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

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- (54) **RETRACTOR BLADE**
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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)

FOREIGN PATENT DOCUMENTS

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

OTHER PUBLICATIONS

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

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- (**) Term: **15 Years**
- (21) Appl. No.: **29/595,296**
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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.

(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

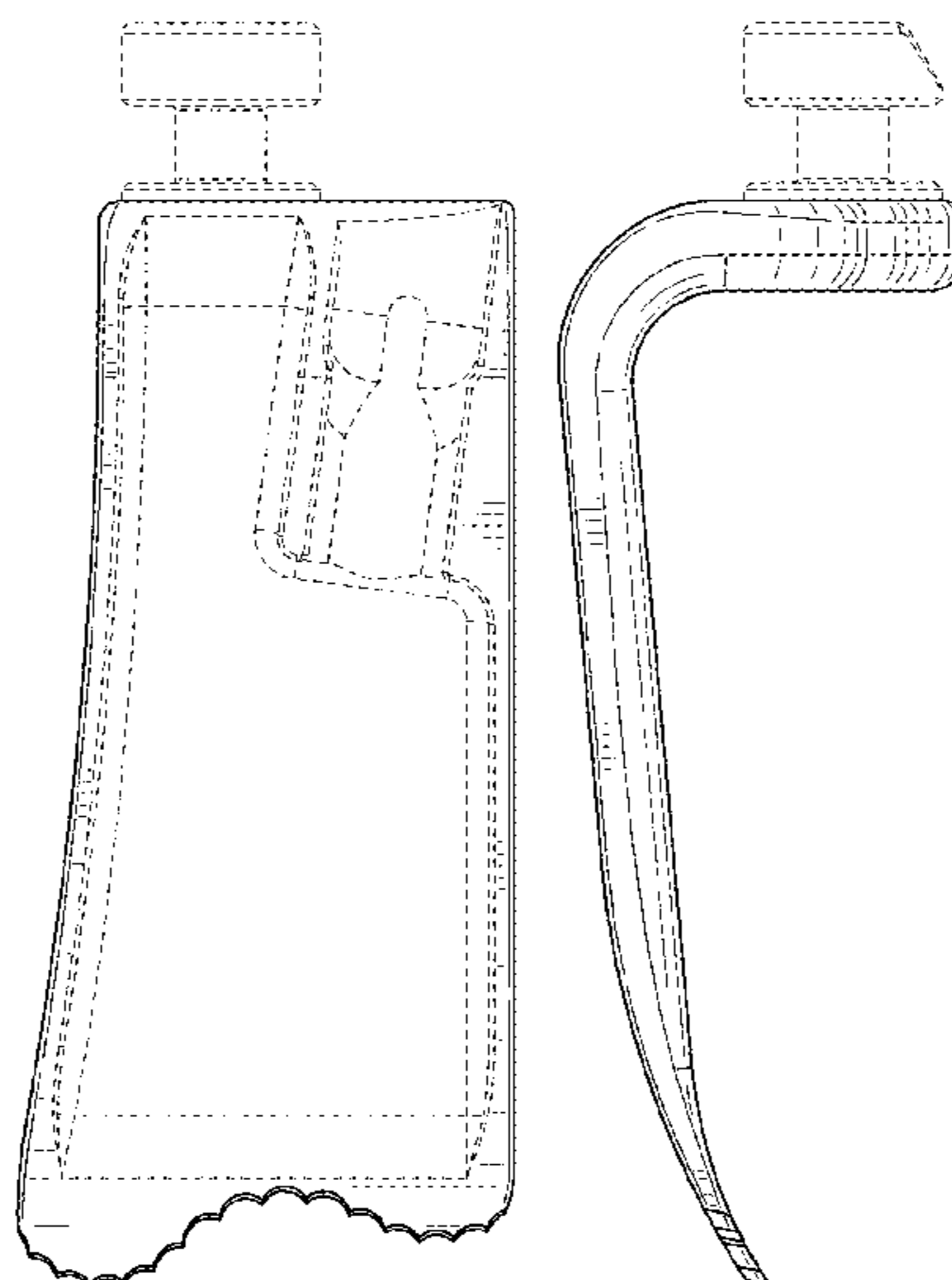
(57) **CLAIM**

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.

