

US00D629896S

(12) **United States Design Patent**
Horton

(10) **Patent No.:** **US D629,896 S**

(45) **Date of Patent:** **** *Dec. 28, 2010**

(54) **SPINOUS PROCESS TAPERED DILATOR**

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(*) Notice: This patent is subject to a terminal disclaimer.

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

(21) Appl. No.: **29/351,743**

(22) Filed: **Dec. 10, 2009**

(51) **LOC (9) Cl.** **24-02**

(52) **U.S. Cl.** **D24/133**

(58) **Field of Classification Search** D24/133,
D24/134, 135, 136, 137, 138, 139, 140, 141,
D24/142, 143, 146, 150, 152, 171, 144, 145,
D24/147, 148, 149, 151, 153, 154, 127, 128,
D24/129, 130, 106-108, 112, 111, 200;
D23/40, 47, 57, 60, 67, 68, 69, 80, 82, 83,
D23/84, 93, 94, 97, 107; D8/72, 73, 74;
600/184, 201-203, 210-218, 220-223, 224,
600/225-227; 606/7, 86 A, 86 B, 119

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 4,501,269 A 2/1985 Bagby
- 4,581,962 A 4/1986 Marbourg
- D297,606 S * 9/1988 Campbell et al. D8/14
- D304,231 S * 10/1989 Stream D24/112
- 5,015,247 A 5/1991 Michelson
- D318,116 S * 7/1991 Michelson D24/147
- D318,117 S * 7/1991 Michelson D24/147
- D318,118 S * 7/1991 Michelson D24/147
- D336,957 S * 6/1993 Koros et al. D24/147
- D338,149 S * 8/1993 Adams D8/107
- D343,234 S * 1/1994 Williams D24/133
- 5,284,128 A * 2/1994 Hart 600/208
- 5,306,307 A 4/1994 Senter et al.
- D358,642 S * 5/1995 Michelson D24/140
- 5,484,437 A 1/1996 Michelson
- 5,489,307 A 2/1996 Kuslich et al.

- 5,593,409 A 1/1997 Michelson
- D381,426 S * 7/1997 Koros et al. D24/147
- D382,644 S * 8/1997 Chi D24/200
- 5,741,253 A 4/1998 Michelson

(Continued)

FOREIGN PATENT DOCUMENTS

WO WO 00/22998 A1 4/2000

(Continued)

OTHER PUBLICATIONS

Mathews, "Percutaneous Interbody Fusions", Orthopedic Clinics of North America, Oct. 1, 1998, pp. 647-653, vol. 29, Issue 4, published by Elsevier, Inc.

(Continued)

