



US00D417438S

United States Patent [19]
Matsushima

[11] **Patent Number: Des. 417,438**

[45] **Date of Patent: ** Dec. 7, 1999**

[54] **QUARTZ OUTER TUBE**

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

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

[21] Appl. No.: **29/074,299**

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

[30] **Foreign Application Priority Data**

Jan. 31, 1997 [JP] Japan 9-2652

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

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

[58] **Field of Search** D23/340; D13/182;
D15/144, 144.1, 199; 392/416, 418; 118/724,
725, 500

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,303,671 4/1994 Kondo et al. 118/725
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Primary Examiner—Lisa Lichtenstein
Attorney, Agent, or Firm—Ladas & Parry

[57] **CLAIM**

I claim the ornamental design for a quartz outer tube, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a quartz outer tube.

FIG. 2 is a front elevational view thereof.

FIG. 3 is a top plan view thereof.

FIG. 4 is a bottom plan view thereof.

FIG. 5 is a cross sectional view thereof taken along line 5—5 in FIG. 2.

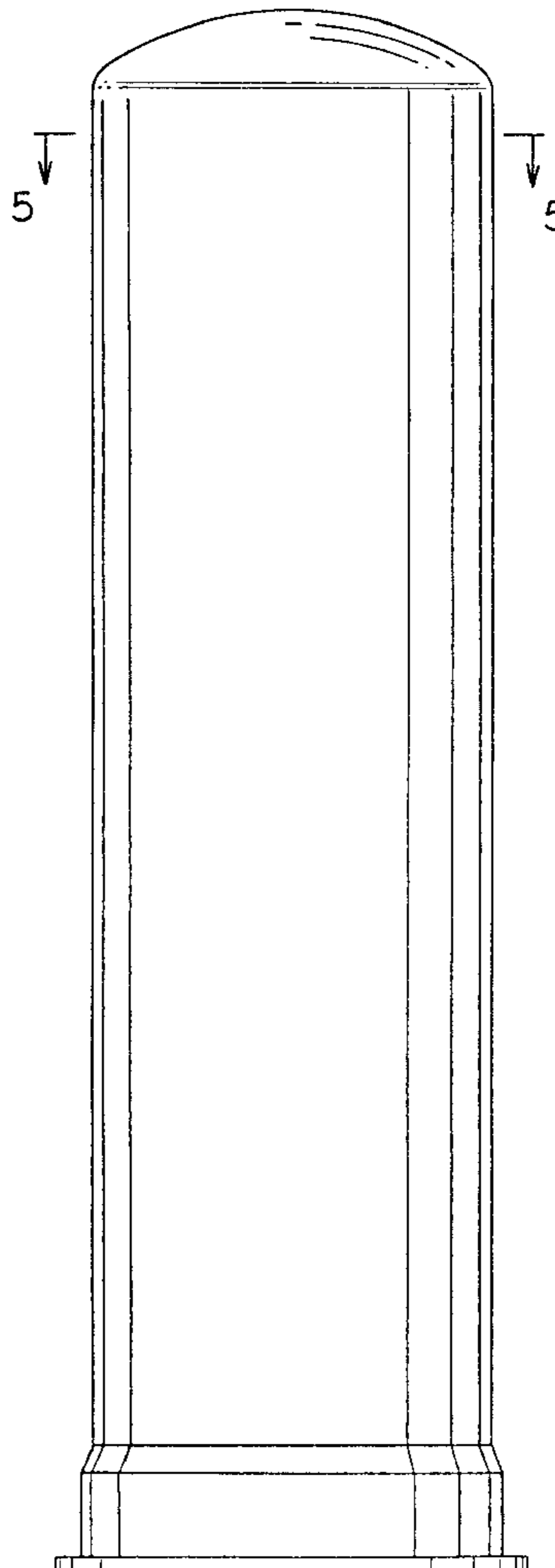
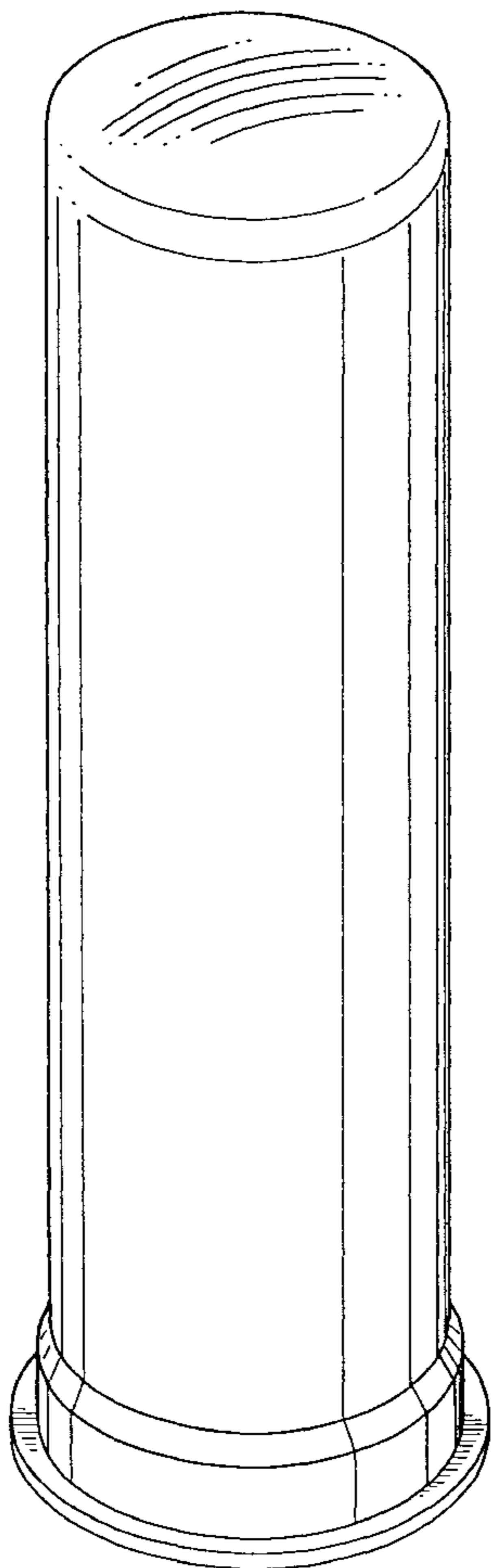
FIG. 6 is a rear elevational view thereof.