1 Claim, 3 Drawing Sheets



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(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

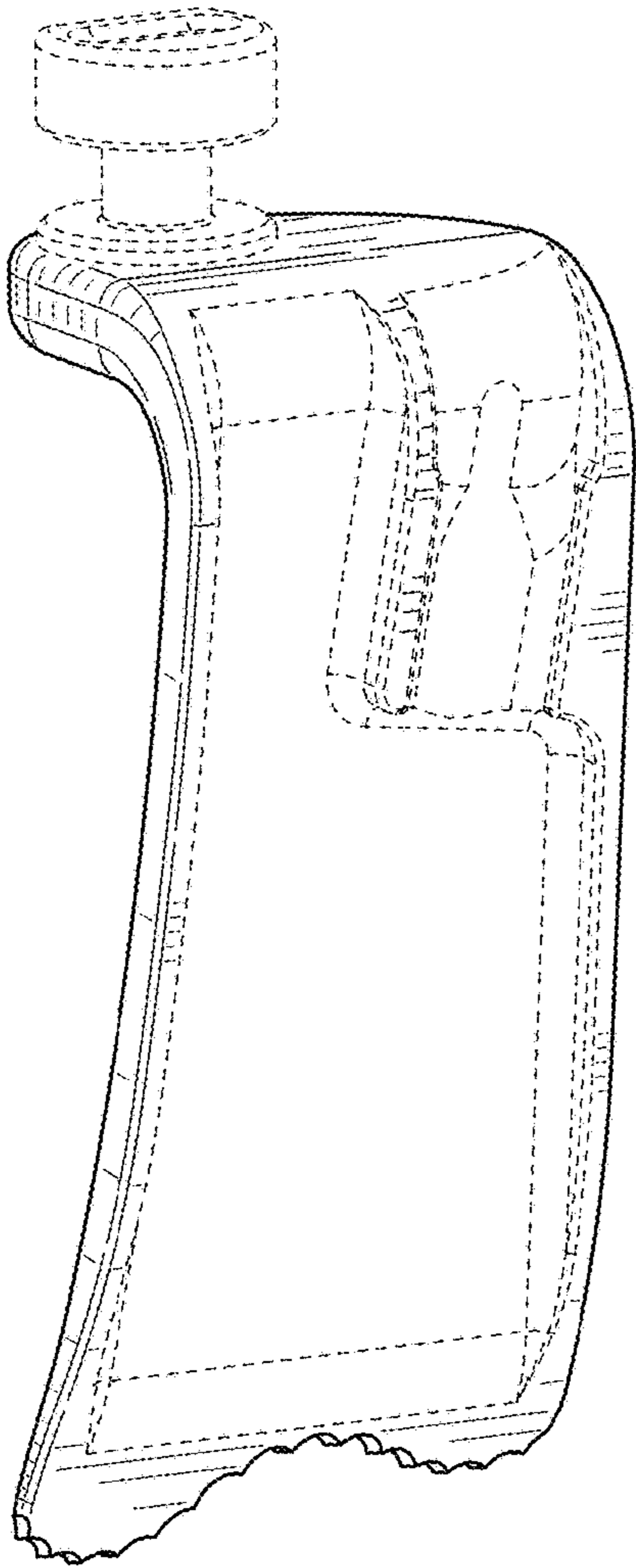


