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(12) **United States Design Patent** (10) **Patent No.:** **US D837,011 S**
Sakamaki et al. (45) **Date of Patent:** **** *Jan. 1, 2019**

(54) **DRILL CHUCK**

D540,645 S * 4/2007 Yaksich D15/138
D542,815 S * 5/2007 Concari D15/140
D555,181 S * 11/2007 Hu D15/140
D562,099 S * 2/2008 Hu D8/70

(Continued)

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FOREIGN PATENT DOCUMENTS

JP D1054222 S 11/1999
JP D1054222/1 S 5/2000

(Continued)

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

OTHER PUBLICATIONS

Notice of Allowance dated Feb. 2, 2017 issued by the Japanese Patent Office in counterpart application No. 2016-007498.

(**) Term: **15 Years**

Primary Examiner — Darlington Ly

(21) Appl. No.: **29/596,759**

(74) *Attorney, Agent, or Firm* — Sughrue Mion, PLLC

(22) Filed: **Mar. 10, 2017**

(57) **CLAIM**

(51) **LOC (11) Cl.** **08-05**

The ornamental design for a drill chuck, as shown and described.

(52) **U.S. Cl.**

USPC **D8/70; D15/140**

DESCRIPTION

(58) **Field of Classification Search**

USPC D8/62, 68-70; D15/138-140

CPC B23B 31/1215; B23B 31/123; B23B

31/1253

See application file for complete search history.

FIG. 1 is a top perspective view of a drill chuck showing our new design;

FIG. 2 is a front elevation view thereof;

FIG. 3 is a rear elevation view thereof;

FIG. 4 is a top plan view thereof;

FIG. 5 is a bottom plan view thereof;

FIG. 6 is a right side elevation view thereof;

FIG. 7 is a cross-sectional view taken along line A-A in FIG. 4;

FIG. 8 is an enlarged sectional view thereof taken along line C-C in FIG. 2 of portion B-B in FIG. 4; and,

FIG. 9 is an enlarged cross-sectional view thereof taken along line A-A in FIG. 4 that shows a length and depth of the grooves shown in FIGS. 1-3, 6, and 8.

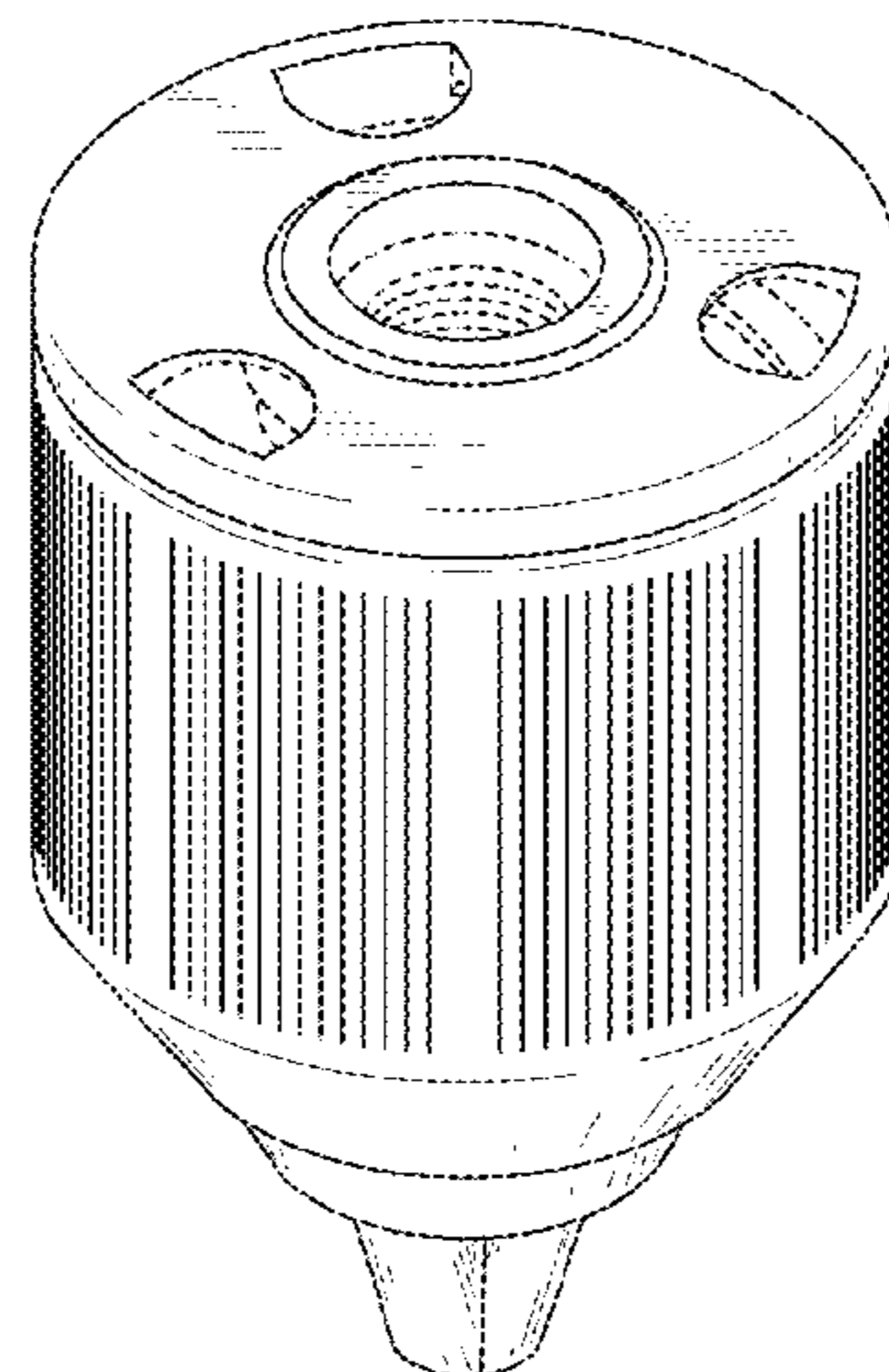
Portions shown with broken lines form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D259,855 S * 7/1981 Derbyshire D8/68
D423,527 S * 4/2000 Sakamaki D15/140
D426,840 S * 6/2000 Sakamaki D15/140
D433,909 S * 11/2000 Long D15/140
D434,629 S * 12/2000 Long D15/140
D461,696 S * 8/2002 Chunn D15/140
D461,697 S * 8/2002 Chunn D15/140
D462,249 S * 9/2002 Chunn D15/140
D472,443 S * 4/2003 Chunn D8/70
D474,387 S * 5/2003 Chunn D15/140
D514,416 S * 2/2006 Watson D15/140
D540,137 S 4/2007 Yaksich

