



US00D478978S

(12) **United States Design Patent** (10) **Patent No.:** **US D478,978 S**  
**Stout, Jr.** (45) **Date of Patent:** **\*\* Aug. 26, 2003**

(54) **REDUCER WITH A CRIMPED END**

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(US)

(73) Assignee: **Eastern Sheet Metal LLC**, Cincinnati,  
OH (US)

(\*) Notice: This patent is subject to a terminal dis-  
claimer.

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

(21) Appl. No.: **29/138,783**

(22) Filed: **Mar. 20, 2001**

(51) **LOC (7) Cl.** ..... **23-04**

(52) **U.S. Cl.** ..... **D23/393**

(58) **Field of Search** ..... D23/259, 262,  
D23/263, 266, 386, 387, 391, 393, 394;  
138/111–117, DIG. 4, DIG. 11, 177, 167,  
169; 285/47, 123.15, 123.16, 110, 374,  
347, 232–234, 123.1, 123.3–123.7, 123.9,  
148.18, 148.22, 148.23, 148.24, 148.25,  
179, 179.2, 181, 183, 332, 332.1, 334.5,  
399, 189, 424; 454/228–236, 243, 270,  
903, 906; 126/307 R, 312, 307 A, 314–317

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*Primary Examiner*—Ted Shooman

*Assistant Examiner*—C Tuttle

(74) *Attorney, Agent, or Firm*—Dinsmore & Shohl LLP

(57) **CLAIM**

The ornamental design for a reducer with a crimped end, as  
shown and described.

**DESCRIPTION**

FIG. 1 is a front elevational view of a first embodiment of  
the reducer with a crimped end; the rear elevational, top and  
bottom views being identical to FIG. 1;

FIG. 2 is a front perspective view of the reducer of FIG. 1;

FIG. 3 is a left end view of the reducer of FIG. 1;

FIG. 4 is a right end view of the reducer of FIG. 1;

FIG. 5 is a front elevational view of a second embodiment  
of the reducer with a crimped end; the rear elevational, top  
and bottom views being identical to FIG. 5;

FIG. 6 is a front perspective view of the reducer of FIG. 5;

FIG. 7 is a left end view of the reducer of FIG. 5;

FIG. 8 is a right end view of the reducer of FIG. 5;

FIG. 9 is a front elevational view of a third embodiment of  
the reducer with a crimped end; the rear elevational view  
being a mirror image of FIG. 9;

FIG. 10 is a front perspective view of the reducer of FIG. 9;

FIG. 11 is a left end view of the reducer of FIG. 9;

FIG. 12 is a right end view of the reducer of FIG. 9;

FIG. 13 is a top view of the reducer of FIG. 9;

FIG. 14 is a bottom view of the reducer of FIG. 9;

FIG. 15 is a front elevational view of a fourth embodiment  
of the reducer with a crimped end; the rear elevational view  
being a mirror image of FIG. 15;

FIG. 16 is a front perspective view of the reducer of FIG. 15;

FIG. 17 is a left end view of the reducer of FIG. 15;

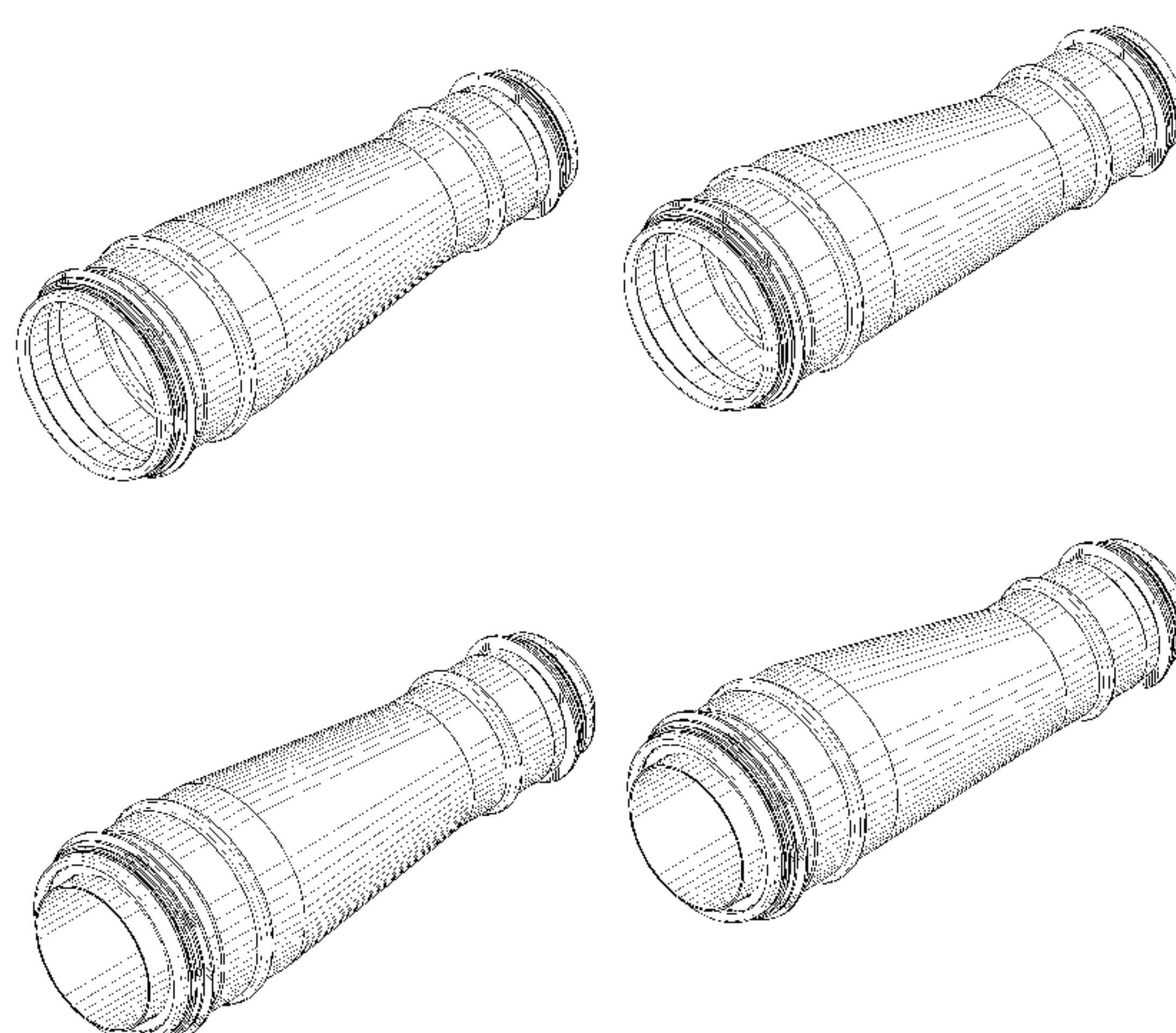
FIG. 18 is a right end view of the reducer of FIG. 15;

FIG. 19 is a top view of the reducer of FIG. 15; and,

FIG. 20 is a bottom view of the reducer of FIG. 15.

The broken lines shown in FIGS. 2, 3 6–8, 10, 11 and 16–18  
are for illustrative purposes only and form no part of the  
claimed design.

**1 Claim, 16 Drawing Sheets**



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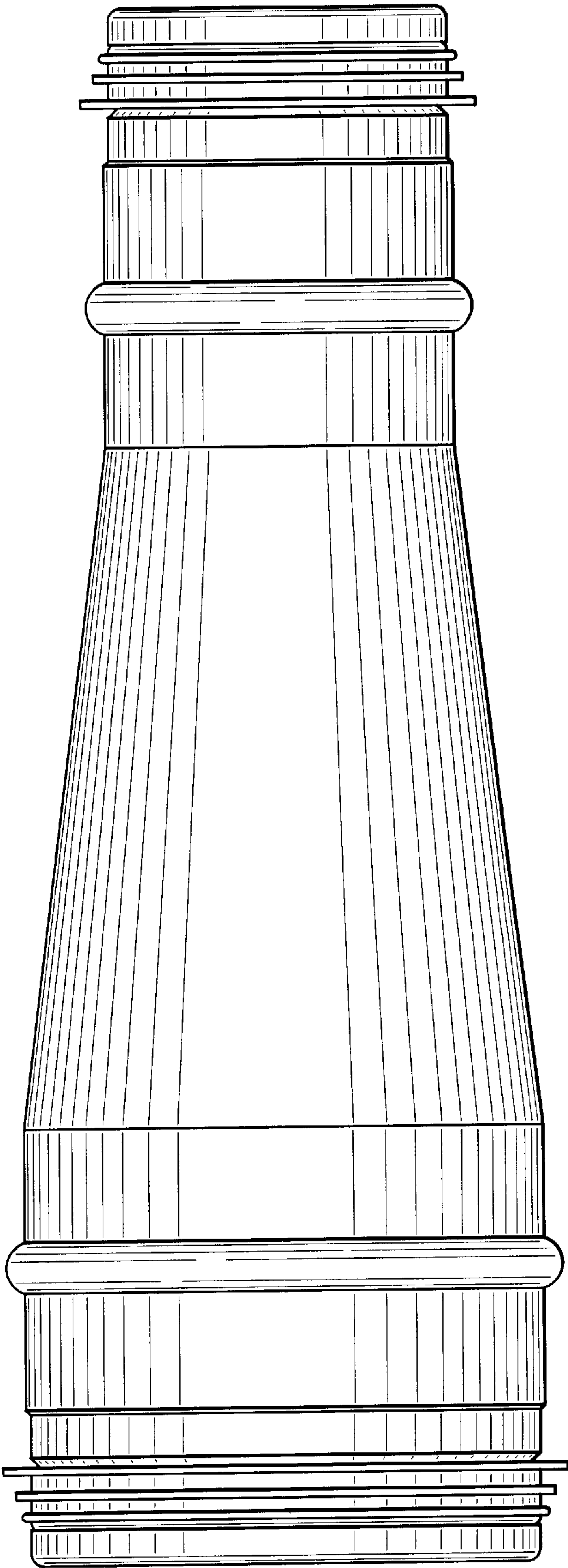


