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(12) **United States Design Patent** (10) **Patent No.:** **US D871,608 S**
Okuda et al. (45) **Date of Patent:** **** Dec. 31, 2019**

(54) **GAS RING FOR A PLASMA PROCESSING APPARATUS**

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

(21) Appl. No.: **29/635,289**

(22) Filed: **Jan. 30, 2018**

(30) **Foreign Application Priority Data**

Jul. 31, 2017 (JP) 2017-016497

(51) **LOC (12) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/224**

(58) **Field of Classification Search**
USPC ... D24/107, 110.6, 113, 129, 144, 206, 224,
D24/193, 197, 216; D23/200, 213-215,

(Continued)

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(57) **CLAIM**

The ornamental design for a gas ring for a plasma processing apparatus, as shown and described.

DESCRIPTION

This application contains subject matter related to the following co-pending U.S. design patent applications:

Application Ser. No. 29/635,287, filed herewith and entitled “Electrode Plate for a Plasma Processing Apparatus”;

Application Ser. No. 29/635,292, filed herewith and entitled “Electrode Cover for a Plasma Processing Apparatus”; and

Application Ser. No. 29/635,296, filed herewith and entitled “Electrode Plate Peripheral Ring for a Plasma Processing Apparatus”.

FIG. 1 is a front and bottom perspective view of a gas ring for a plasma processing apparatus according to the design; FIG. 2 is a front elevational view thereof;

FIG. 3 is a left side elevational view thereof;

FIG. 4 is a right side elevational view thereof;

FIG. 5 is a top plan view thereof;

FIG. 6 is a bottom plan view thereof;

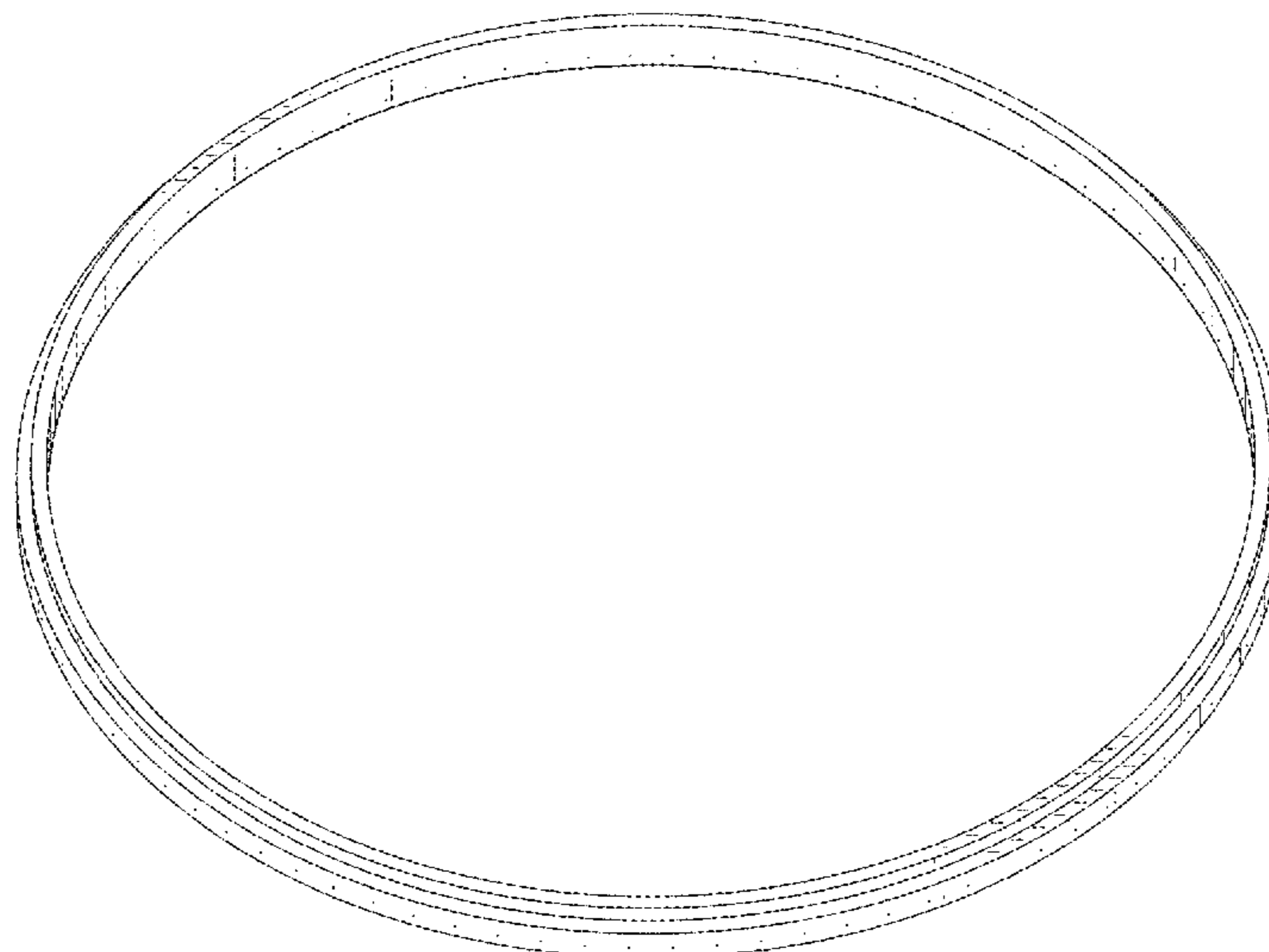
FIG. 7 is a rear elevational view thereof;

