



US00D404015S

United States Patent [19]

[11] **Patent Number: Des. 404,015**

Honma

[45] **Date of Patent: **Jan. 12, 1999**

[54] **WAFER BOAT FOR USE IN A SEMICONDUCTOR WAFER HEAT PROCESSING APPARATUS**

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5,174,045	12/1992	Thompson et al.	414/935 X
5,314,574	5/1994	Takahashi	414/935 X
5,320,218	6/1994	Yamashita et al.	414/935 X

[75] Inventor: **Manabu Honma**, Kanagawa, Japan

[73] Assignee: **Tokyo Electron Ltd.**, Tokyo-To, Japan

[**] Term: **14 Years**

Primary Examiner—Brian N. Vinson
Attorney, Agent, or Firm—Ladas & Parry

[21] Appl. No.: **74,281**

[22] Filed: **Jul. 24, 1997**

[57] CLAIM

The ornamental design for wafer boat for use in a semiconductor wafer heat processing apparatus, as shown and described.

[30] Foreign Application Priority Data

Jan. 31, 1997 [JP] Japan 9-2659

DESCRIPTION

[51] **LOC (6) Cl.** **13-03**

[52] **U.S. Cl.** **D13/182**

[58] **Field of Search** D13/182; D15/144,
D15/144.1, 199; 414/935-941, 217, 147;
437/247, 946; D6/407, 629

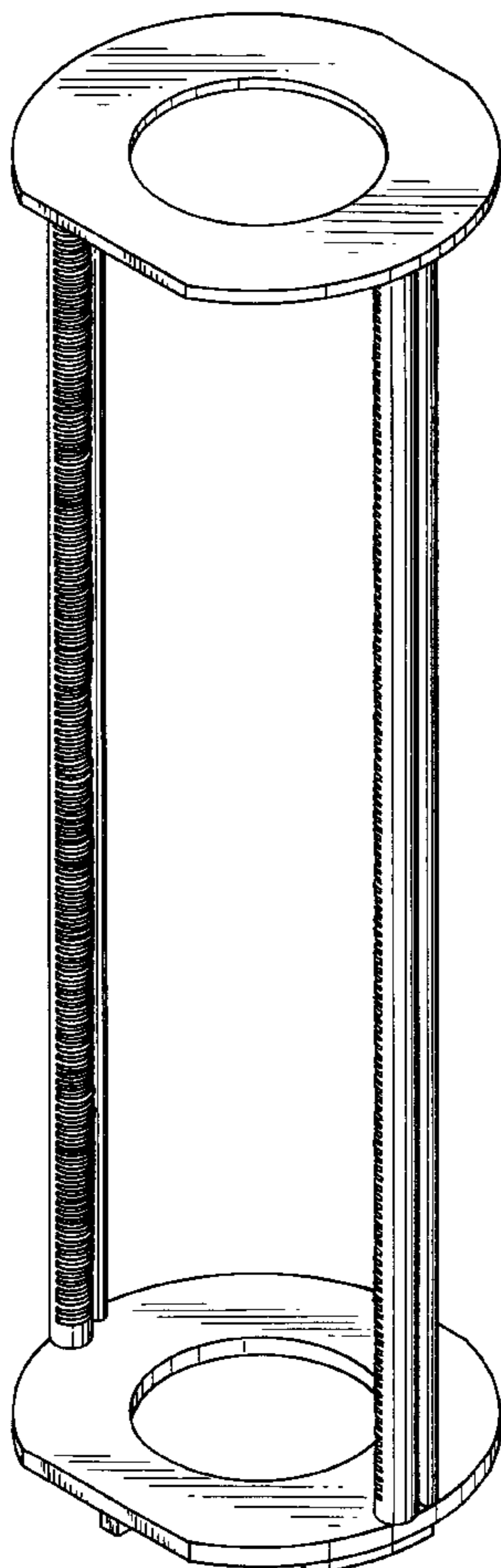
FIG. 1 a perspective view of a wafer boat for use in a semiconductor wafer heat processing apparatus;
 FIG. 2 a front elevational view thereof;
 FIG. 3 a top plan view thereof;
 FIG. 4 a bottom plan view thereof;
 FIG. 5 a cross sectional view taken along line V-V in FIG. 2;
 FIG. 6 a right side view thereof, the left side view being a mirror image of the right view;
 FIG. 7 a rear elevational view thereof; and,
 FIG. 8 a cross sectional view taken along line VIII-VIII in FIG. 2.

