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(12) **United States Design Patent** (10) **Patent No.:** **US D895,901 S**
Coffin et al. (45) **Date of Patent:** **** *Sep. 8, 2020**

(54) **HEARING PROTECTOR** 4,193,396 A 3/1980 Wacker
4,253,452 A 3/1981 Powers
(71) Applicant: **3M INNOVATIVE PROPERTIES** 4,314,553 A 2/1982 Westerdal
COMPANY, St. Paul, MN (US) (Continued)

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CA 2709768 12/2010
CN 203183139 9/2013
(Continued)

(73) Assignee: **3M Innovative Properties Company**, St. Paul, MN (US) OTHER PUBLICATIONS

(*) Notice: This patent is subject to a terminal disclaimer. US 9,592,159 B2, 03/2017, Endle (withdrawn)
(Continued)

(**) Term: **15 Years** Primary Examiner — Elizabeth J Oswecki
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(51) **LOC (12) Cl.** **29-02**

(52) **U.S. Cl.**
USPC **D29/112**

(58) **Field of Classification Search**
USPC D29/100, 102, 105, 106, 108, 112, 122;
D14/205, 223, 249
CPC A42B 3/16; A42B 3/163; A42B 3/166;
A61F 11/06; A61F 11/08; A61F 11/10;
A61F 11/12; A61F 11/14; A61F
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H04R 1/1083; H04R 5/0335; H04R
25/652; H04R 25/654; H04R 25/656;
A63B 71/10
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,446,707 A * 8/1948 Leight A61F 11/08
128/864
D245,202 S * 7/1977 Asker D24/106

