



US00D404016S

United States Patent [19]
Ishii

[11] **Patent Number:** **Des. 404,016**
[45] **Date of Patent:** ****Jan. 12, 1999**

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

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

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

[21] Appl. No.: **74,282**

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

[30] **Foreign Application Priority Data**

Jan. 31, 1997 [JP] Japan 9-2658

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

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

[58] **Field of Search** D13/182, 179; D15/144, 144.1, 199; 414/935-941, 217, 147; 437/247, 946

[56] **References Cited**

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[57] **CLAIM**

I claim the ornamental design for heat retaining tube for use in a semiconductor wafer heat processing apparatus, as shown and described.

DESCRIPTION

FIG. 1 a perspective view of a heat retaining tube for use in a semiconductor wafer heat processing apparatus;

FIG. 2 a top plan view thereof;

FIG. 3 a front elevational view thereof;

FIG. 4 a cross sectional view taken along line IV—IV in FIG. 3;

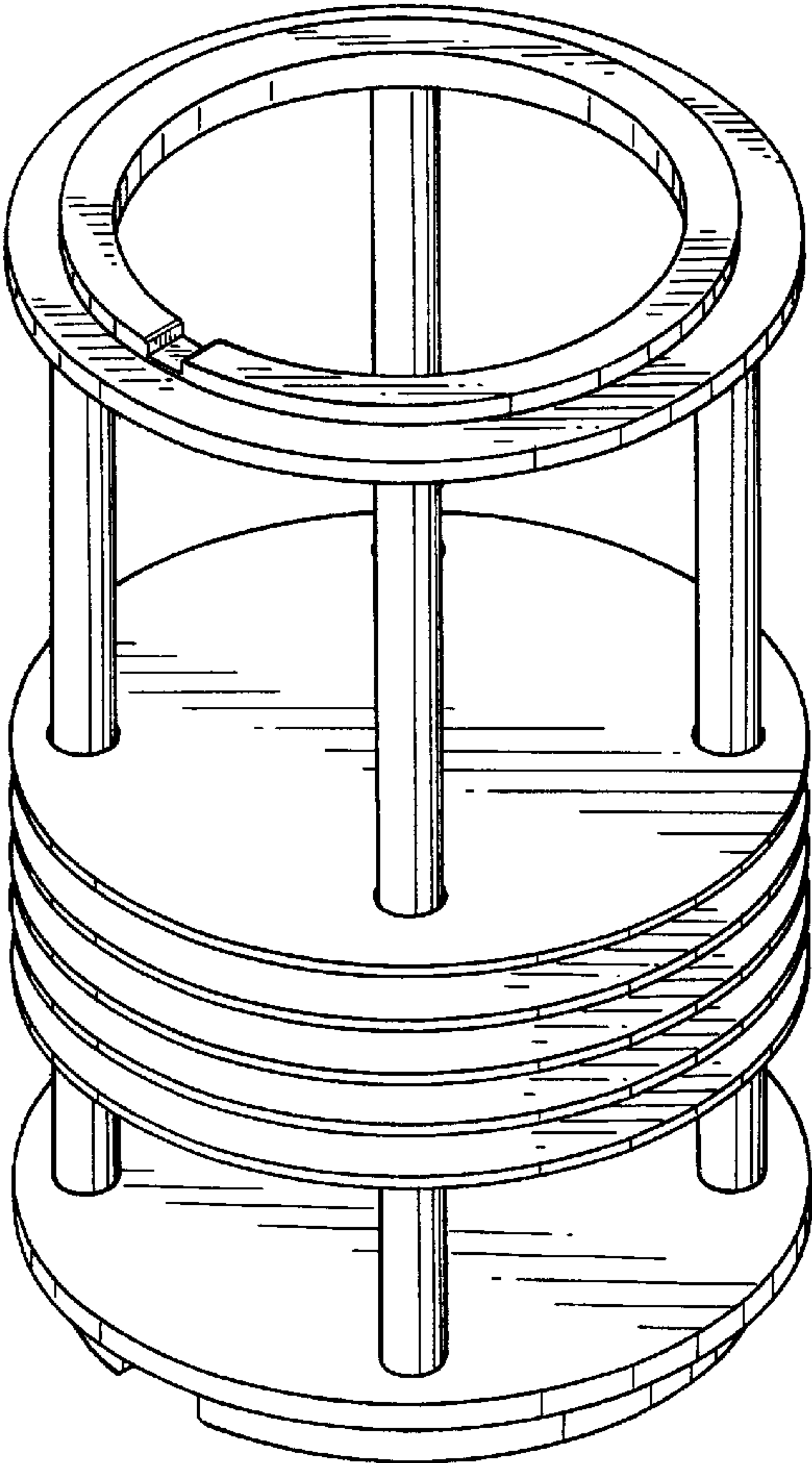
FIG. 5 a cross sectional view taken along line V—V in FIG. 3;