[56] References Cited

U.S. PATENT DOCUMENTS

D. 291,413	8/1987	Uehara et al.	D13/182 X
D. 361,752	8/1995	Yamaga	D13/182
D. 378,823	4/1997	Watanabe et al.	D13/182 X

1 Claim, 4 Drawing Sheets



F I G . 1

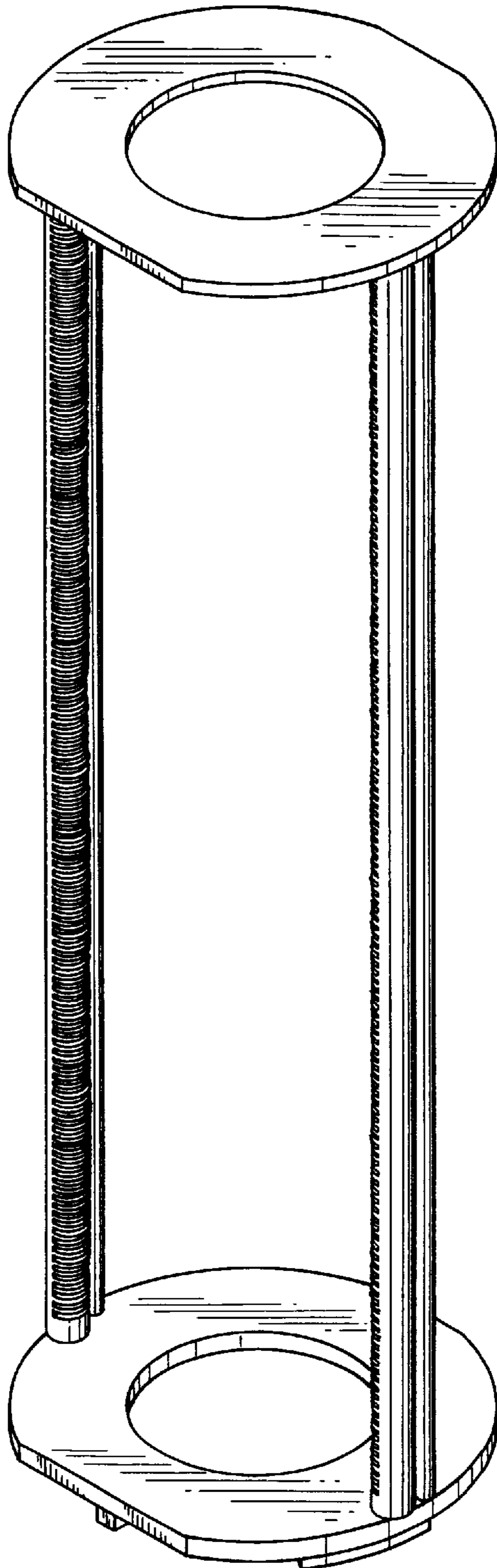