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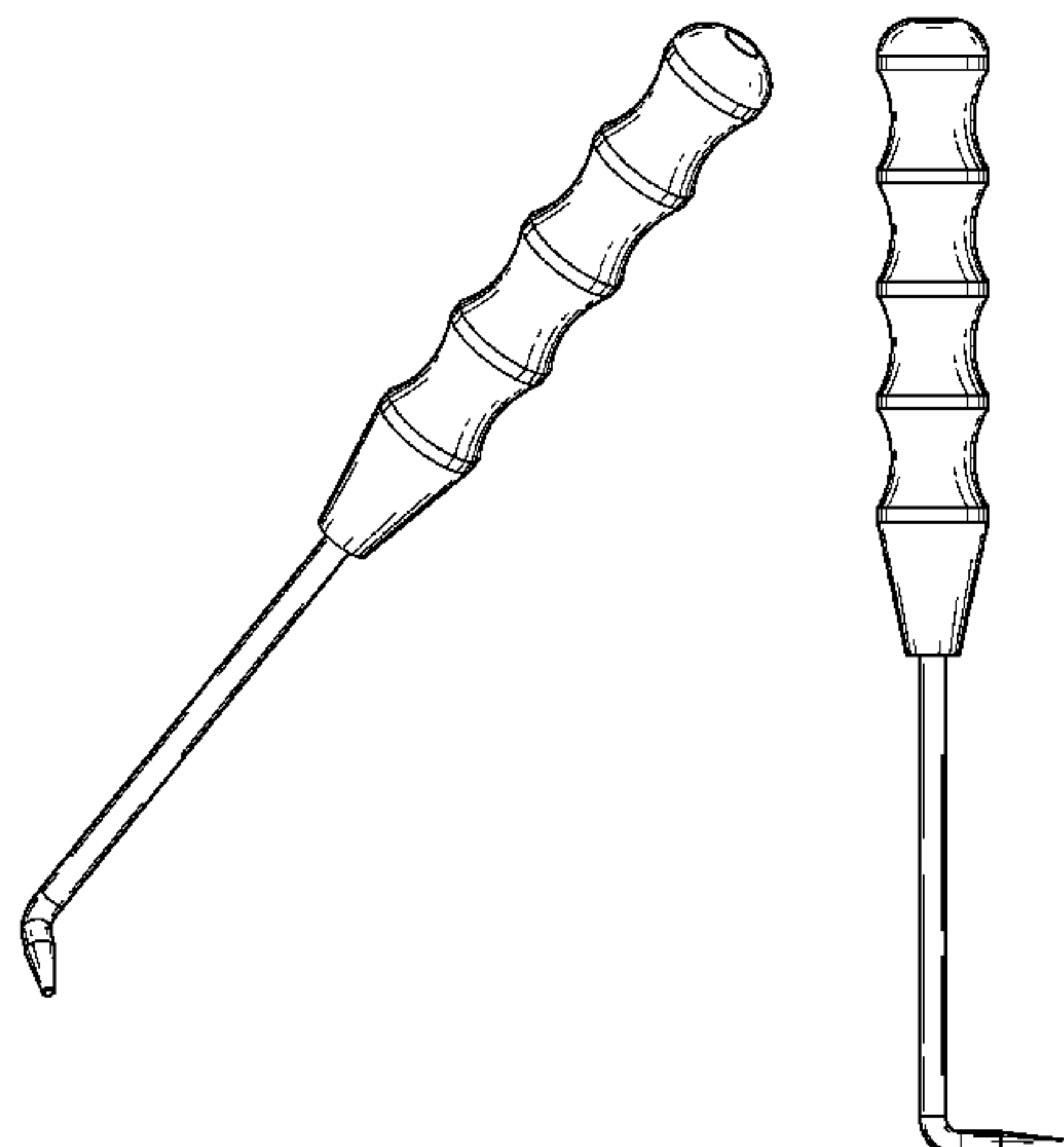
(57) **CLAIM**

I claim the ornamental design for a spinous process tapered dilator, as shown and described.

DESCRIPTION

FIG. 1 is a top front left perspective view of a spinous process tapered dilator showing my new design;
FIG. 2 is a front elevation view thereof;
FIG. 3 is a rear elevation view thereof;
FIG. 4 is a left side elevation view thereof;
FIG. 5 is a right side elevation view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.
The ornamental design for a tapered dilator for spinous ligament dissection, distraction, and sizing.

1 Claim, 4 Drawing Sheets



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U.S. PATENT DOCUMENTS

5,741,261 A 4/1998 Moskovitz et al.
 5,860,973 A 1/1999 Michelson
 5,954,635 A 9/1999 Foley et al.
 D416,652 S * 11/1999 Martin D30/156
 D417,913 S * 12/1999 Szarmach D24/152
 6,042,582 A 3/2000 Ray
 D425,379 S * 5/2000 Clausen D7/683
 6,080,155 A 6/2000 Michelson
 6,210,412 B1 4/2001 Michelson
 6,371,988 B1 4/2002 Pafford et al.
 6,485,518 B1 11/2002 Cornwall et al.
 6,520,907 B1 2/2003 Foley et al.
 6,540,747 B1 4/2003 Marino
 6,562,046 B2 5/2003 Sasso
 6,579,319 B2 6/2003 Goble et al.
 6,902,578 B1 6/2005 Anderson et al.
 6,923,810 B1 8/2005 Michelson
 6,923,811 B1 8/2005 Carl et al.
 6,926,728 B2 * 8/2005 Zucherman et al. 606/190
 6,942,698 B1 9/2005 Jackson
 D535,744 S * 1/2007 Wright D24/135
 7,223,269 B2 5/2007 Chappuis
 D574,495 S 8/2008 Petersen
 D574,957 S 8/2008 Petersen
 D581,538 S 11/2008 Horton
 7,452,369 B2 11/2008 Barry
 D585,547 S * 1/2009 Bisleri D24/135
 D600,806 S 9/2009 Horton et al.
 D601,251 S 9/2009 Horton et al.
 7,588,573 B2 * 9/2009 Berry 606/86 A
 D605,289 S 12/2009 Horton
 2004/0087948 A1 5/2004 Suddaby
 2004/0098129 A1 * 5/2004 Lin 623/17.11
 2004/0138662 A1 * 7/2004 Landry et al. 606/61