FIG. 6 a rear elevational view thereof;

FIG. 7 a left side view thereof, the right side view being a mirror image of the left view; and

FIG. 8 a bottom plan view thereof.

1 Claim, 3 Drawing Sheets



F I G . 1

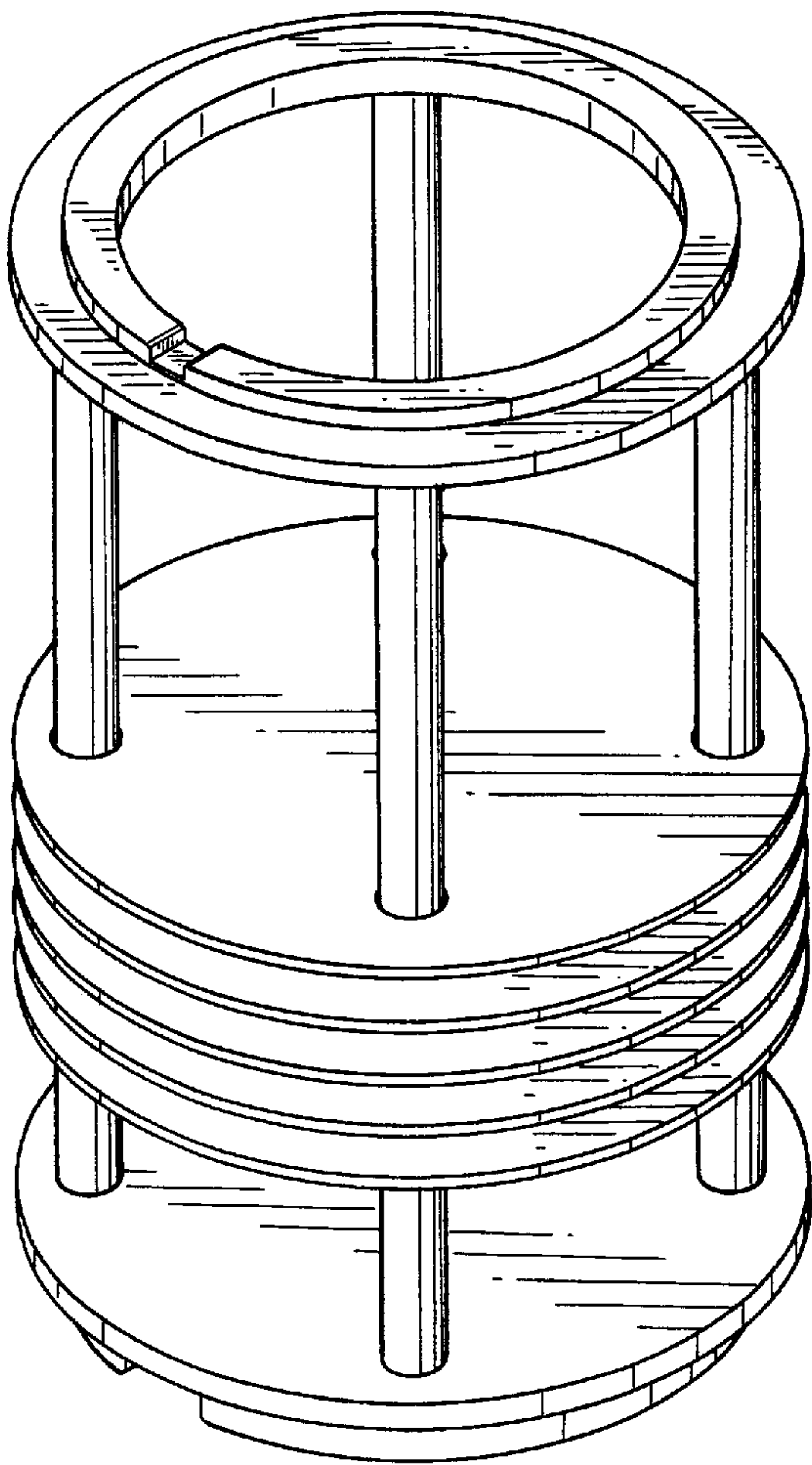