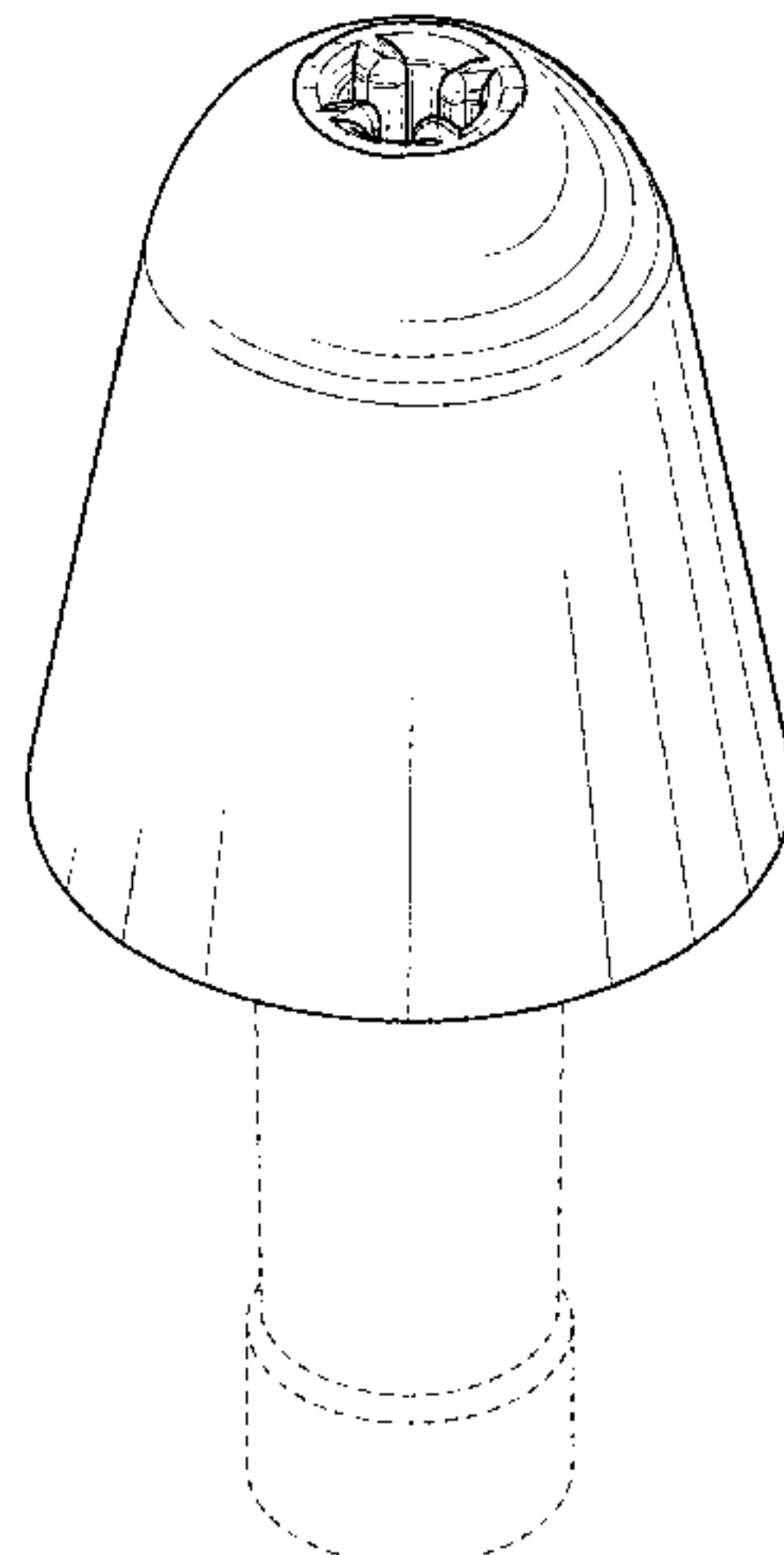
(57) **CLAIM**

The ornamental design for a hearing protector, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of a hearing protector showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a back view thereof;
FIG. 4 is a top view thereof;
FIG. 5 is a bottom view thereof;
FIG. 6 is a perspective view of a second embodiment of a hearing protector showing our new design;
FIG. 7 is a front view thereof;
FIG. 8 is a back view thereof;
FIG. 9 is a top view thereof; and,
FIG. 10 is a bottom view thereof.
The broken lines shown in the drawings represent portions of the hearing protector that form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,481,158 A 11/1984 Georlette
 D276,855 S * 12/1984 Falco D29/112
 4,555,313 A 11/1985 Duchane
 5,188,123 A * 2/1993 Gardner, Jr. A61F 11/08
 128/864
 5,249,309 A 10/1993 Berg
 5,541,677 A 7/1996 Huhtala
 5,581,821 A 12/1996 Nakano
 5,668,354 A 9/1997 Falco
 5,711,313 A 1/1998 Fleming
 5,806,506 A 9/1998 Kitamura
 5,811,742 A 9/1998 Leight
 6,105,714 A * 8/2000 Lindgren A61F 11/08
 181/135
 6,241,042 B1 * 6/2001 Falco B29C 44/1214
 181/135
 6,340,227 B1 1/2002 Solberg
 6,440,339 B1 8/2002 Magidson
 D466,995 S * 12/2002 Knauer A61F 11/08
 D24/106
 D492,766 S 7/2004 Falco
 D496,722 S * 9/2004 Falco A61F 11/08
 D24/106
 6,938,622 B2 9/2005 Huang
 7,210,484 B1 5/2007 Tiemens
 7,264,081 B2 9/2007 Bruck
 7,464,786 B2 * 12/2008 Falco A61F 11/08
 181/135
 D598,894 S * 8/2009 Masuda D14/205
 D606,972 S * 12/2009 Schaefer D14/205
 7,697,706 B2 * 4/2010 Doty A61F 11/08
 381/328
 7,727,433 B2 * 6/2010 Knauer A61F 11/10
 264/46.4
 7,743,771 B2 * 6/2010 Falco A61F 11/08
 128/864
 7,793,662 B2 * 9/2010 Elliott A61F 11/08
 128/864
 D636,484 S * 4/2011 Tiemens A61F 11/08
 D24/106
 7,967,015 B2 * 6/2011 Jenkins, Jr. A61F 11/08
 128/857
 7,984,716 B2 * 7/2011 Purcell A61F 11/08
 128/865

8,113,207 B2 * 2/2012 Gehling A61F 11/08
 128/864
 8,118,031 B2 2/2012 Seville
 D657,499 S * 4/2012 Parkins D24/106
 8,671,948 B2 3/2014 Turdjian
 8,679,607 B2 3/2014 Hamer
 8,968,613 B2 3/2015 Endle
 D735,180 S * 7/2015 Smith D14/242
 9,549,855 B2 1/2017 Hamer
 9,737,439 B2 8/2017 Endle
 2002/0124851 A1 9/2002 Knauer
 2003/0159878 A1 8/2003 Hakansson
 2004/0045558 A1 3/2004 Taylor
 2004/0079579 A1 4/2004 Barwacz
 2005/0056289 A1 3/2005 Jenkins, Jr.
 2005/0229938 A1 10/2005 Jenkins, Jr.
 2005/0230181 A1 10/2005 Woo
 2007/0086599 A1 4/2007 Wilmink
 2007/0227546 A1 10/2007 Schumaier
 2012/0073583 A1 3/2012 Turdjian
 2012/0272974 A1 11/2012 Magidson
 2013/0014768 A1 1/2013 Vaarbroe
 2015/0335489 A1 11/2015 Hamer
 2015/0335490 A1 11/2015 Hamer
 2017/0079845 A1 3/2017 Cai

FOREIGN PATENT DOCUMENTS

CN 103054670 7/2014
 NL 9401212 3/1996
 TW M304038 1/2007
 TW M497521 3/2015
 WO WO 2003-063744 8/2003
 WO WO 2004-100608 11/2004
 WO WO 2005-120131 12/2005
 WO WO 2009-020644 2/2009
 WO WO 2010-138447 12/2010

OTHER PUBLICATIONS

U.S. Appl. No. 62/553,620, filed Sep. 1, 2017, entitled "Earplug Assembly and Method for Forming the Same".
 U.S. Appl. No. 62/553,639, filed Sep. 1, 2017 entitled "Cold-Drawn Polyolefin Copolymer Cord for Earplug".
 Dove Earplugs Blog post obtained from internet on Feb. 26, 2013: <https://blog.naver.com/kbsss000/130161087797>.