FIG. 1

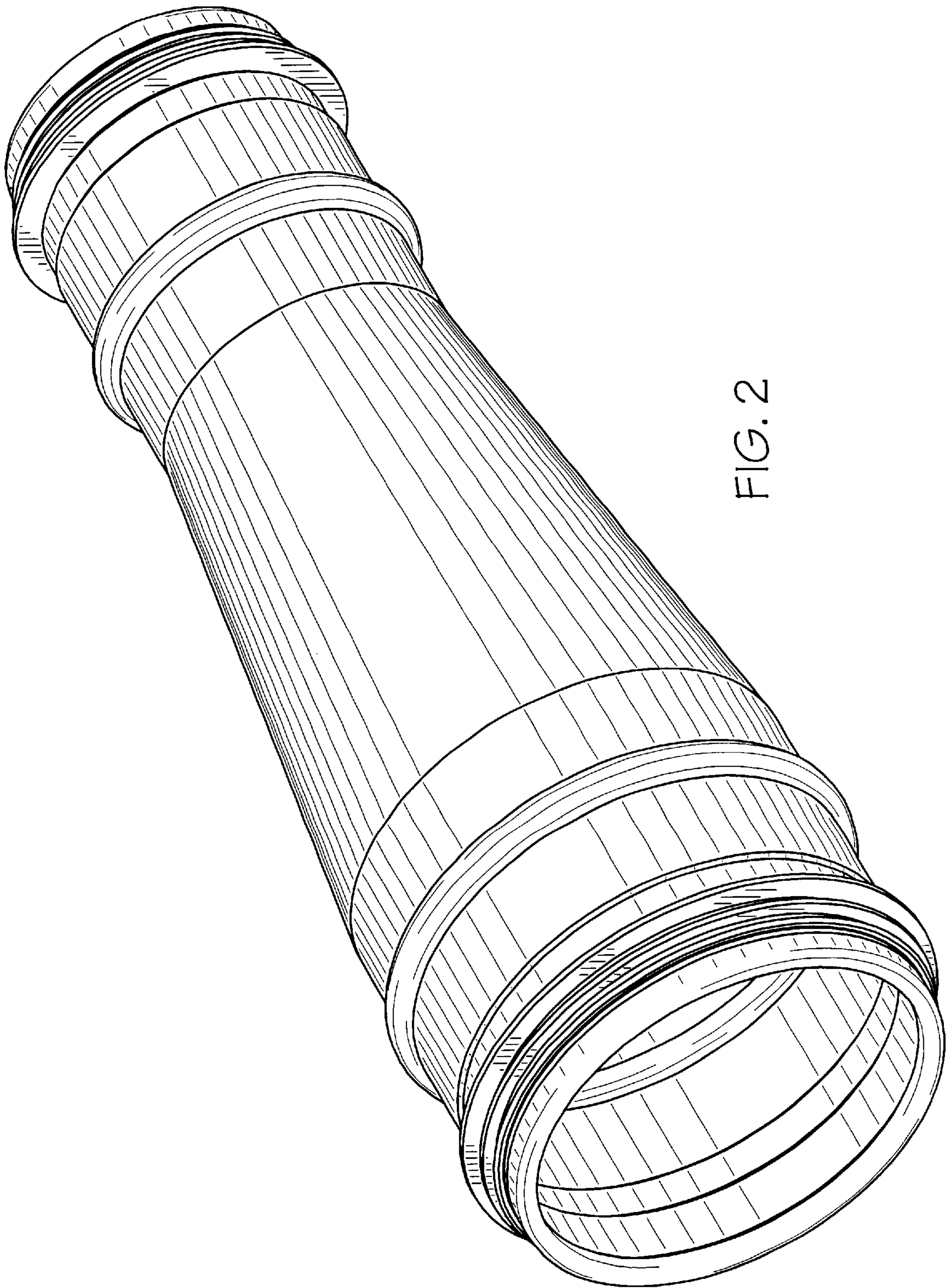


FIG. 2

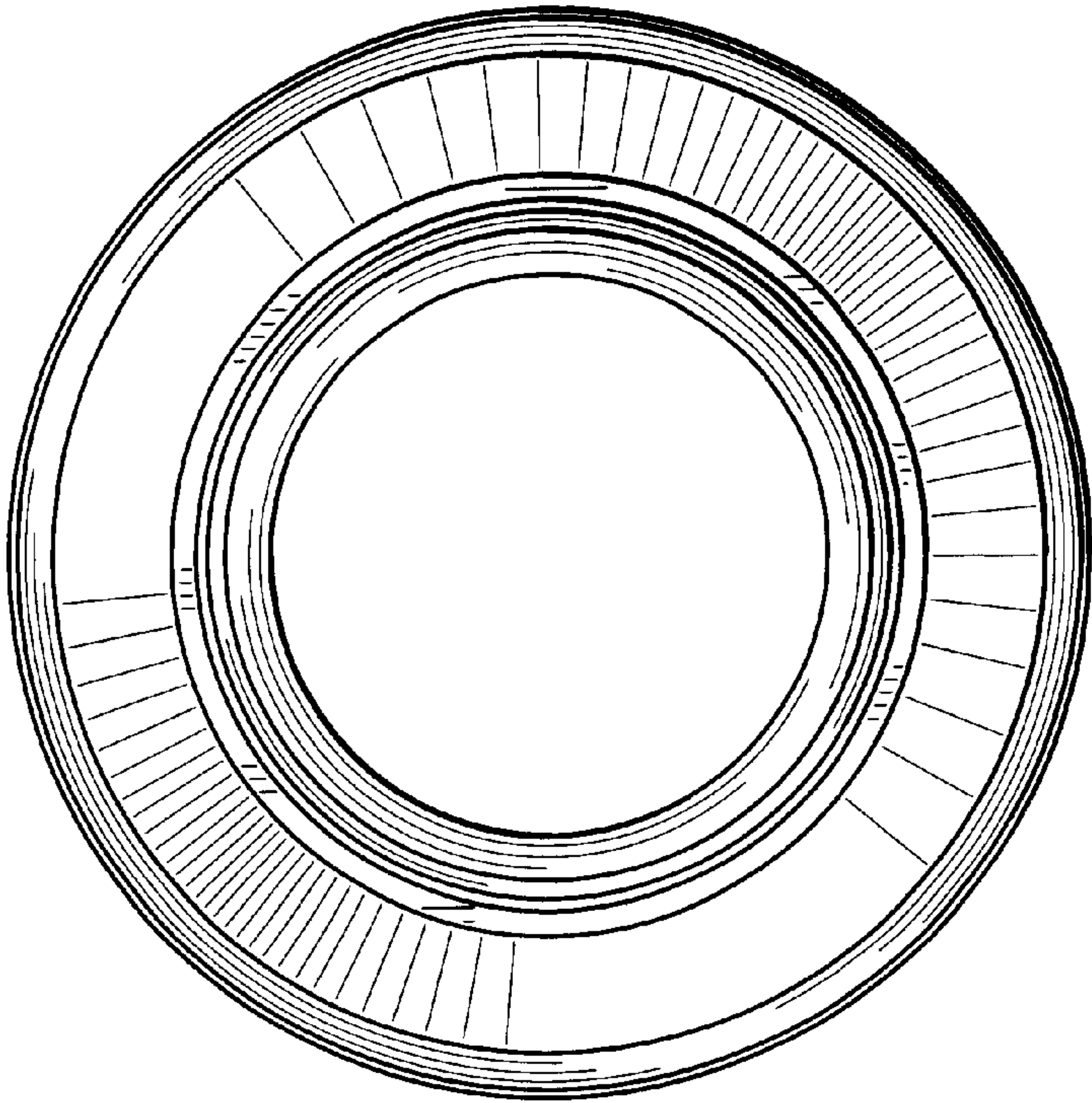


FIG. 4

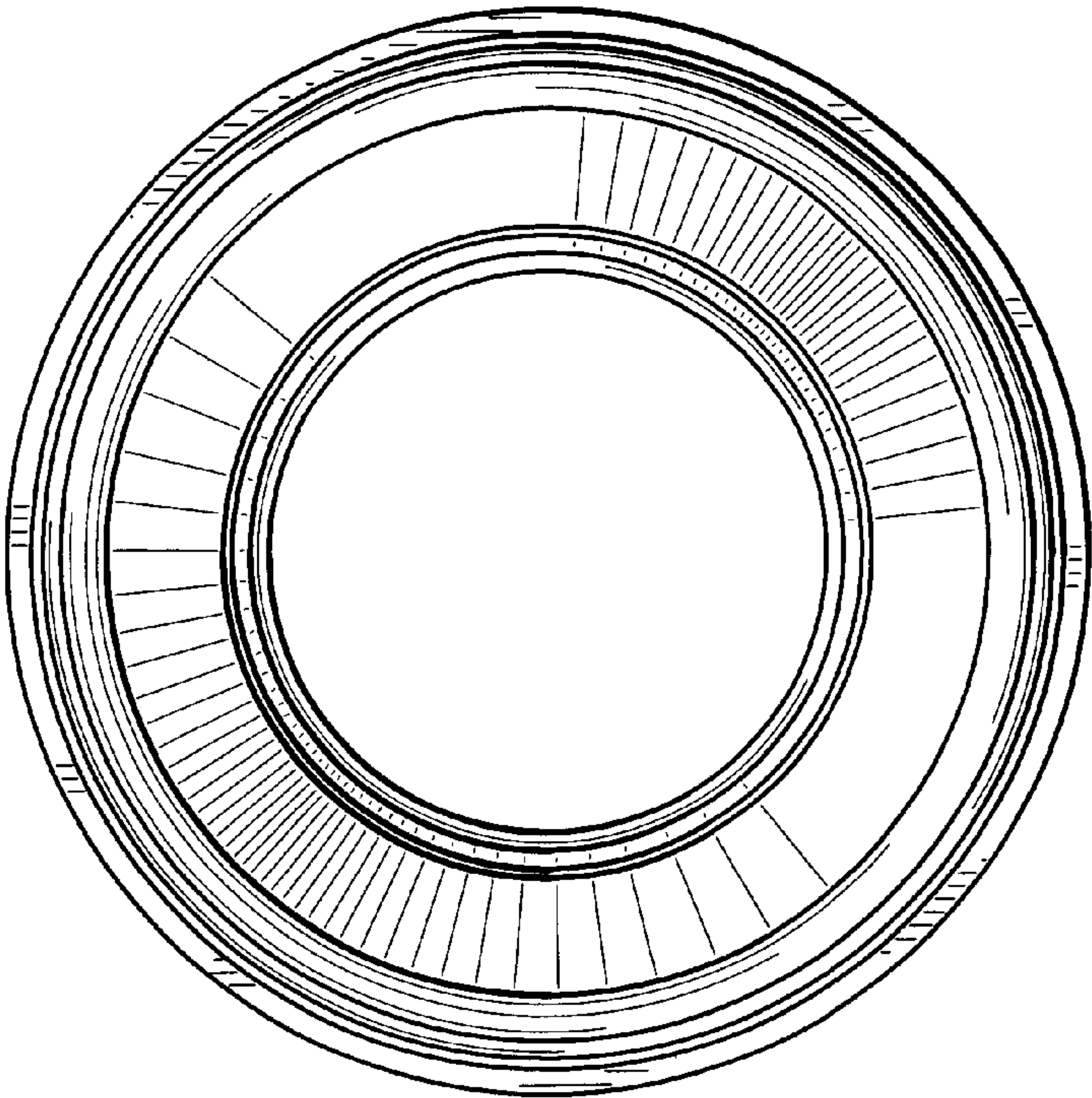


FIG. 3



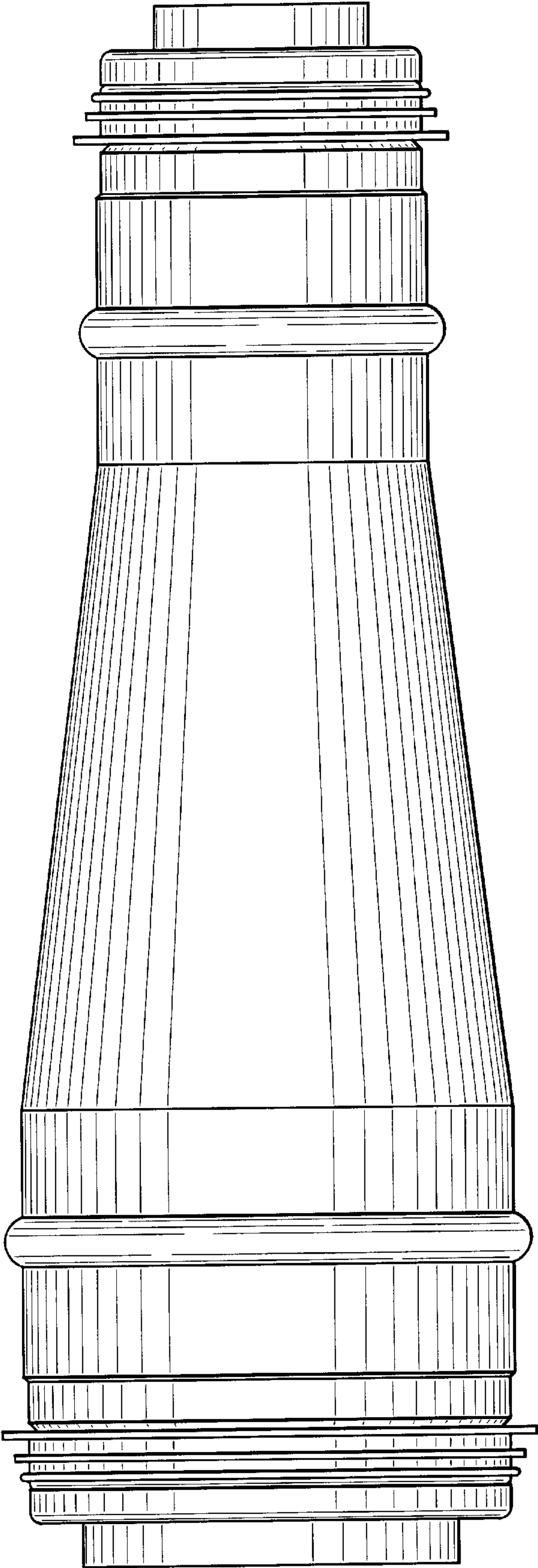


FIG. 5

