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United States Design Patent

Whited

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(54) ANNULAR BLADE

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(73) Assignee: Bettcher Industries, Inc., Birmingham, OH (US)

(**) Term: 15 Years

(21) Appl. No.: 29/920,449

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Related U.S. Application Data

(60) Continuation of application No. 18/117,154, filed on Mar. 3, 2023, now Pat. No. 11,839,988, which is a continuation of application No. 17/210,024, filed on Mar. 23, 2021, now Pat. No. 11,597,113, which is a continuation of application No. 16/736,439, filed on Jan. 7, 2020, now Pat. No. 10,960,564, which is a continuation of application No. 16/050,931, filed on Jul. 31, 2018, now Pat. No. 10,532,478, which is a continuation of application No. 15/374,207, filed on Dec. 9, 2016, now Pat. No. 10,040,211, application No. 29/920,449 is a continuation of application No. 29/863,248, filed on Dec. 16, 2022, which is a division of application No. 29/674,824, filed on Dec. 26, 2018, now Pat. No. Des. 973,115, which is a continuation of application No. 29/634,991, filed on Jan. 26, 2018, now abandoned.

(51) LOC (15) Cl. 15-09

(52) U.S. Cl.
USPC D15/139
CPC B26B 25/002 (2013.01); A22B 5/0047 (2013.01); A22B 5/165 (2013.01); A22C 17/0033 (2013.01); A22C 17/12 (2013.01); F16C 17/10 (2013.01)

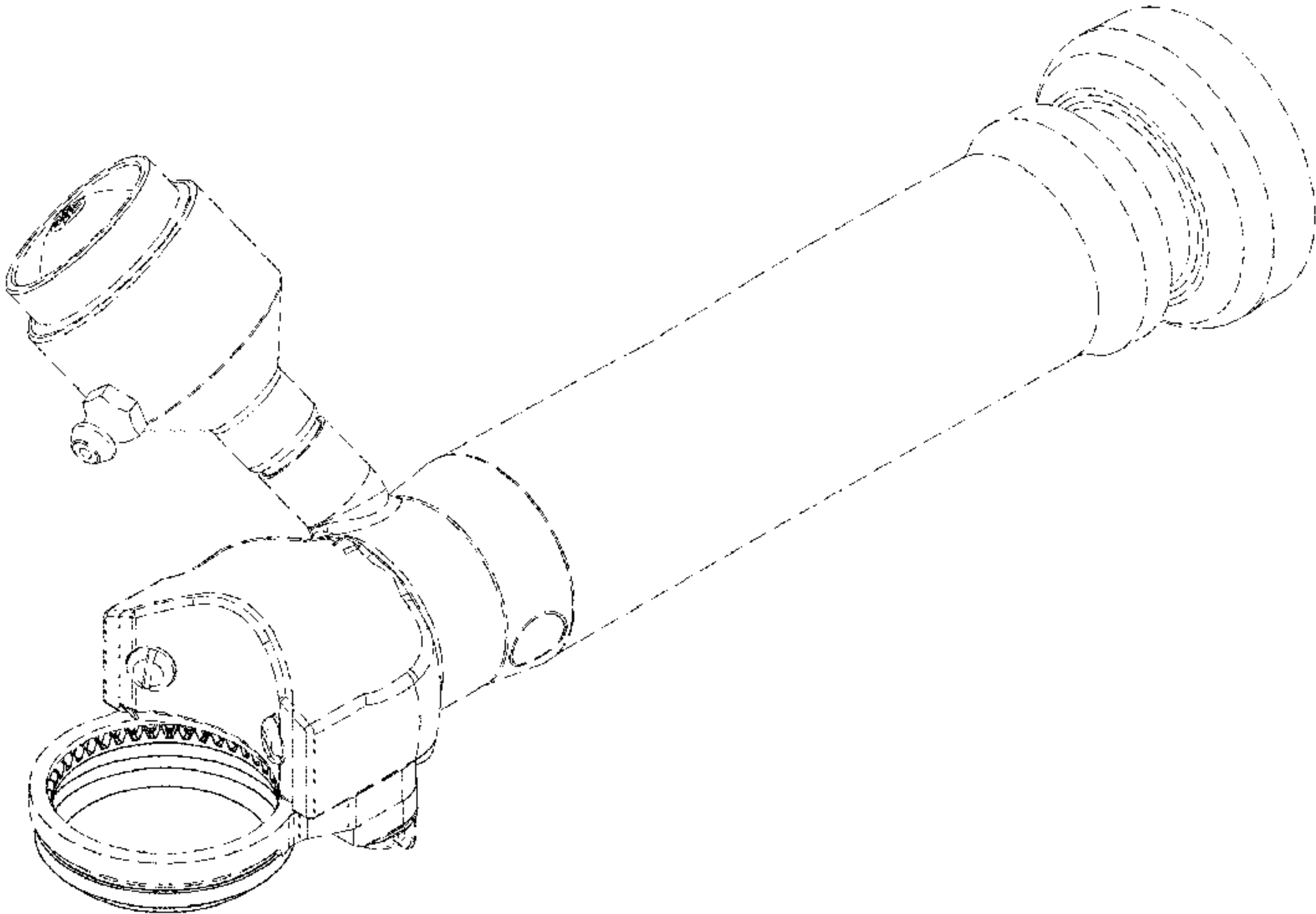
(58) Field of Classification Search
USPC D8/61, 64, 67, 70, 107; D15/138, 139, D15/140; D10/64

CPC B23D 45/003; B23D 49/11; B23D 49/003; B23D 61/18; B23D 61/006
See application file for complete search history.

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 Watts Law LLC

(57) **CLAIM**

The ornamental design for an annular blade as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of an annular blade in accordance with a first embodiment;
 FIG. 2 is a top perspective view of the annular blade independent from the exemplary rotary knife;
 FIG. 3 is a bottom perspective view thereof;
 FIG. 4 is a top plan view thereof;
 FIG. 5 is a bottom plan view thereof;
 FIG. 6 is a front elevation view thereof;
 FIG. 7 is a rear elevation view thereof;
 FIG. 8 is a side elevation view thereof; and
 FIG. 9 is a cross-sectional view thereof along lines 9-9 in FIG. 4.
 FIG. 10 is a top perspective view of an annular blade in accordance with a second embodiment;

FIG. 11 is a top perspective view of the annular blade independent from the exemplary rotary knife;
 FIG. 12 is a bottom perspective view thereof;
 FIG. 13 is a top plan view thereof;
 FIG. 14 is a bottom plan view thereof;
 FIG. 15 is a front elevation view thereof;
 FIG. 16 is a rear elevation view thereof;
 FIG. 17 is a side elevation view thereof; and
 FIG. 18 is a cross-sectional view thereof along lines 18-18 in FIG. 13.

FIG. 19 is a top perspective view of an annular blade in accordance with a third embodiment;
 FIG. 20 is a top perspective view of the annular blade independent from the exemplary rotary knife;
 FIG. 21 is a bottom perspective view thereof;
 FIG. 22 is a top plan view thereof;
 FIG. 23 is a bottom plan view thereof;
 FIG. 24 is a front elevation view thereof;
 FIG. 25 is a rear elevation view thereof;
 FIG. 26 is a side elevation view thereof; and
 FIG. 27 is a cross-sectional view thereof along lines 27-27 in FIG. 22.

FIG. 28 is a top perspective view of an annular blade in accordance with a third embodiment;
 FIG. 29 is a top perspective view of the annular blade independent from the exemplary rotary knife;
 FIG. 30 is a bottom perspective view thereof;
 FIG. 31 is a top plan view thereof;
 FIG. 32 is a bottom plan view thereof;
 FIG. 33 is a front elevation view thereof;
 FIG. 34 is a rear elevation view thereof;
 FIG. 35 is a side elevation view thereof; and,
 FIG. 36 is a cross-sectional view thereof along lines 36-36 in FIG. 31.

The broken line showing of the rotary knife is provided for the purpose of providing environmental structure and forms no part of the claimed design. The dashed-dot-dot lines designate boundaries and form no part of the claimed design.