2004/0143268 A1 7/2004 Falahee
 2004/0215344 A1 10/2004 Hochschuler et al.
 2005/0015150 A1 1/2005 Lee
 2005/0065516 A1 3/2005 Jahng
 2005/0149030 A1 7/2005 Serhan et al.
 2005/0154389 A1 * 7/2005 Selover et al. 606/61
 2006/0025768 A1 * 2/2006 Iott et al. 606/61
 2006/0036264 A1 2/2006 Selover et al.
 2006/0064099 A1 3/2006 Pavlov et al.
 2006/0111779 A1 5/2006 Petersen
 2006/0111782 A1 5/2006 Petersen
 2007/0208346 A1 * 9/2007 Marnay et al. 606/61
 2007/0233089 A1 * 10/2007 DiPoto et al. 606/61
 2007/0250166 A1 10/2007 McKay
 2008/0221627 A1 * 9/2008 Shluzas et al. 606/86 A
 2008/0255667 A1 10/2008 Horton
 2009/0131986 A1 5/2009 Lee et al.

FOREIGN PATENT DOCUMENTS

WO 2007/120903 A2 10/2007

OTHER PUBLICATIONS

Polly, Jr. et al., "Surgical Treatment for the Painful Motion Segment", *Spine*, 2005, pp. S44-S51, vol. 30, No. 16S, published by Lippincott Williams & Wilkins, Inc.
 Powers, et al., "Minimally Invasive Fusion and Fixation Techniques", *Neurosurgery Clinics of North America*, Oct. 2006, pp. 447-489, vol. 17, Issue 4, published by Elsevier, Inc.
 Seldomridge, et al., "Minimally Invasive Spine Surgery", *The American Journal of Orthopedics*, May 2005, pp. 224-232.
 Stein, et al., "Percutaneous Facet Joint Fusion: Preliminary Experience", *Journal of Vascular and Interventional Radiology*, Jan.-Feb. 1993, pp. 69-74, vol. 4, No. 1.