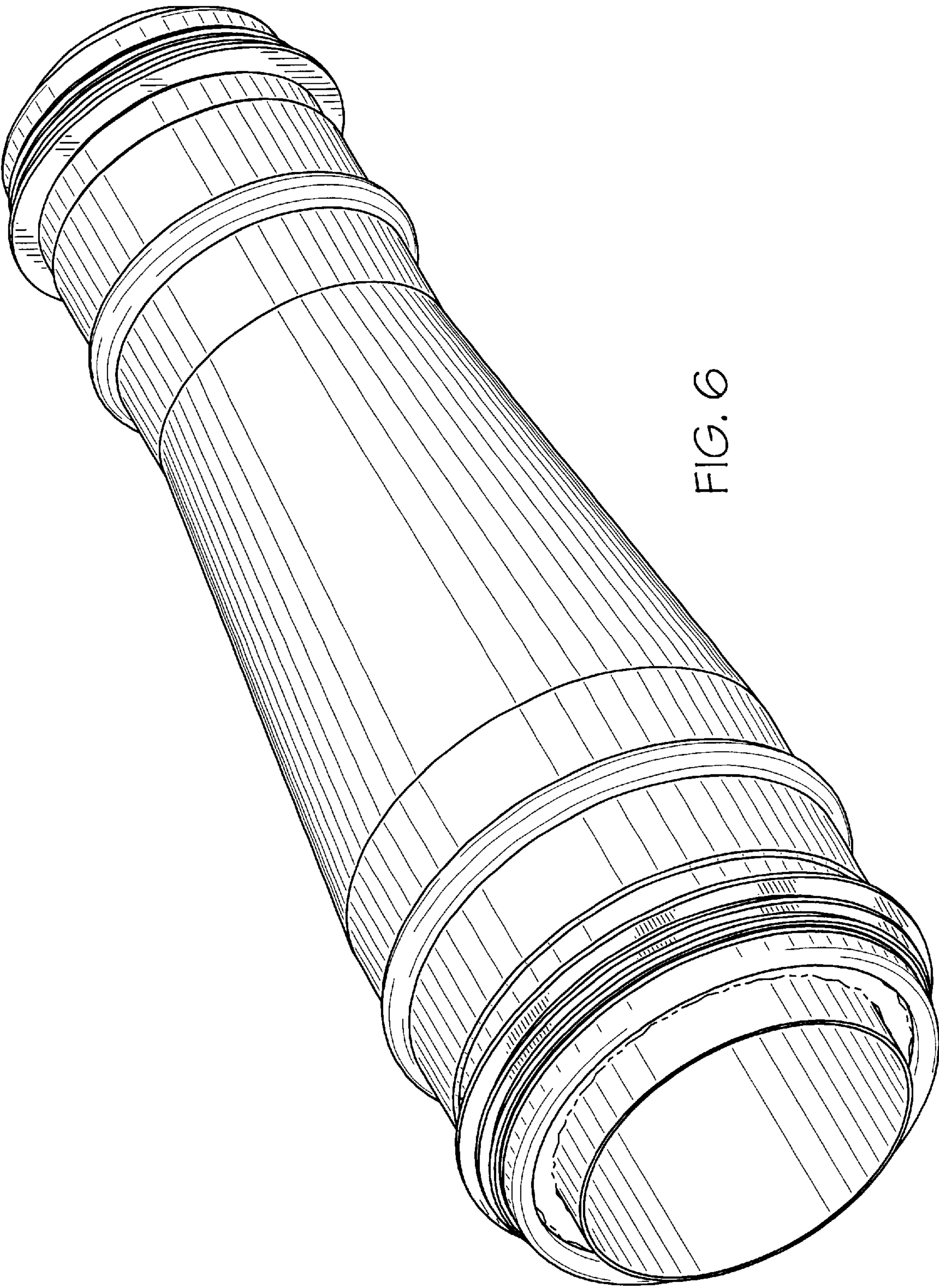


FIG. 6

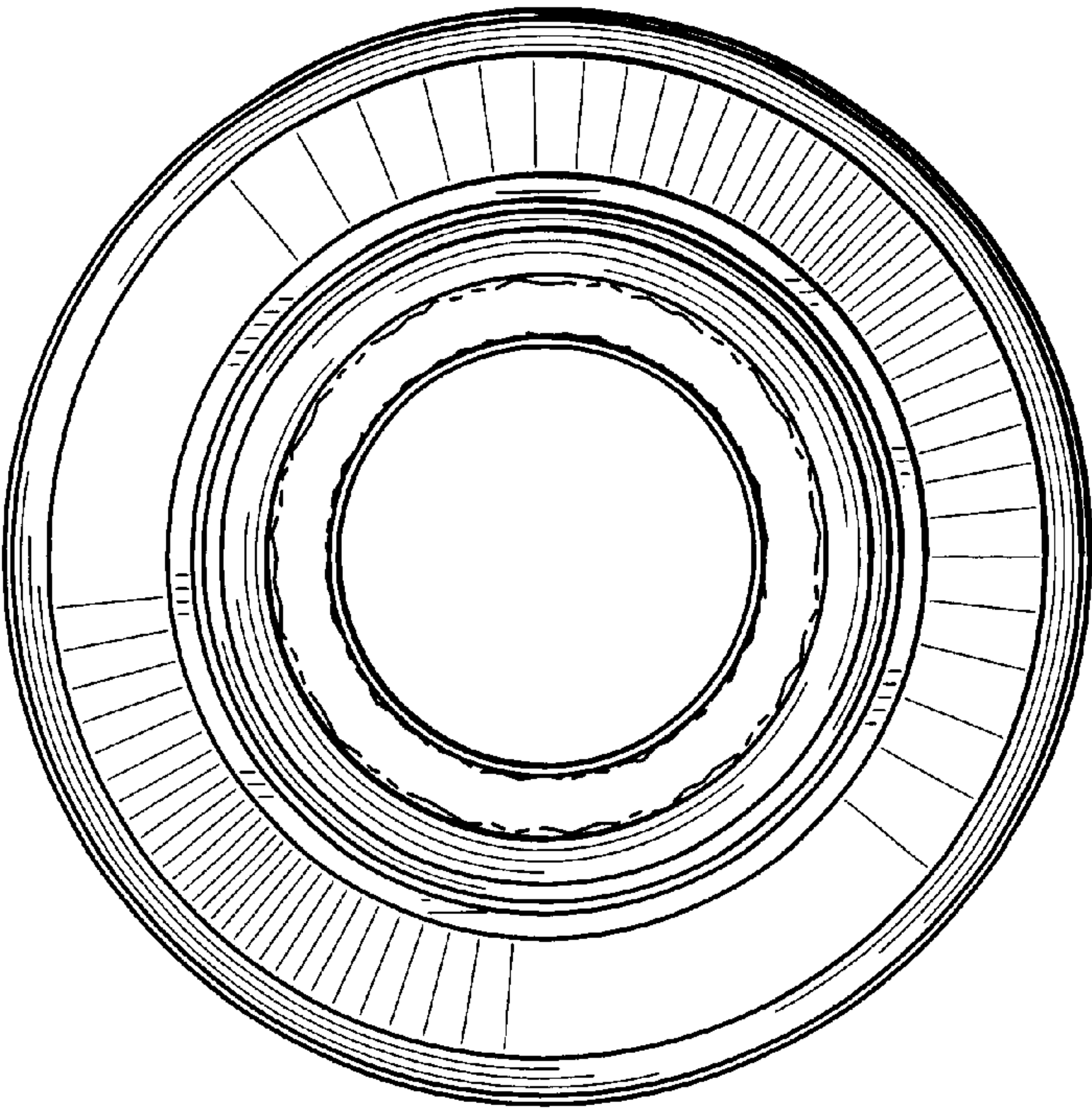


FIG. 8

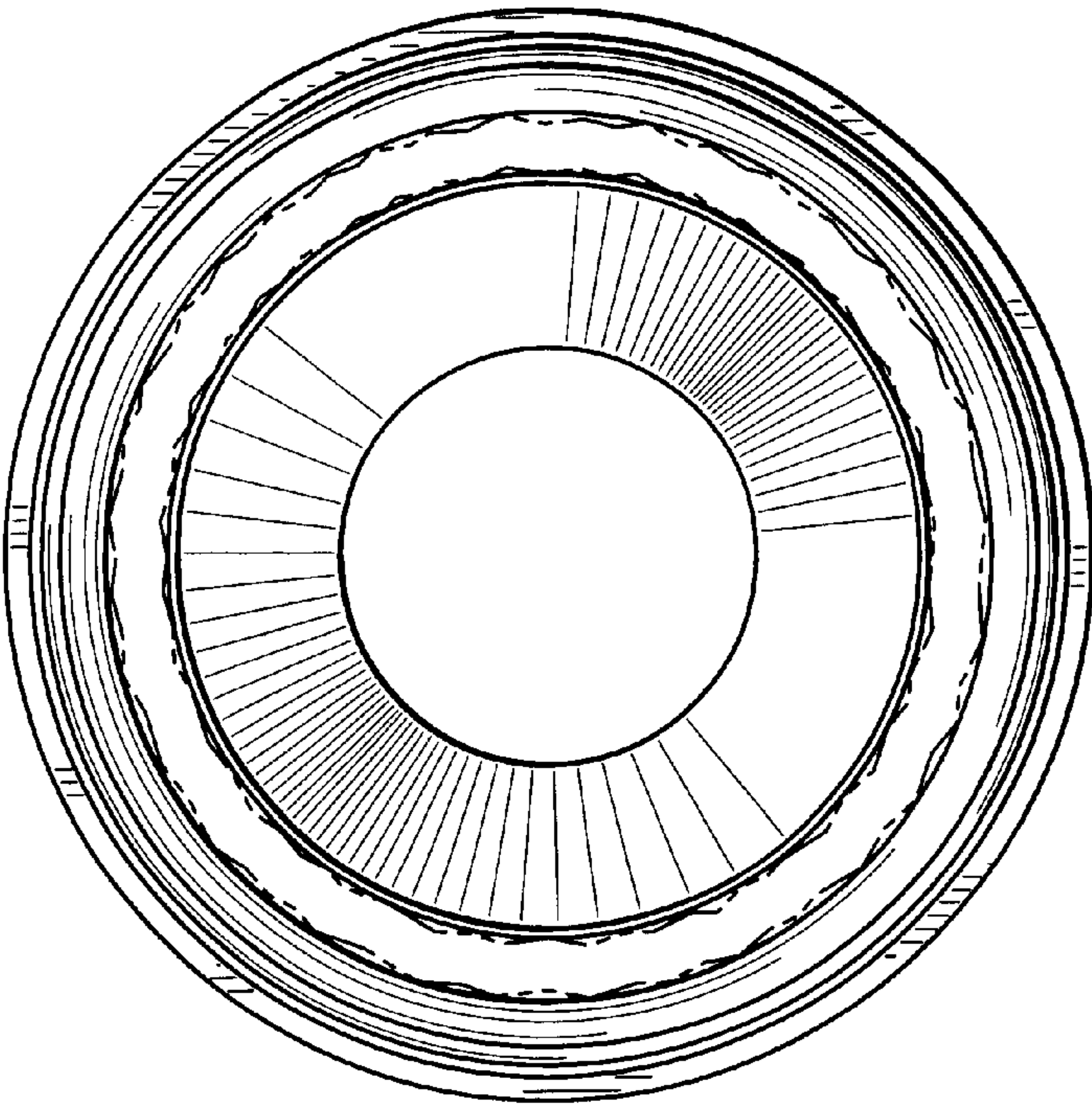


FIG. 7



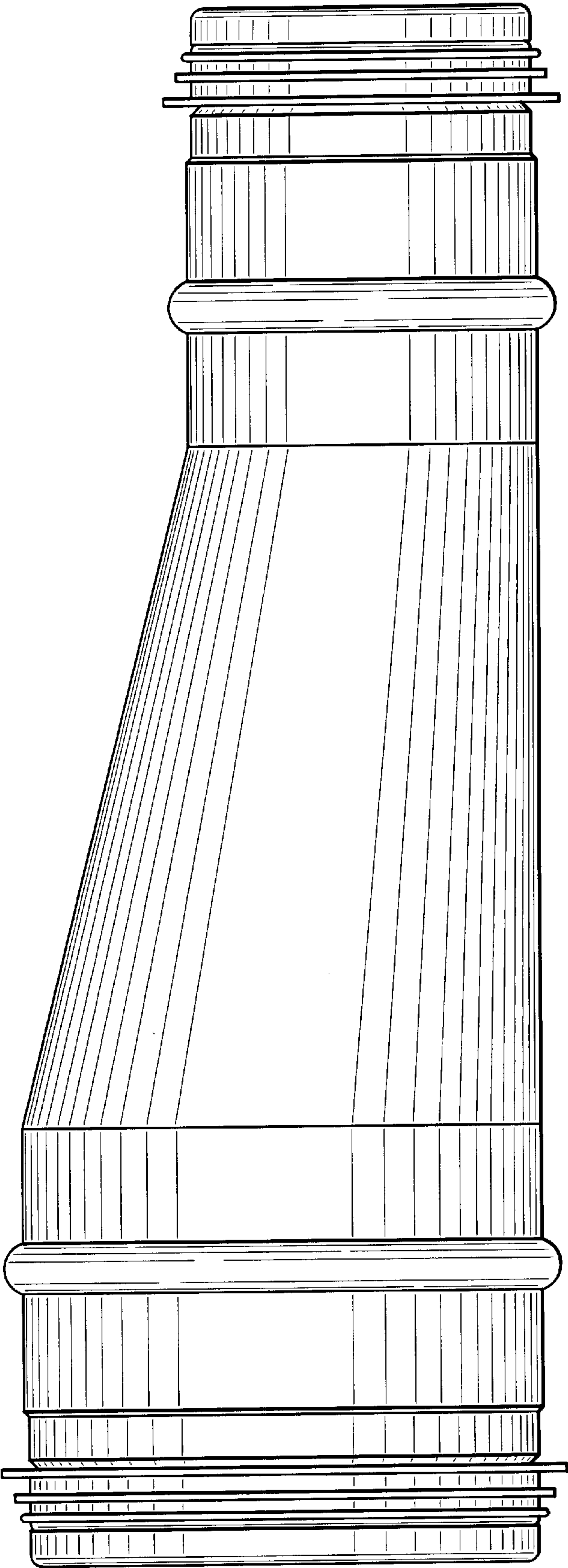


FIG. 9

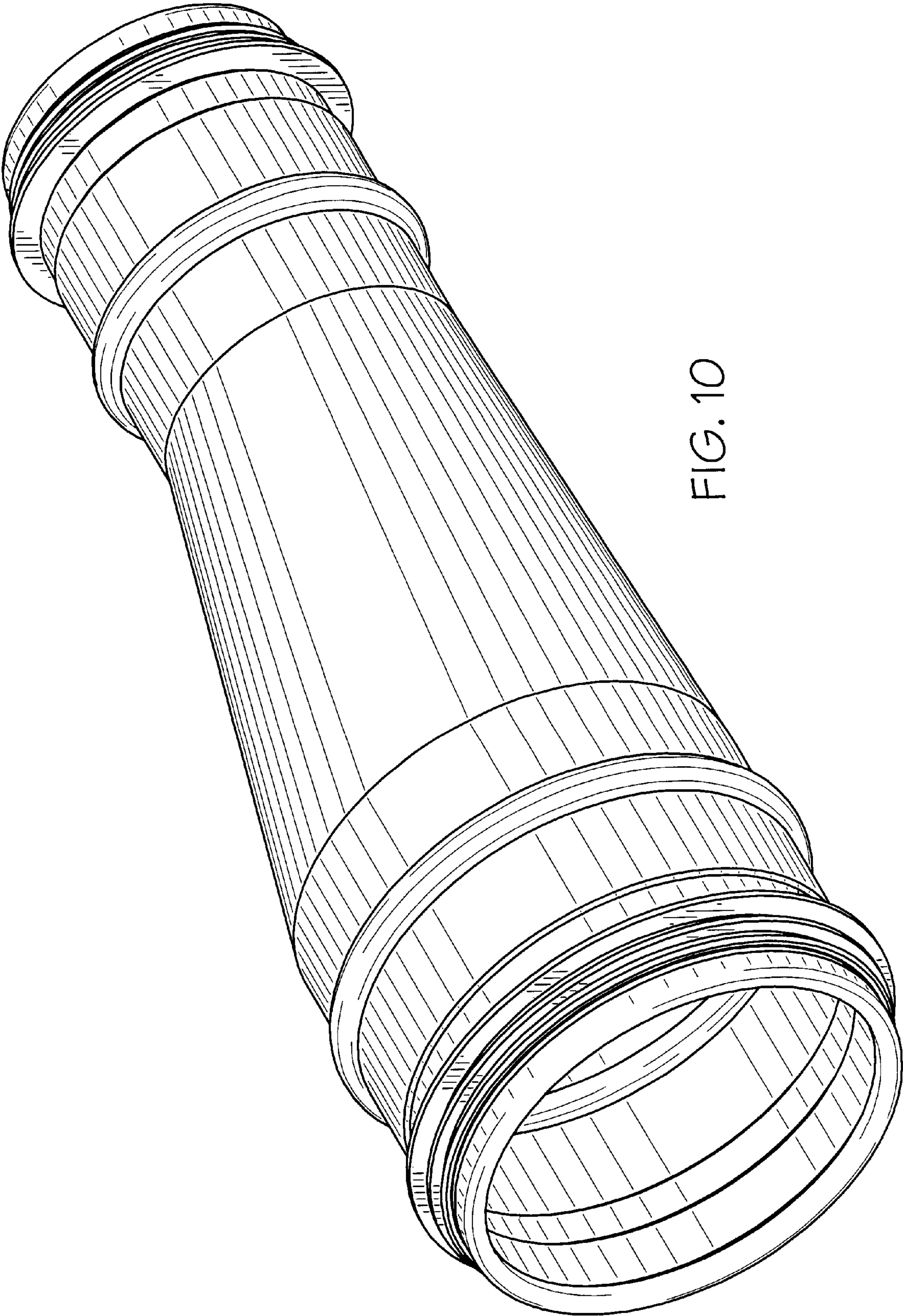