FIG. 1

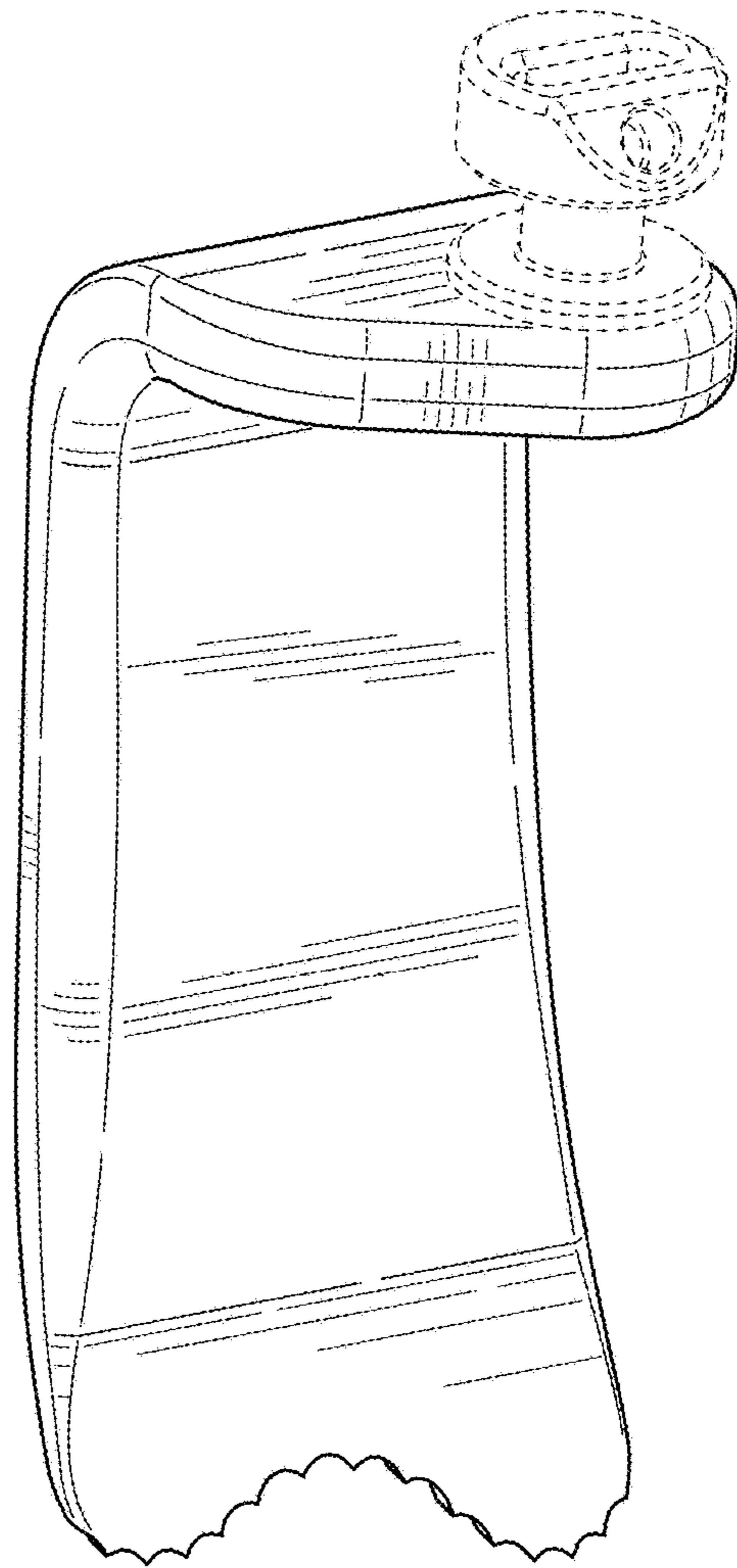


FIG. 2

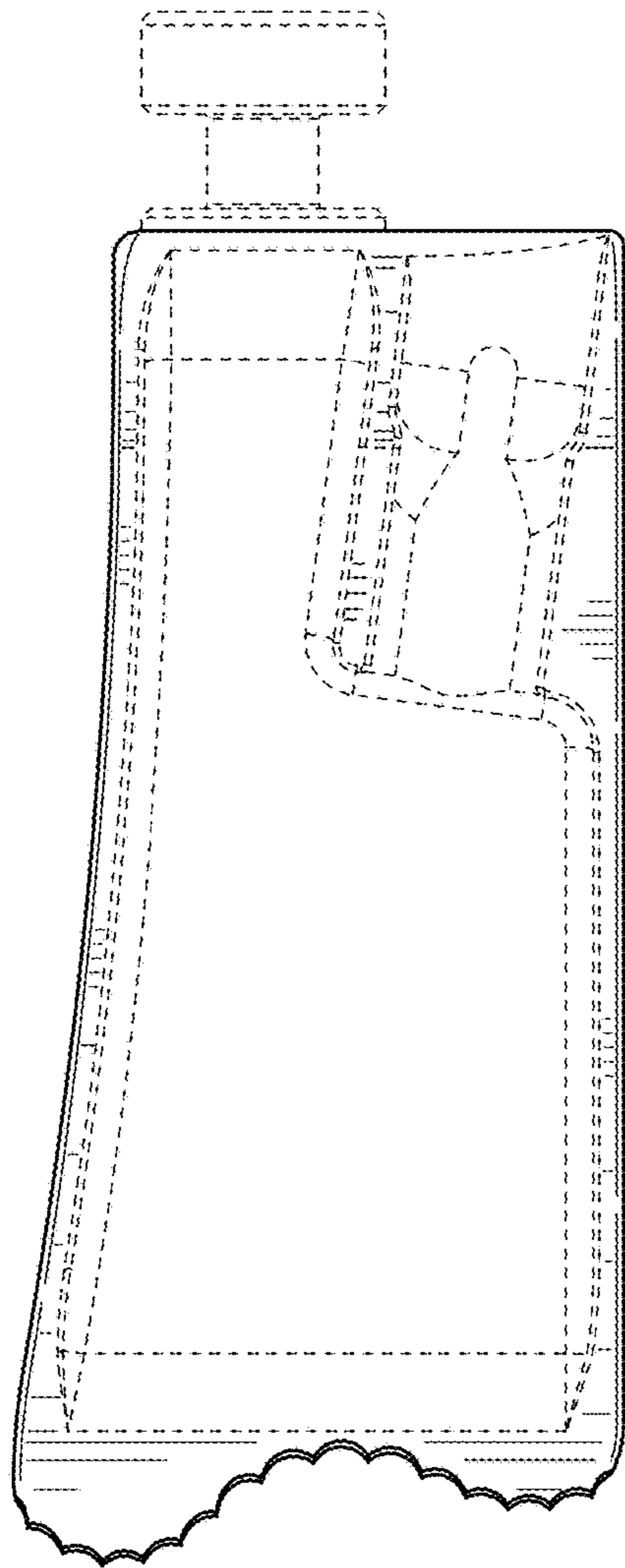