* cited by examiner

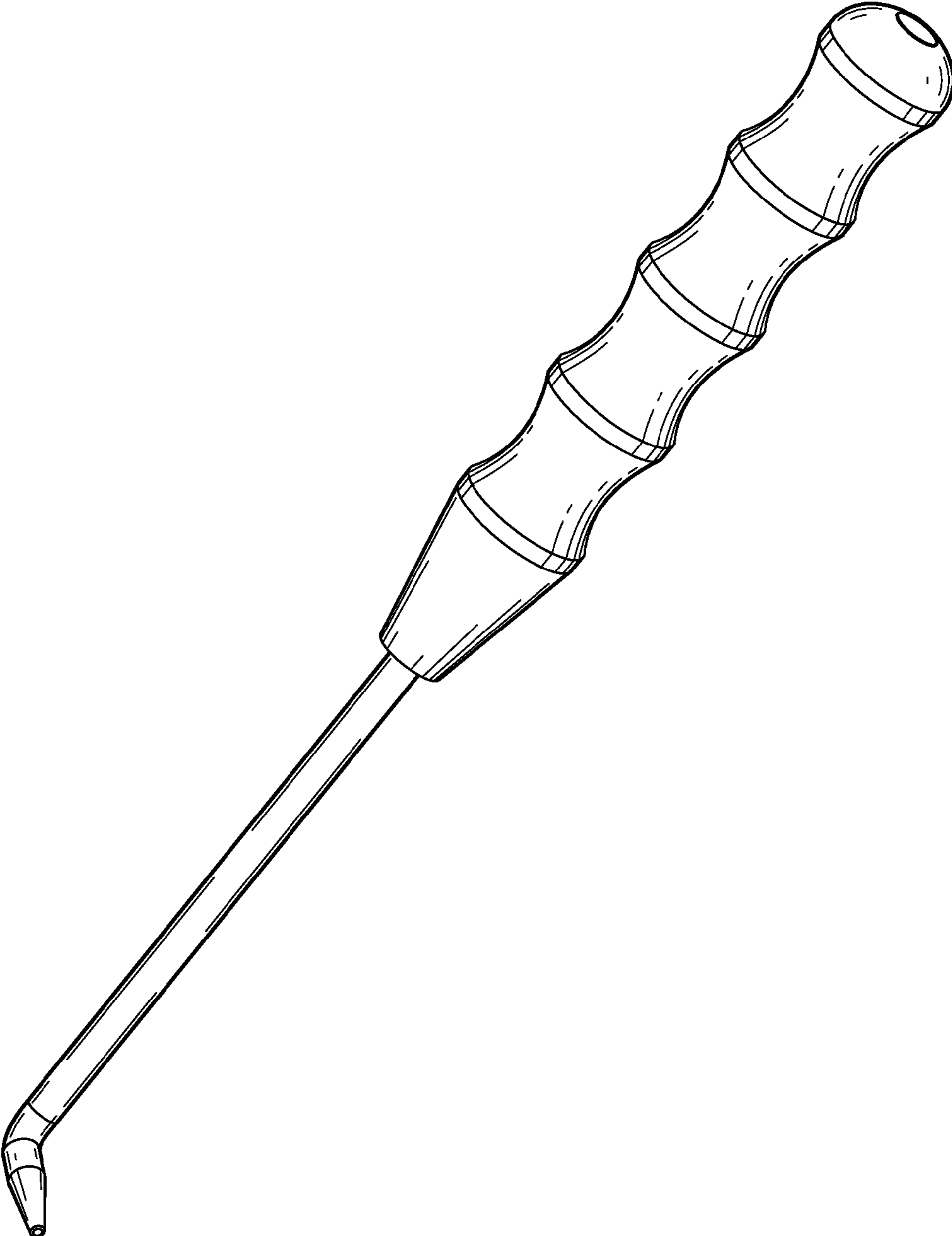


FIG. 1



FIG. 2



FIG. 3