1 Claim, 16 Drawing Sheets

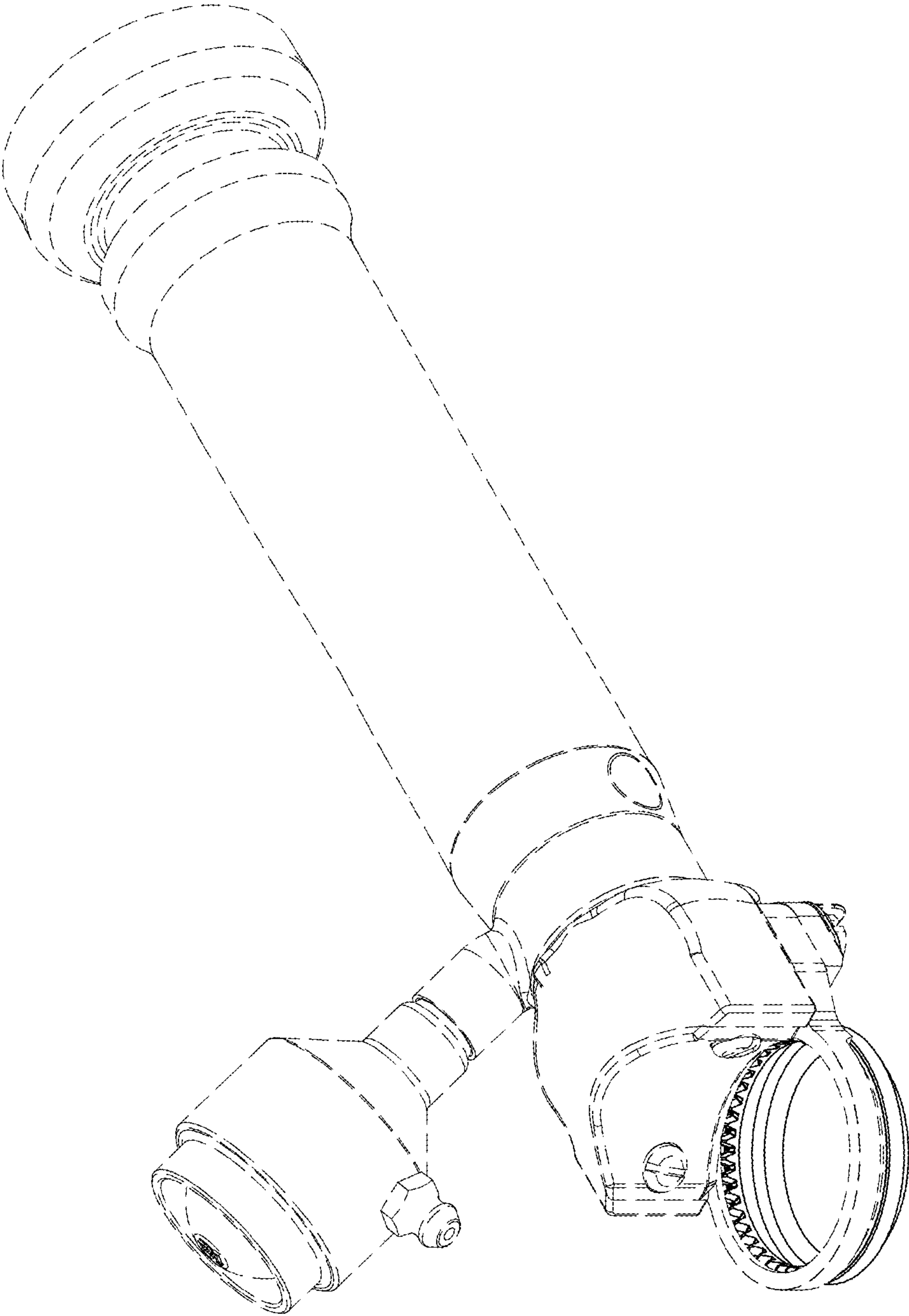


FIG. 1

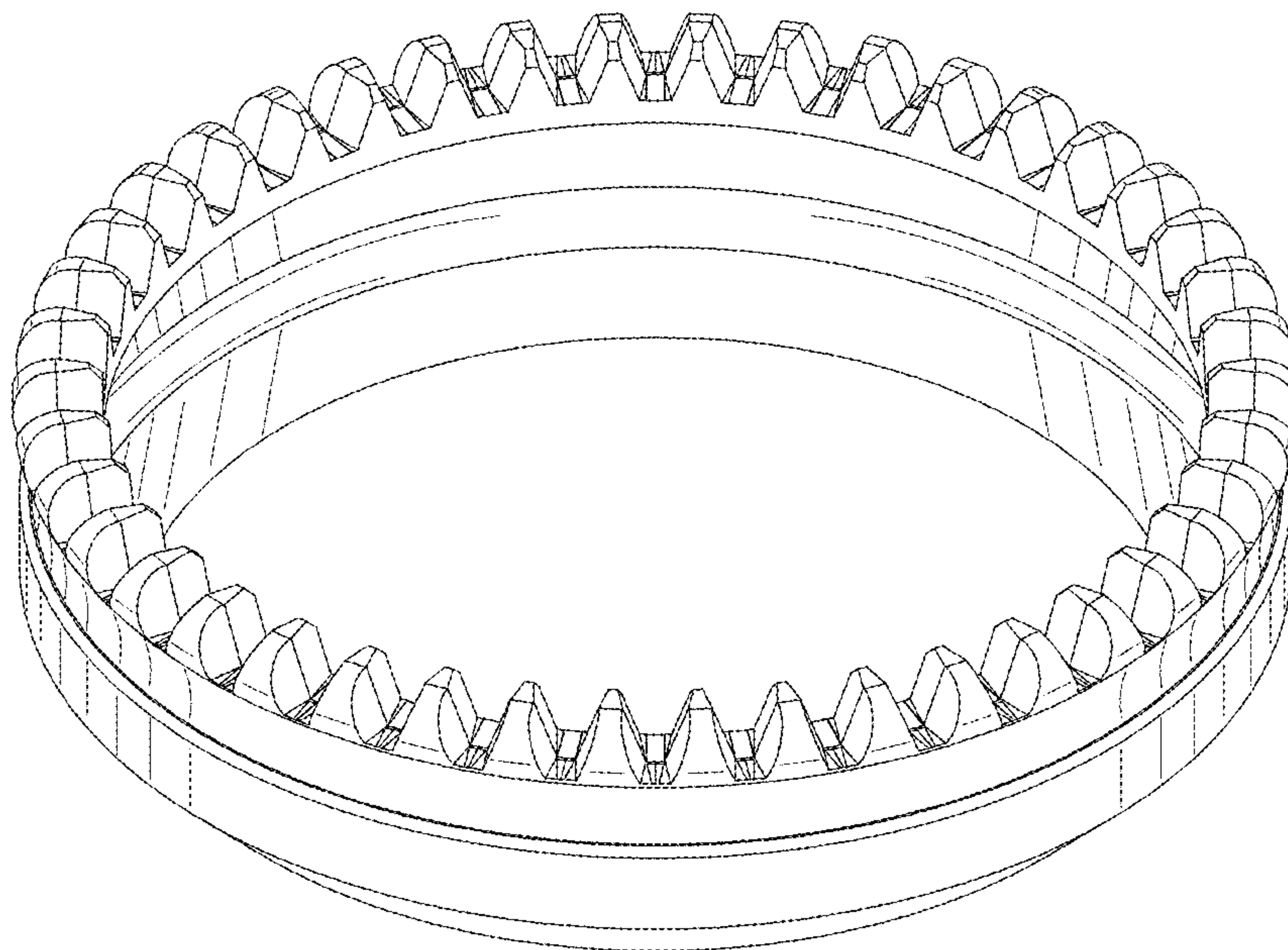


FIG. 2

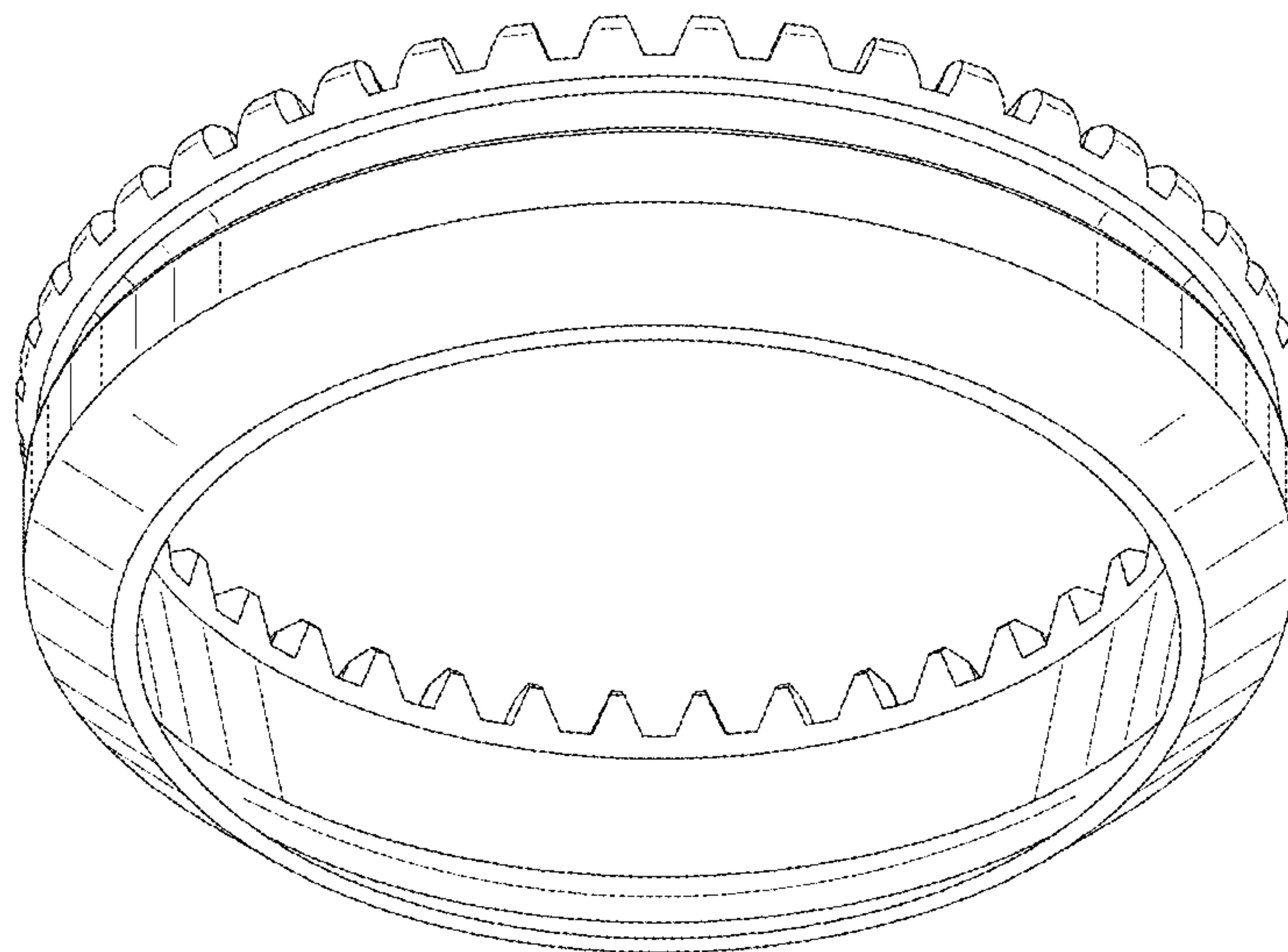


FIG. 3

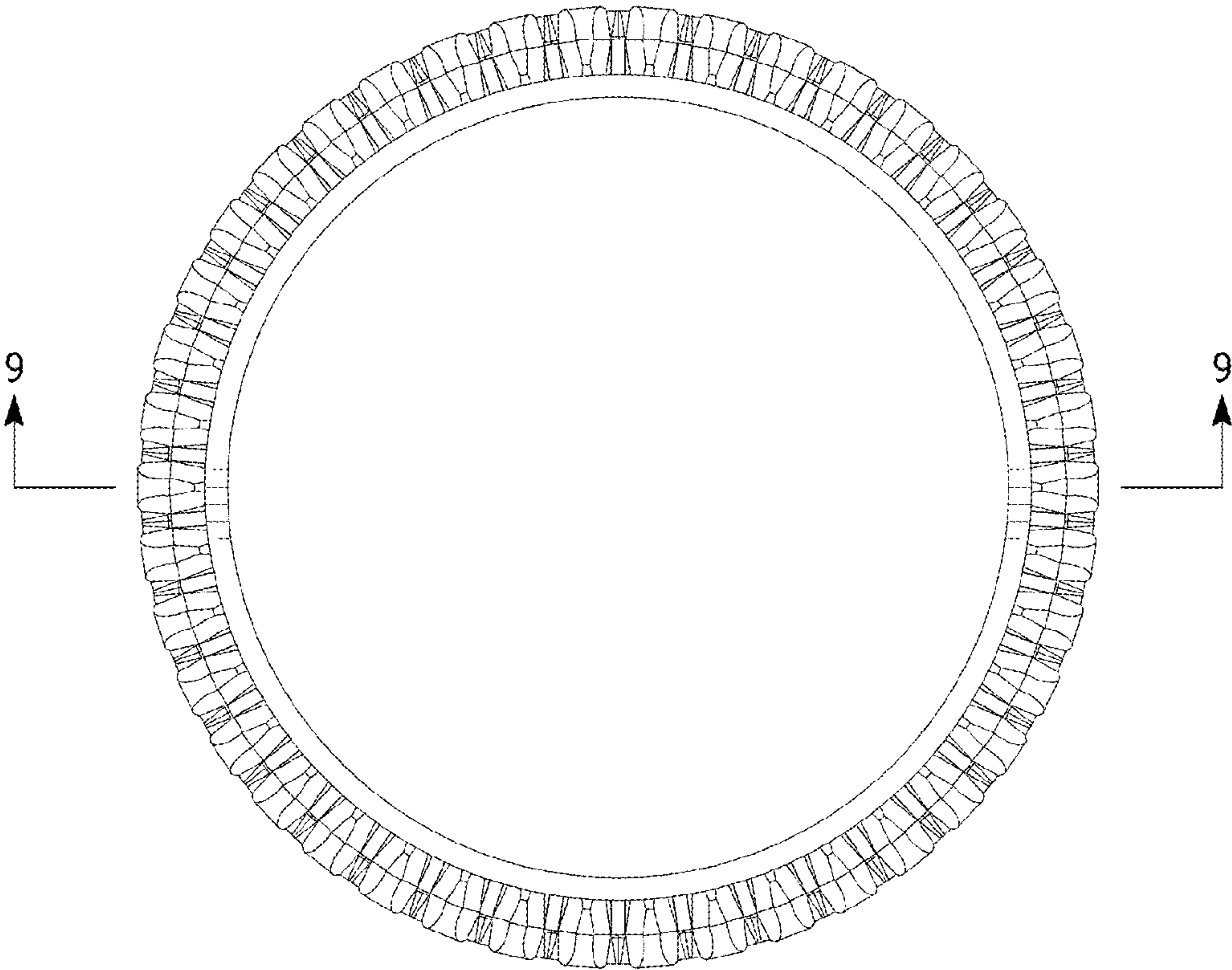


FIG. 4

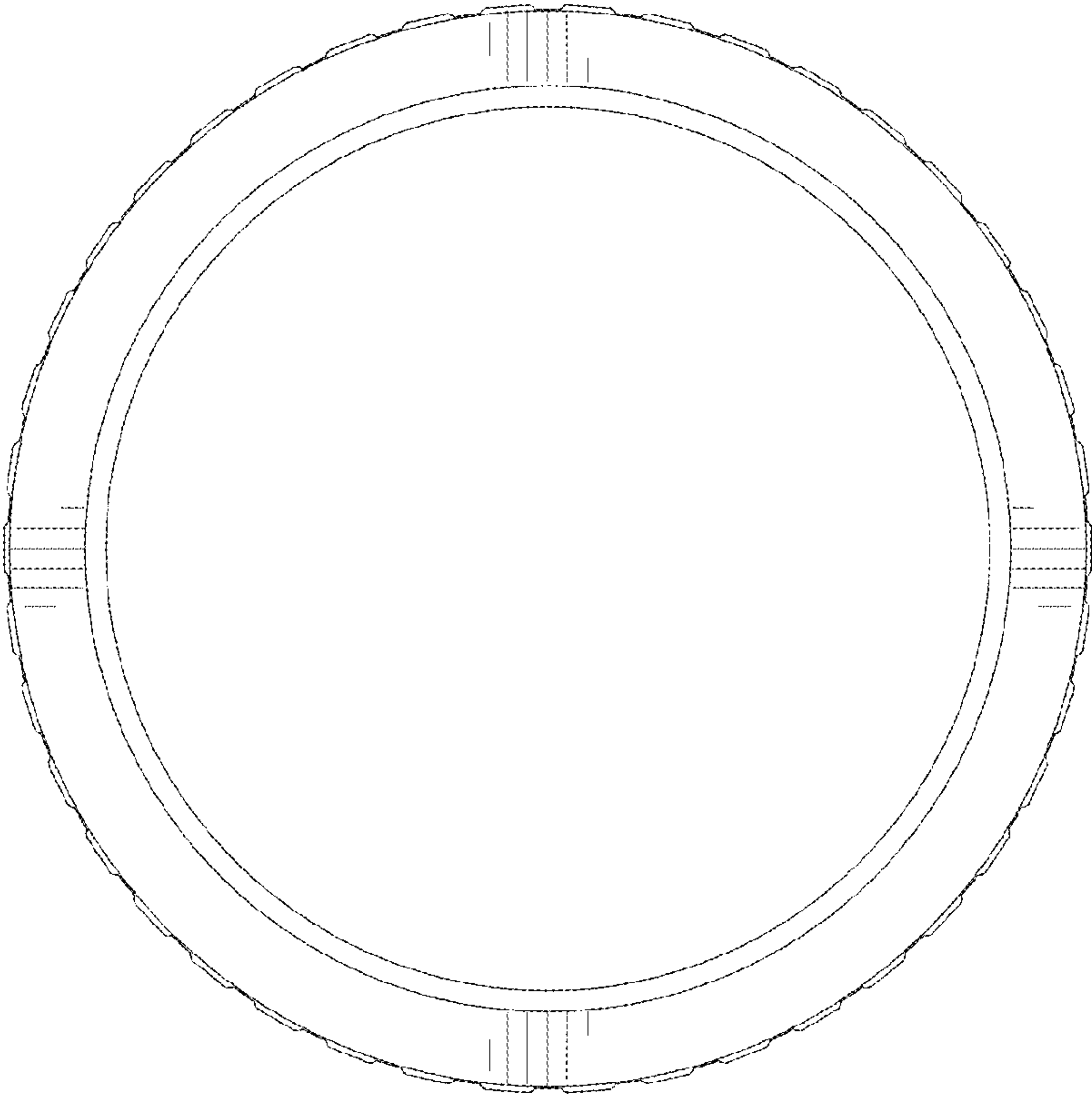


FIG. 5