FIG. 2

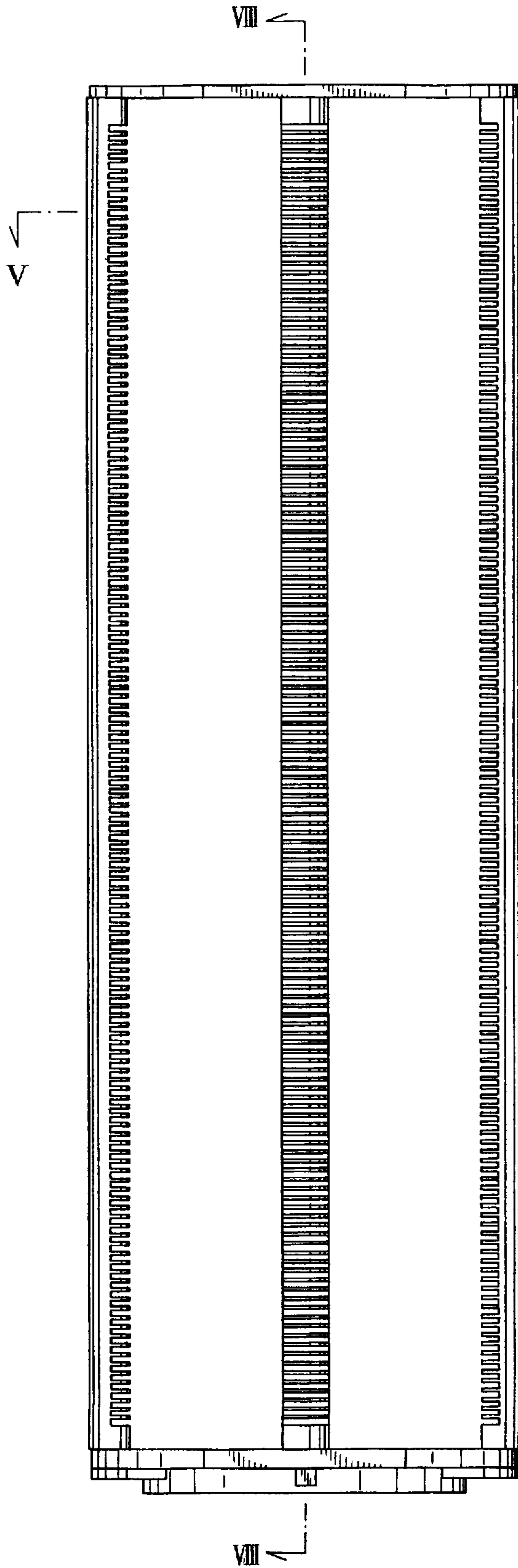


FIG. 3

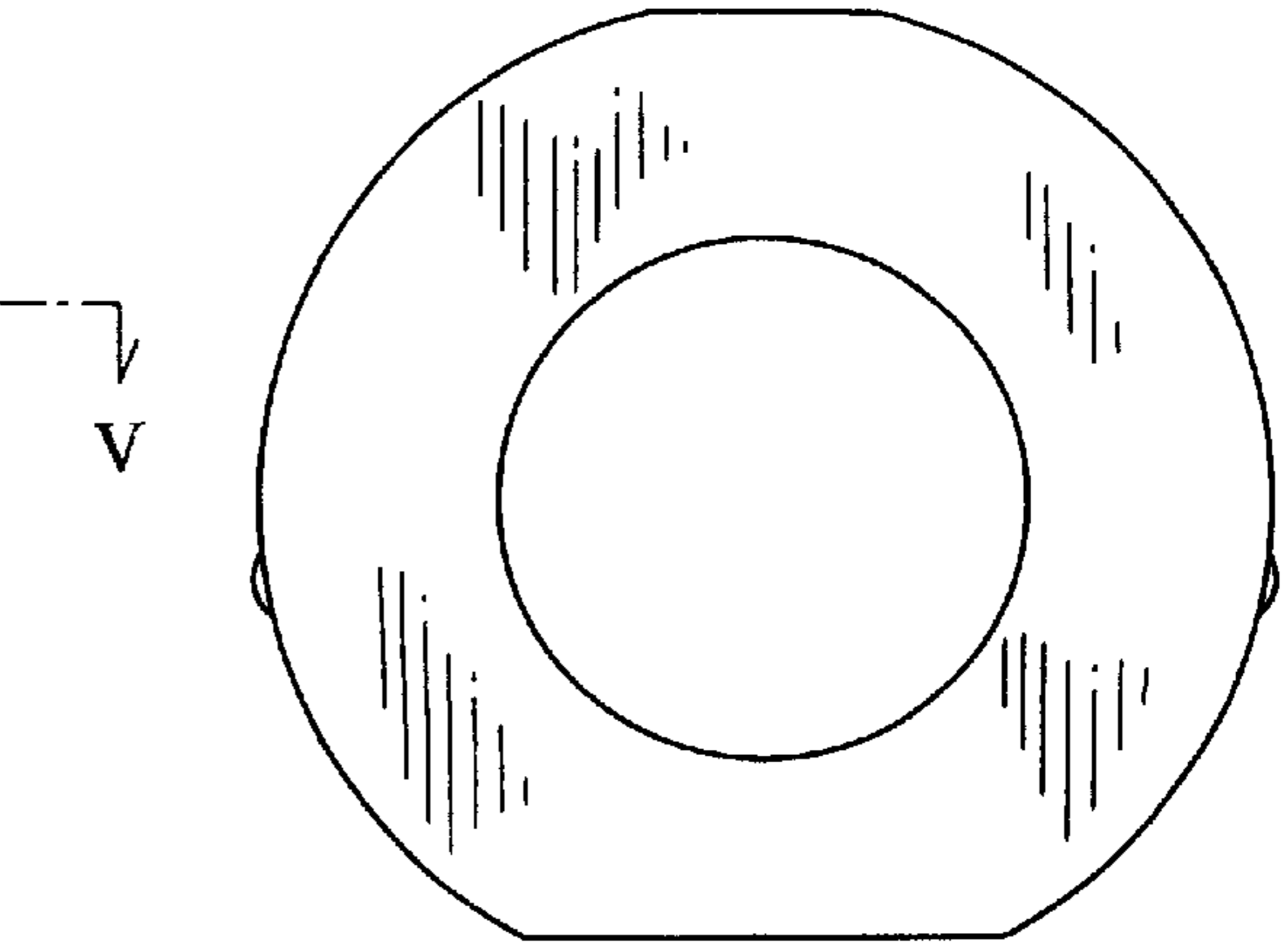


FIG. 4