* cited by examiner

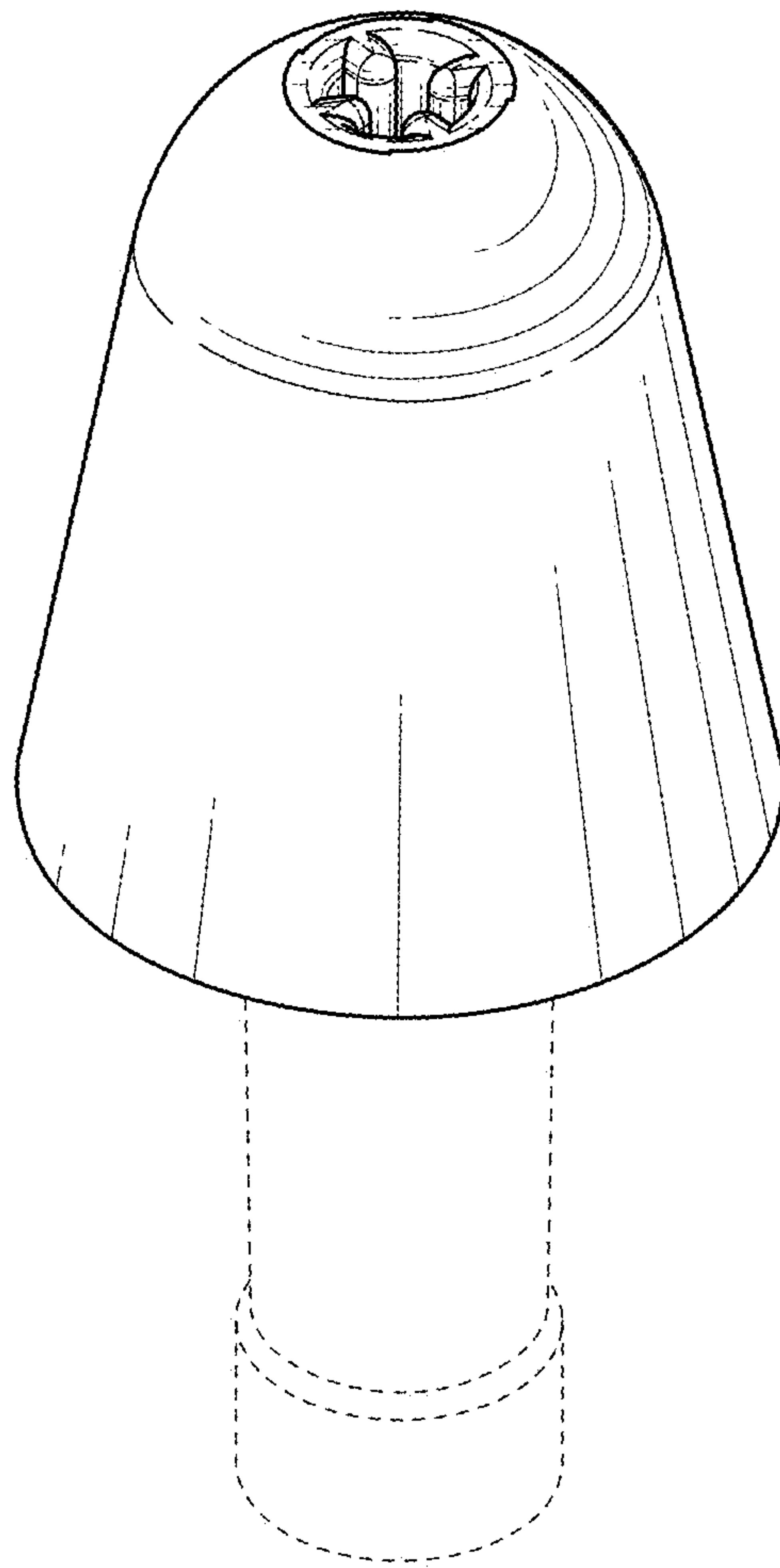


FIG. 1