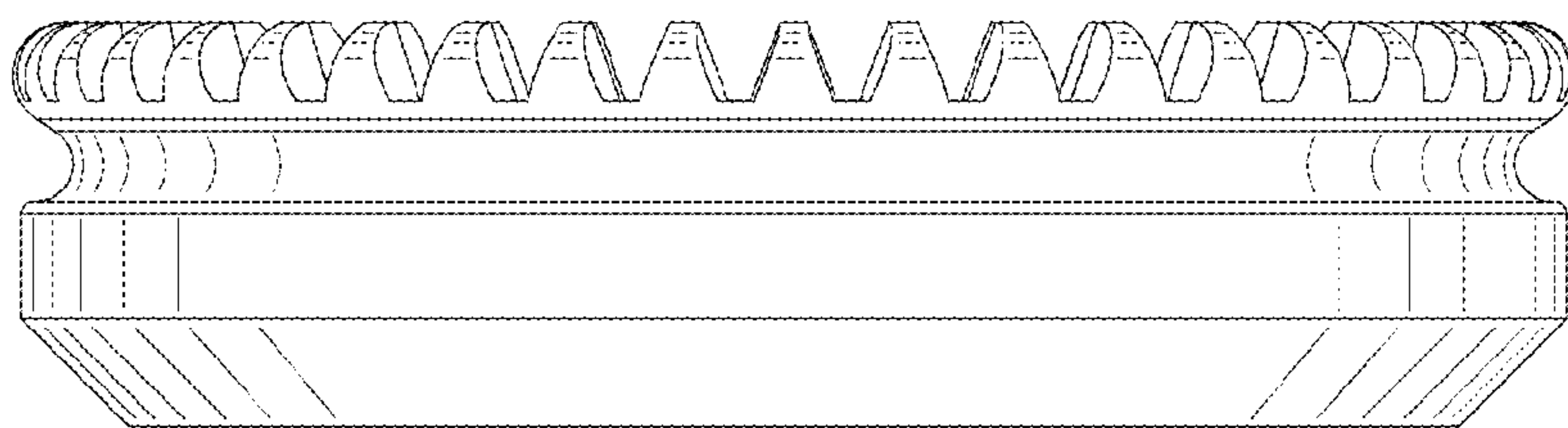


FIG. 6

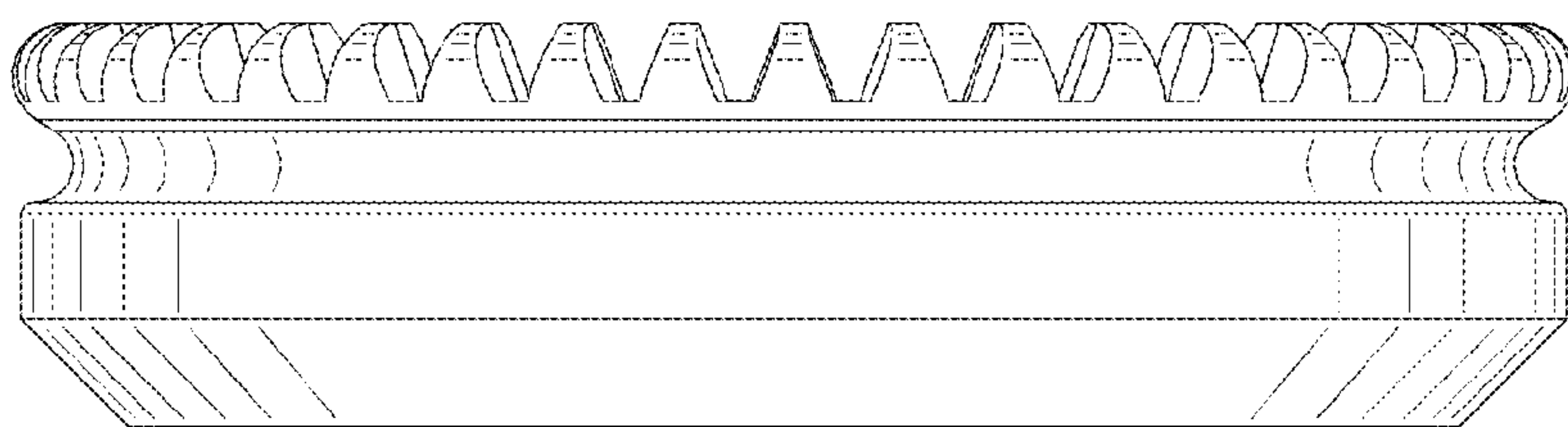


FIG. 7

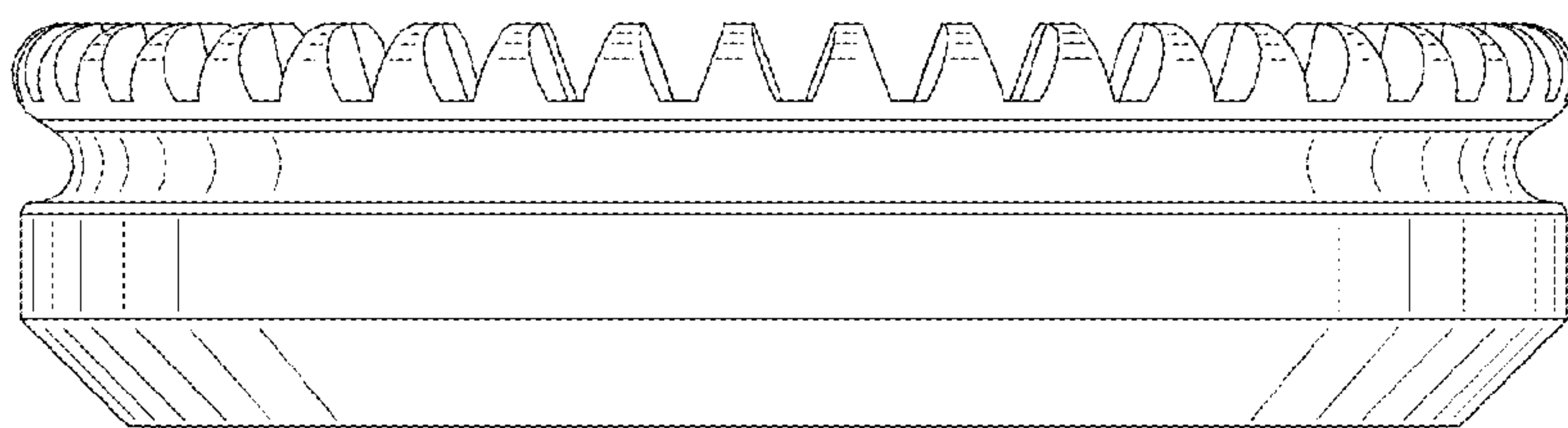


FIG. 8

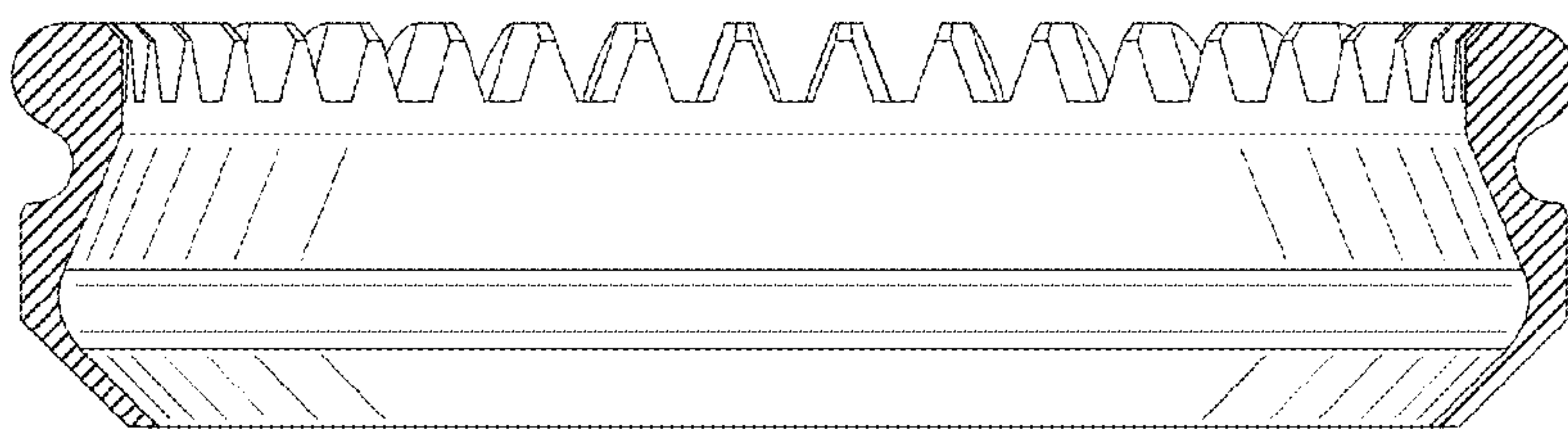


FIG. 9

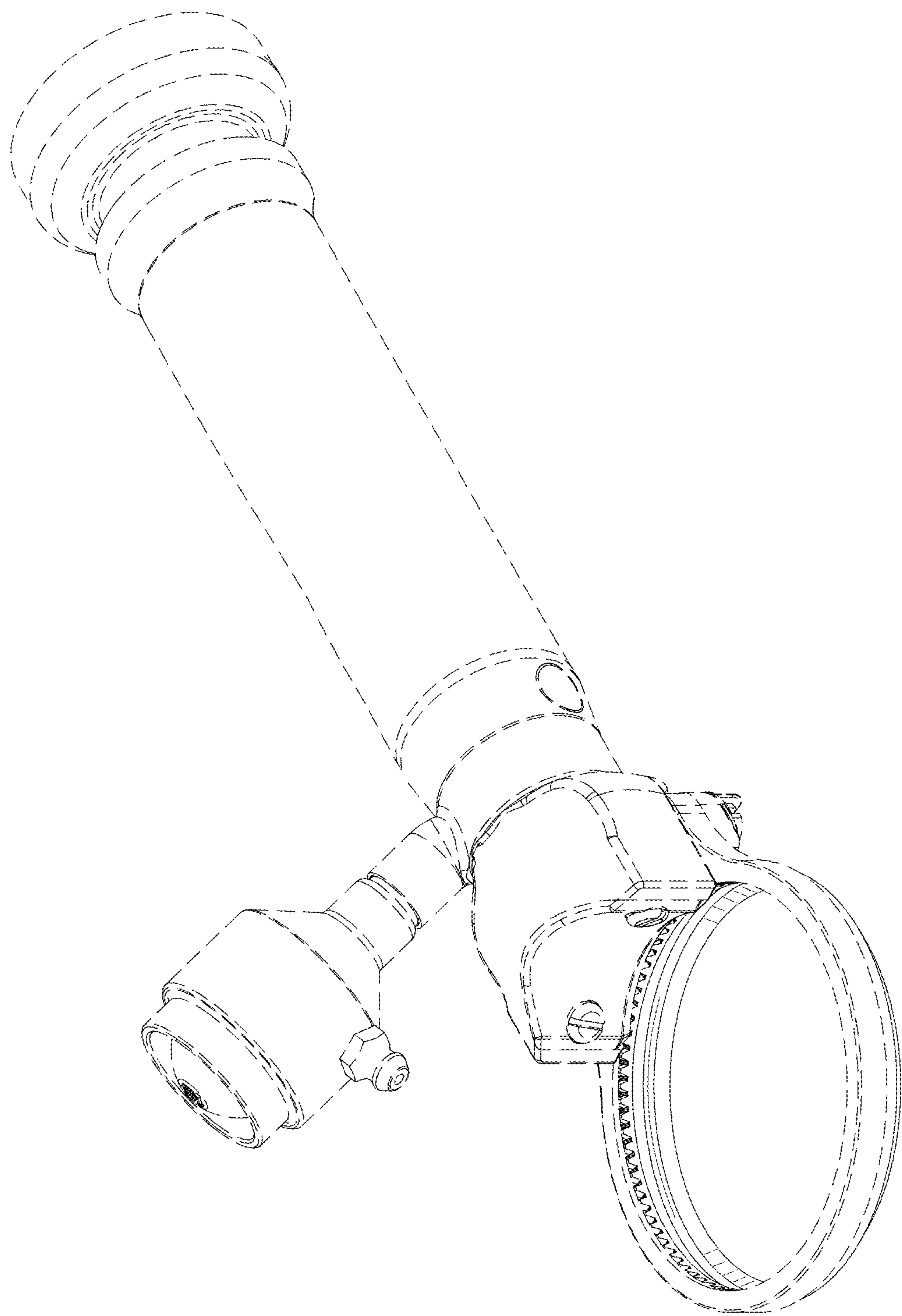


FIG. 10

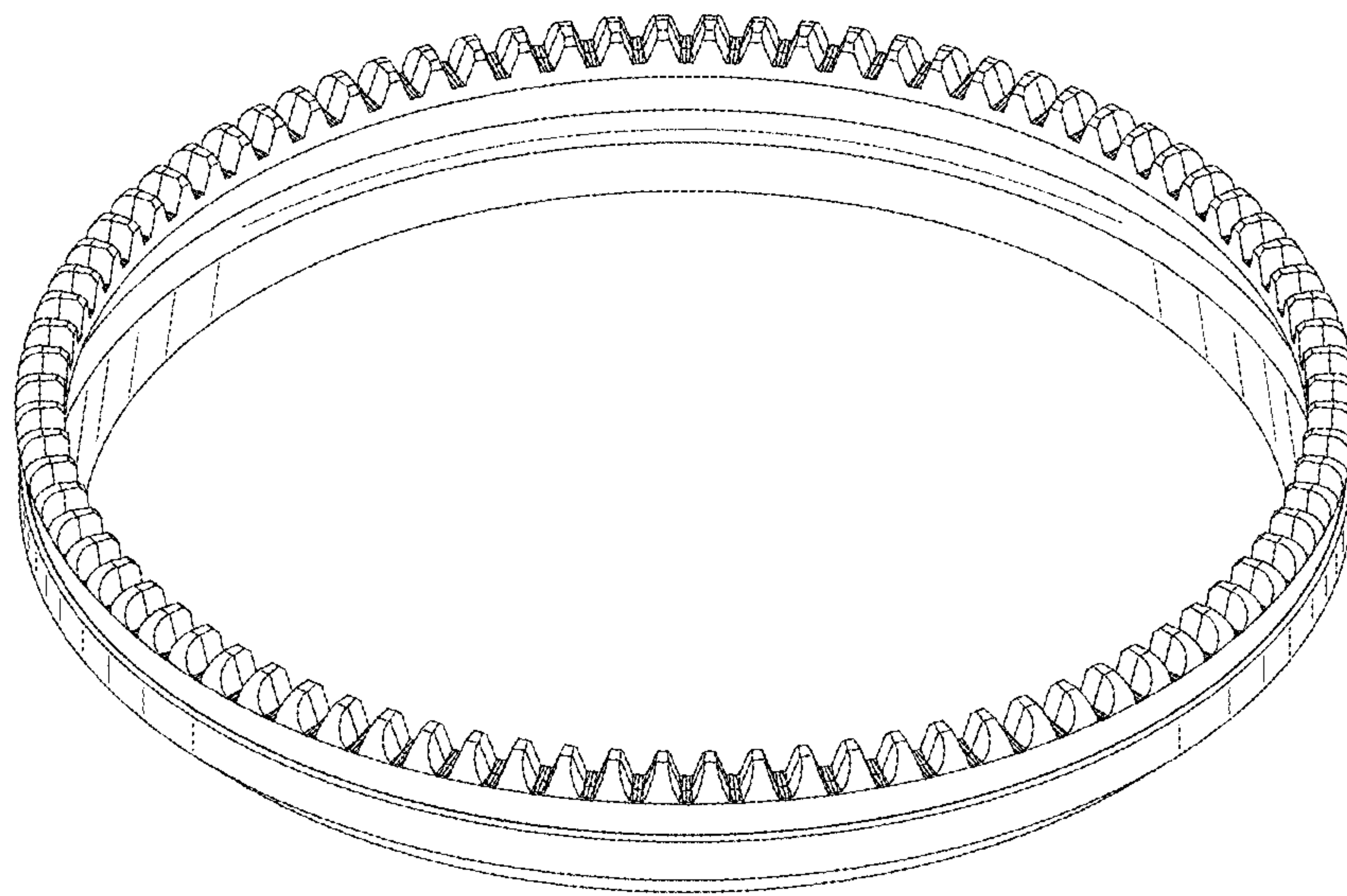


FIG. 11