FIG. 3

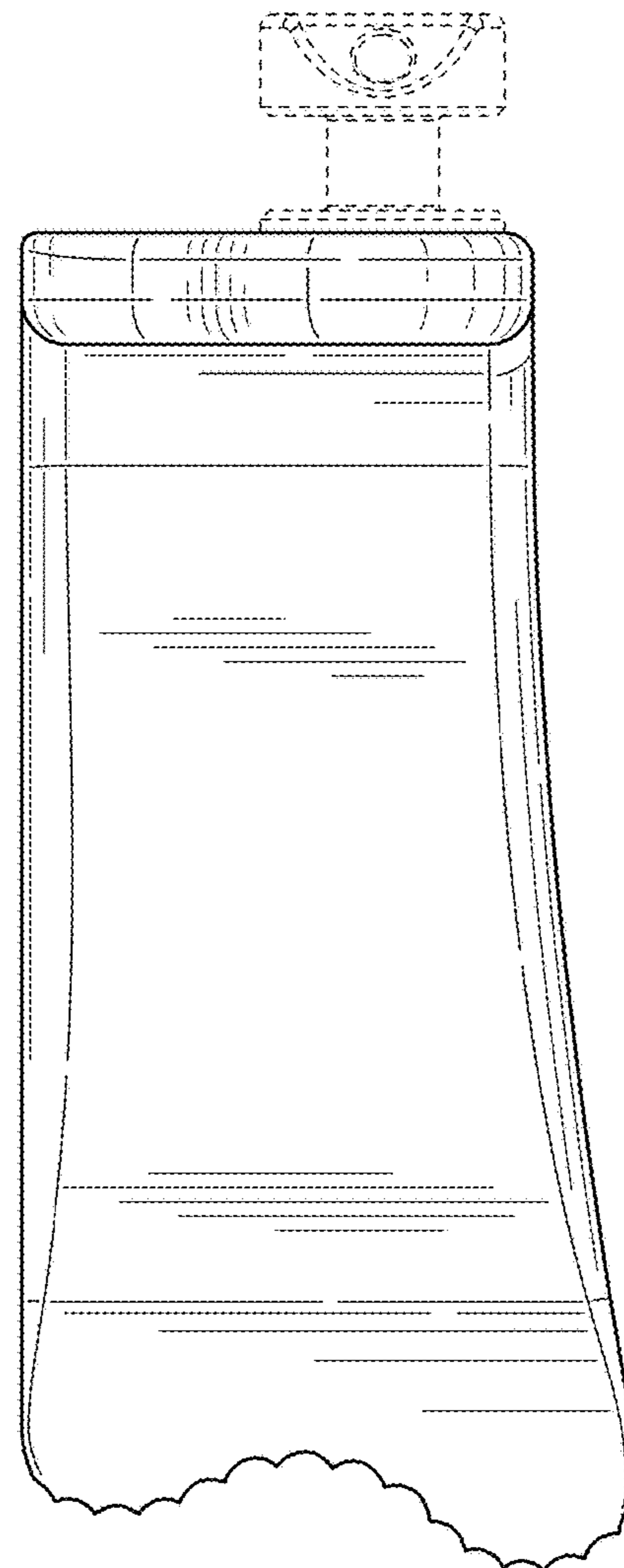


FIG. 4