FIG. 2

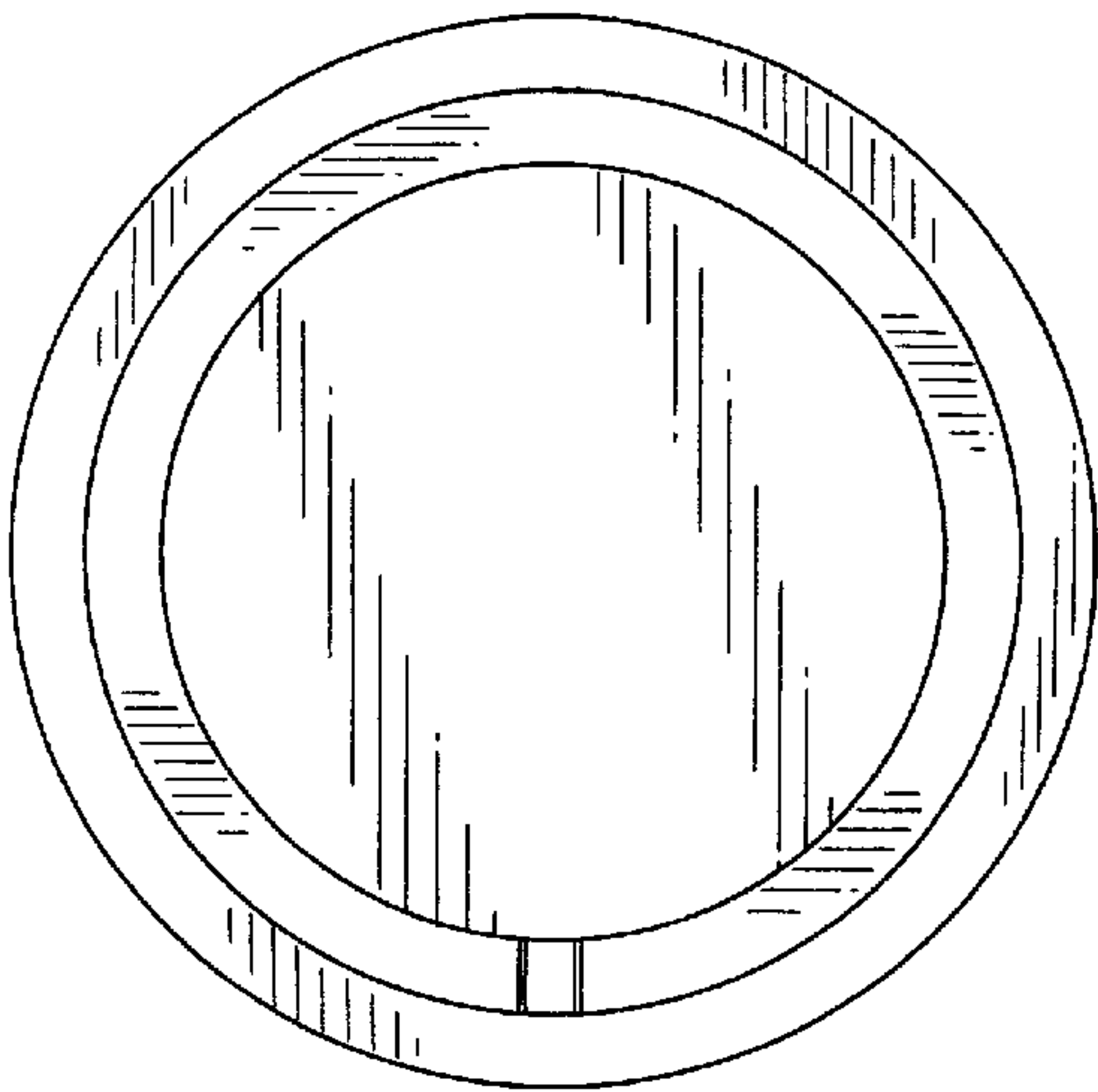


FIG. 3