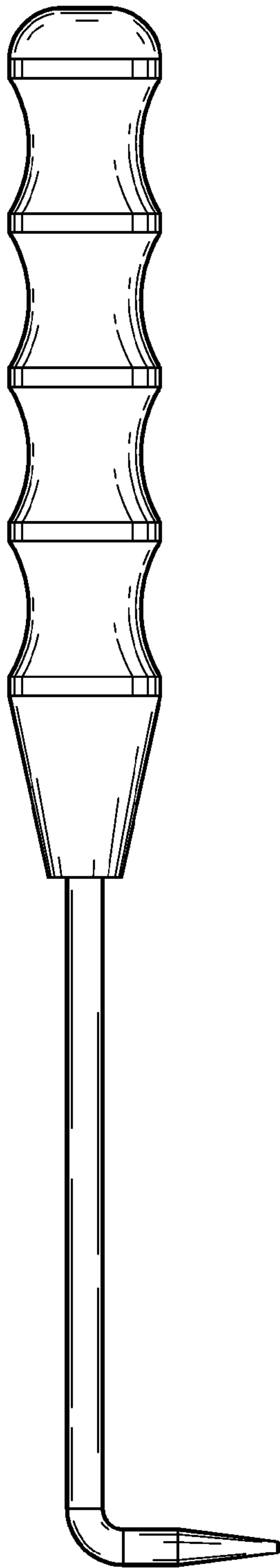


FIG. 4

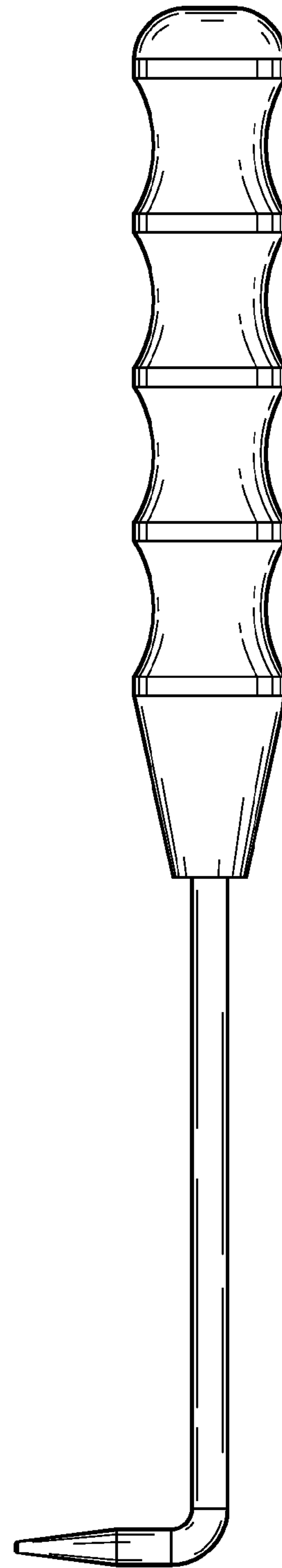


FIG. 5