FIG. 10



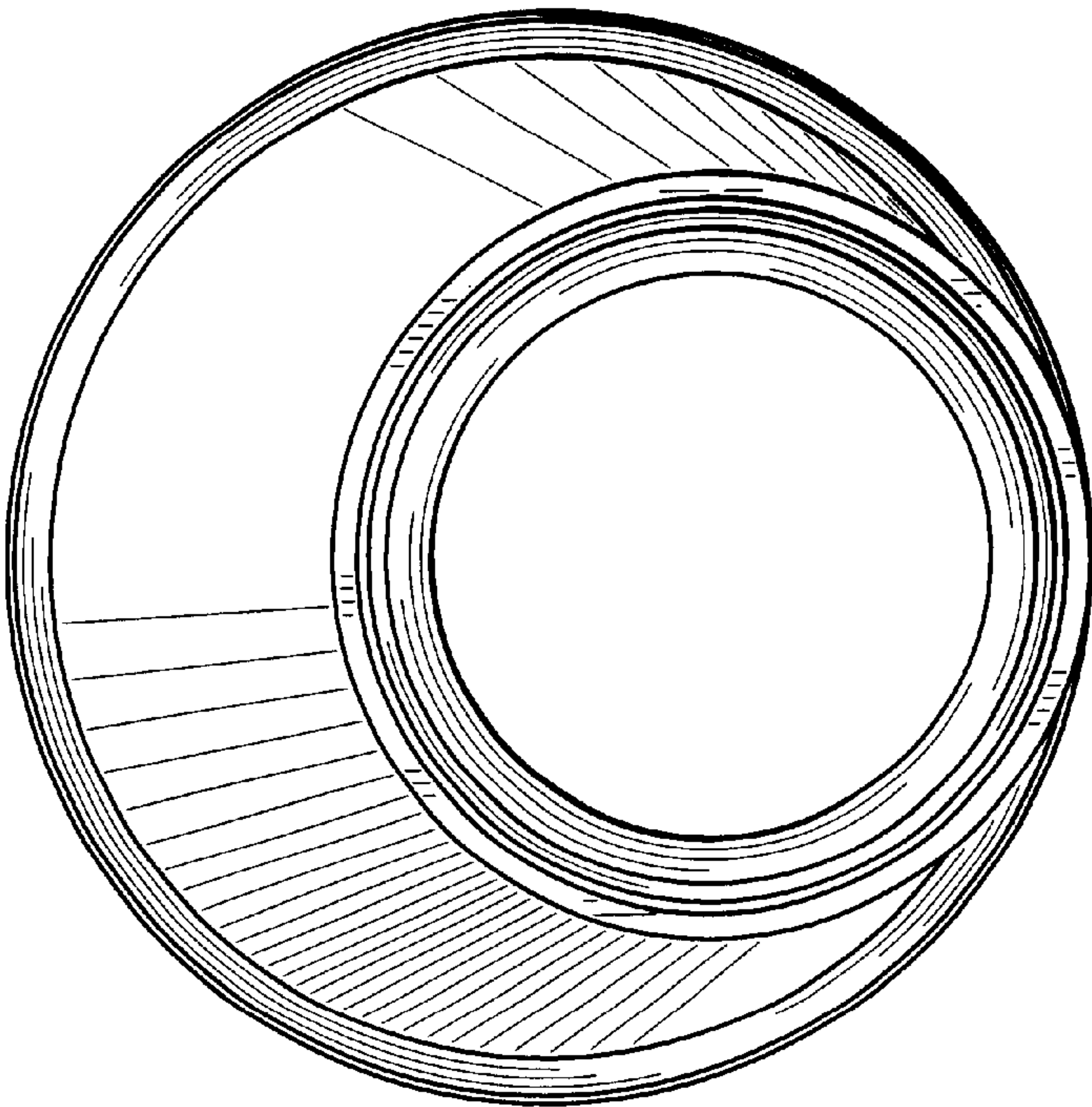


FIG. 12

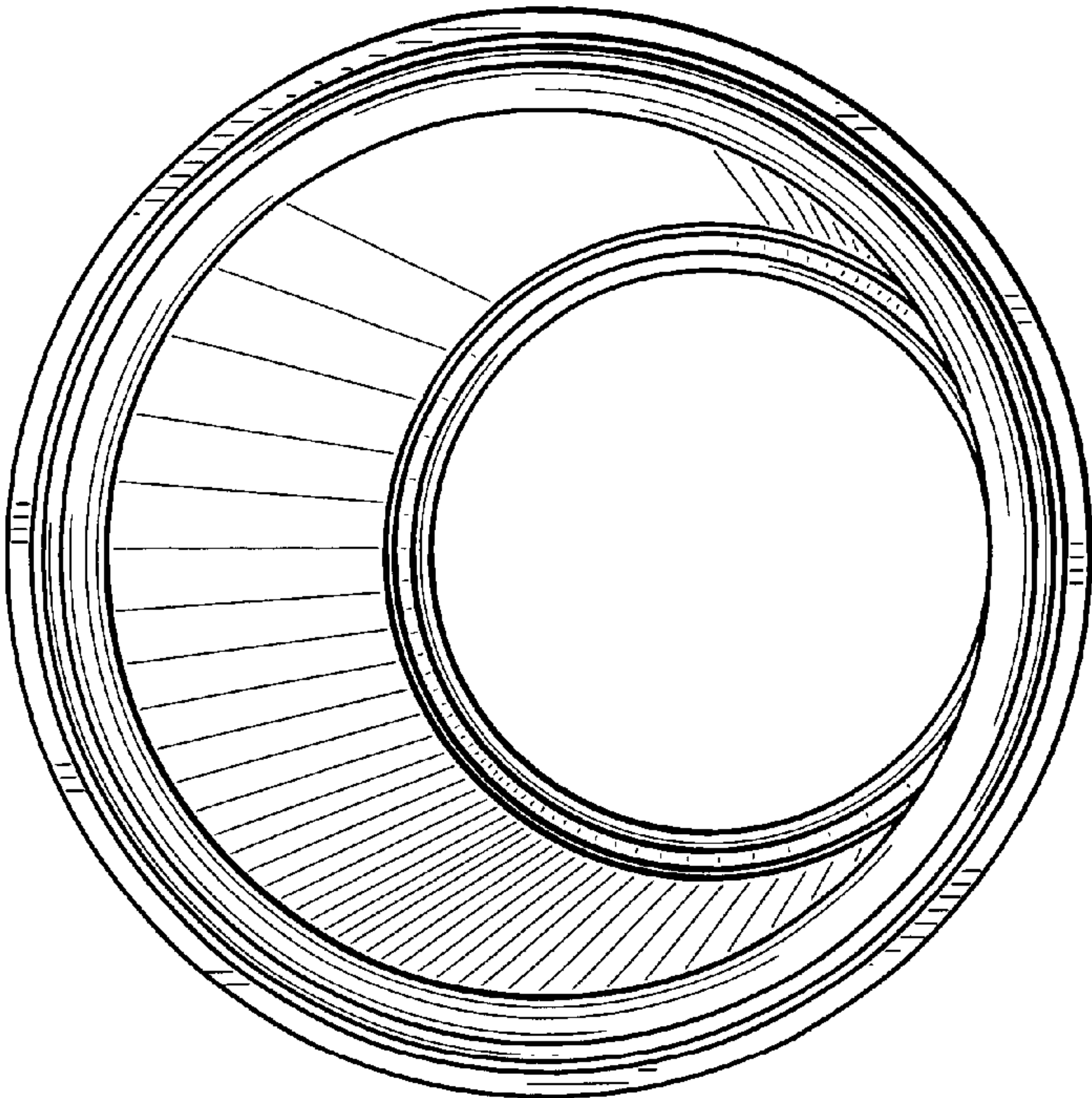


FIG. 11

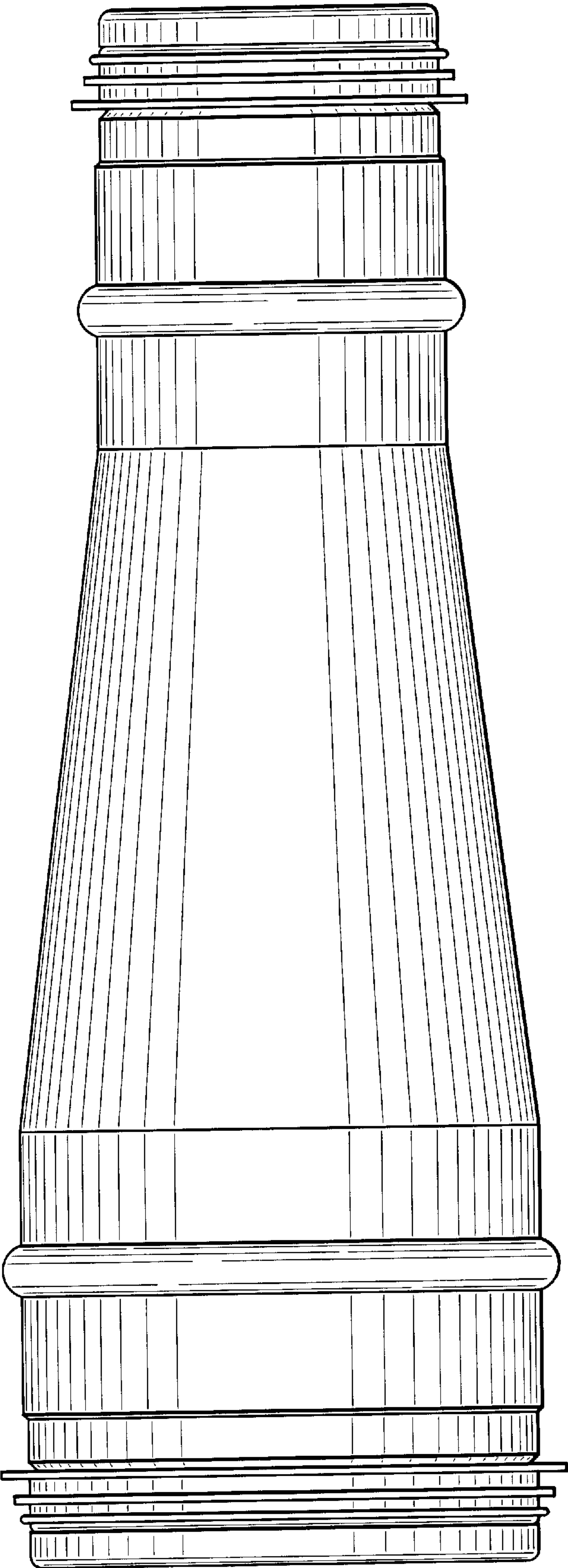


FIG. 13



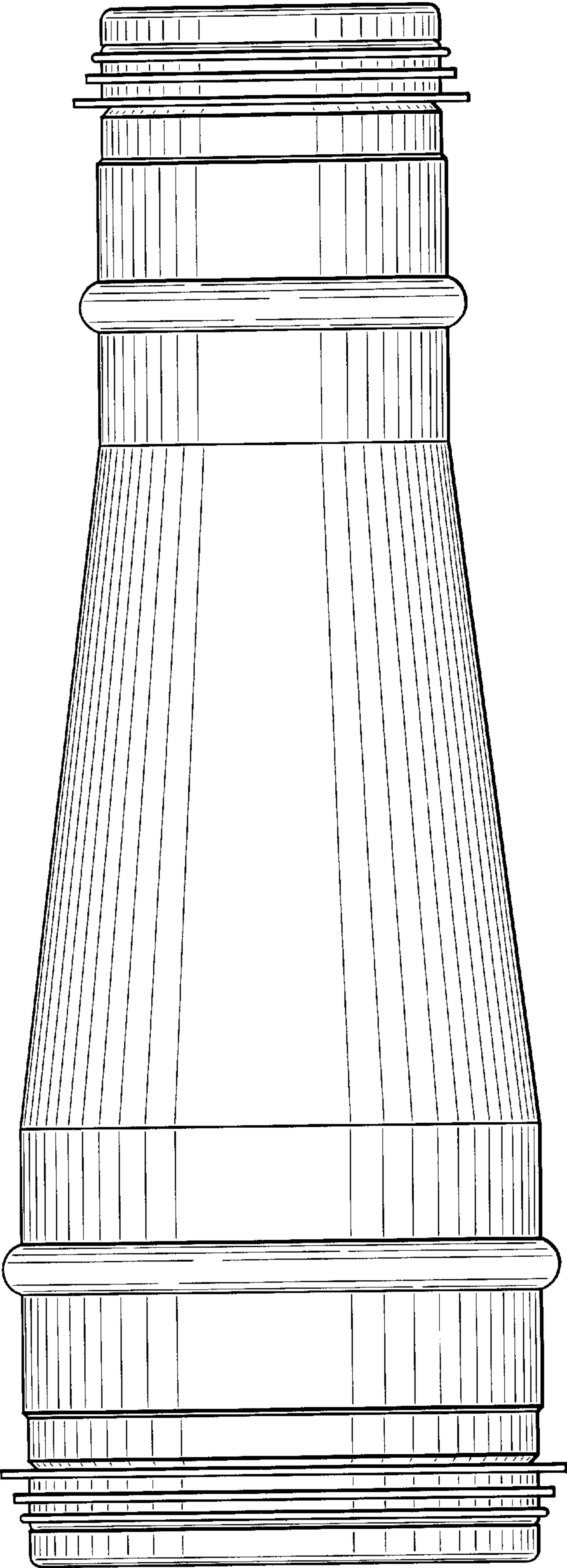


FIG. 14