1 Claim, 9 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D565,376 S * 4/2008 Hu D8/70
D565,377 S * 4/2008 Hu D8/70
D567,268 S * 4/2008 Mack D15/140
D580,727 S * 11/2008 Mack D8/70
D590,228 S * 4/2009 Aglassinger D8/70
D593,390 S * 6/2009 Sakamaki D15/140
7,845,650 B2 * 12/2010 Mack B23B 31/1215
279/152
8,678,400 B2 3/2014 Bordeianu et al.
D735,007 S * 7/2015 Schenk D15/140
D735,549 S * 8/2015 Schenk D15/140
2008/0143062 A1 * 6/2008 Mack B23B 31/1215
279/62
2010/0127463 A1 * 5/2010 Zhou B23B 31/123
279/61

FOREIGN PATENT DOCUMENTS

JP D1105454 S 4/2001
JP D1357494 S 4/2009
JP D1524919 S 6/2015

* cited by examiner

FIG. 1

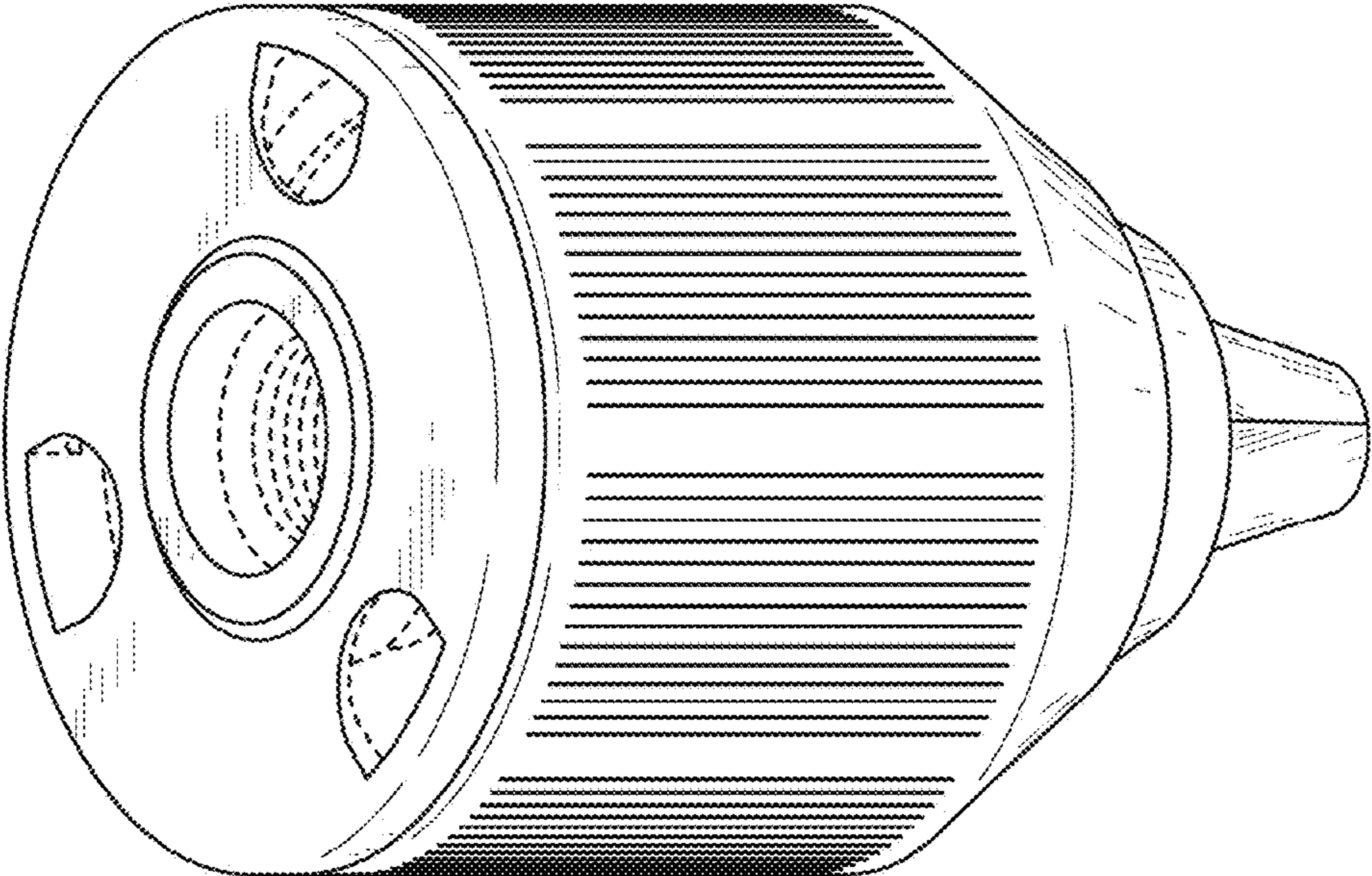


FIG. 2

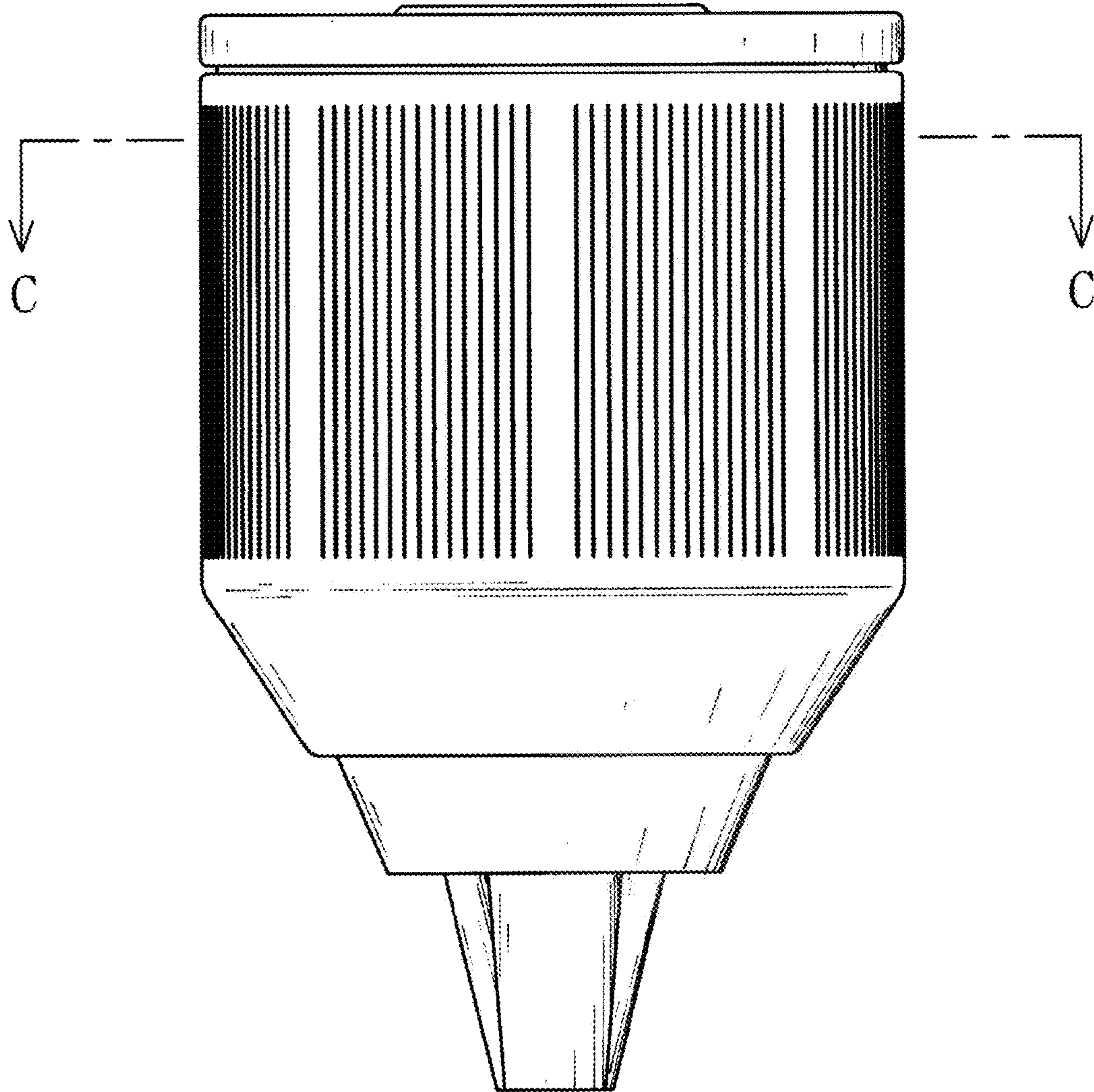
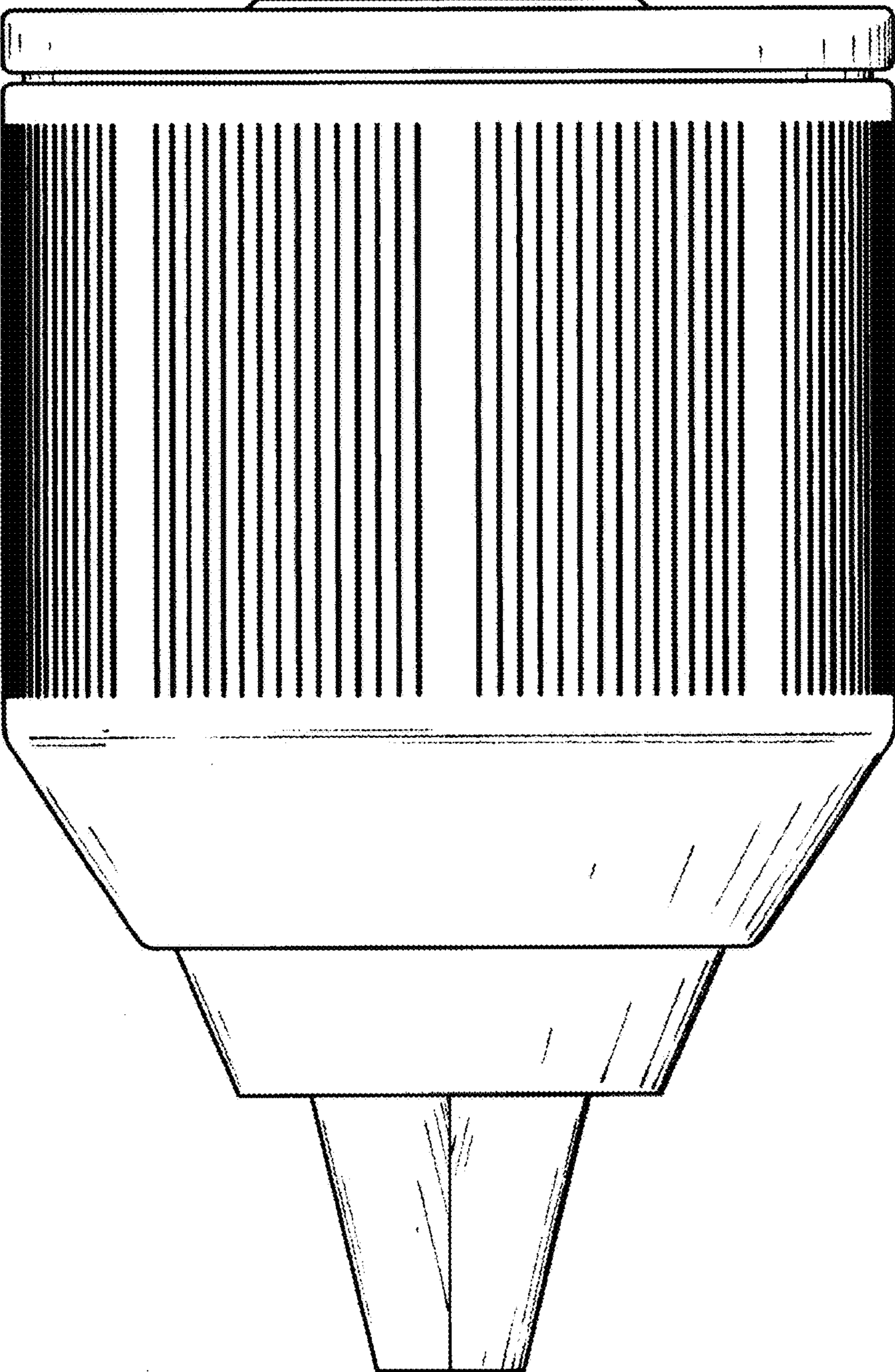