FIG. 8 is a cross-sectional view taken along line 8-8 of FIG. 2; and,

FIG. 9 is an enlarged view of the portion shown in BOX 9 in FIG. 8.

The broken lines in FIG. 8 show the boundary of the enlarged portion illustrated in FIG. 9 and form no part of the claimed design.

1 Claim, 5 Drawing Sheets



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(58) **Field of Classification Search**

USPC D23/222, 223, 229, 283, 269; D15/140,
D15/17, 126, 138, 199; D13/182;
D12/212; D8/66, 358, 375
CPC H01J 37/32082; H01J 37/32541; H01L
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See application file for complete search history.

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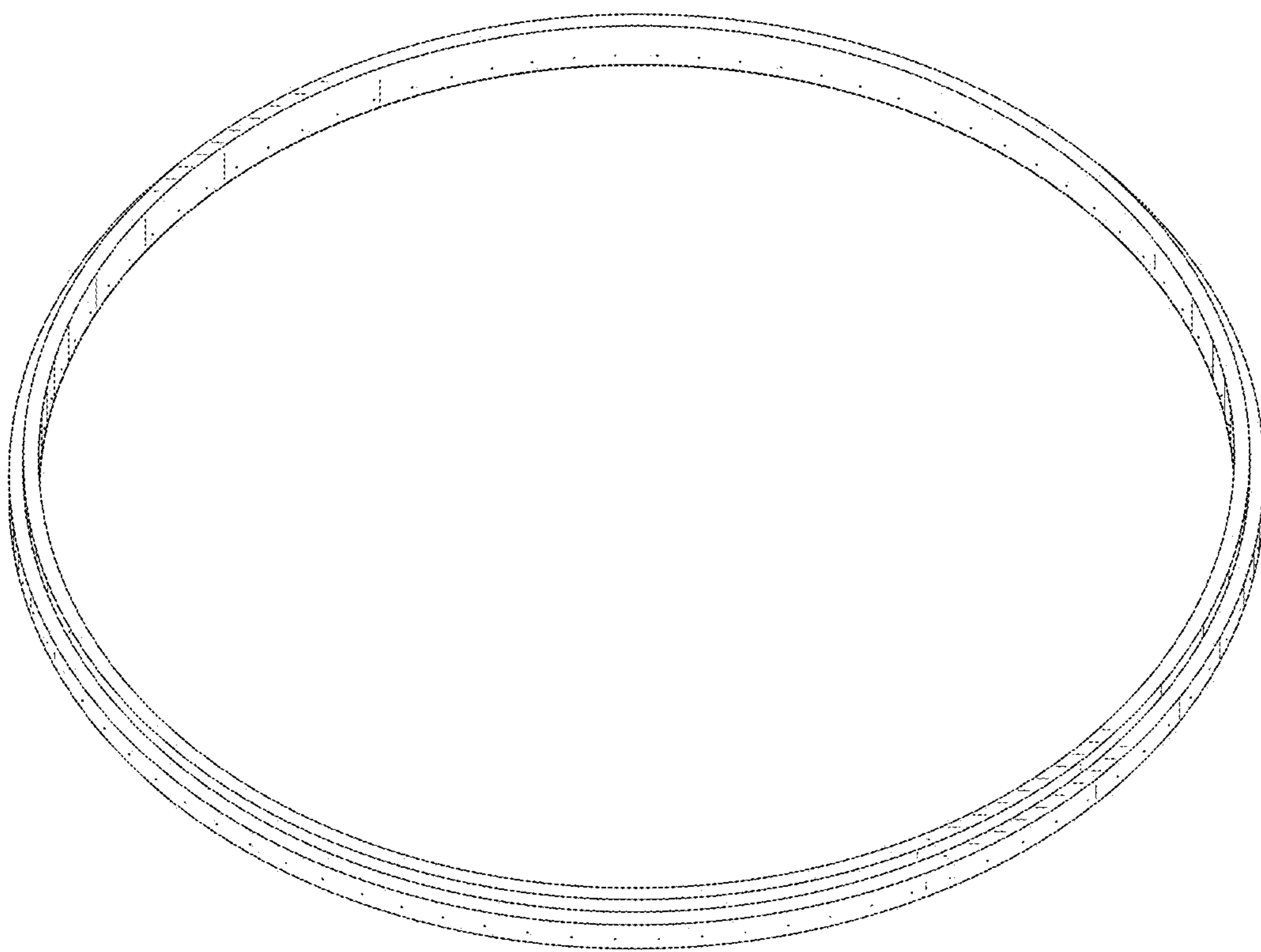