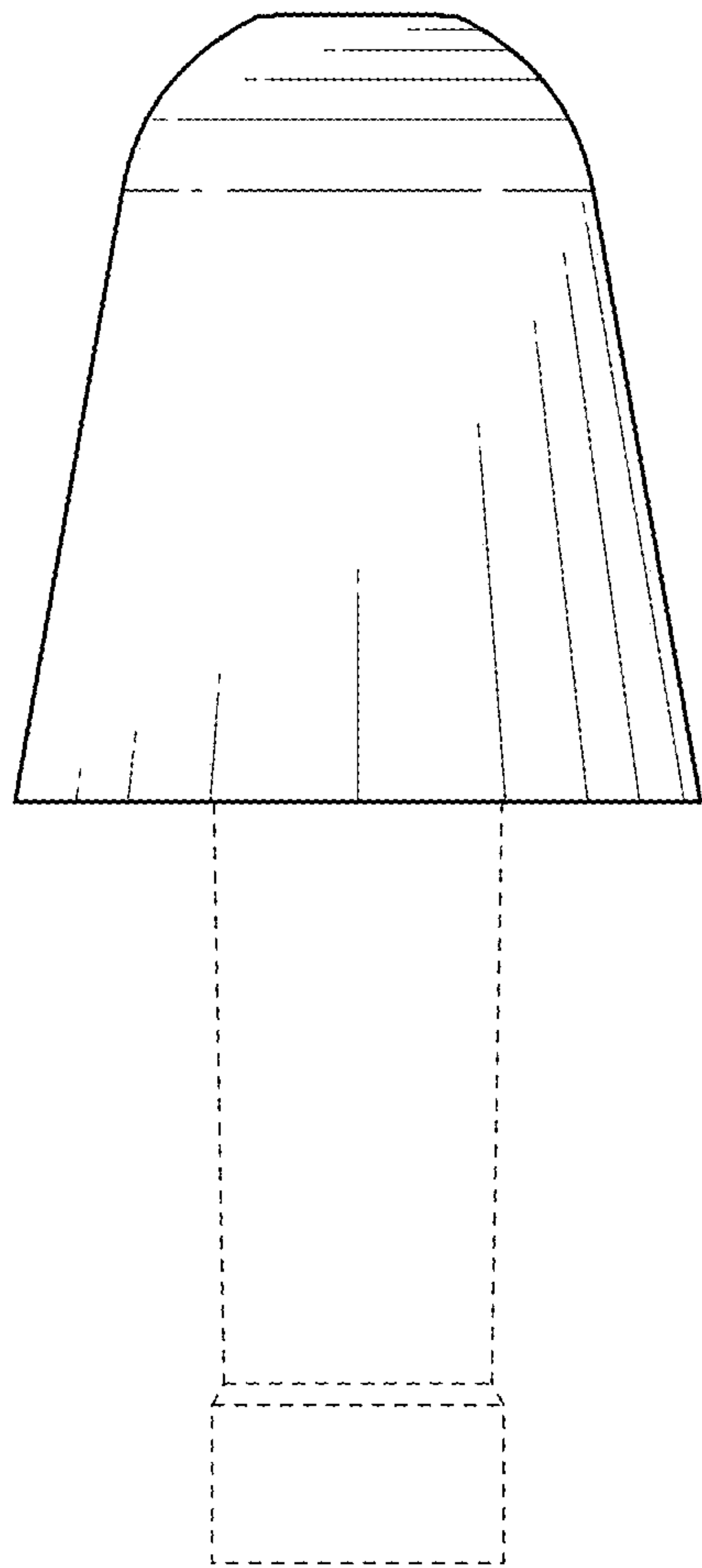


FIG. 2

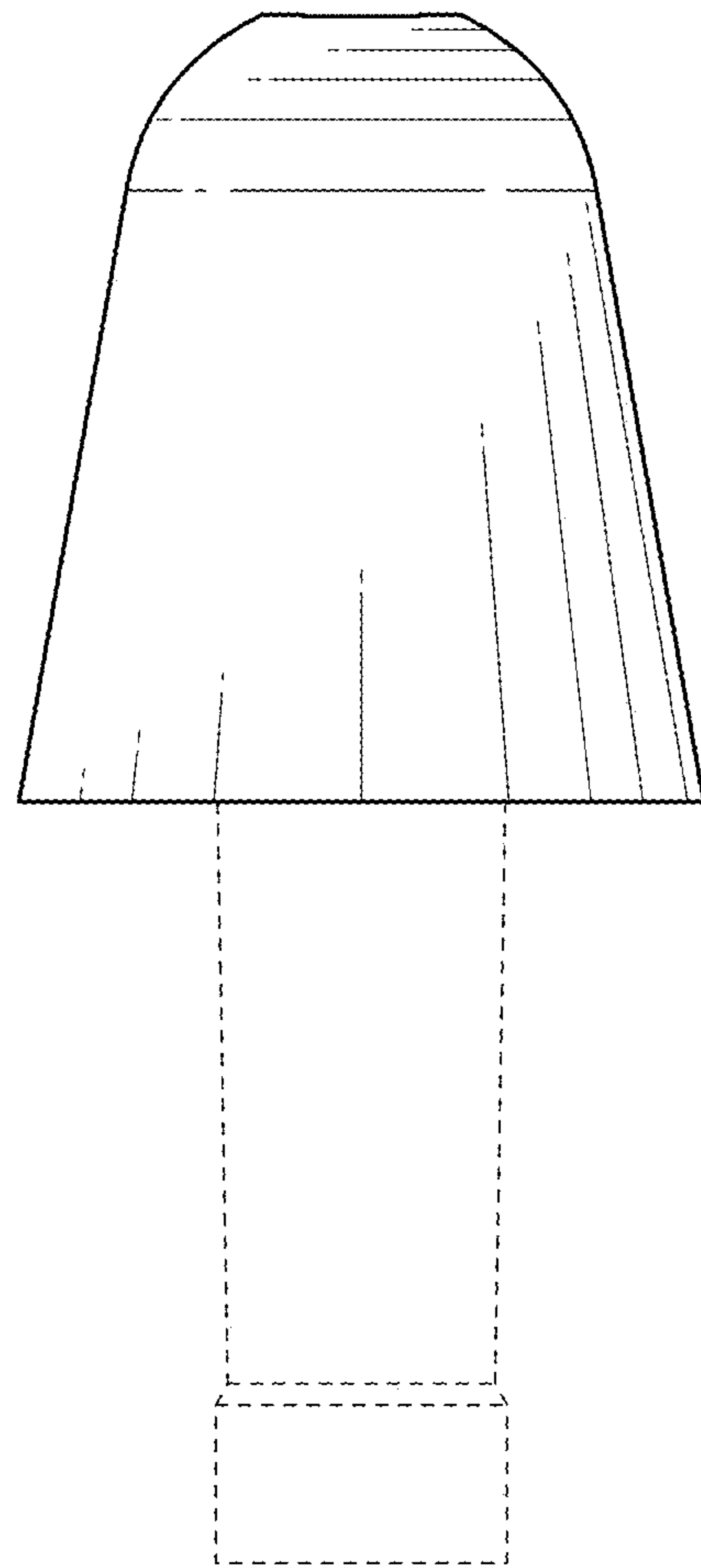


FIG. 3