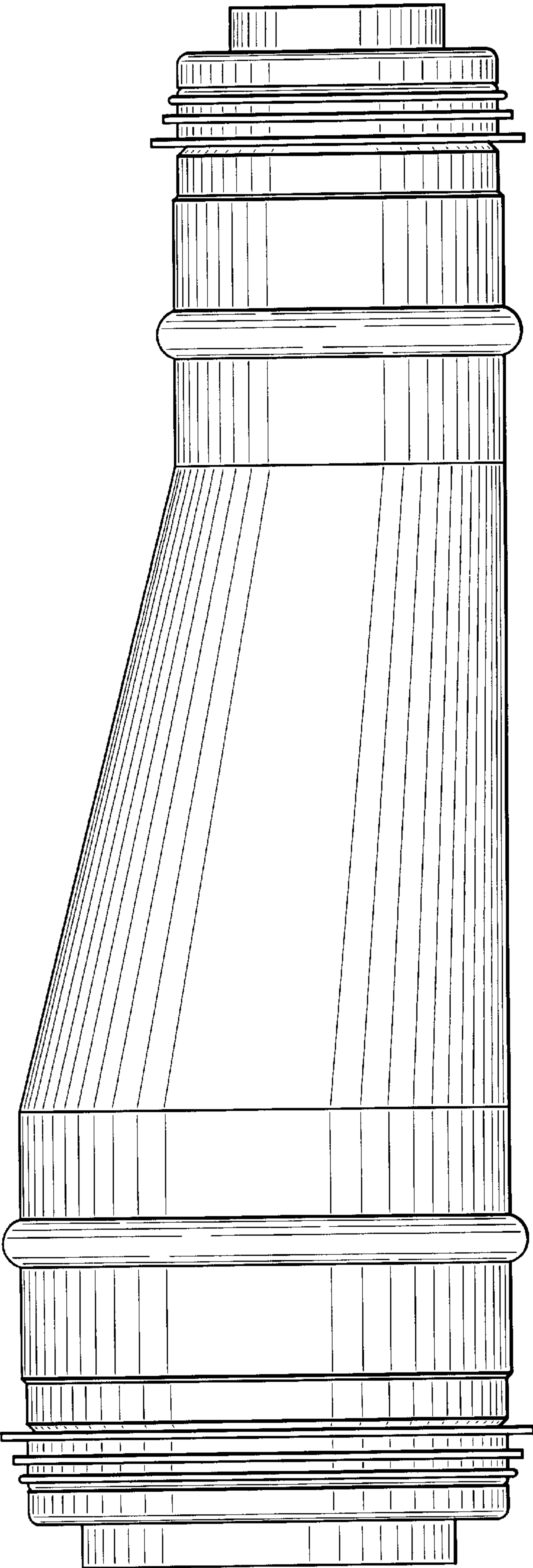


FIG. 15



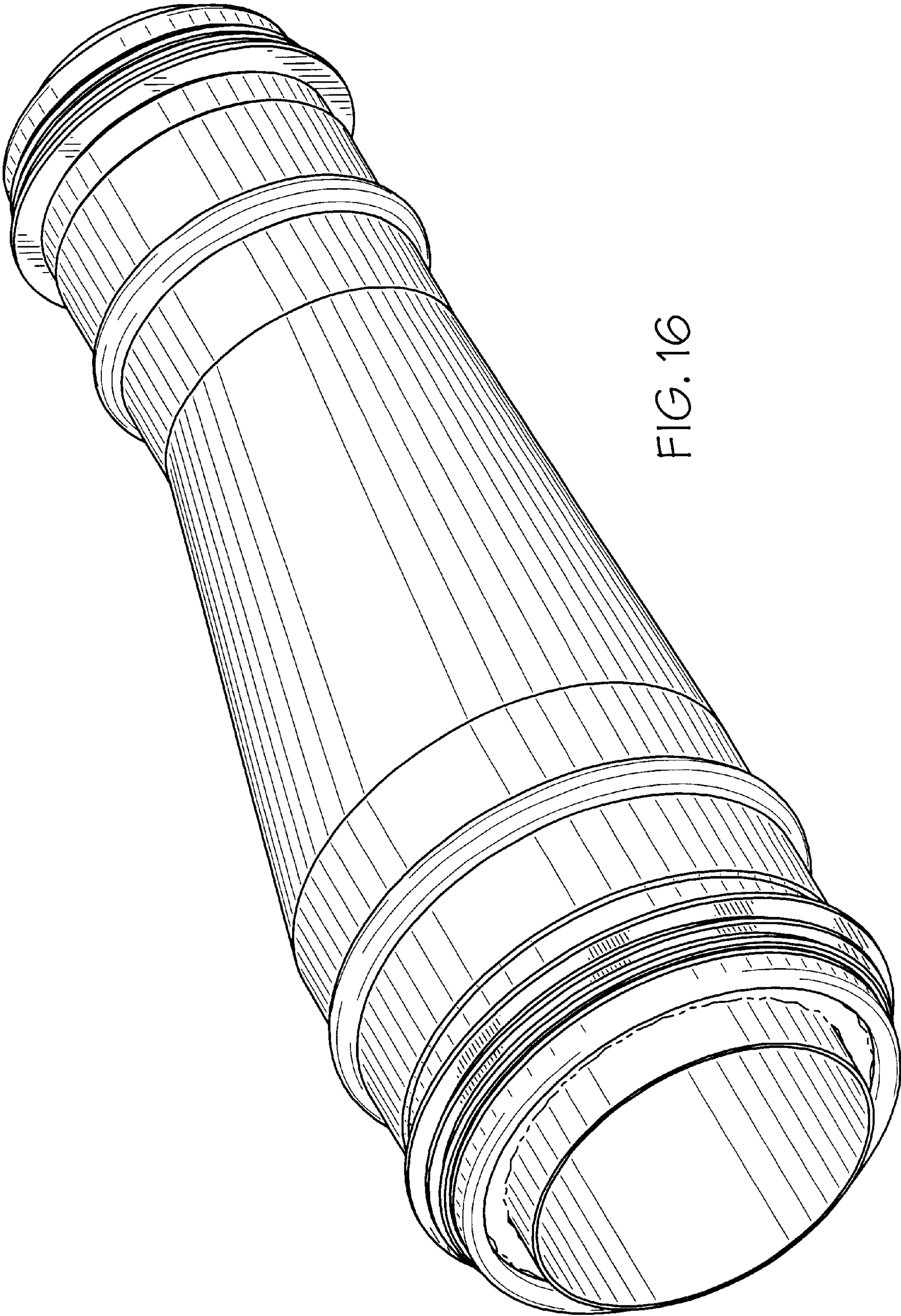


FIG. 16

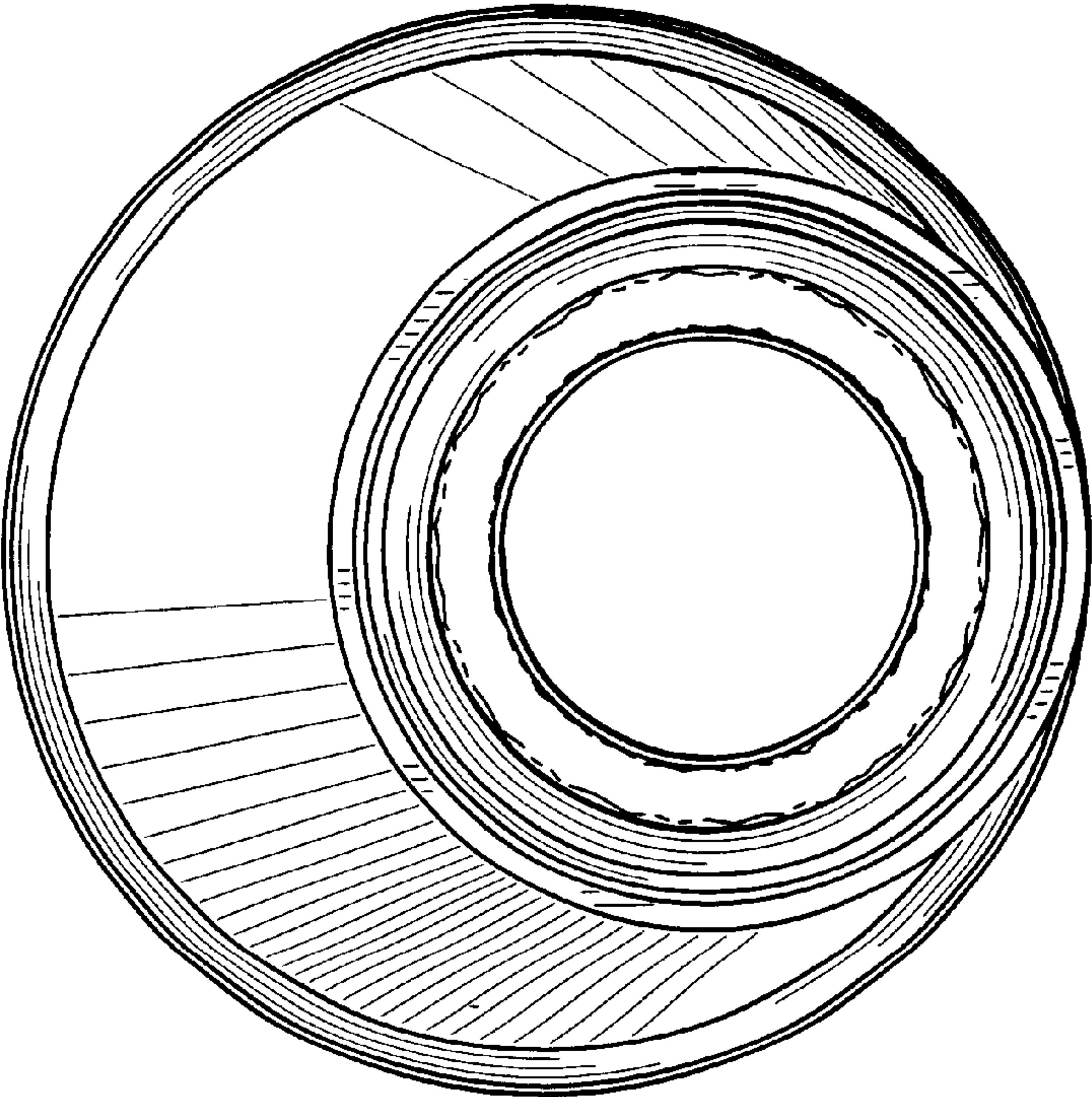


FIG. 18

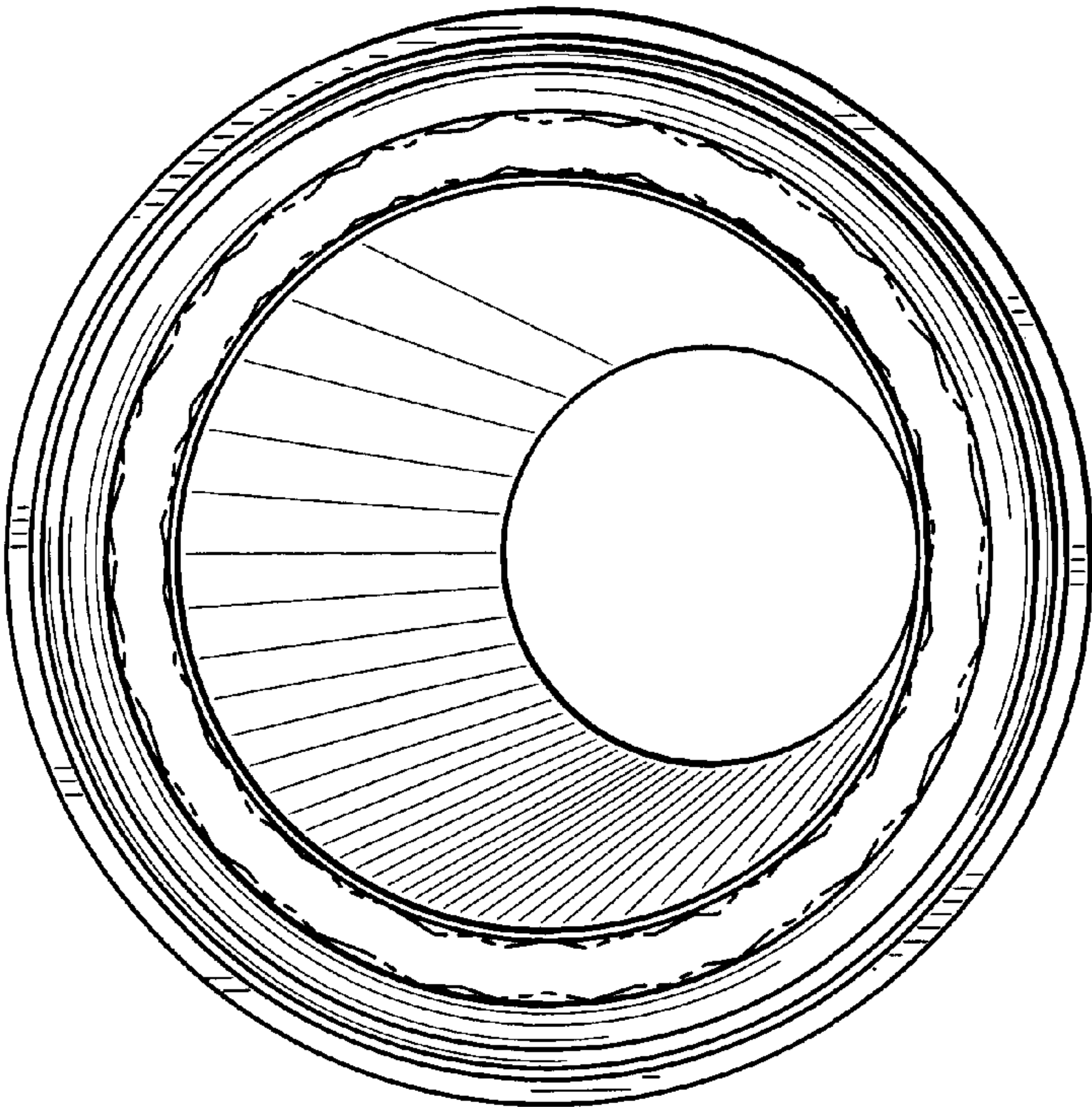


FIG. 17