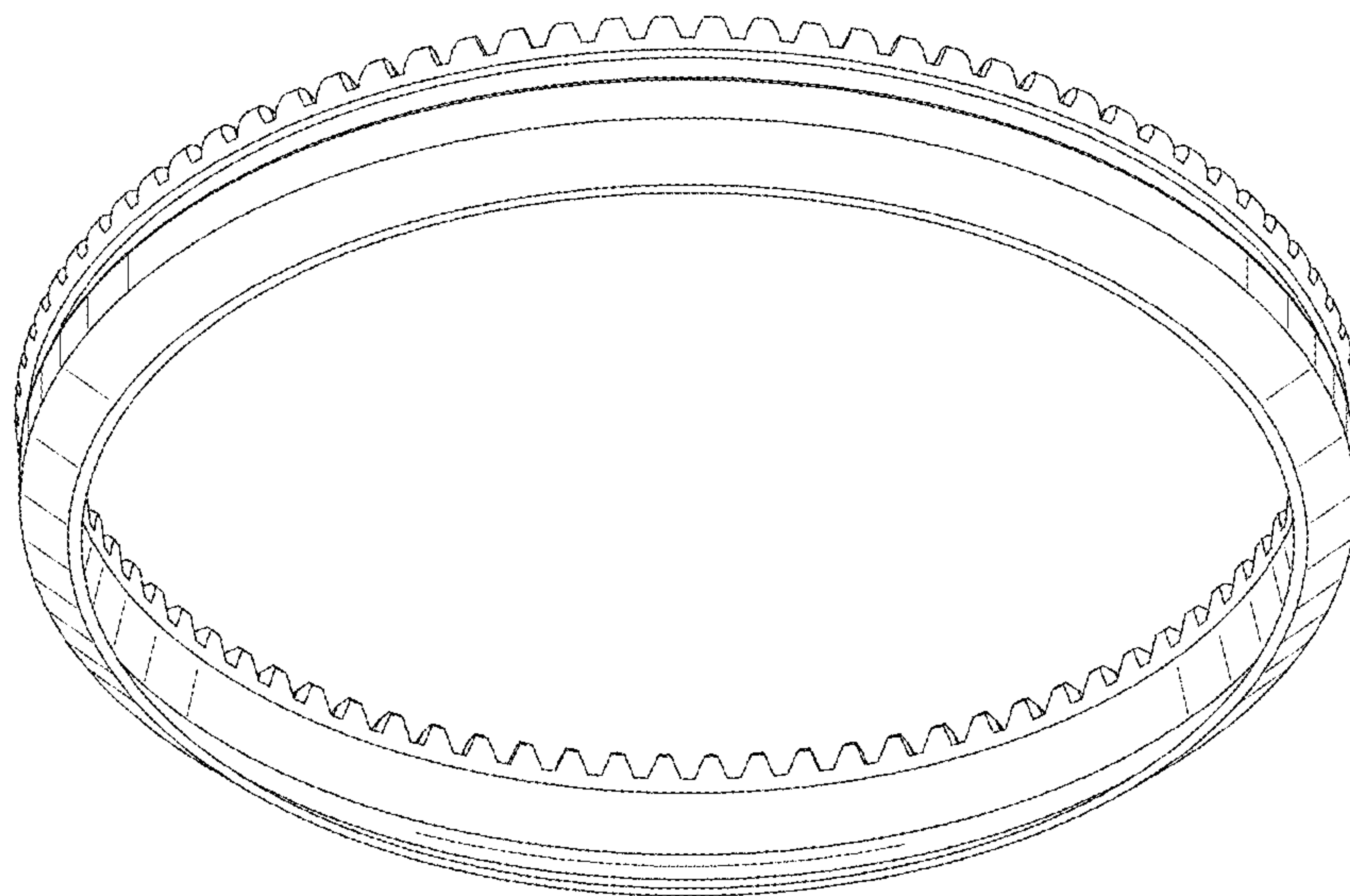


FIG. 12

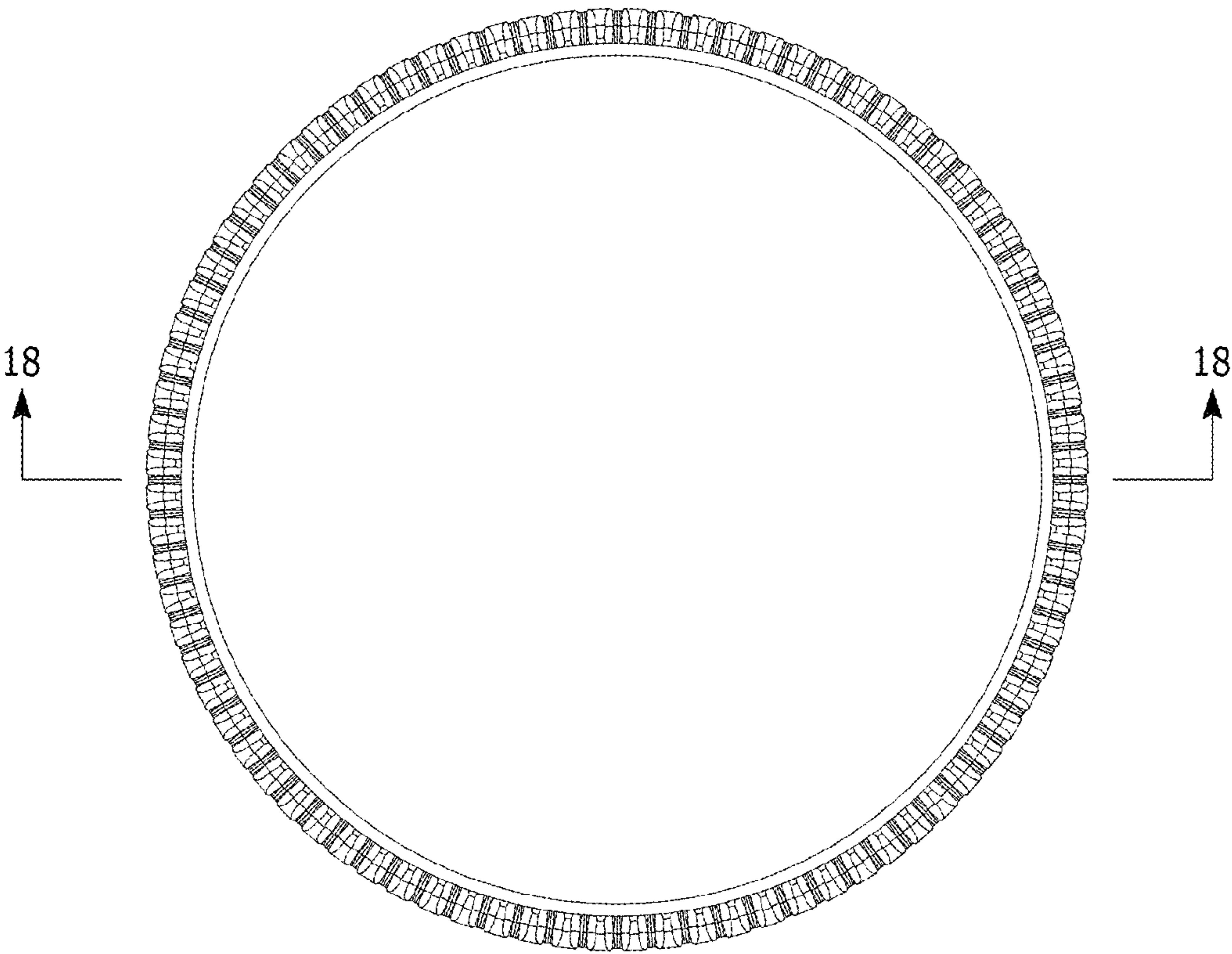


FIG. 13

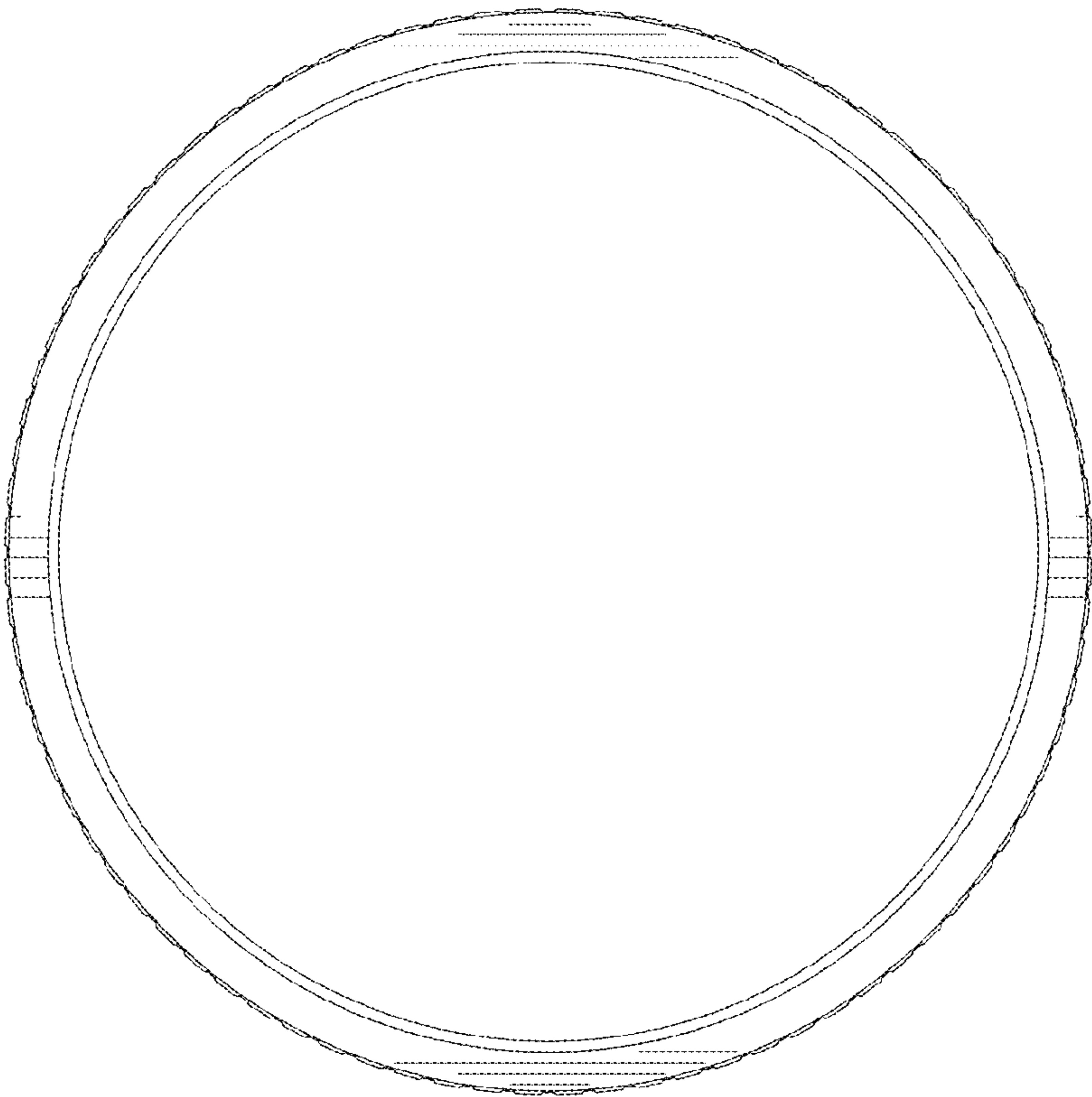


FIG. 14

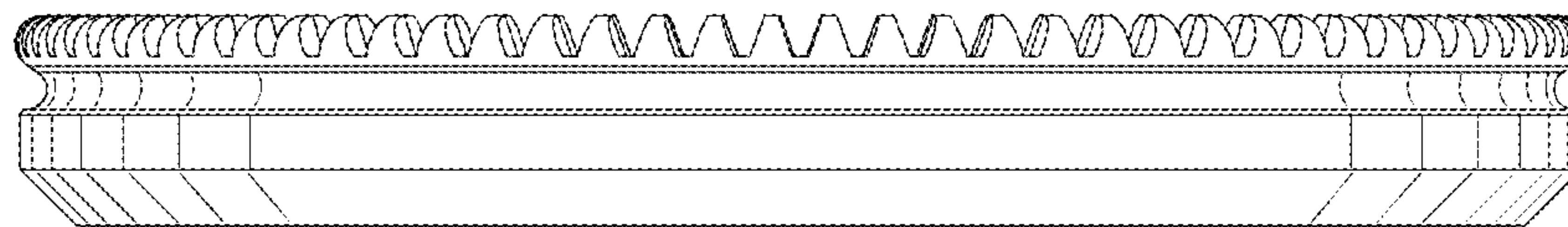


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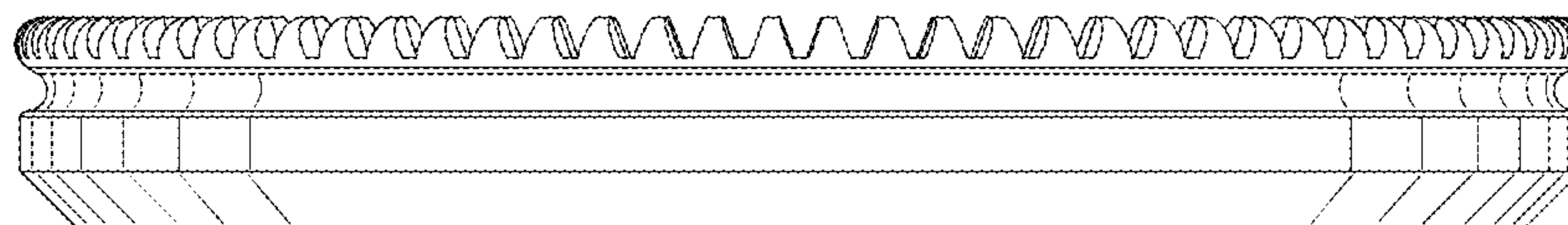