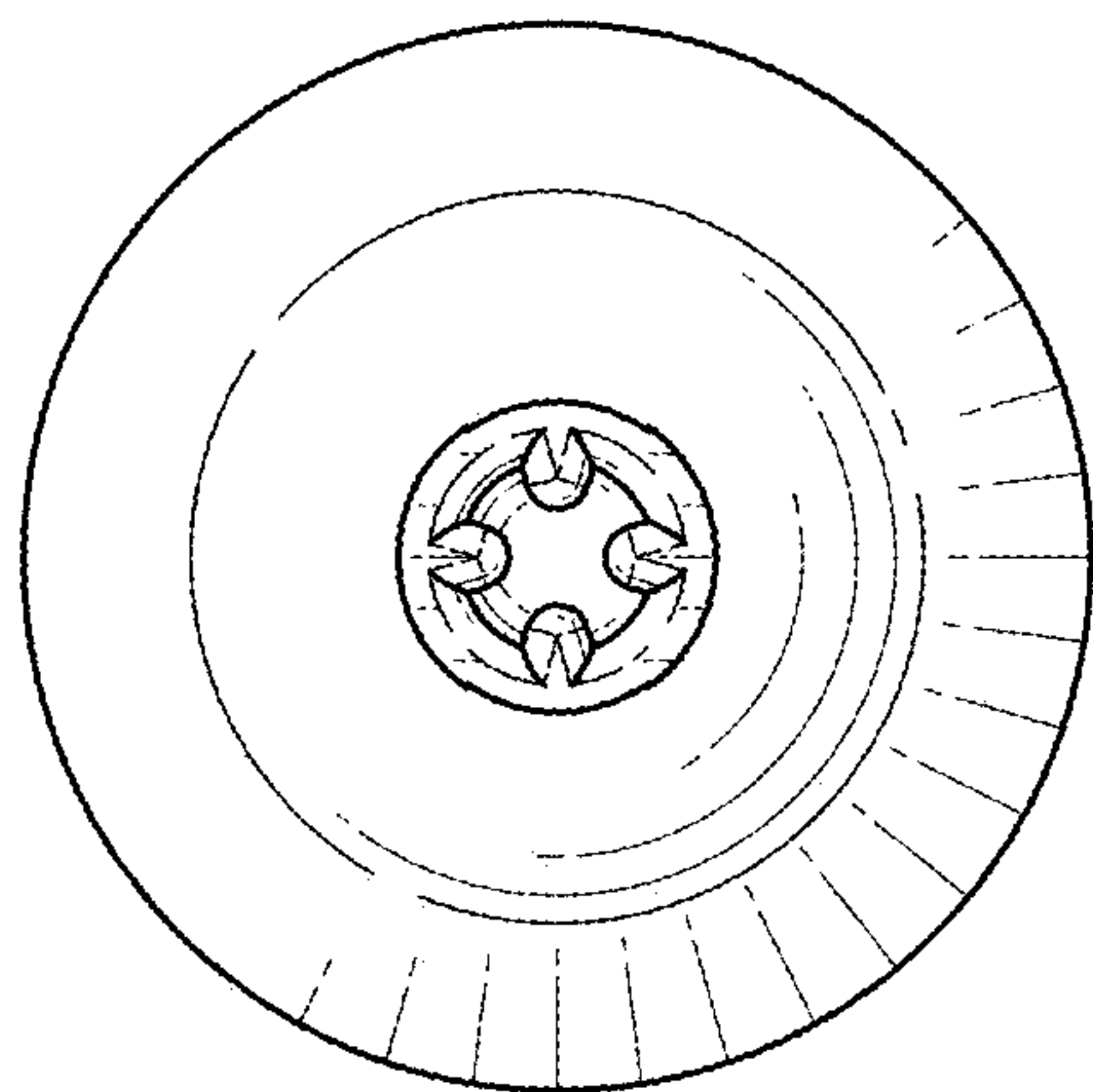


FIG. 4

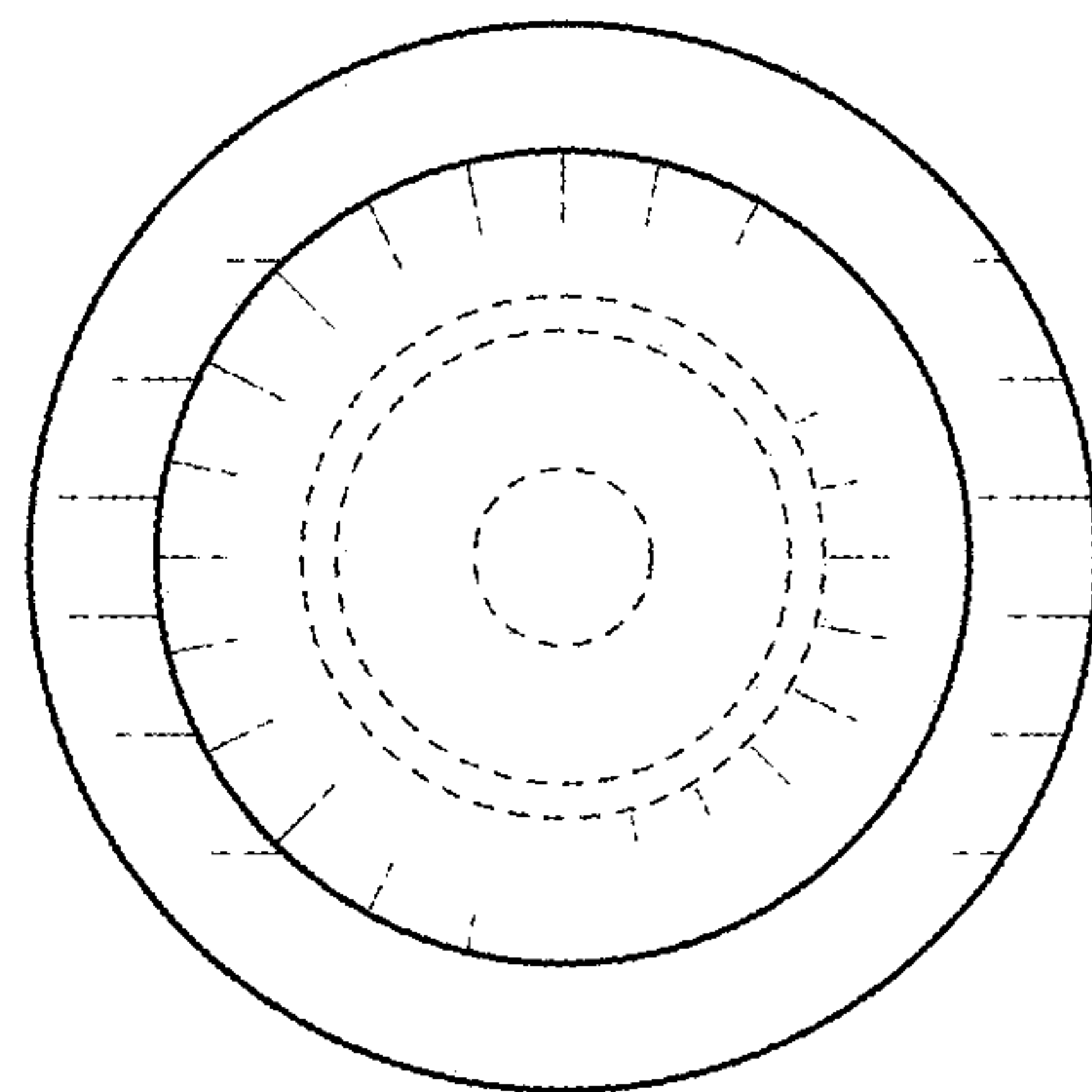