FIG. 1

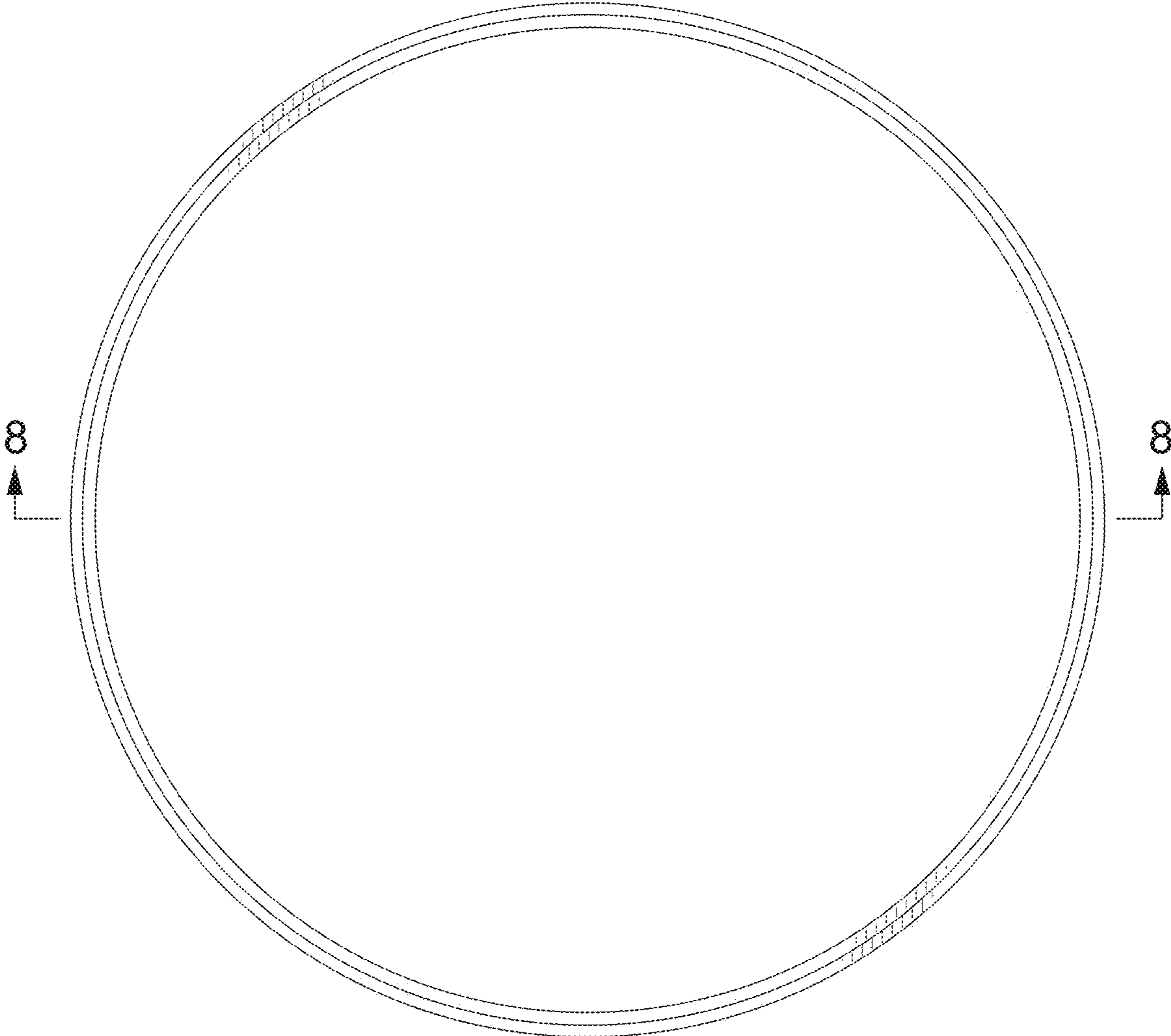


FIG. 2

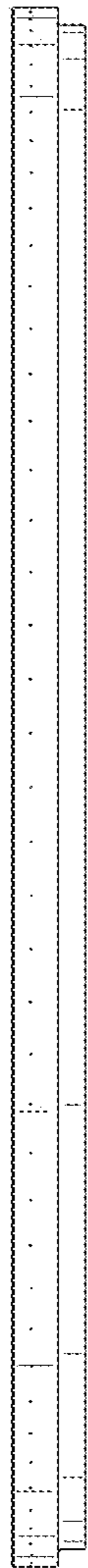