FIG. 3



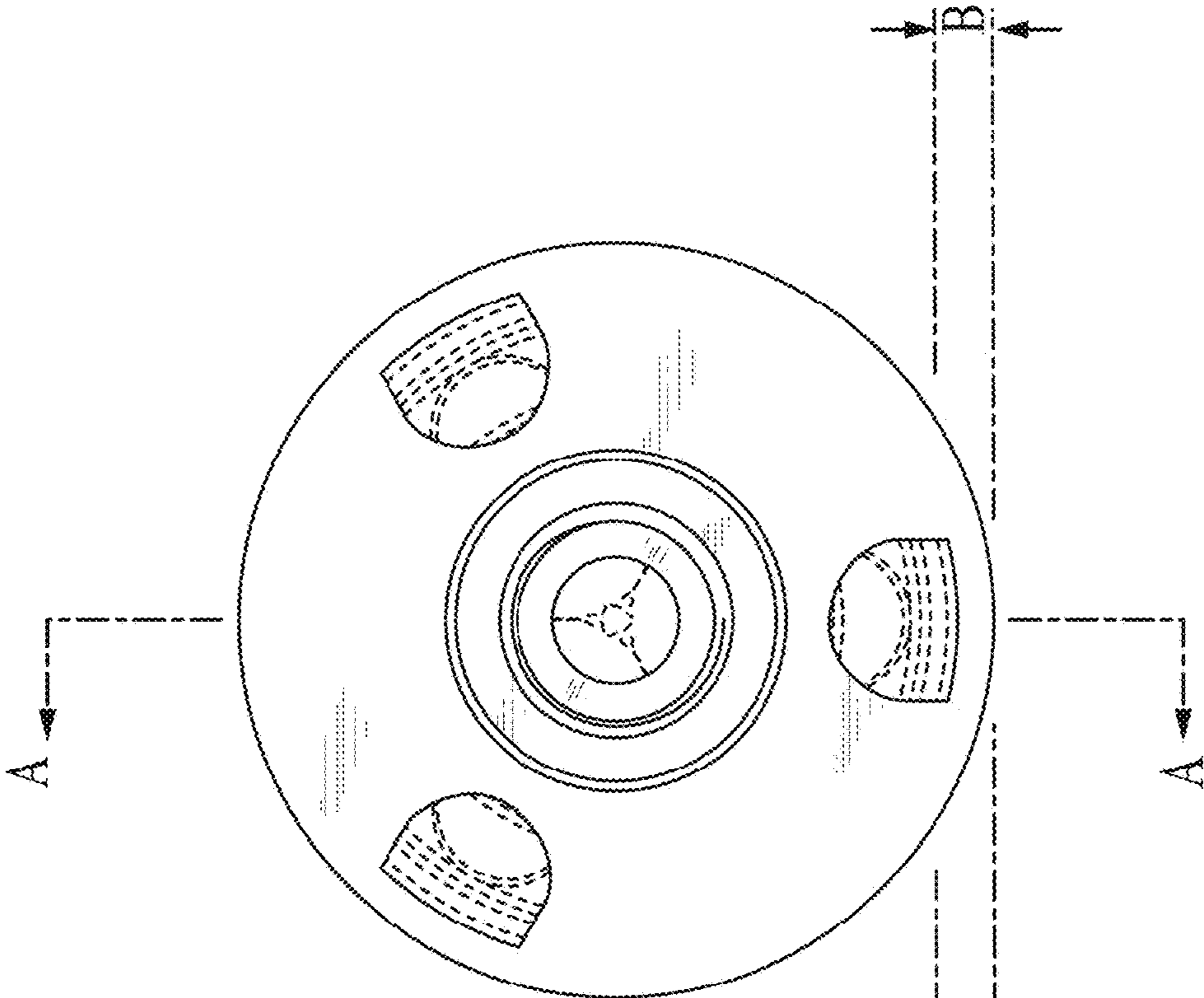


FIG. 4

FIG. 5