FIG. 16

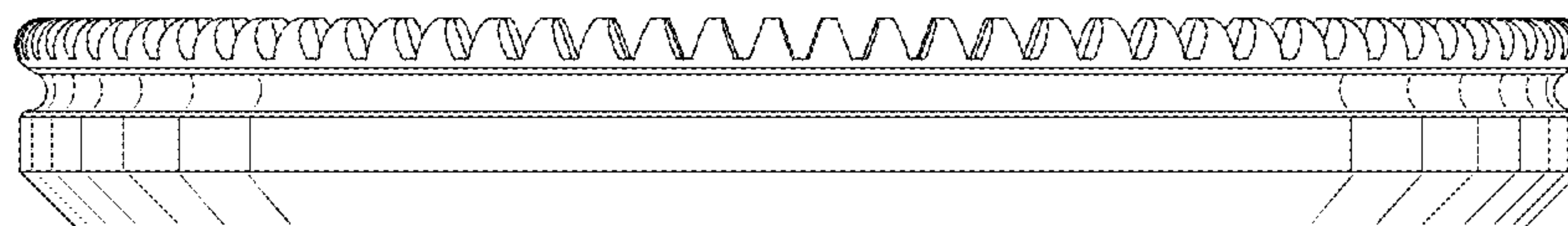


FIG. 17

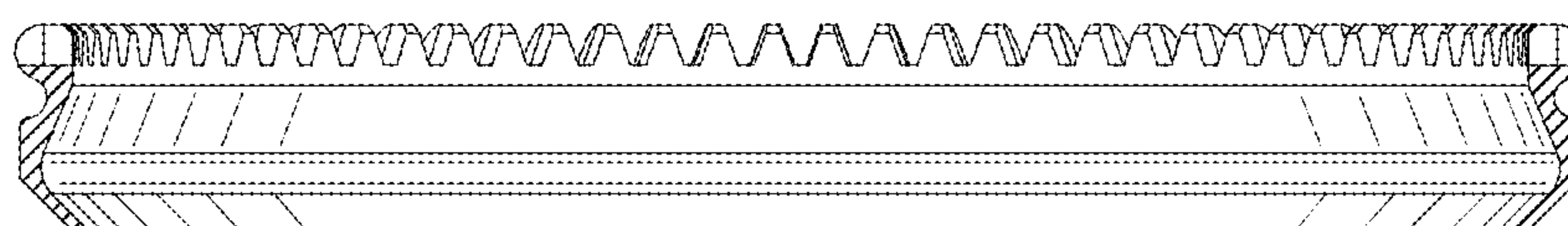


FIG. 18

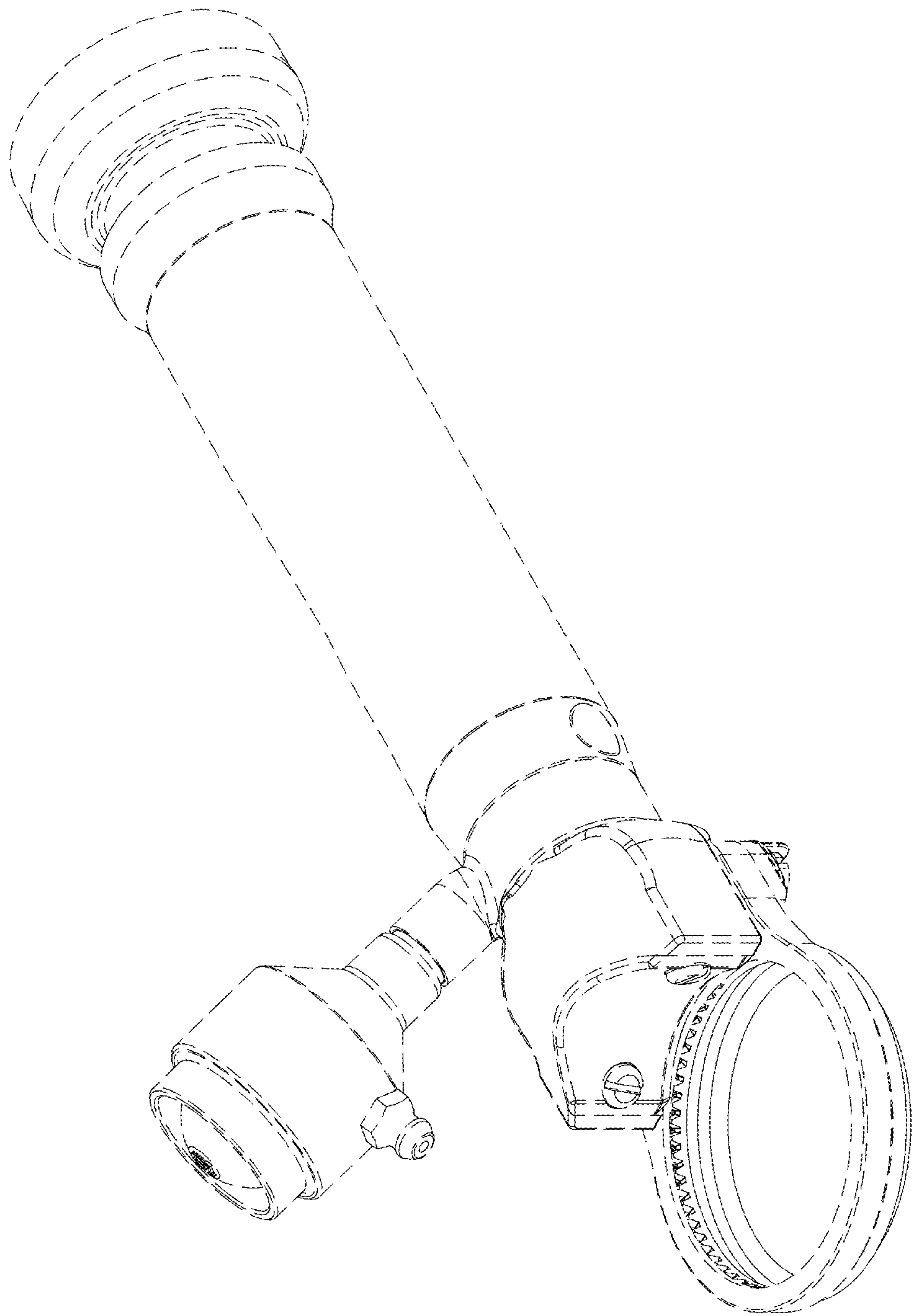


FIG. 19

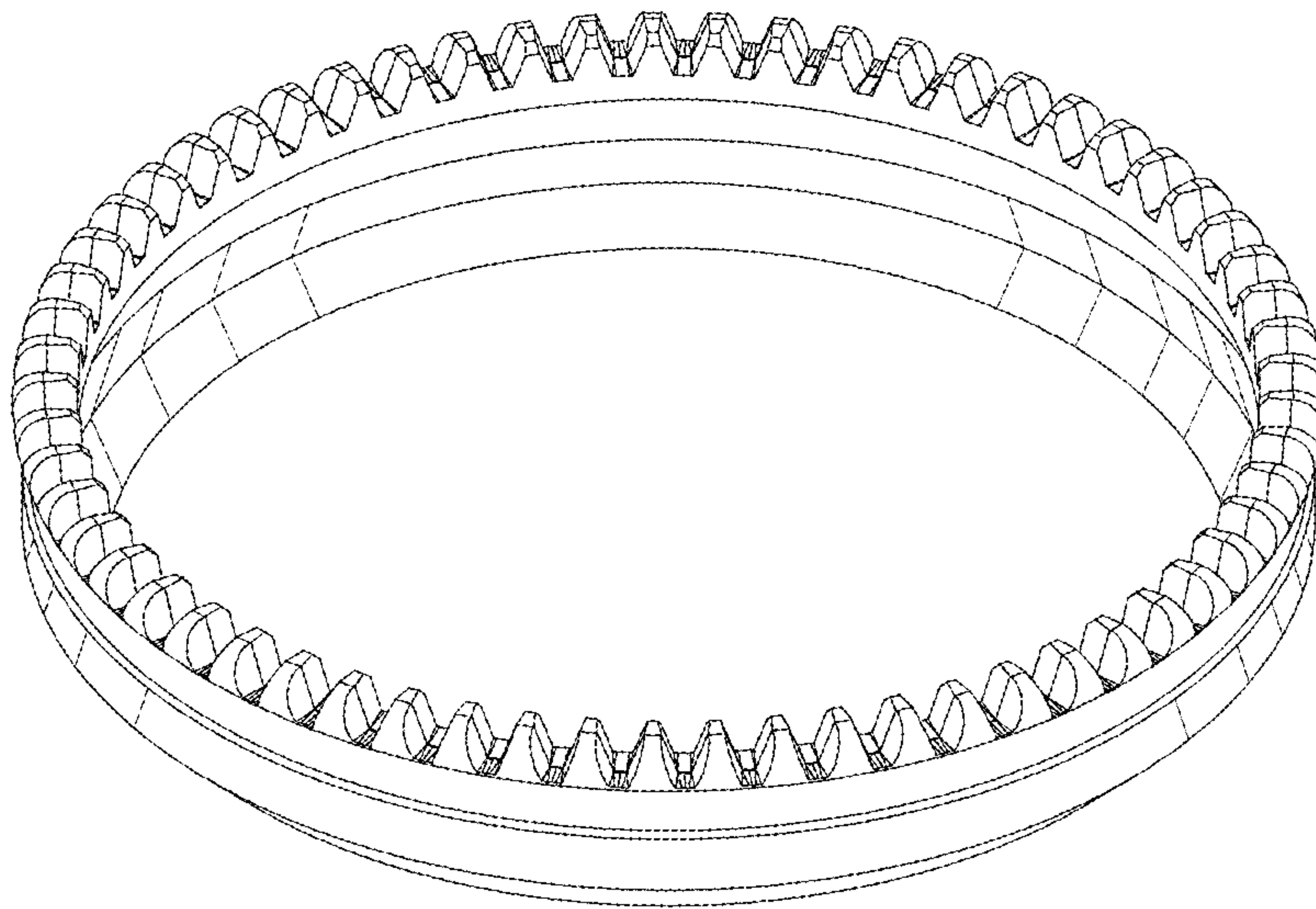


FIG. 20

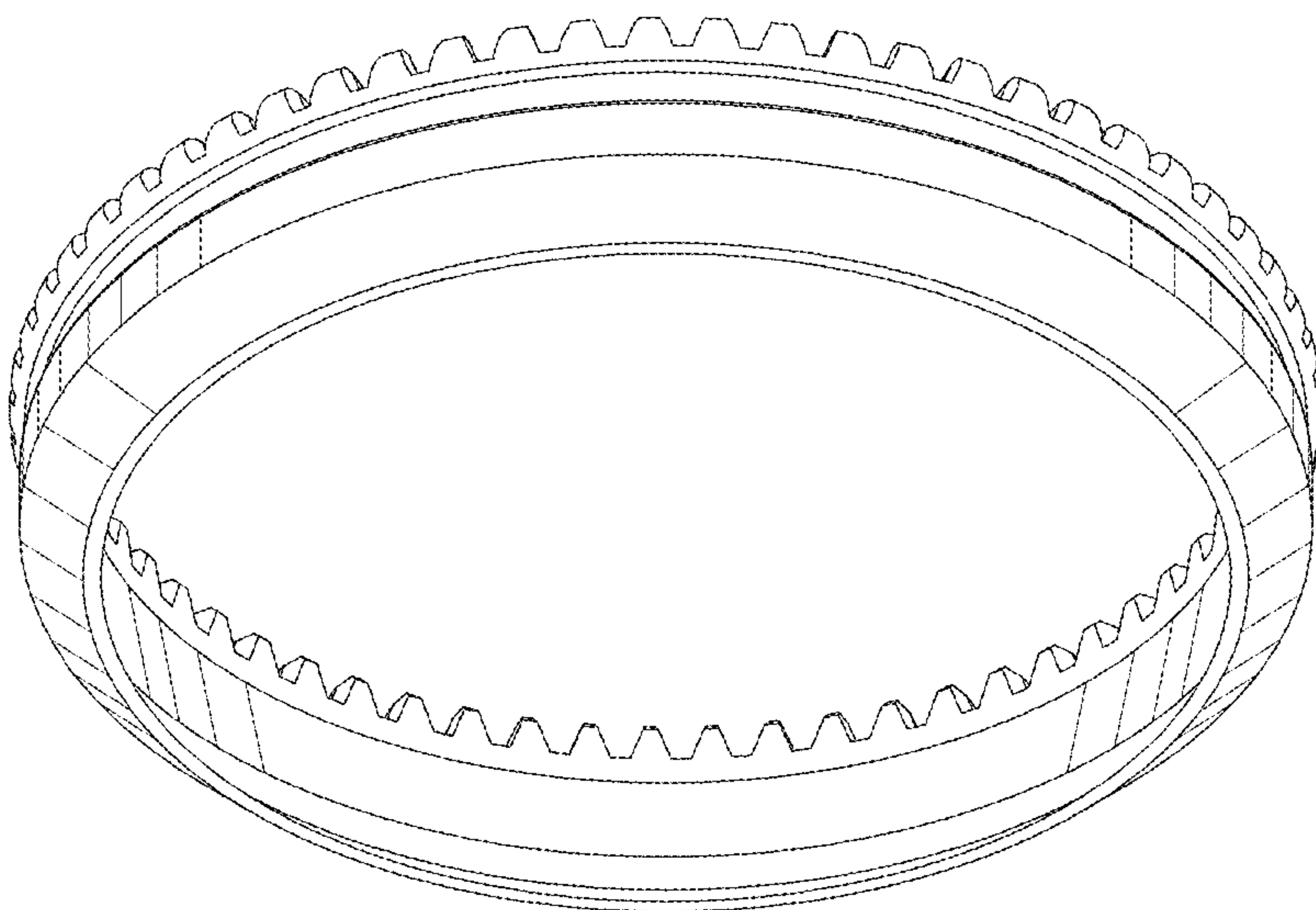