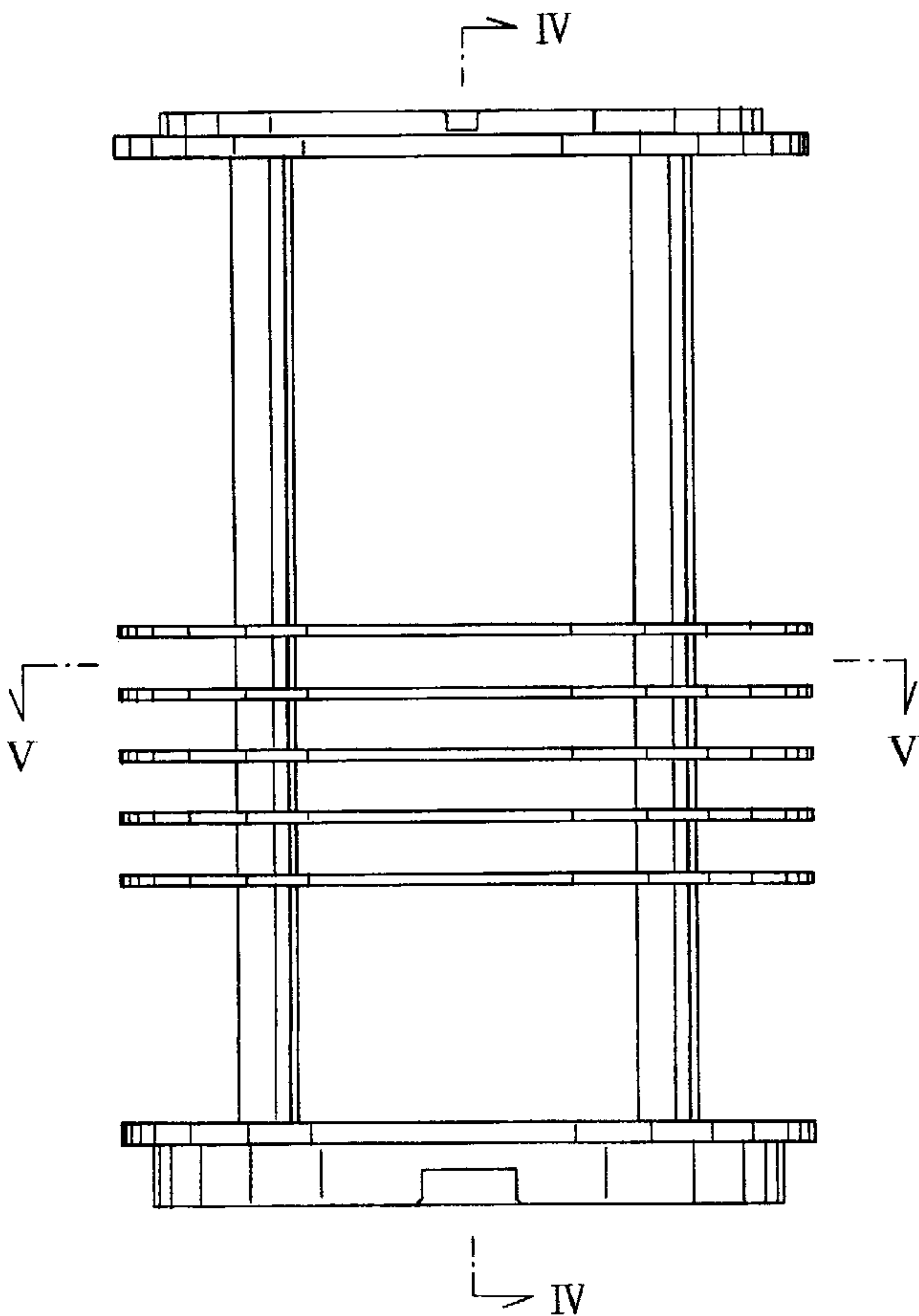


FIG. 4

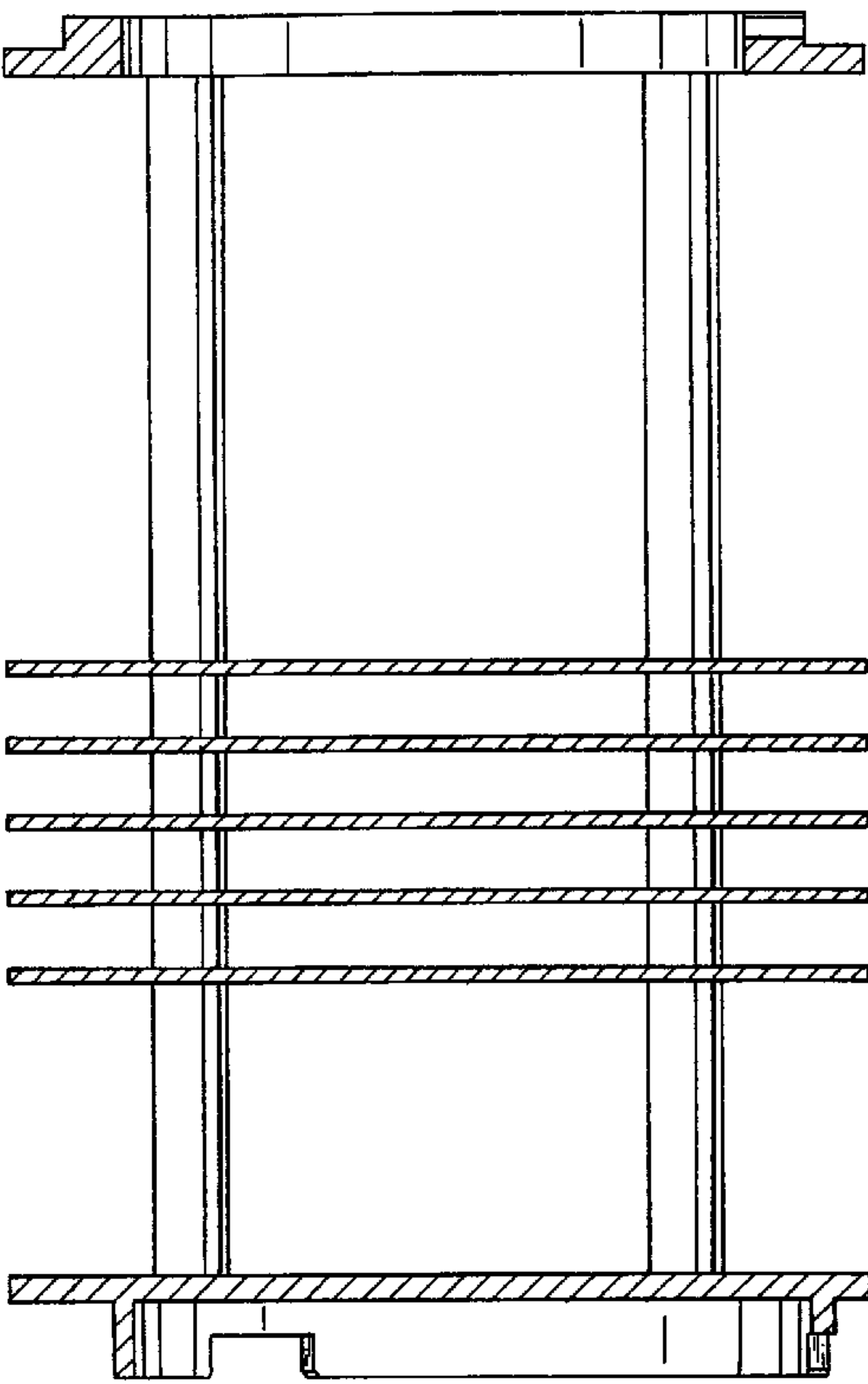