FIG. 3

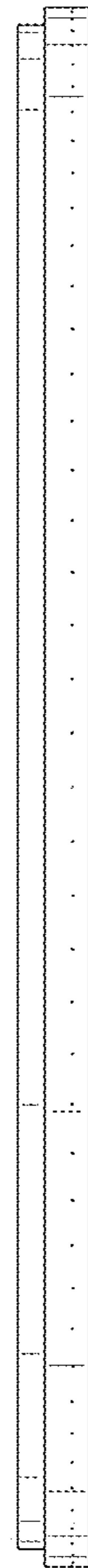


FIG. 4

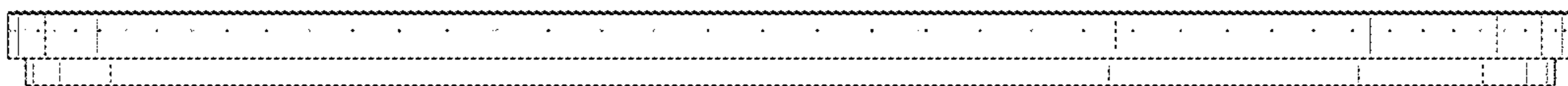


FIG. 5



FIG. 6

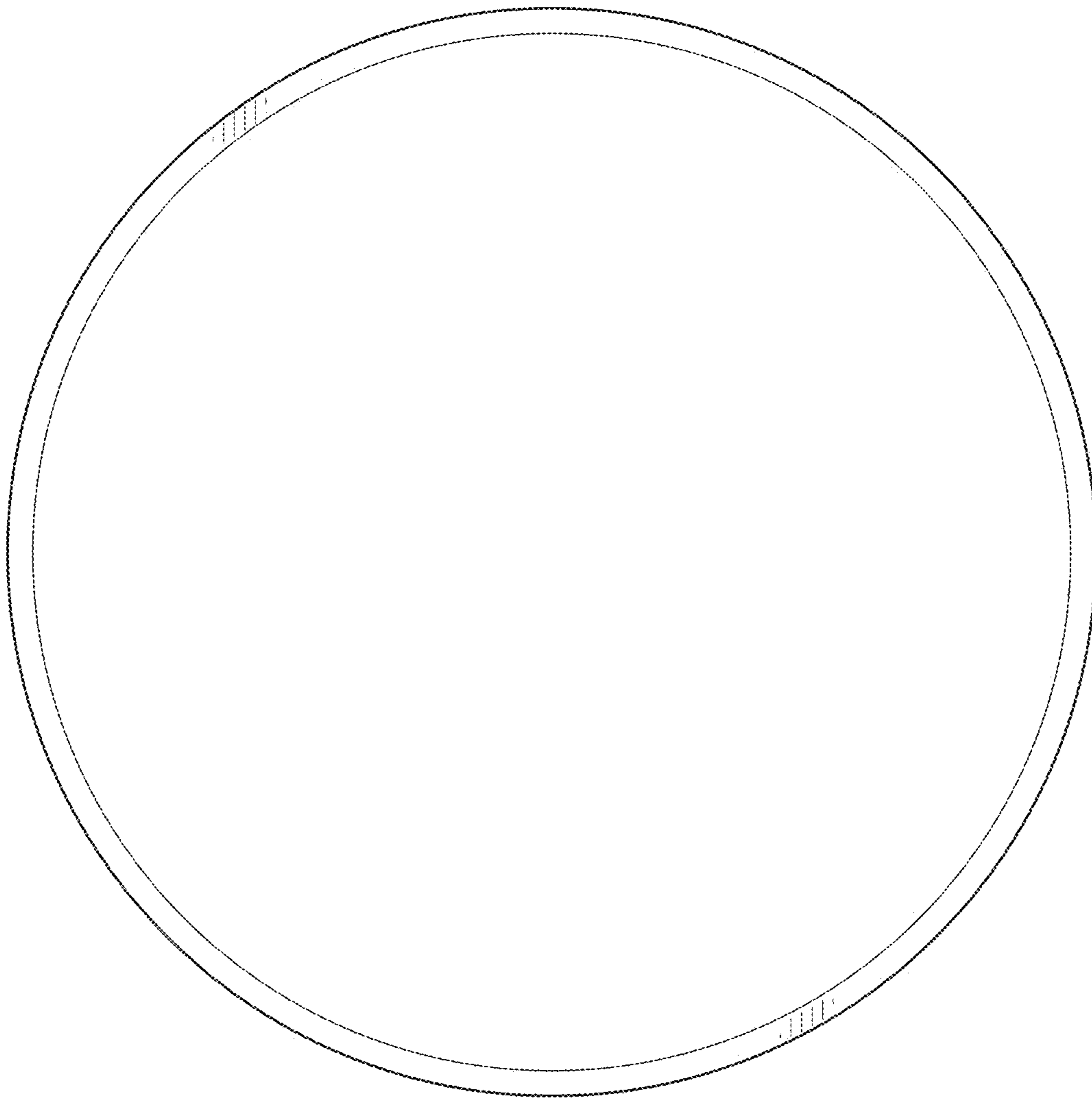


FIG. 7