FIG. 21

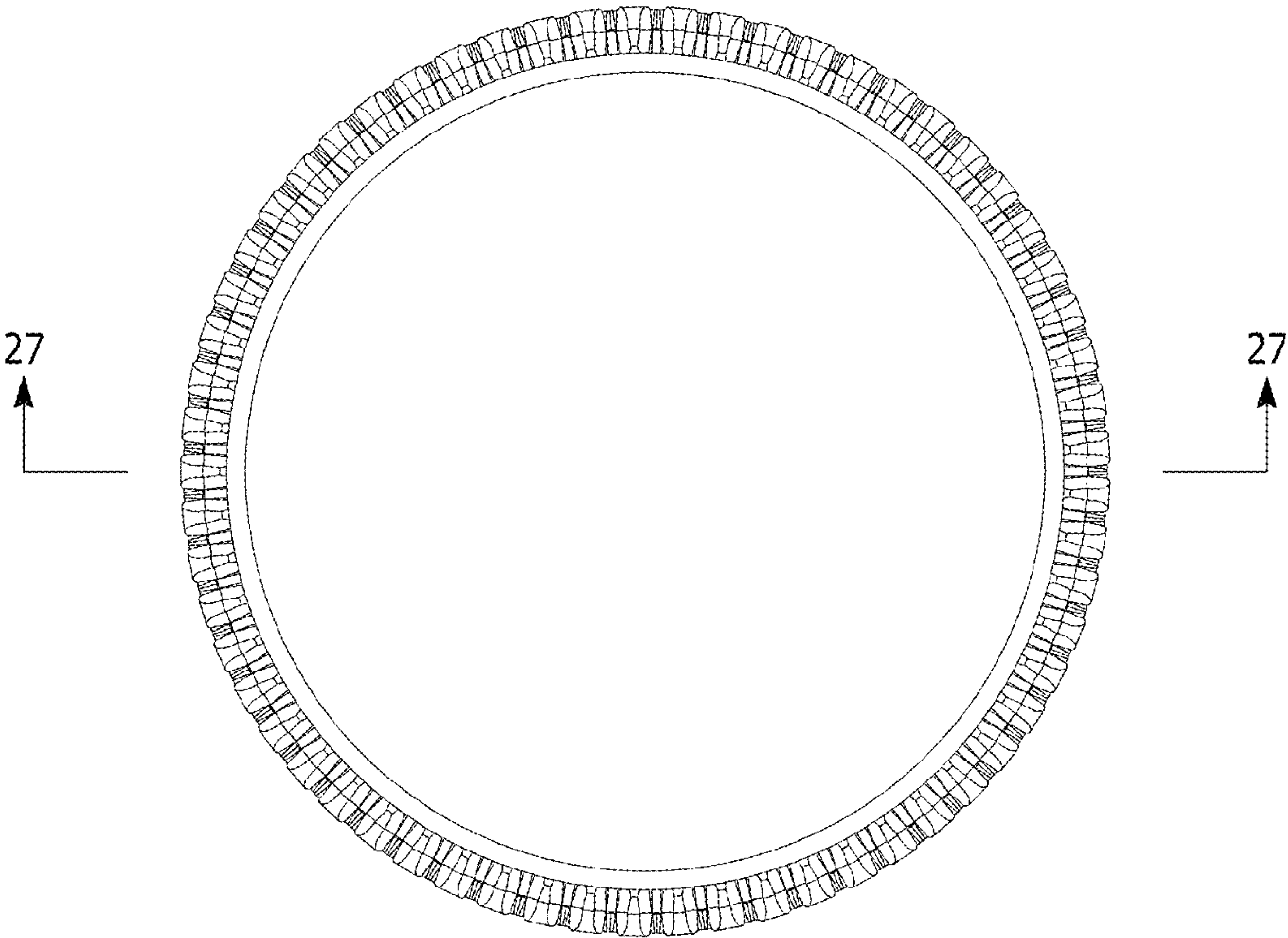


FIG. 22

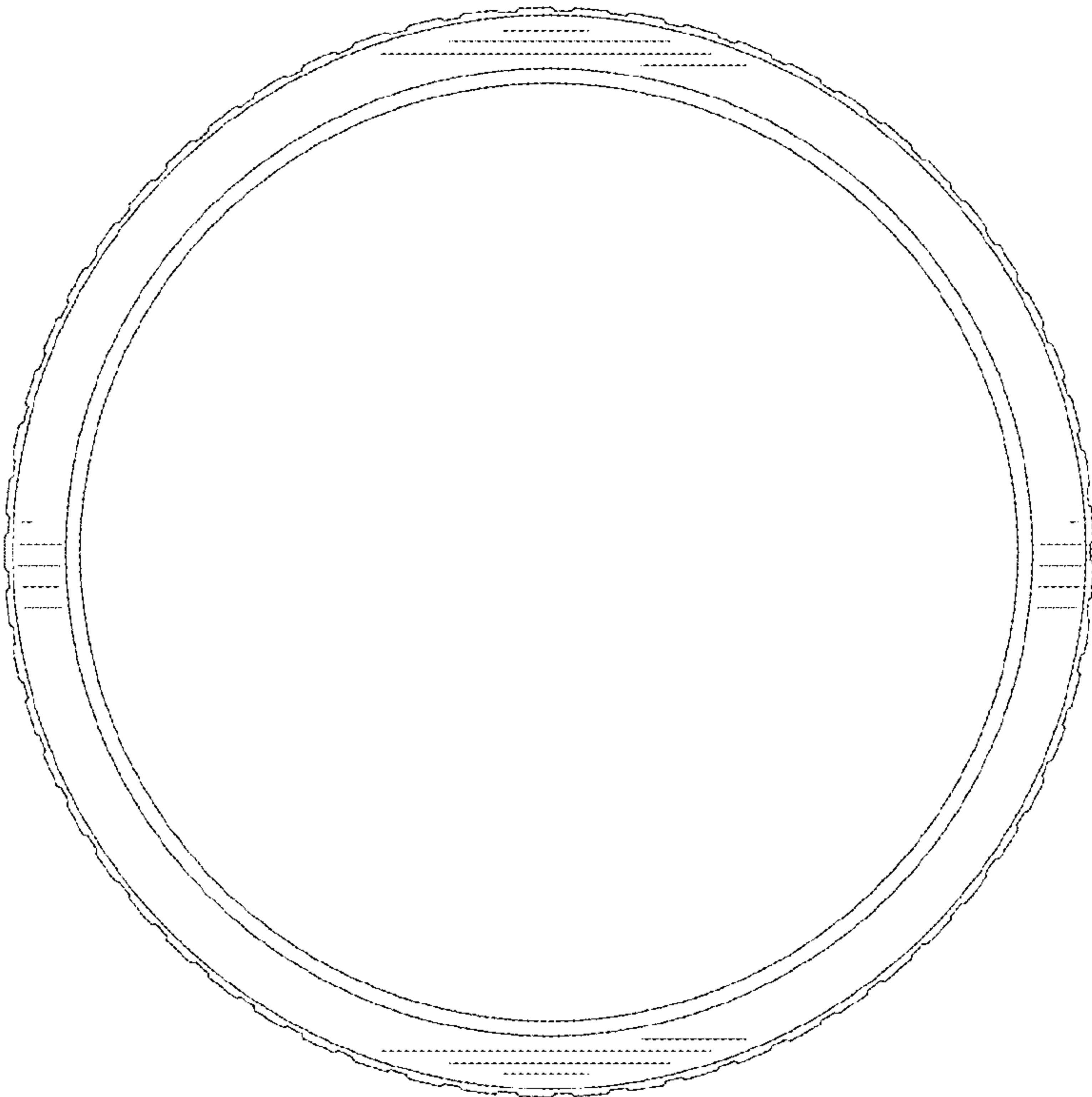


FIG. 23

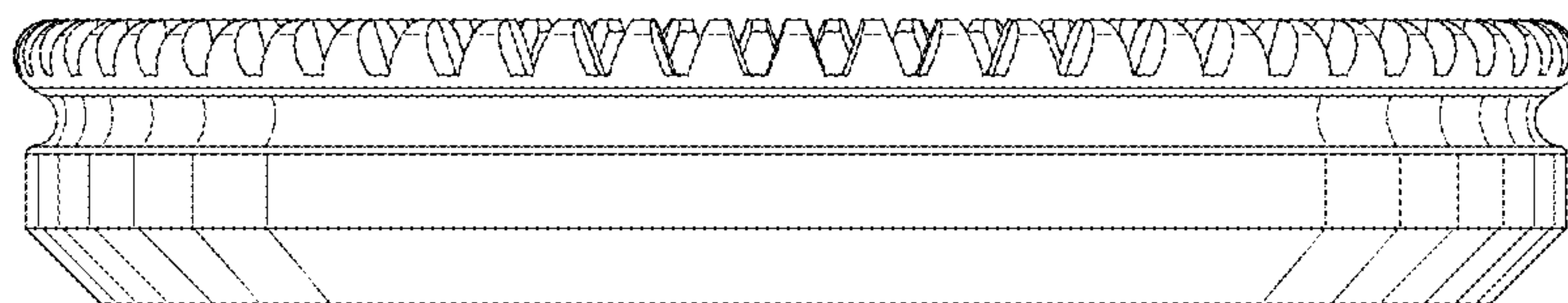


FIG. 24

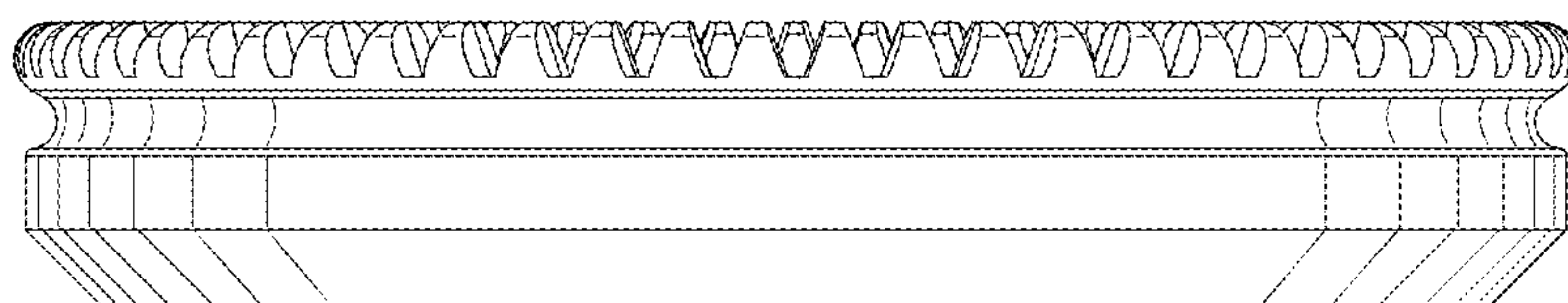


FIG. 25

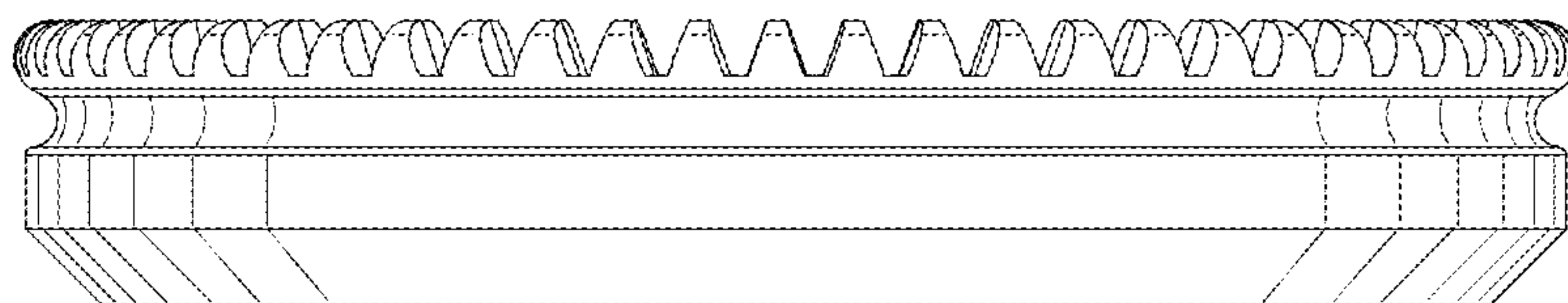