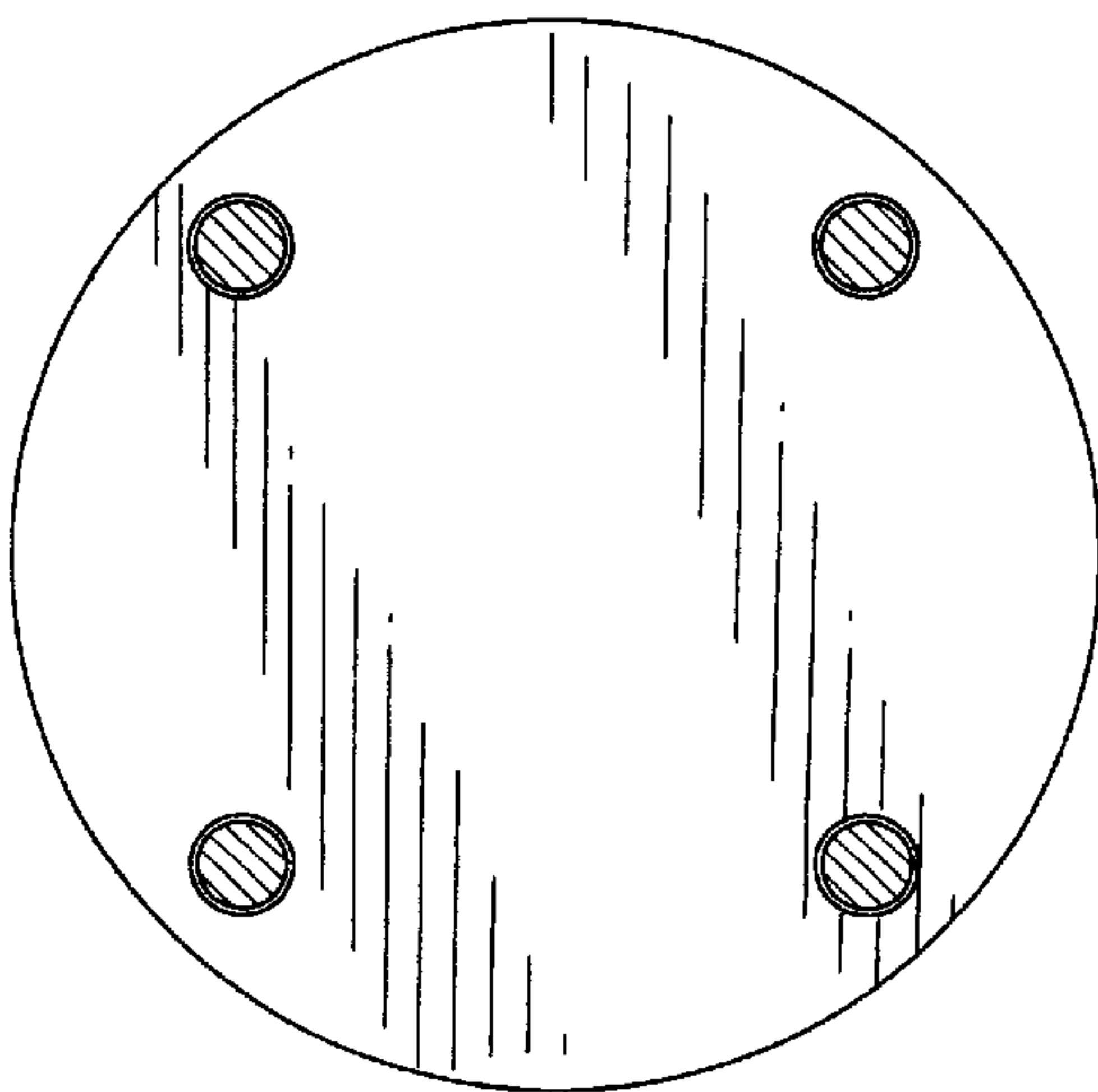
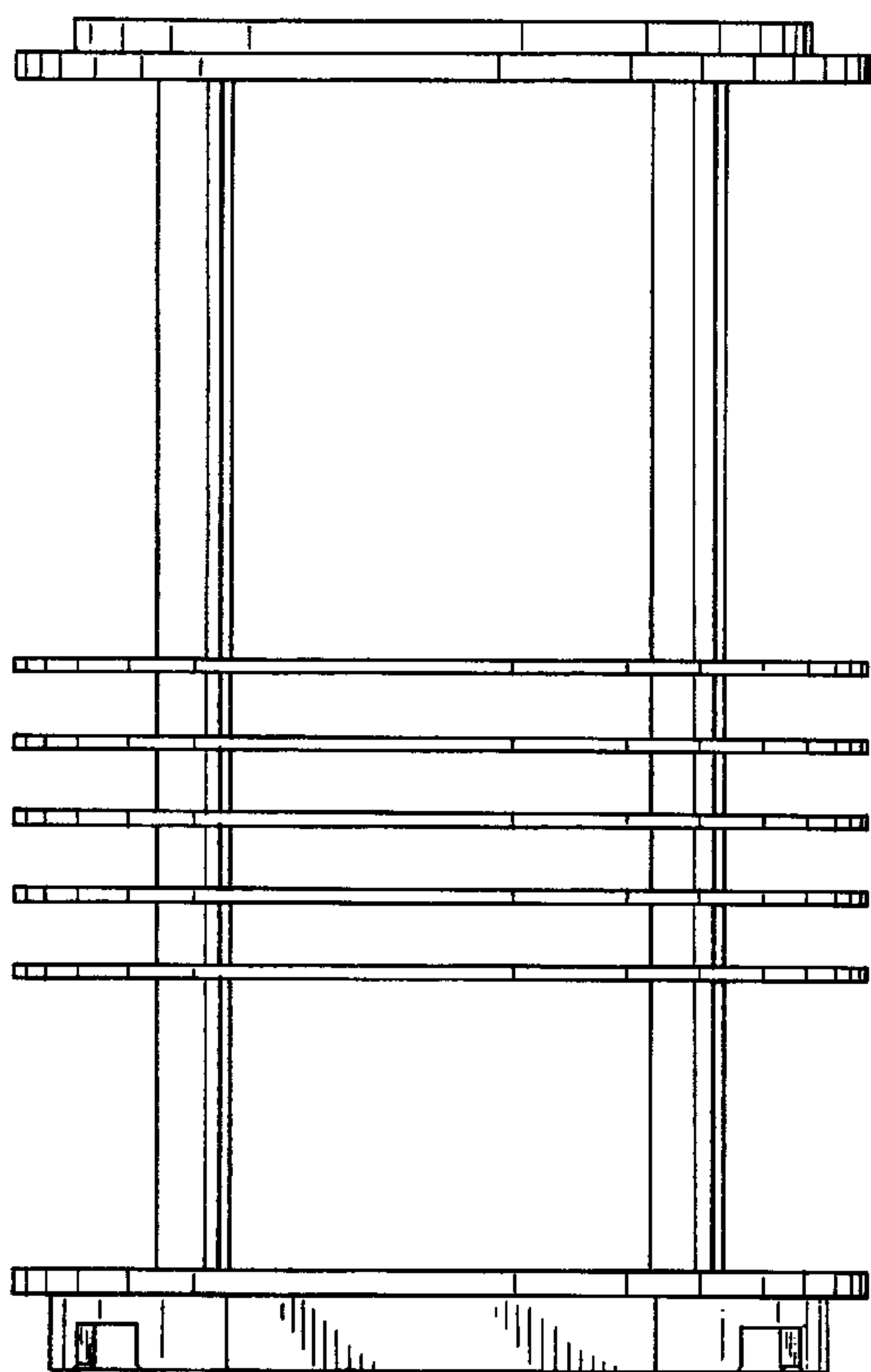


