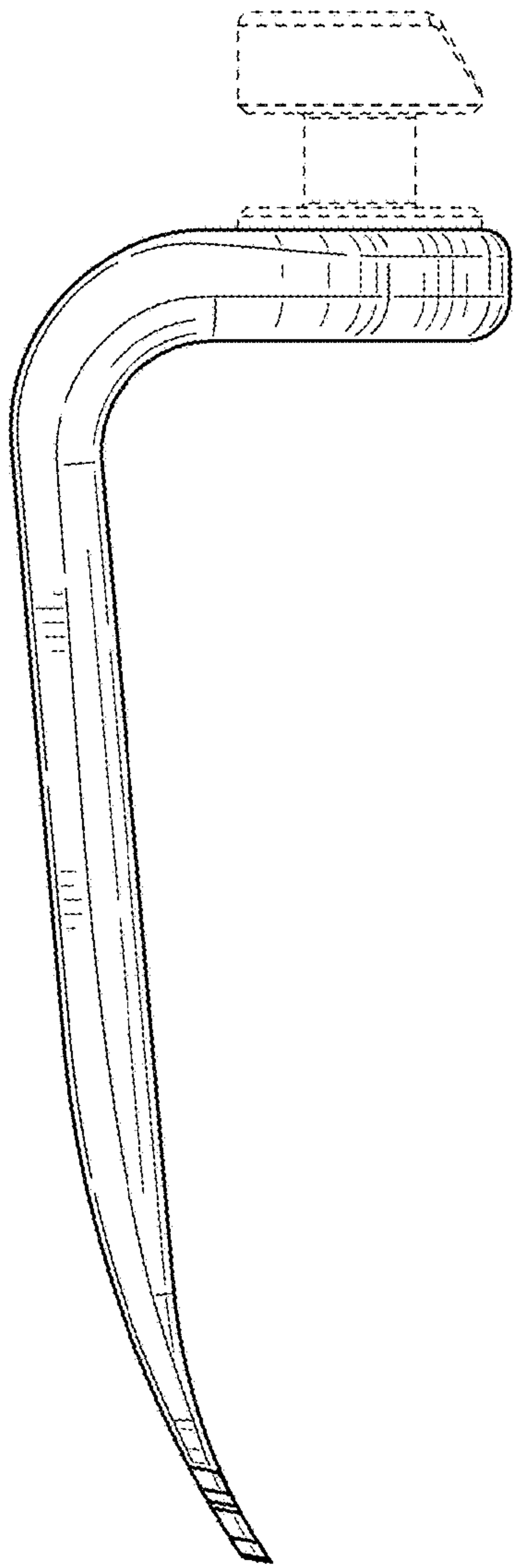


FIG. 5

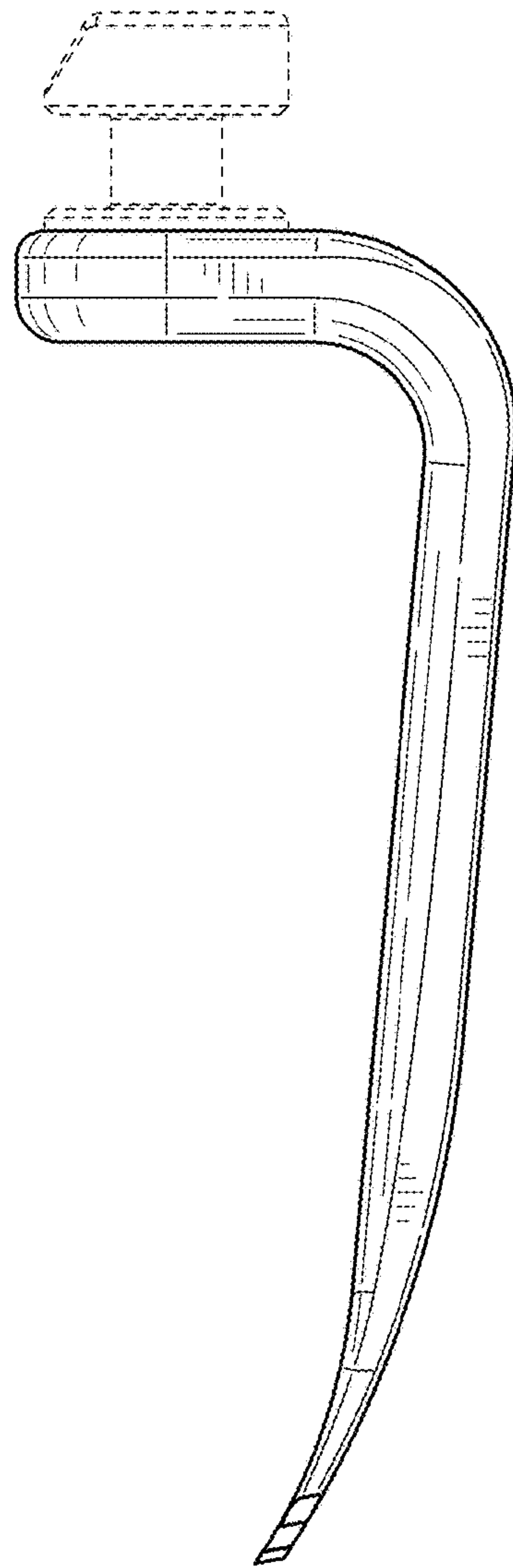


FIG. 6