FIG. 5

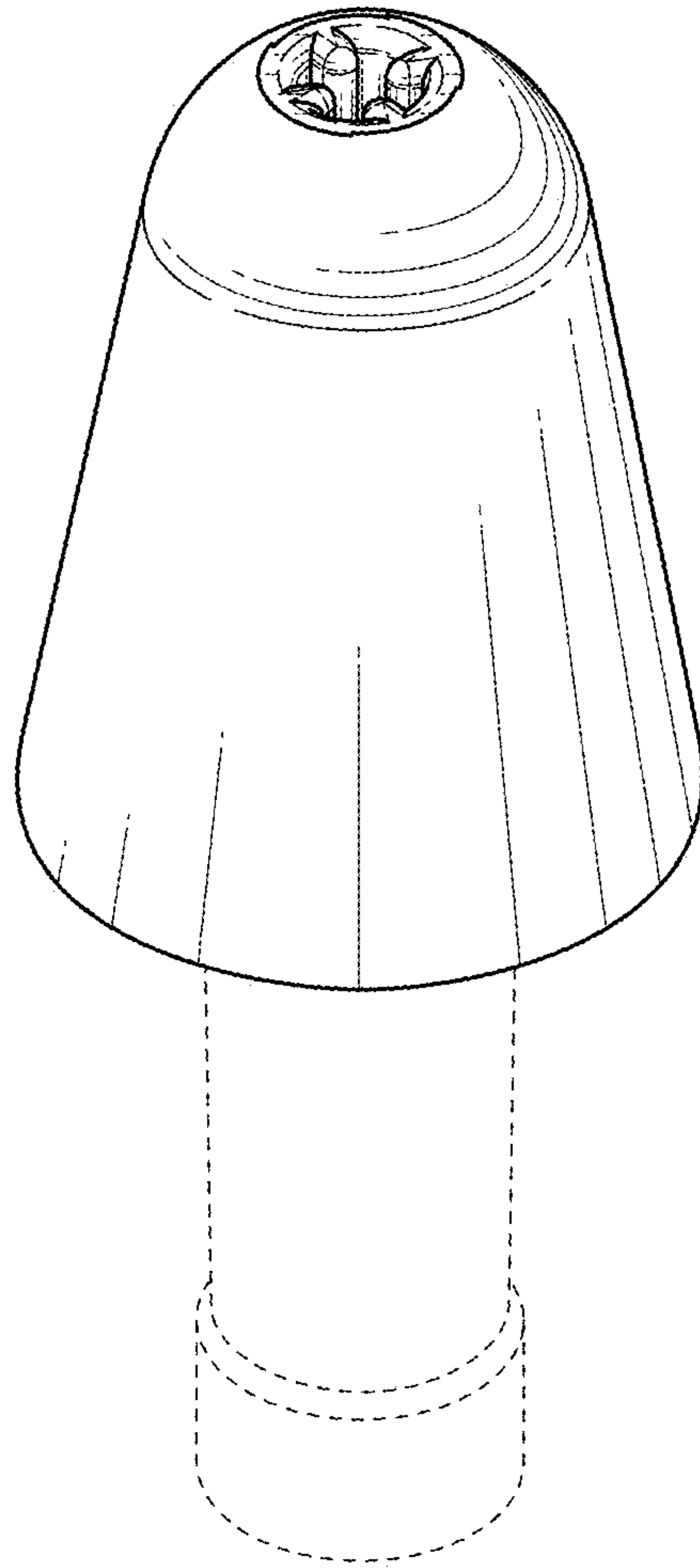


FIG. 6

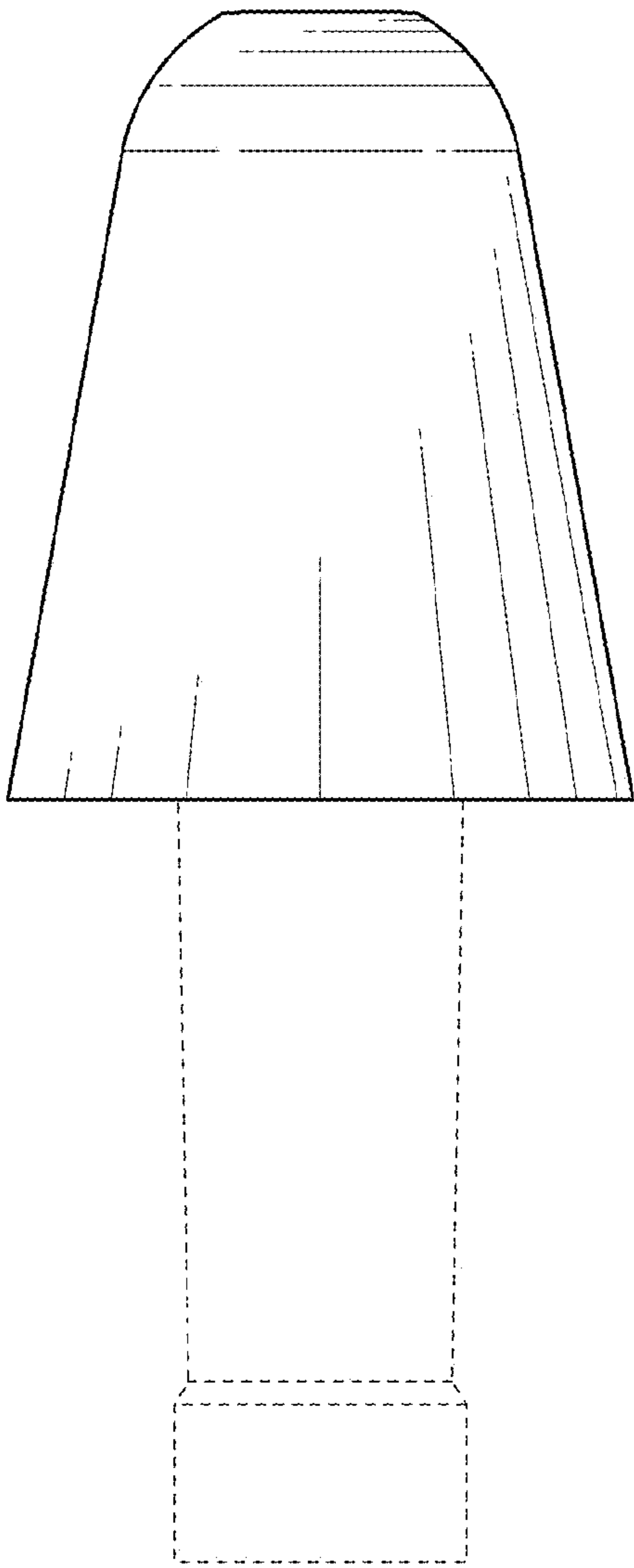