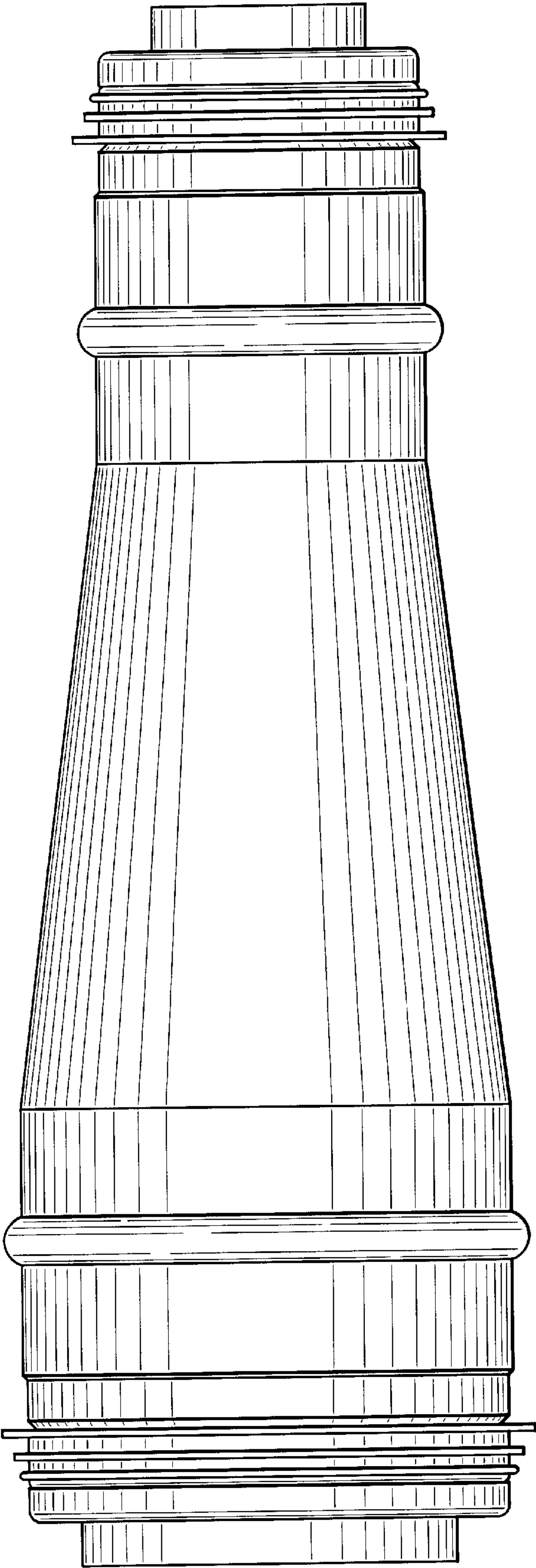


FIG. 19

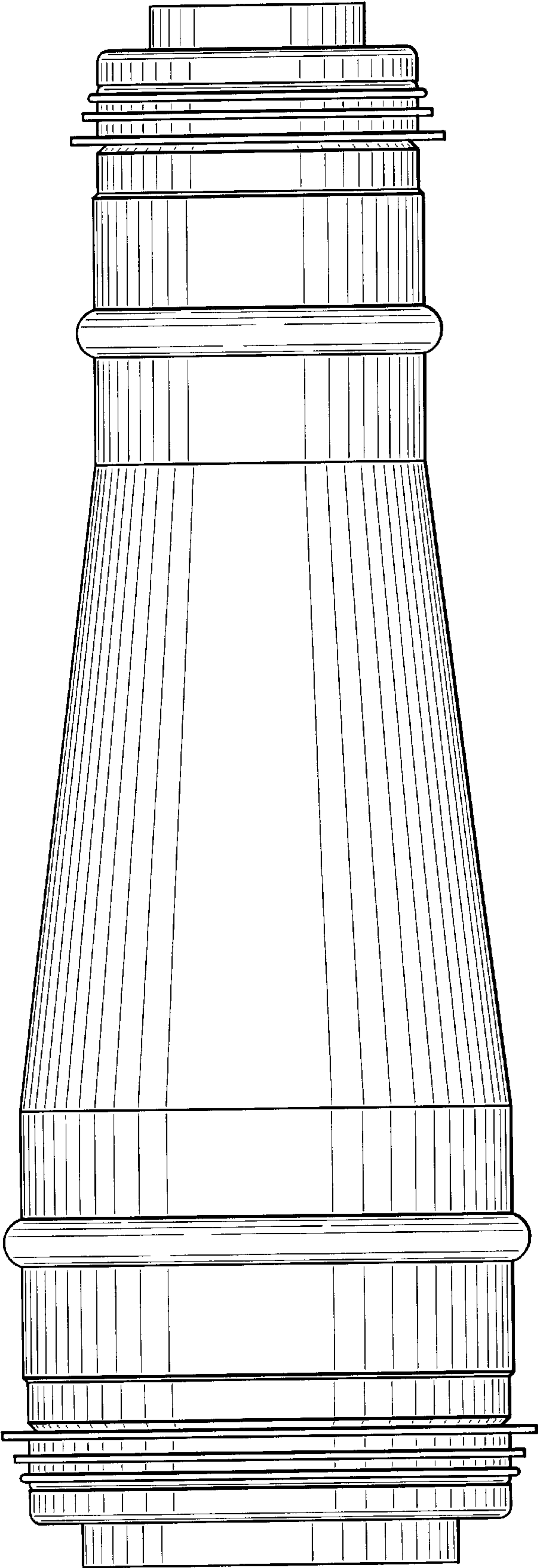


FIG. 20

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : Des. 478,978 S  
DATED : August 26, 2003  
INVENTOR(S) : William K. Stout, Jr.