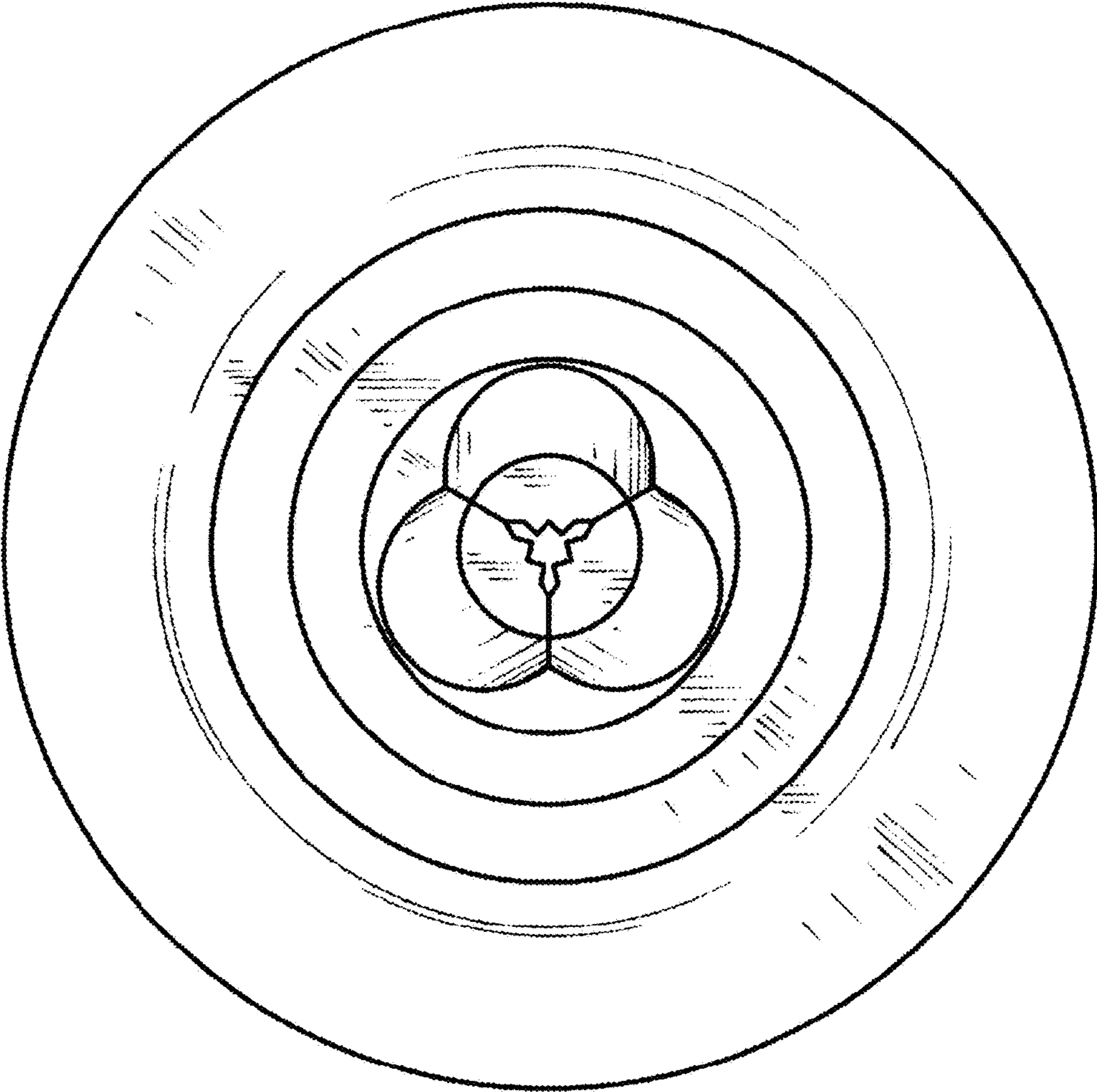


FIG. 6

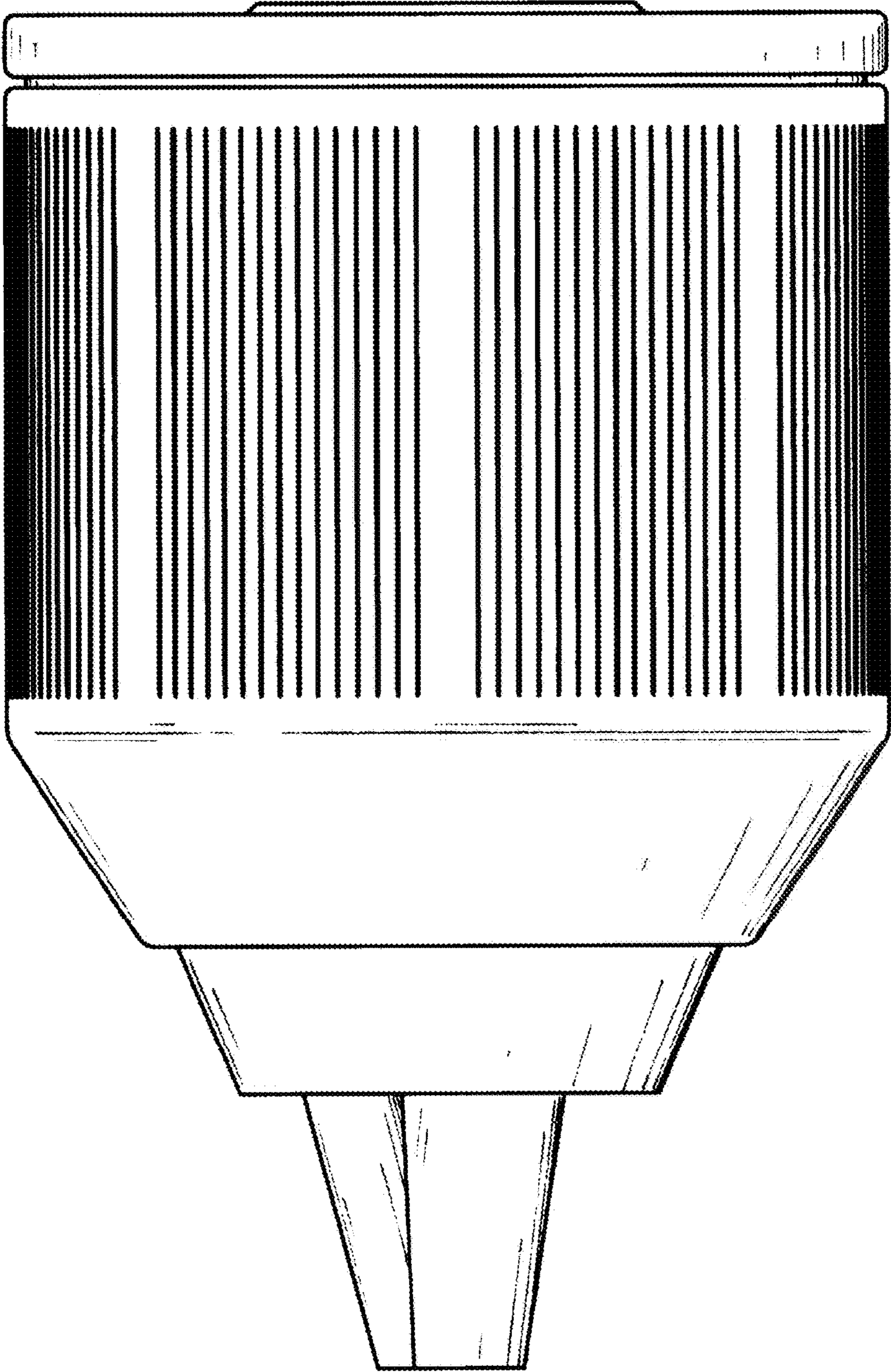