FIG. 7

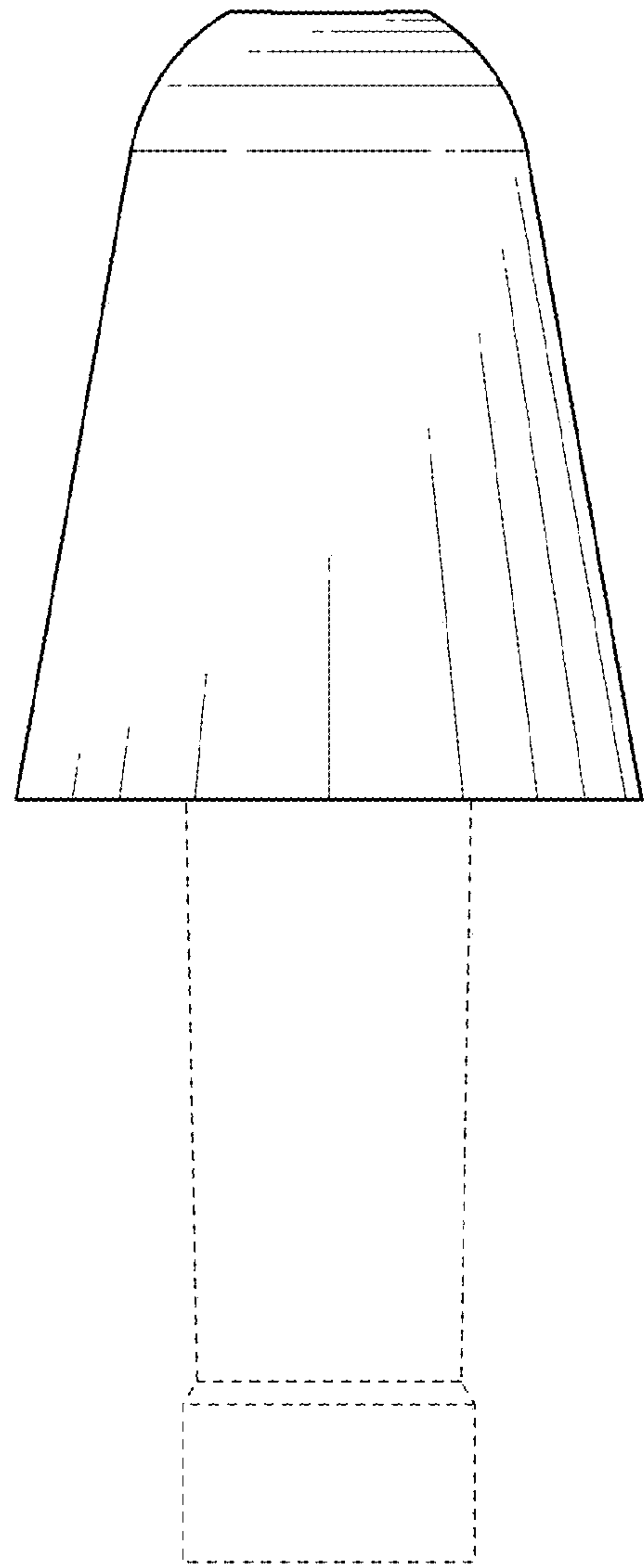


FIG. 8