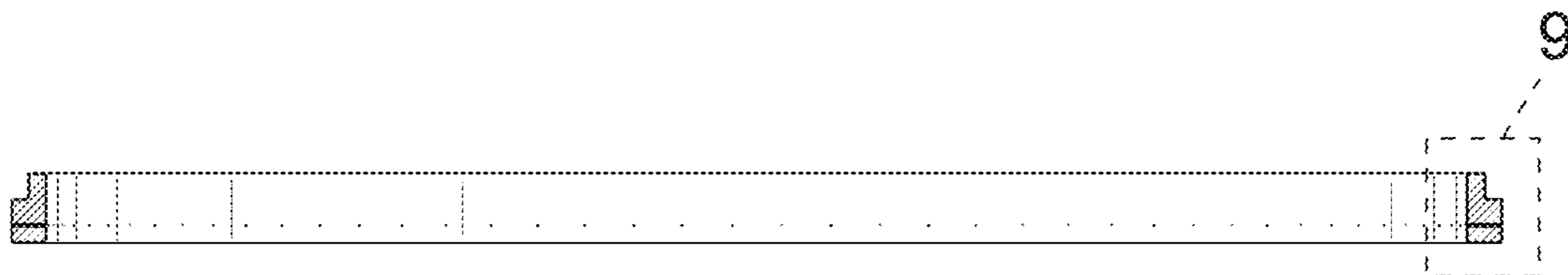


FIG. 8

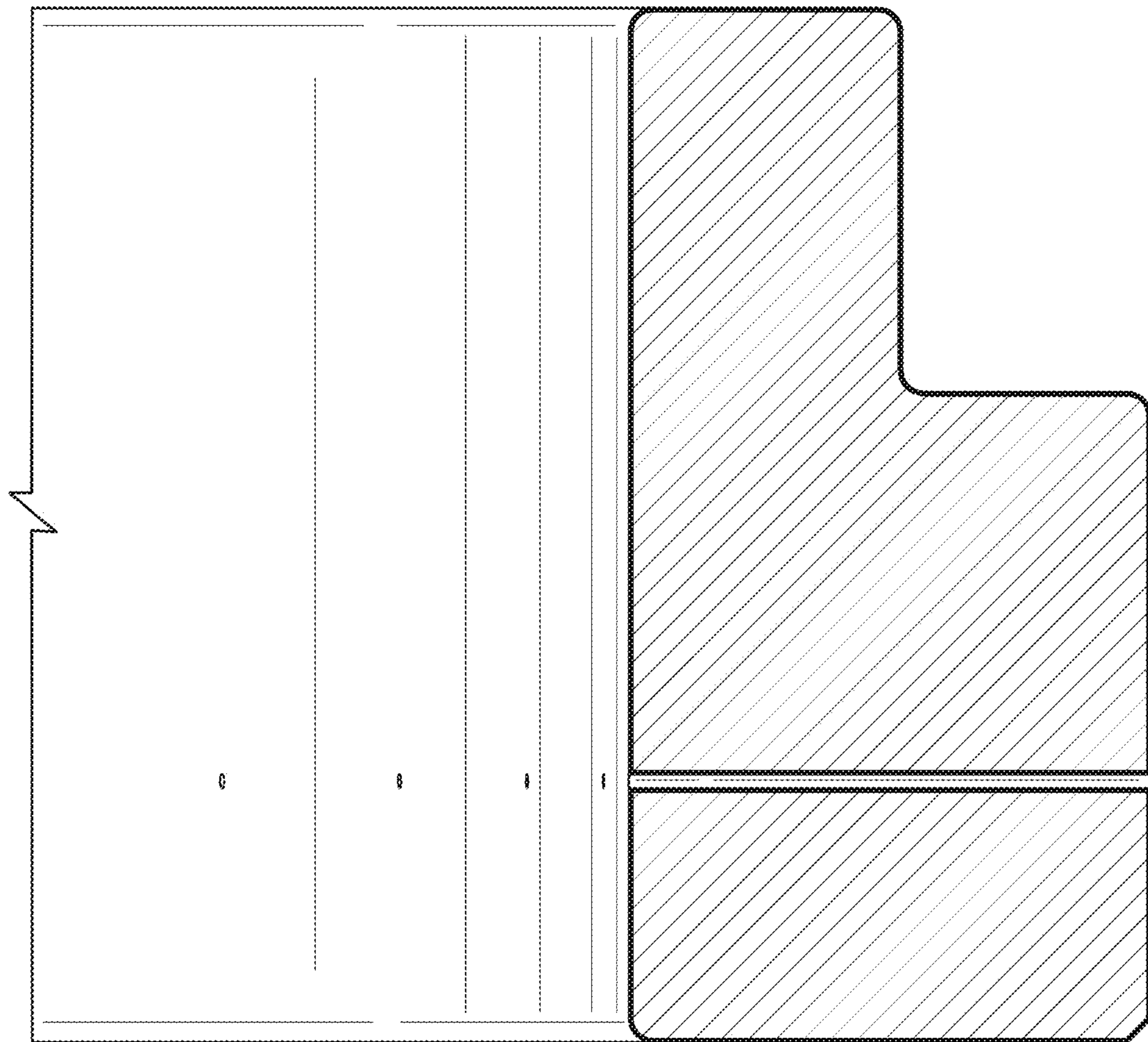


FIG. 9