FIG. 26

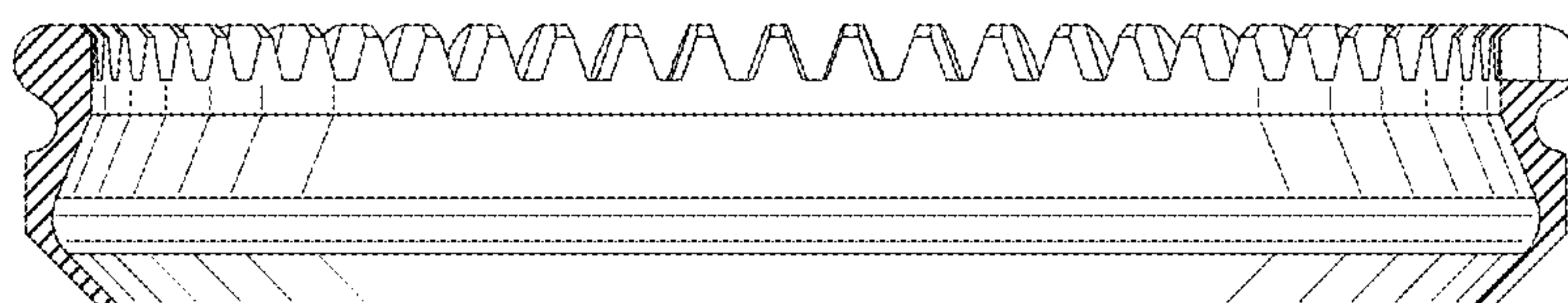


FIG. 27

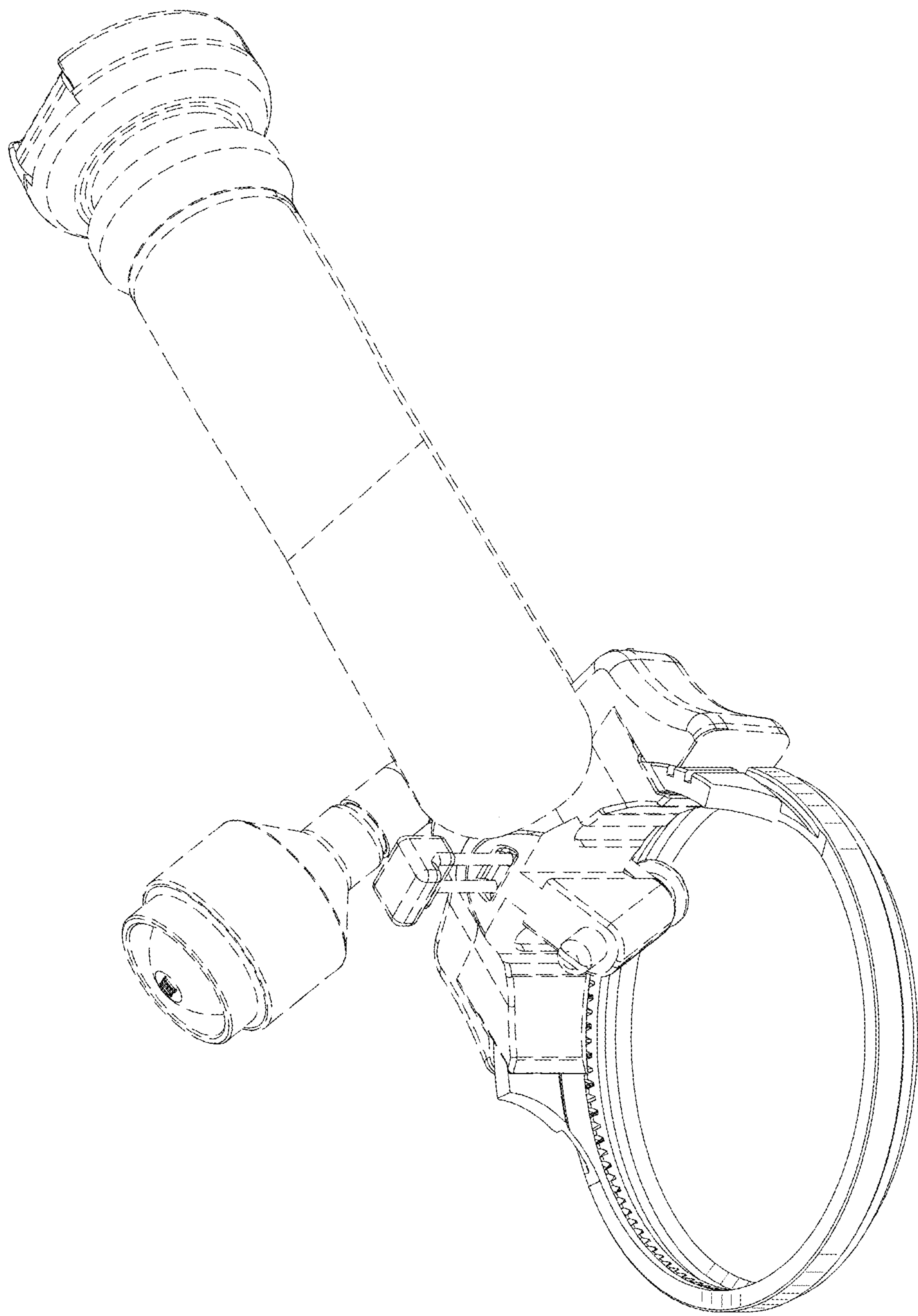


FIG. 28

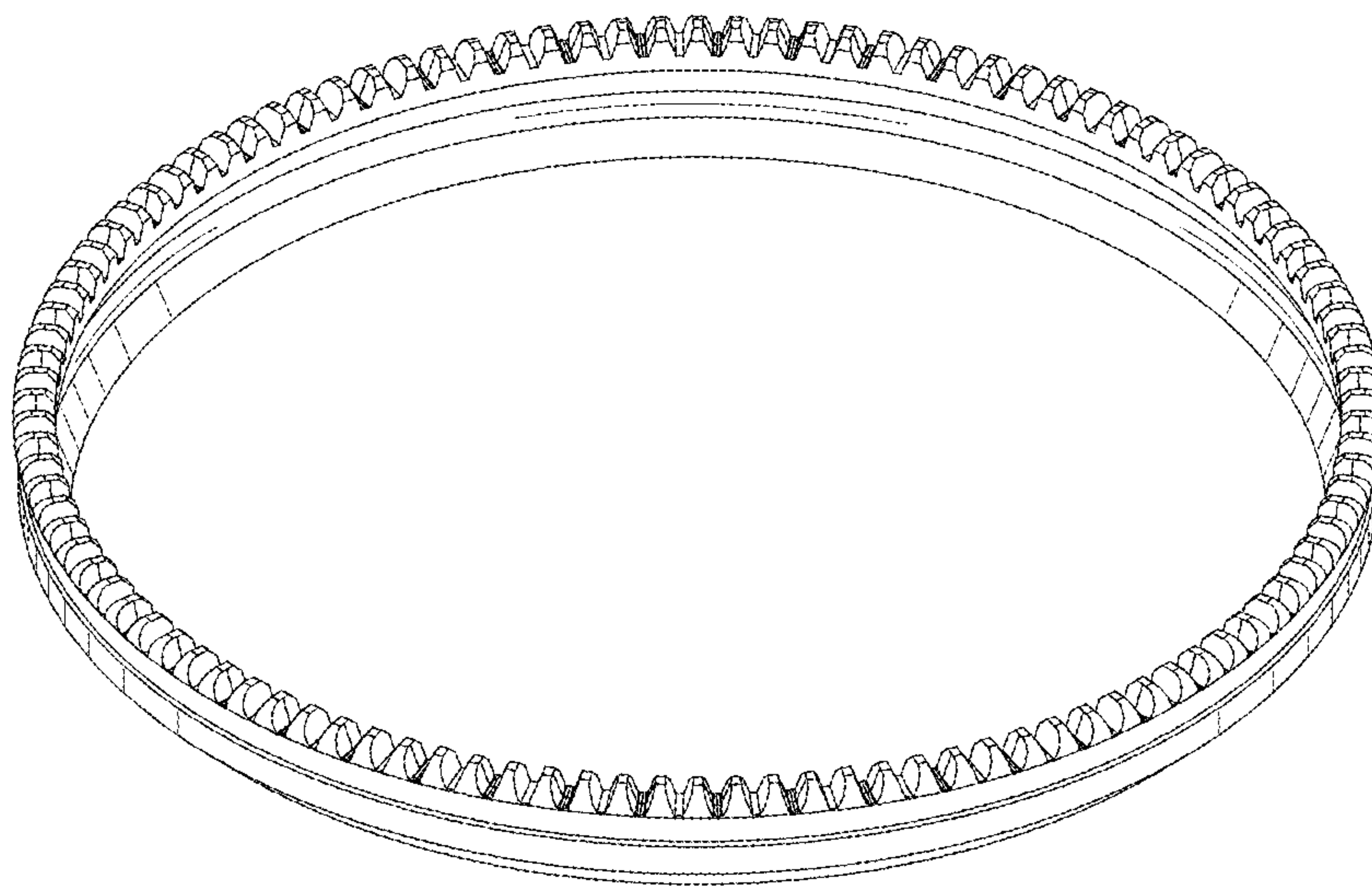


FIG. 29

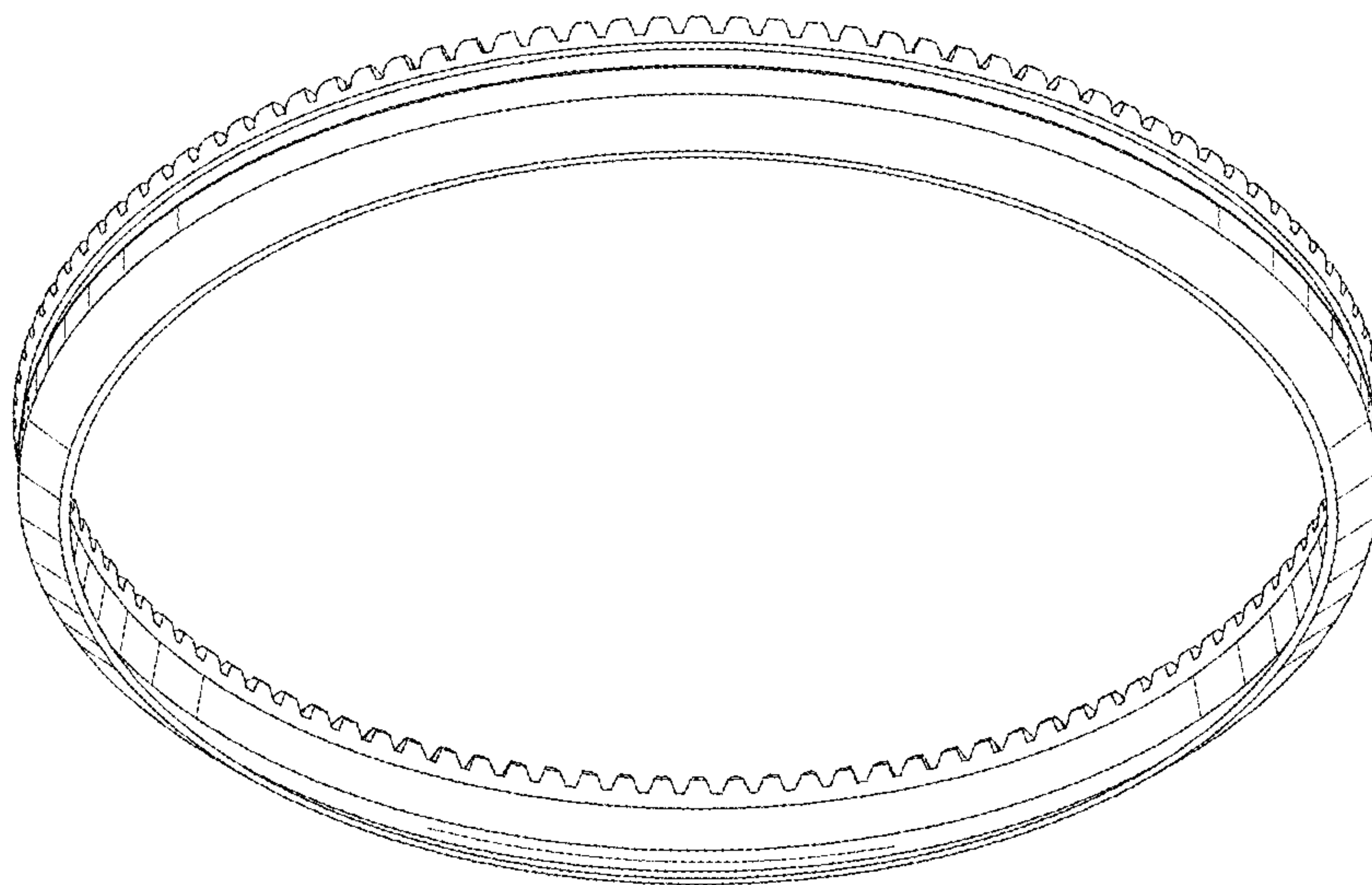


FIG. 30

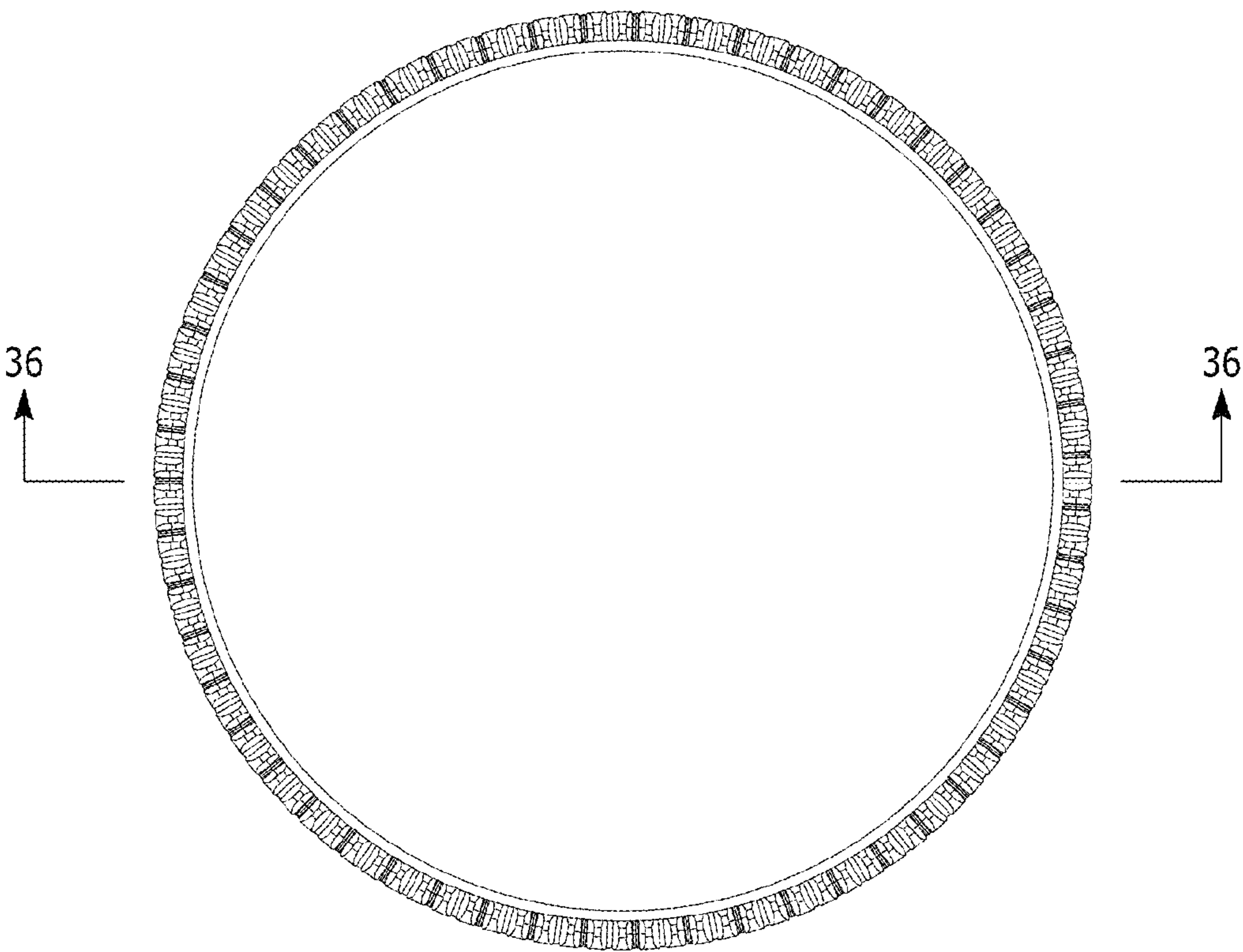


FIG. 31