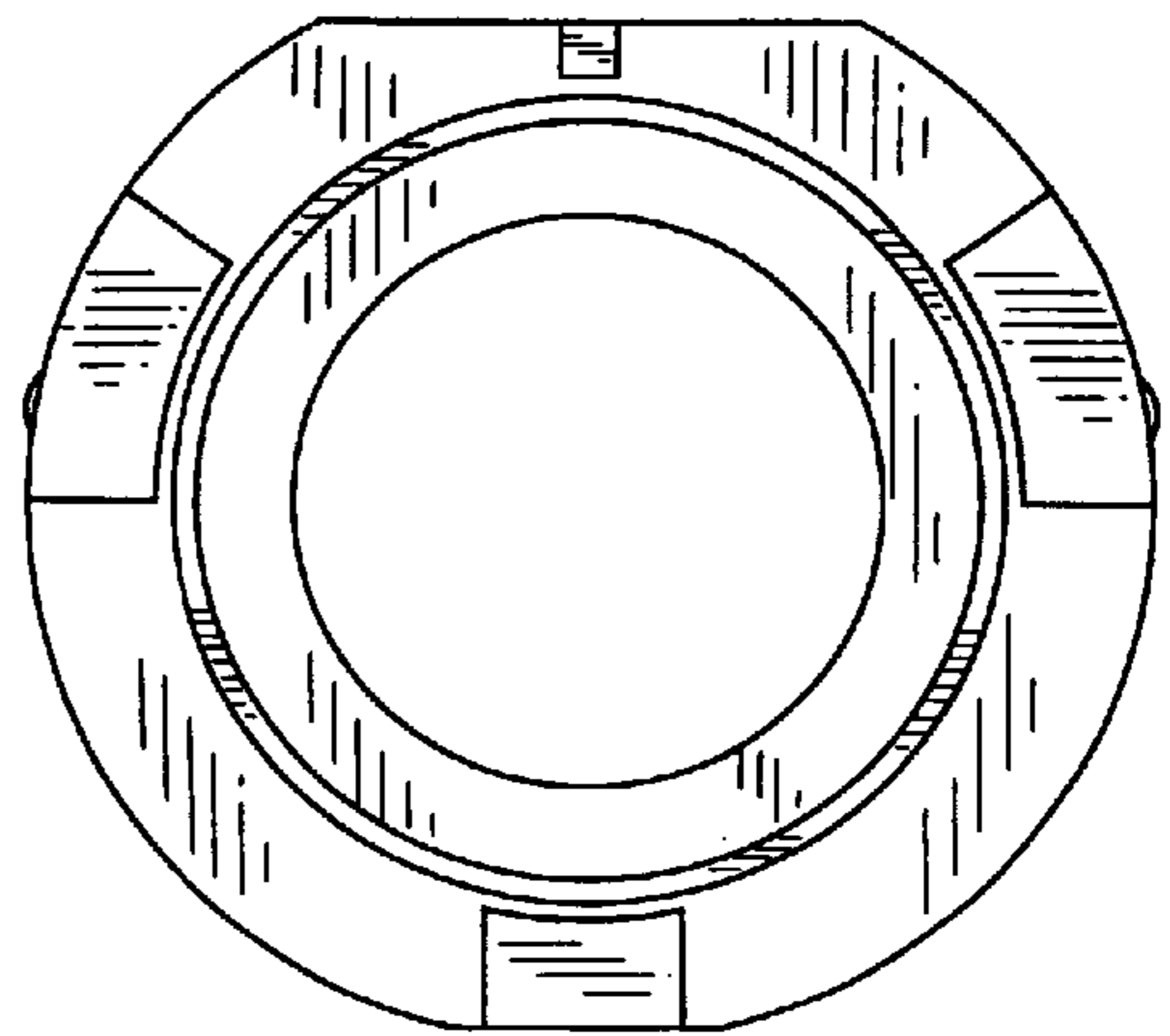
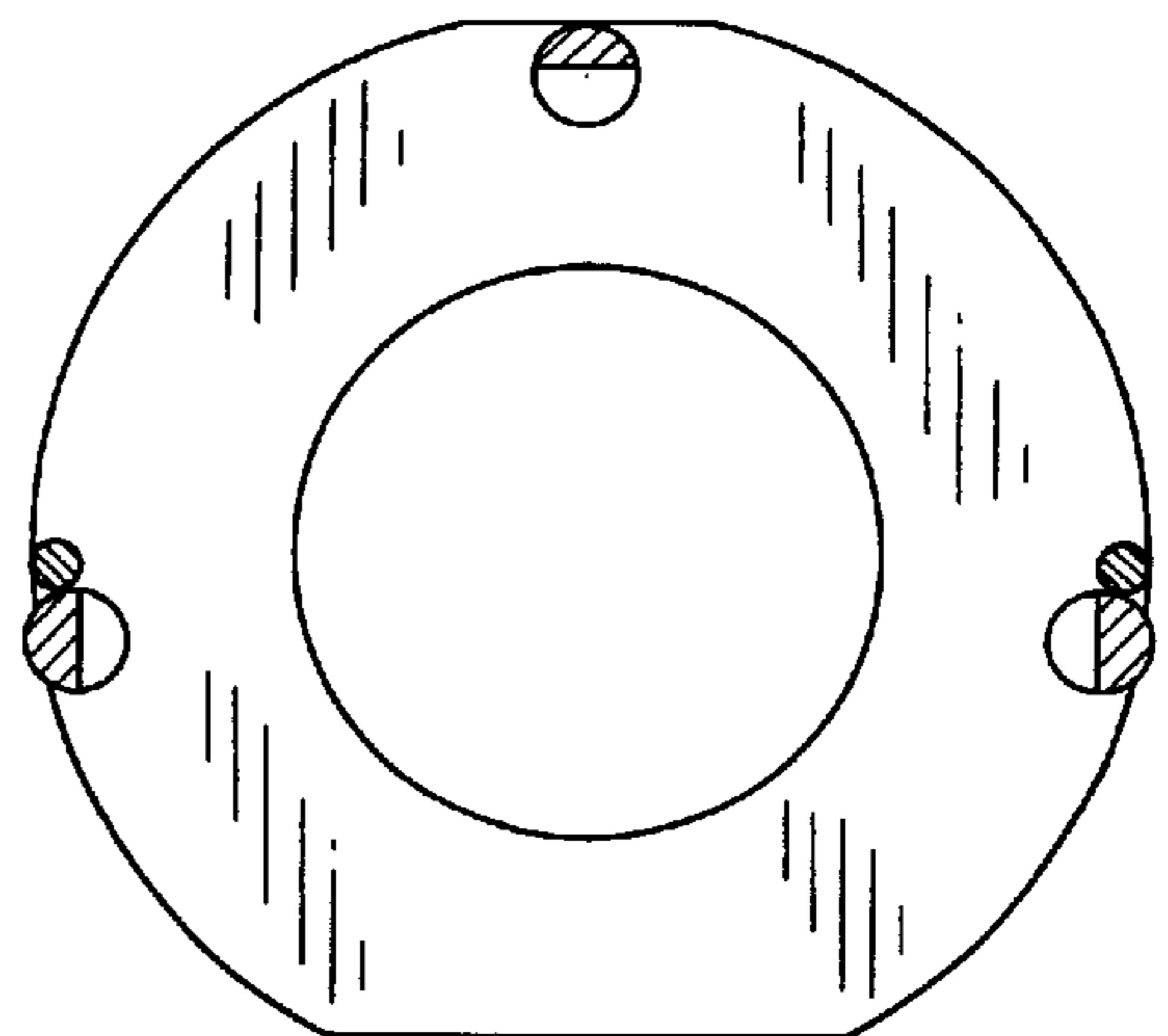
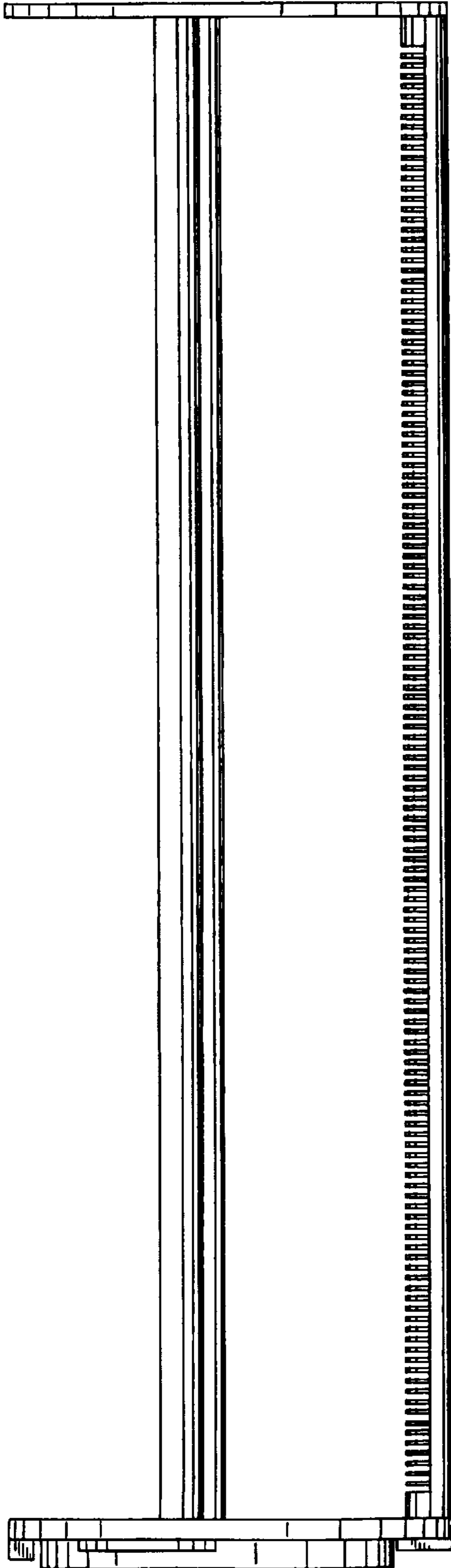