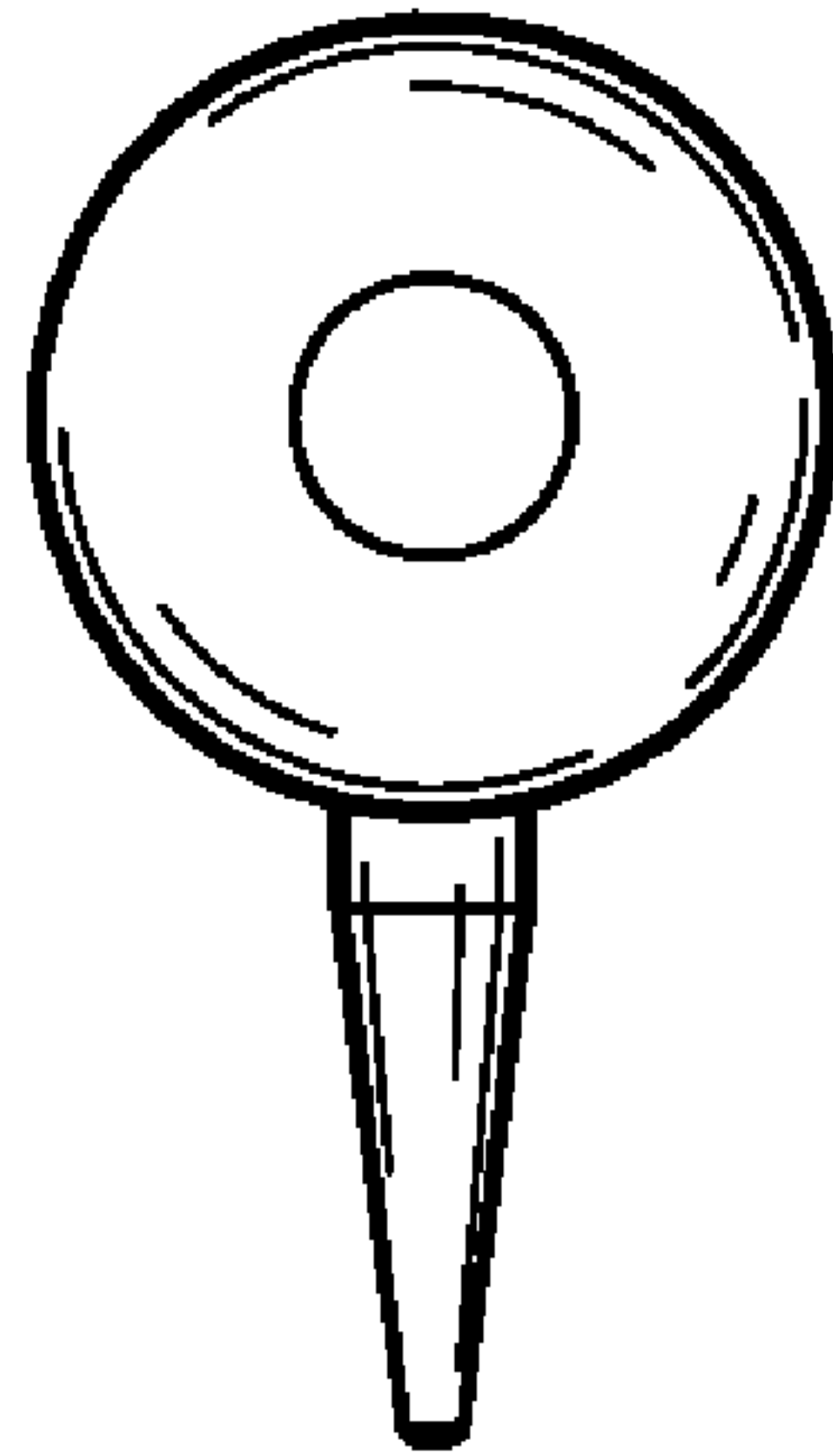


FIG. 6

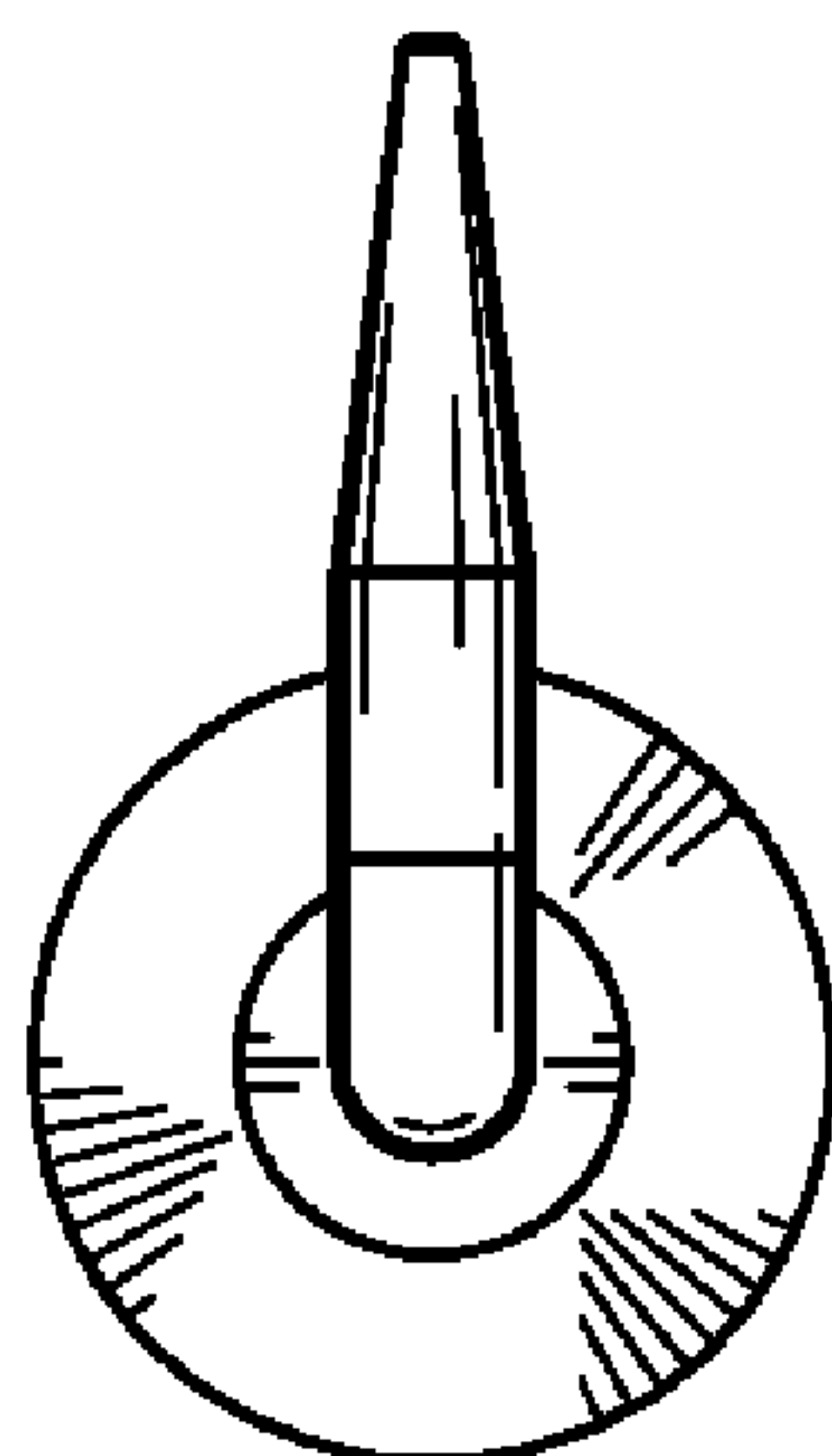


FIG. 7