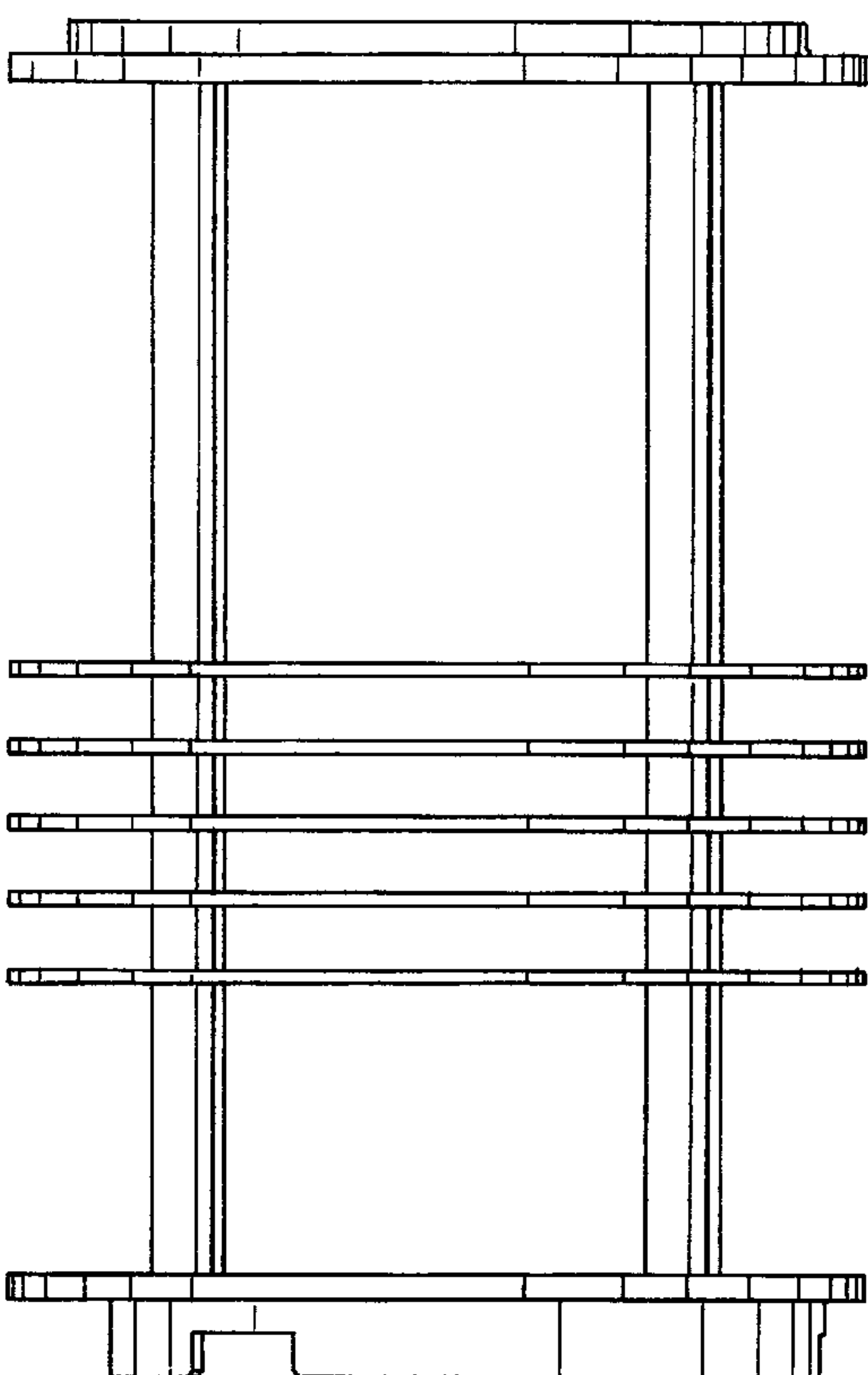
FIG. 5



F I G . 6



F I G . 7



F I G . 8