FIG. 7

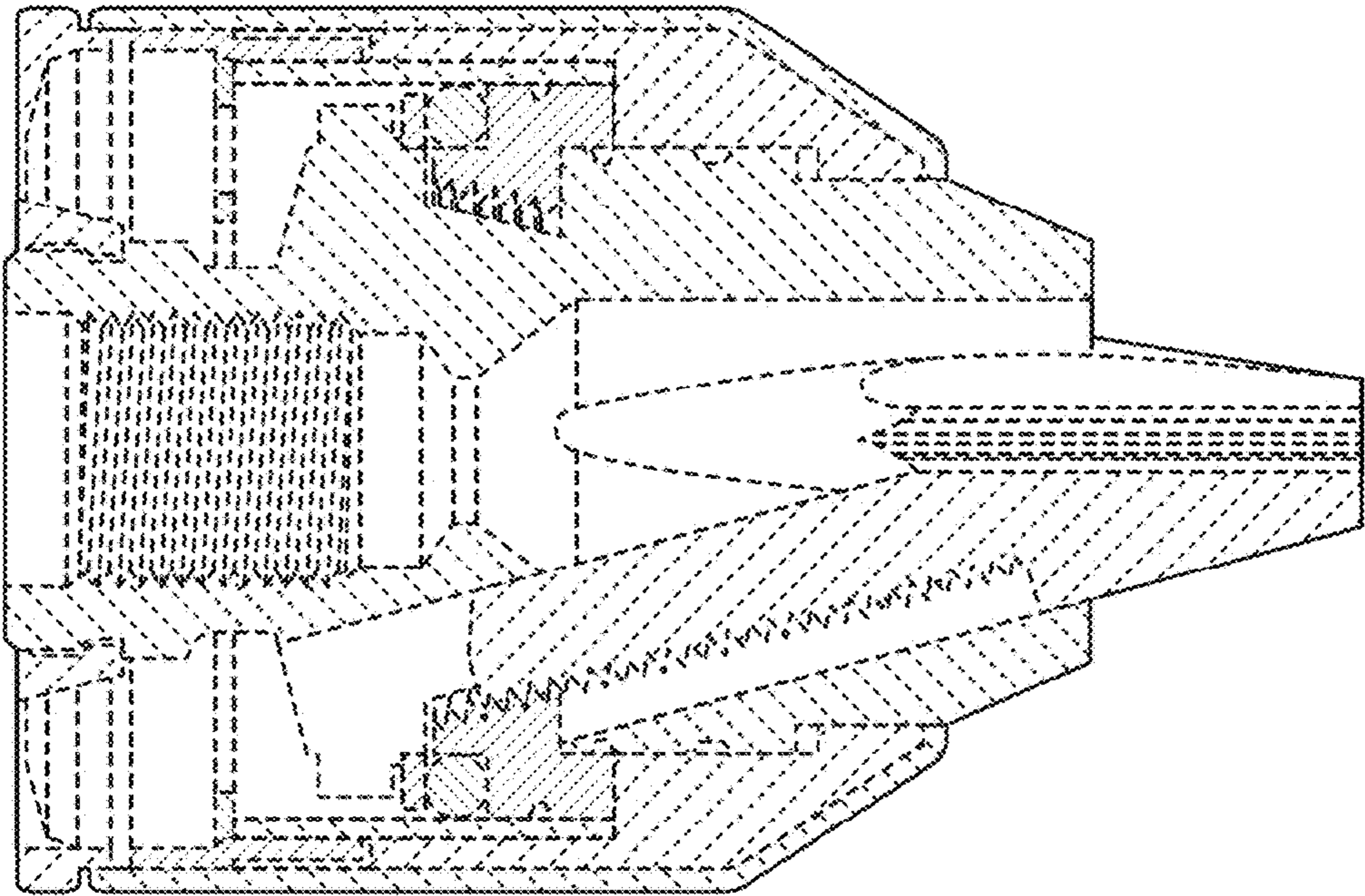
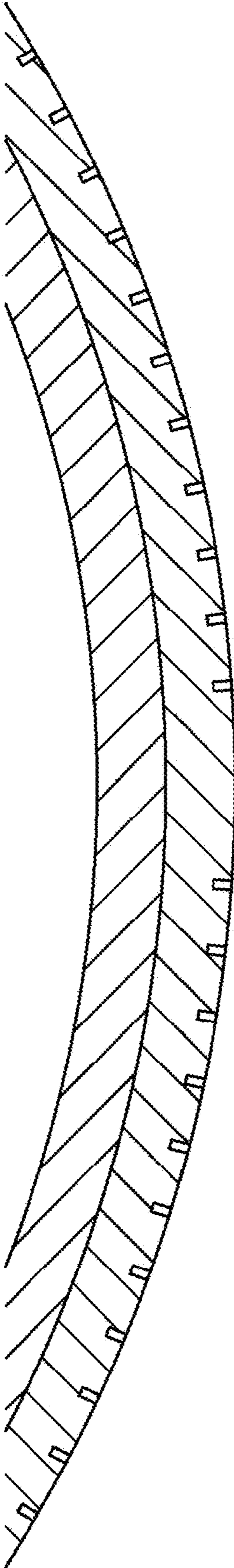