FIG. 5



F I G . 6



F I G . 7

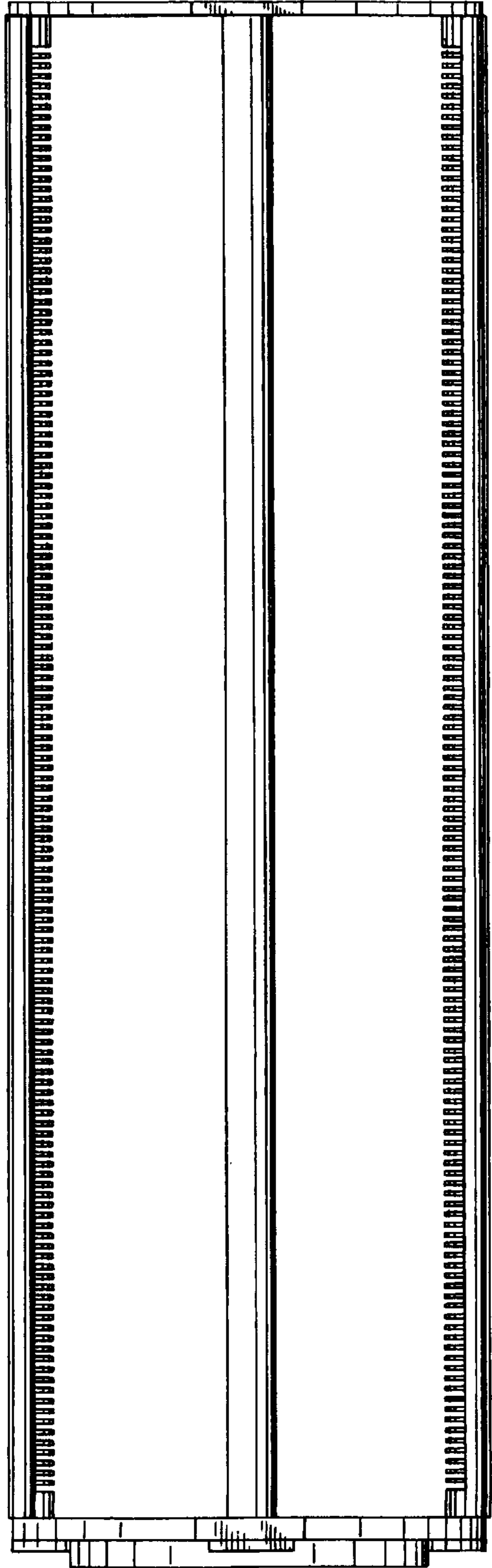


FIG. 8