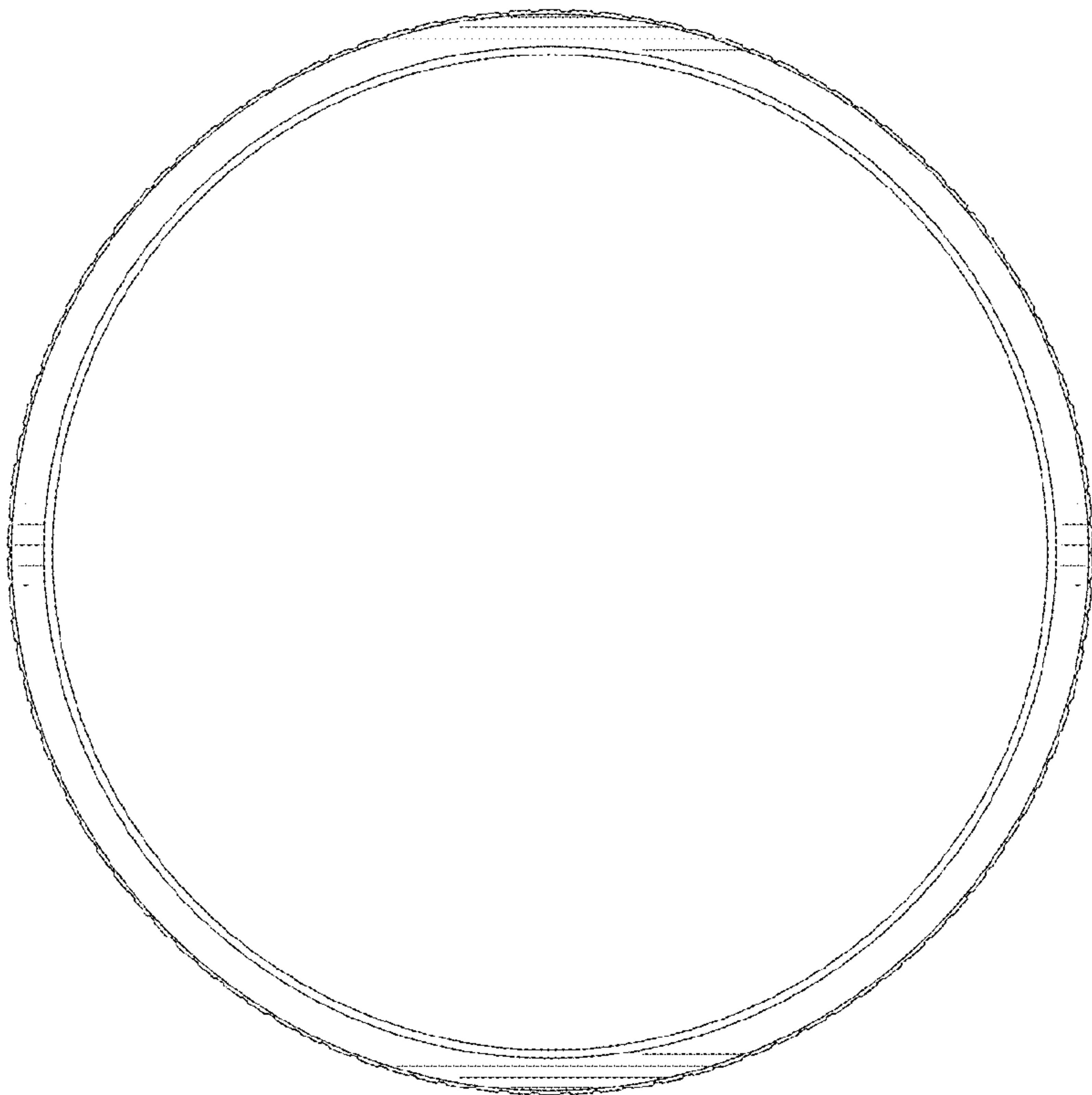


FIG. 32

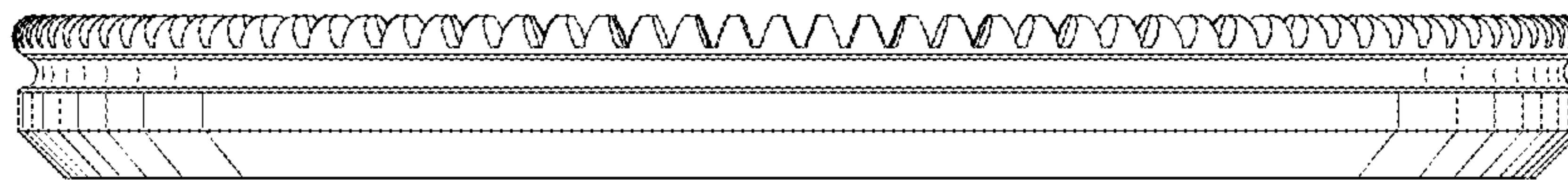


FIG. 33

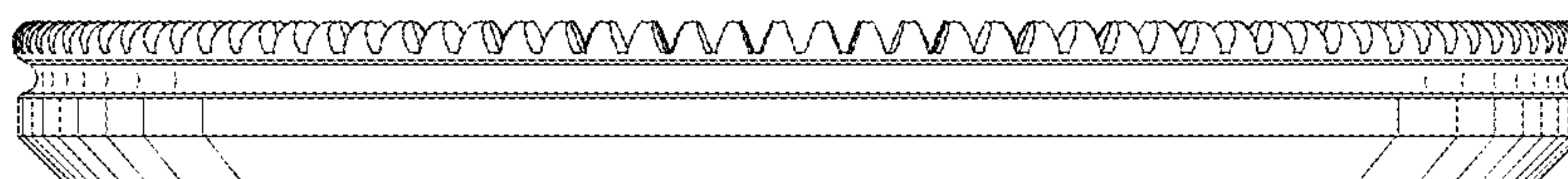


FIG. 34

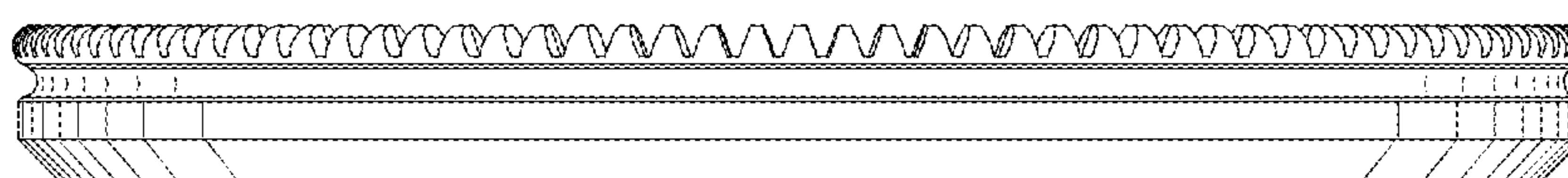


FIG. 35

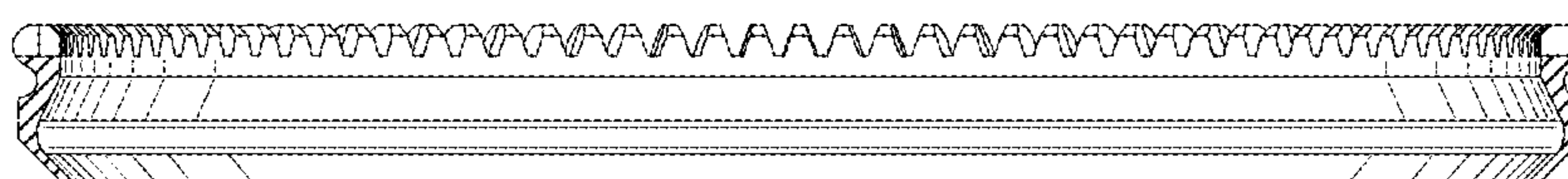


FIG. 36