FIG. 8



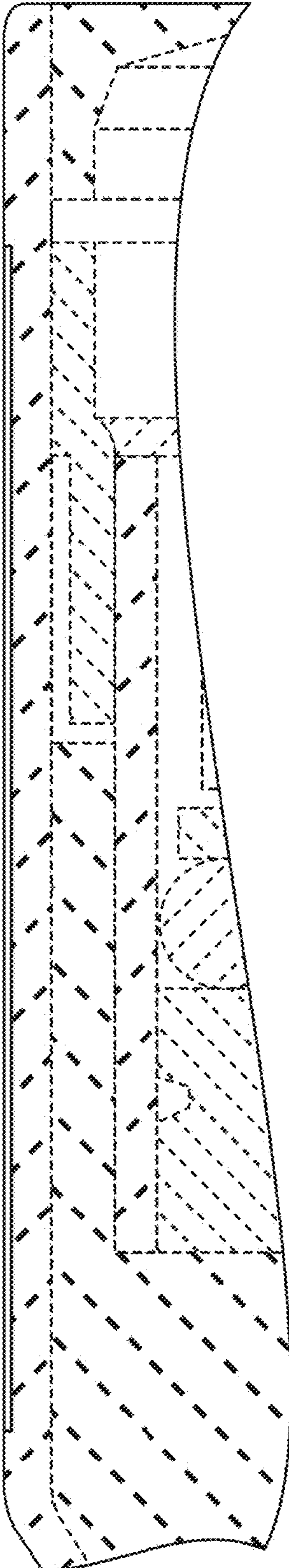


FIG. 9