Page 1 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

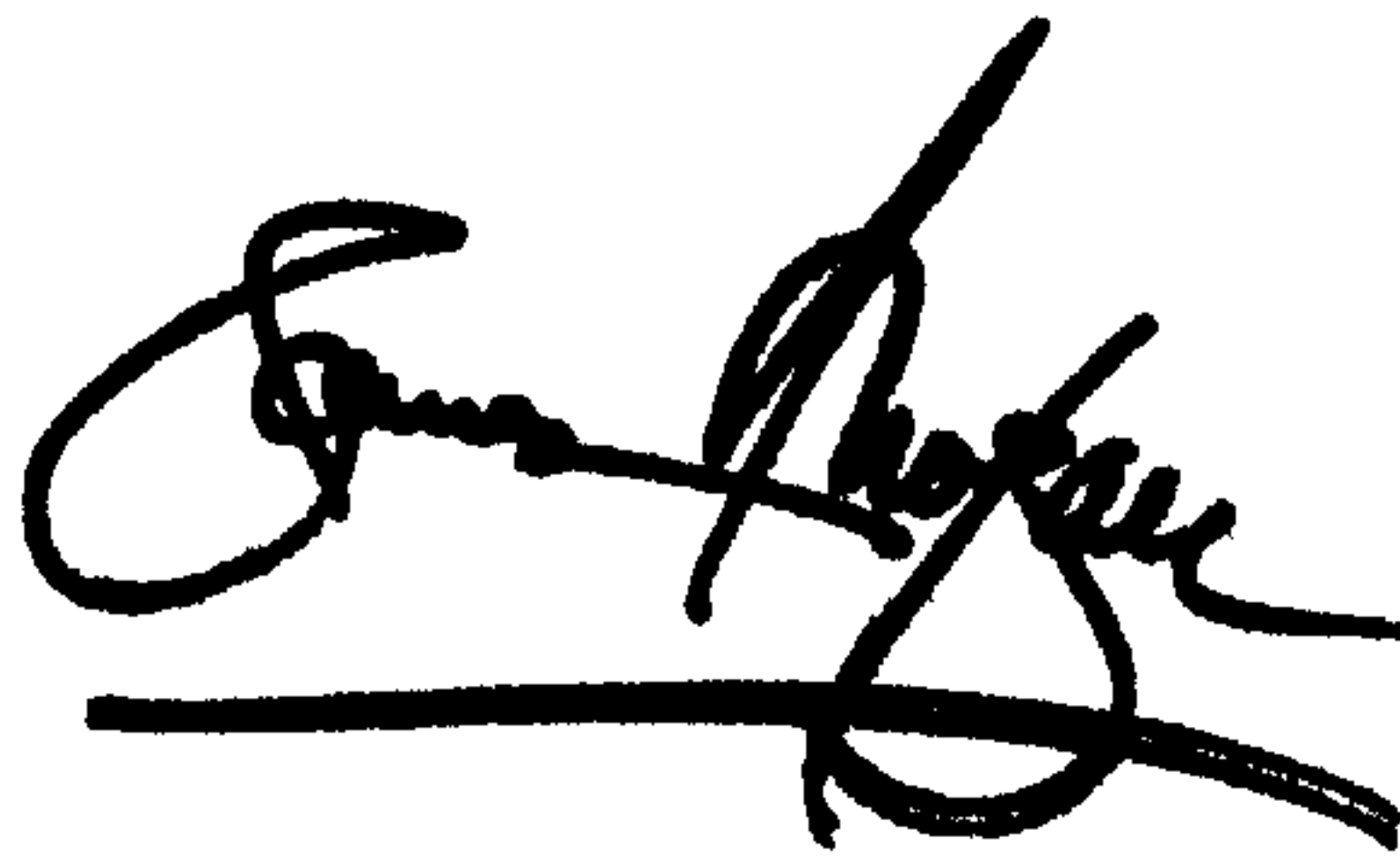
Drawings,

Replace sheets 2, 3, 8 and 9, with the attached sheets 2, 3, 8 and 9.

Replace representative figures 2 and 10, with the figures 2 and 10 found on attached sheets 2 and 8, respectively.

Signed and Sealed this

Twenty-third Day of December, 2003

A handwritten signature in black ink, appearing to read "James E. Rogan", with a long horizontal stroke extending from the bottom of the signature.