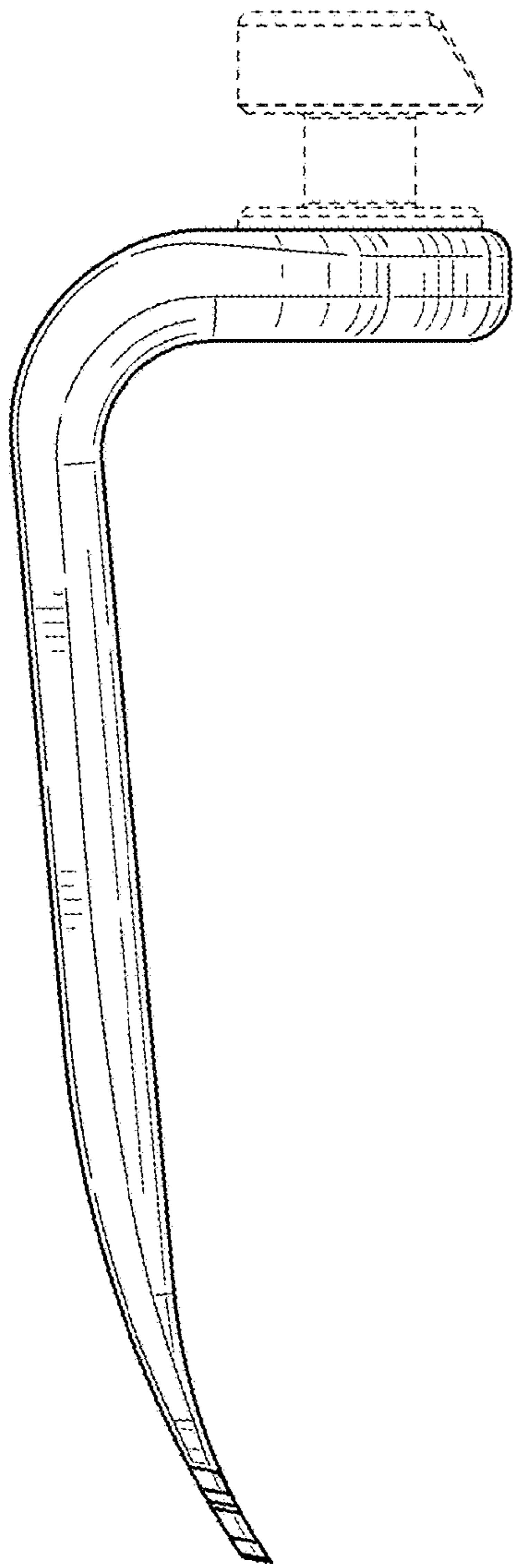


FIG. 5

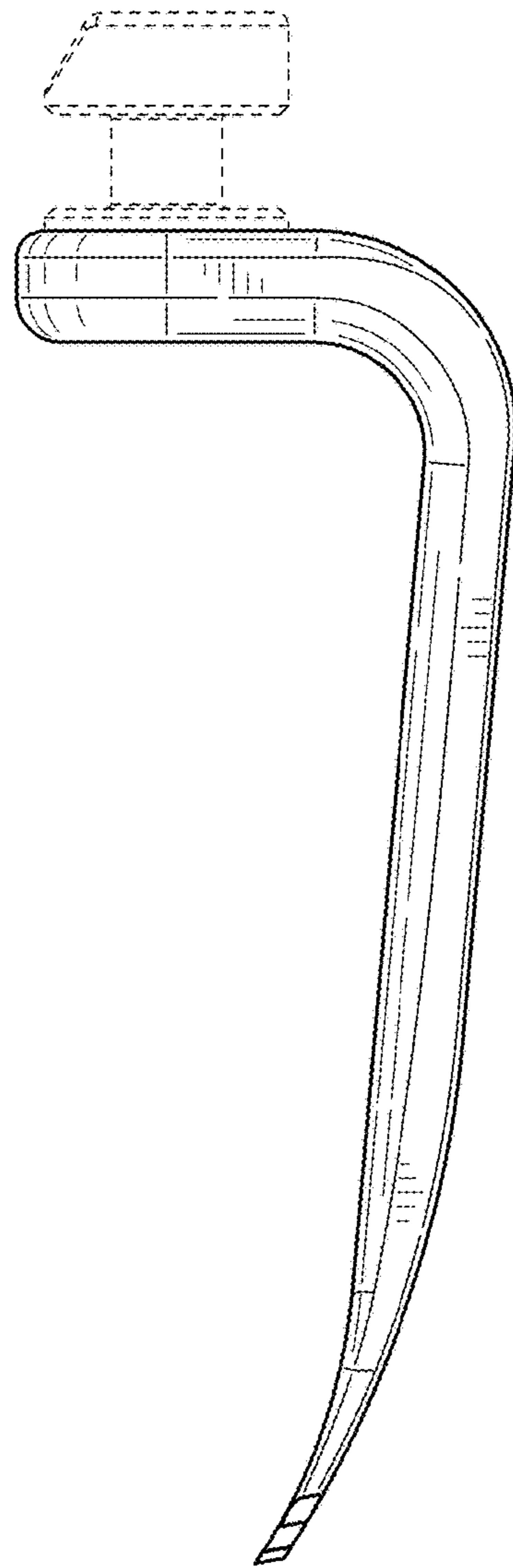


FIG. 6