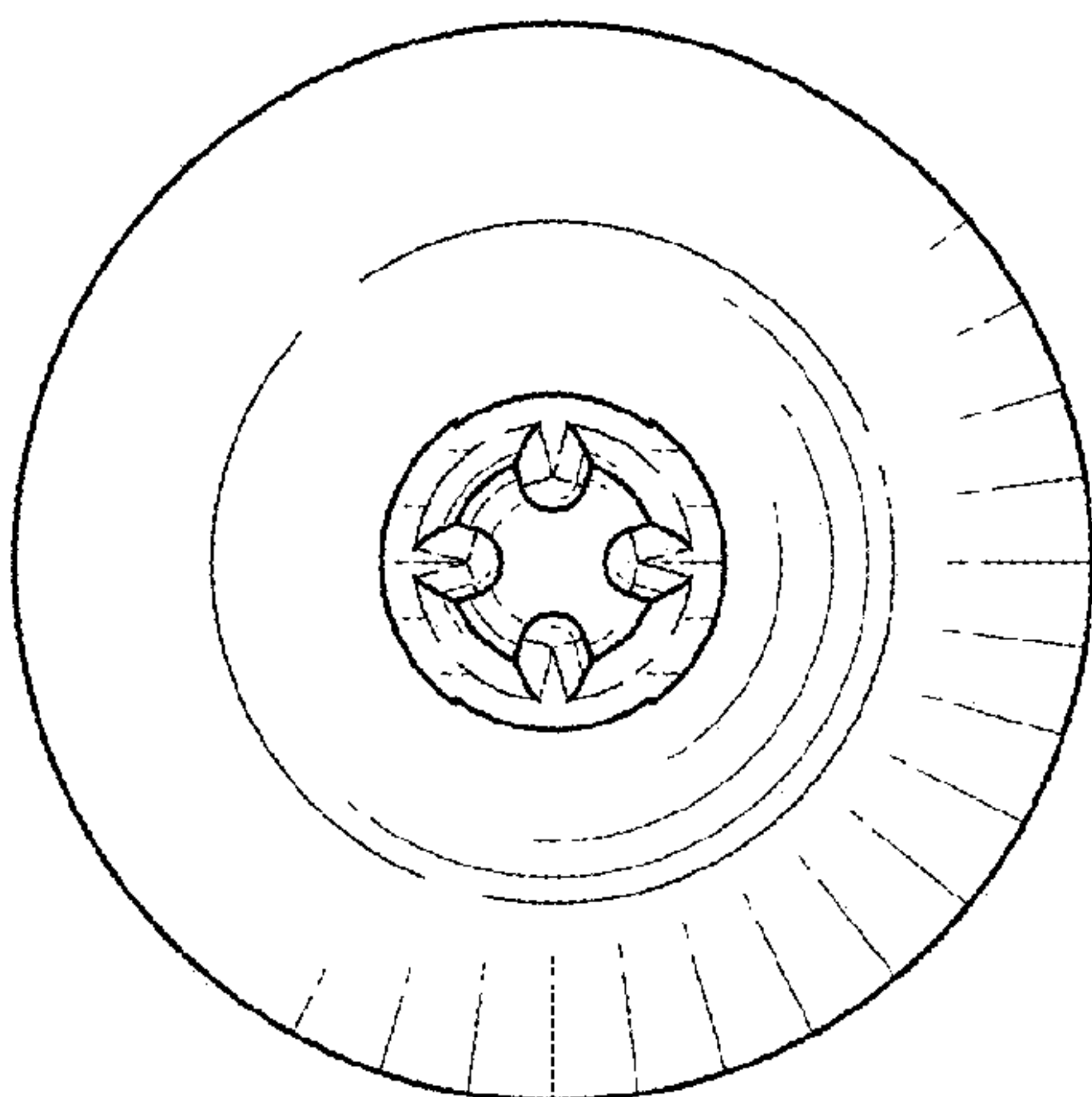


FIG. 9

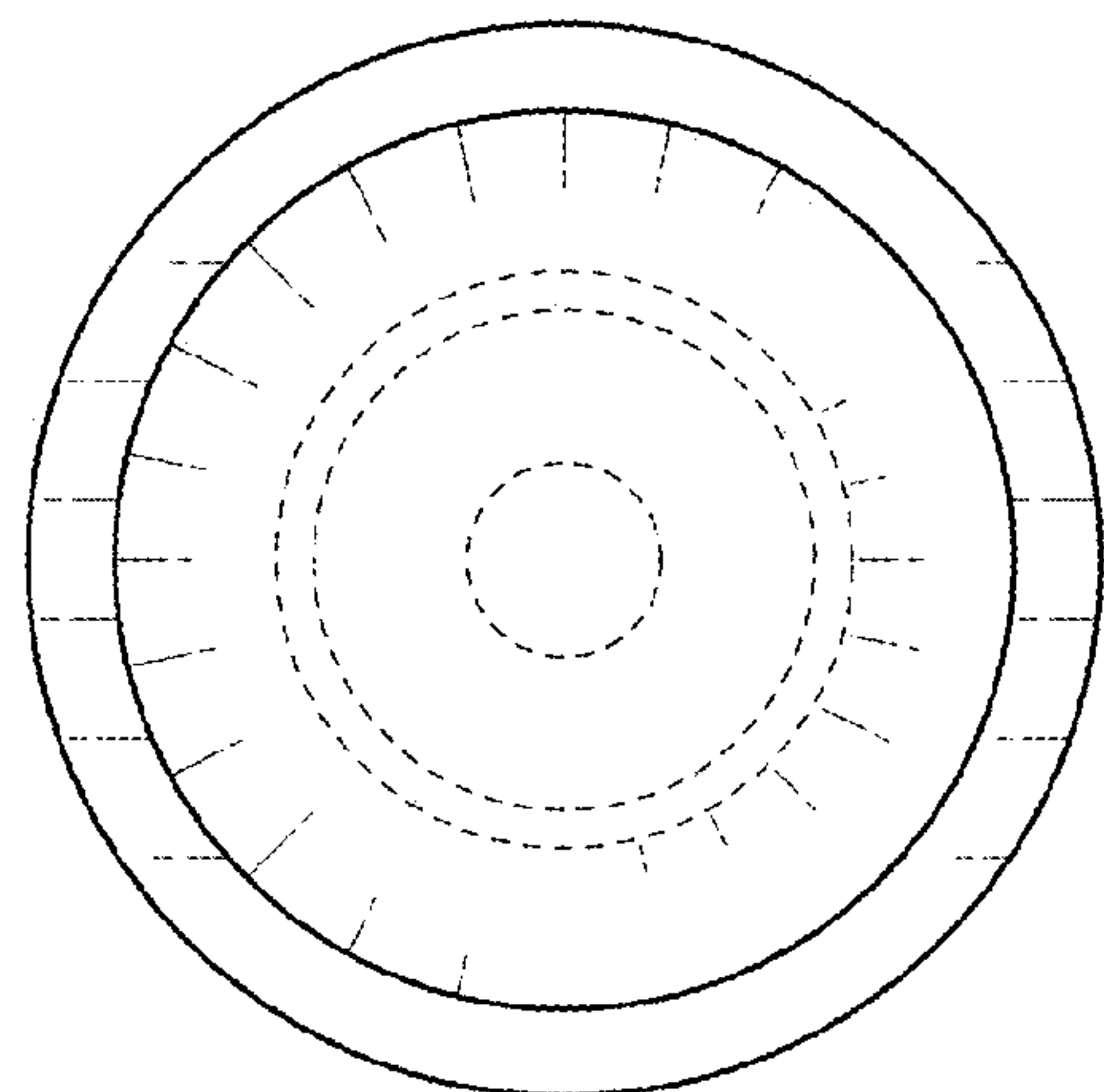


FIG. 10