JAMES E. ROGAN  
*Director of the United States Patent and Trademark Office*



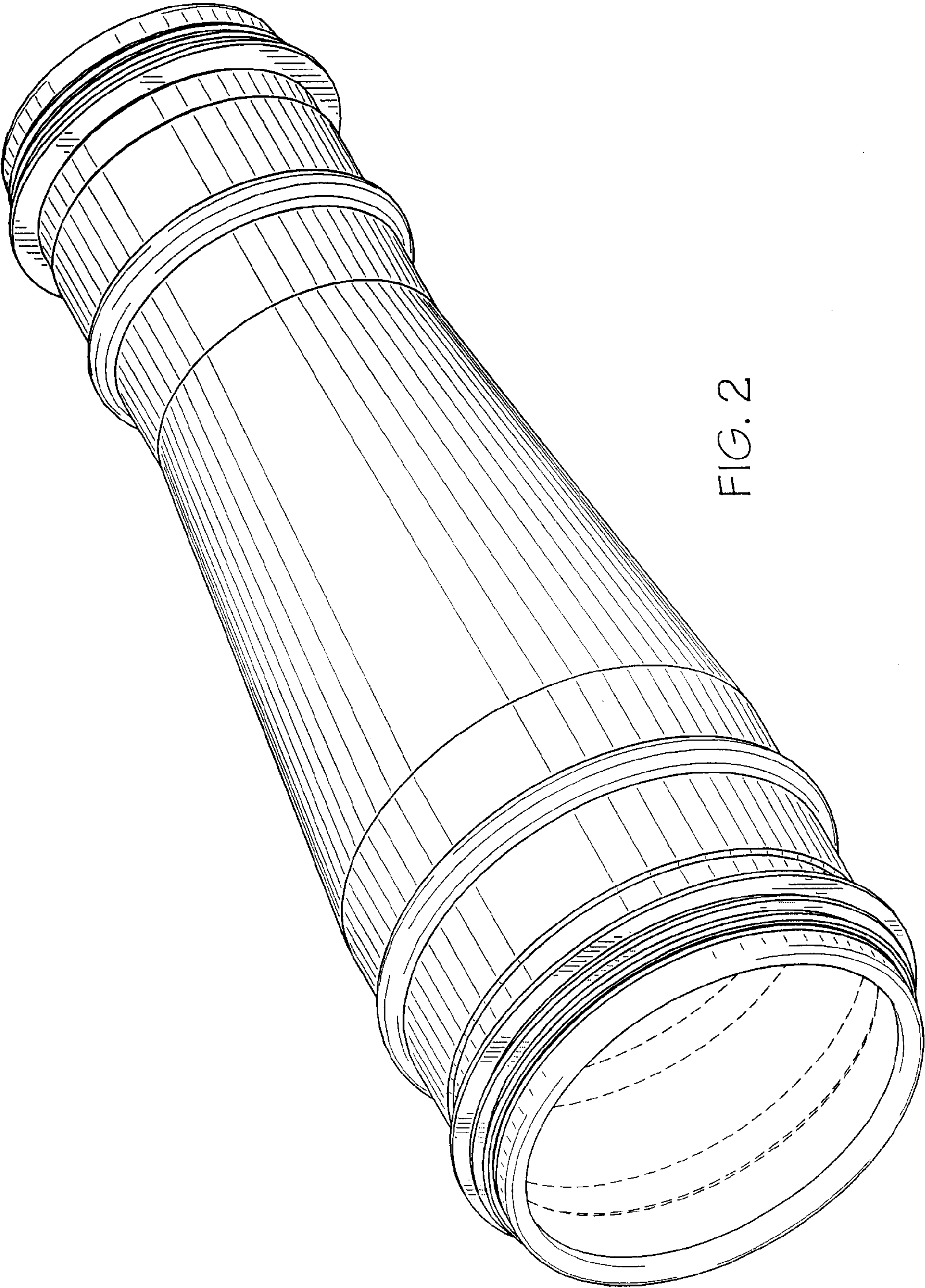


FIG. 2

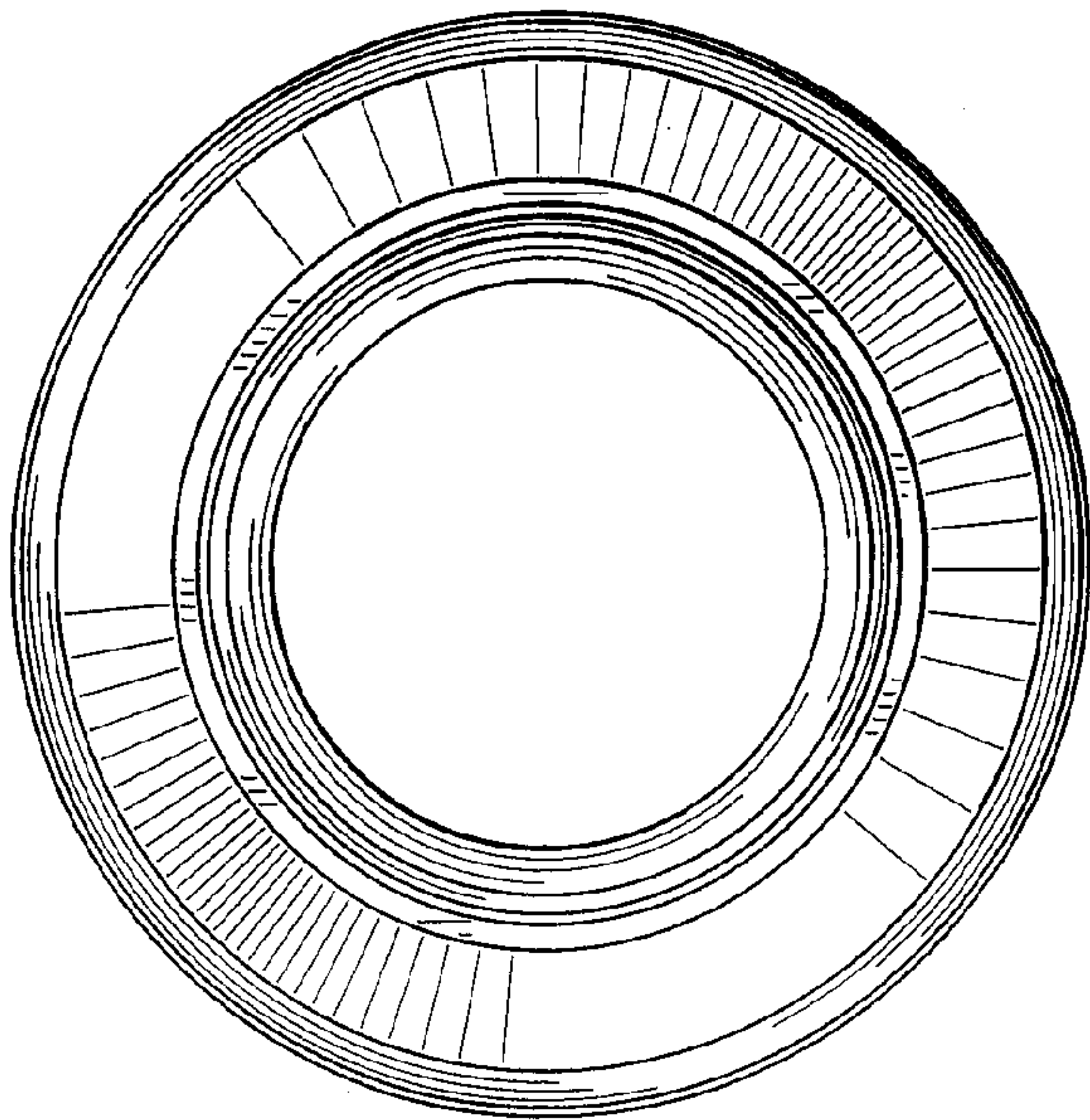


FIG. 4

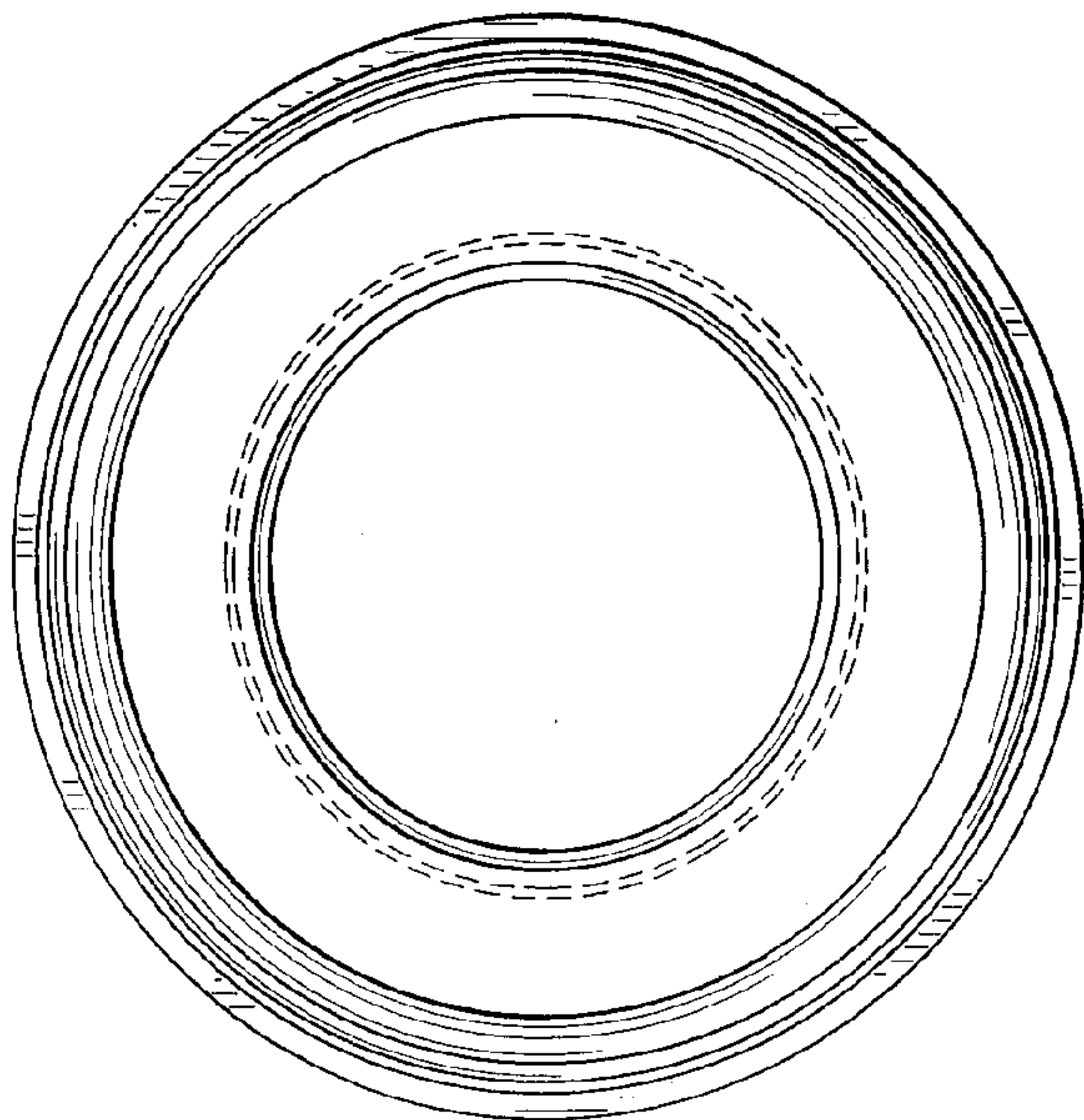


FIG. 3

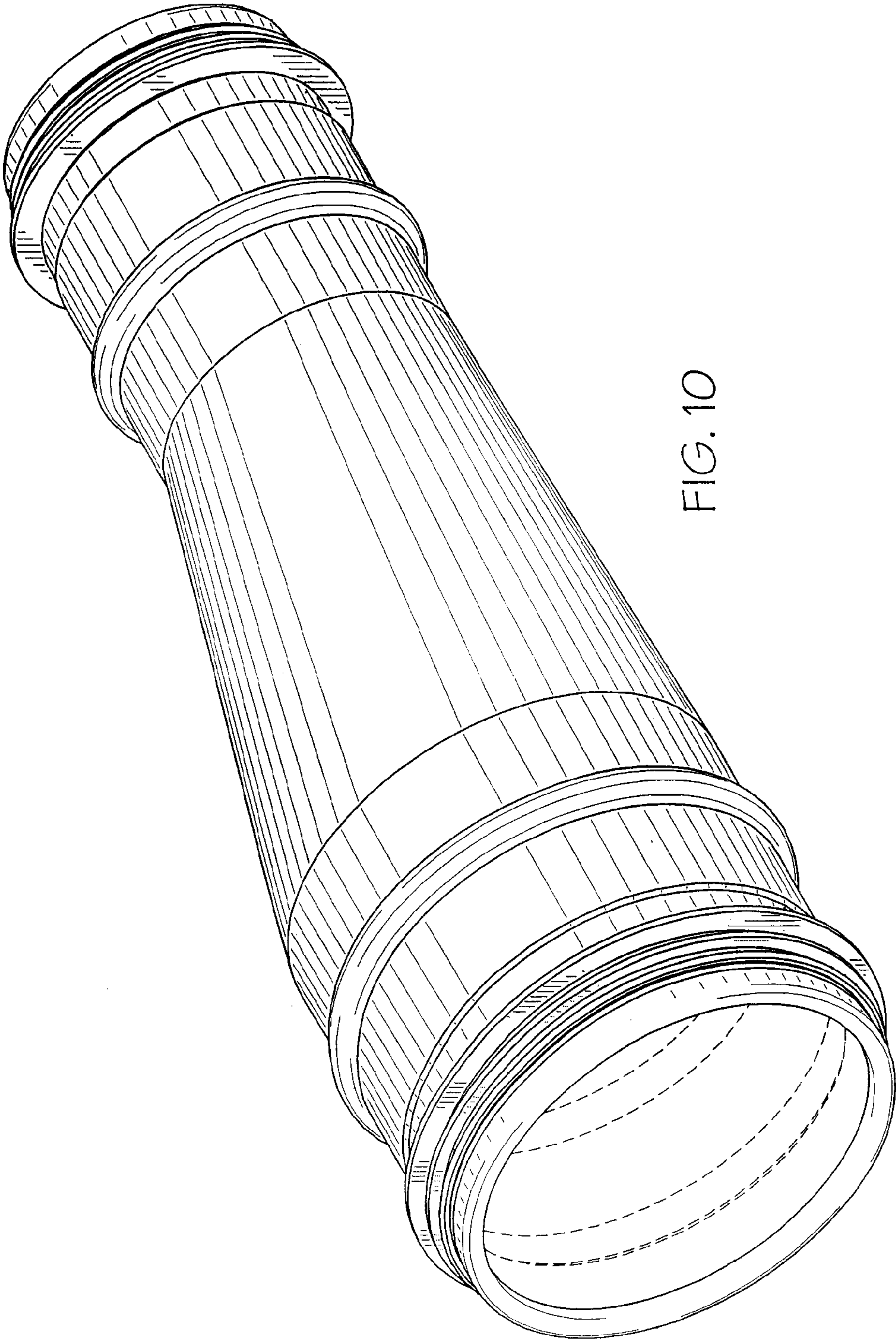


FIG. 10



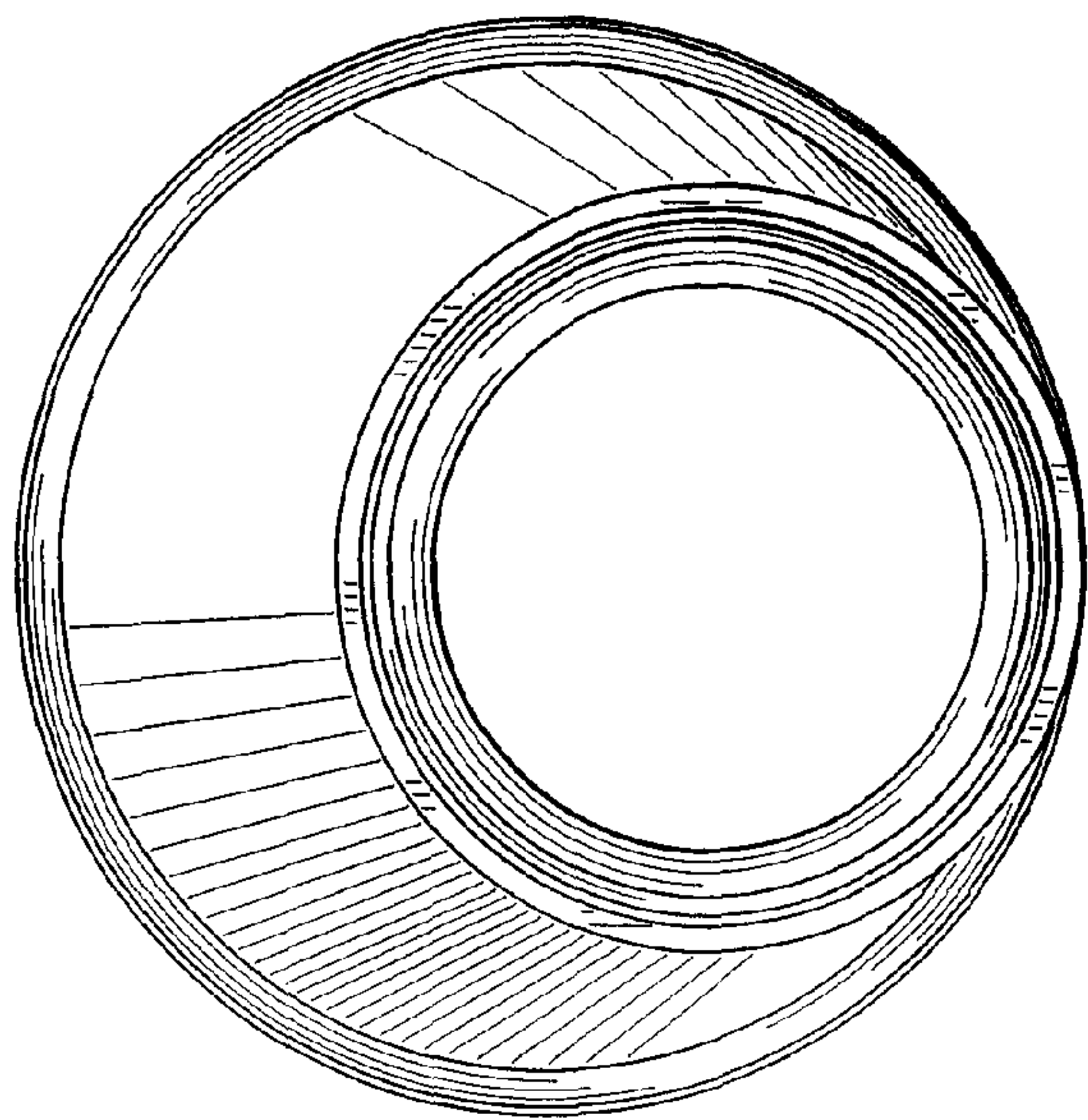


FIG. 12

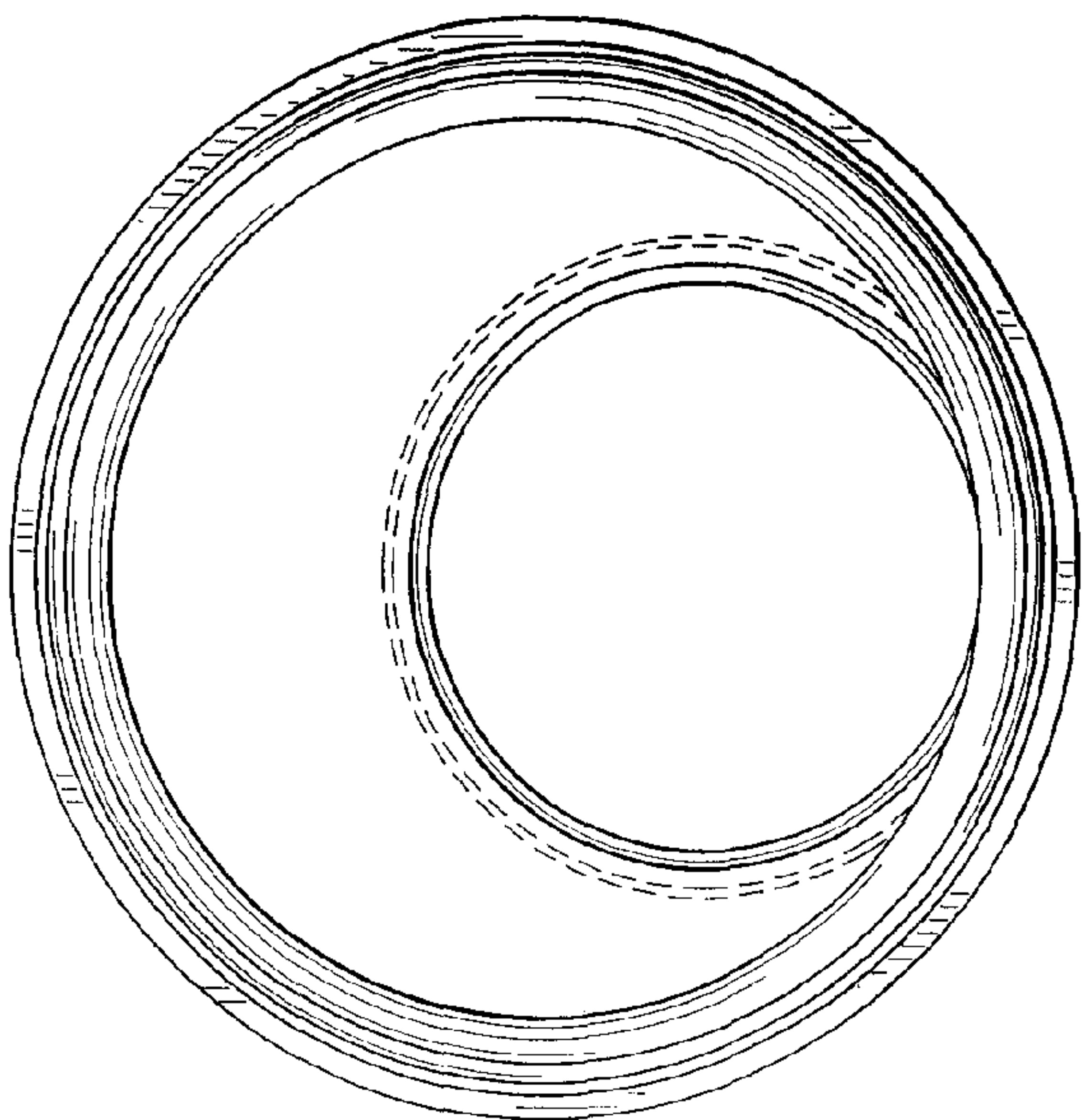


FIG. 11