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

FIG. 8 is a cross sectional view thereof taken along line 8—8 in FIG. 3; and,

FIG. 9 is a cross sectional view thereof taken along line 9—9 in FIG. 3.

1 Claim, 4 Drawing Sheets



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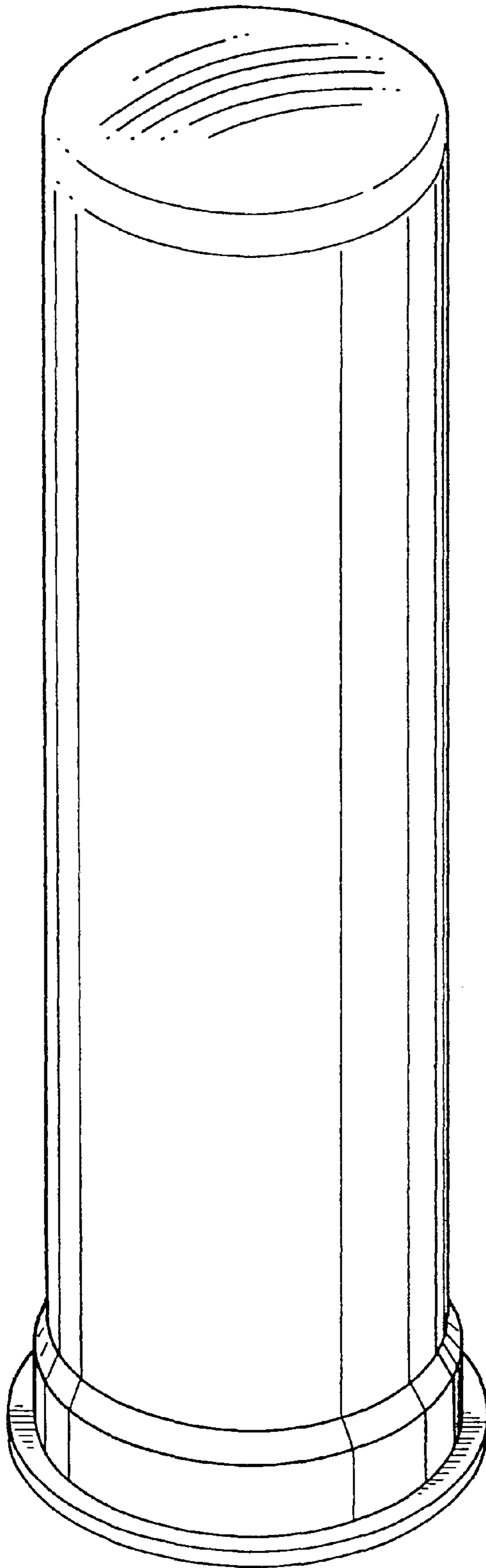


FIG. 2

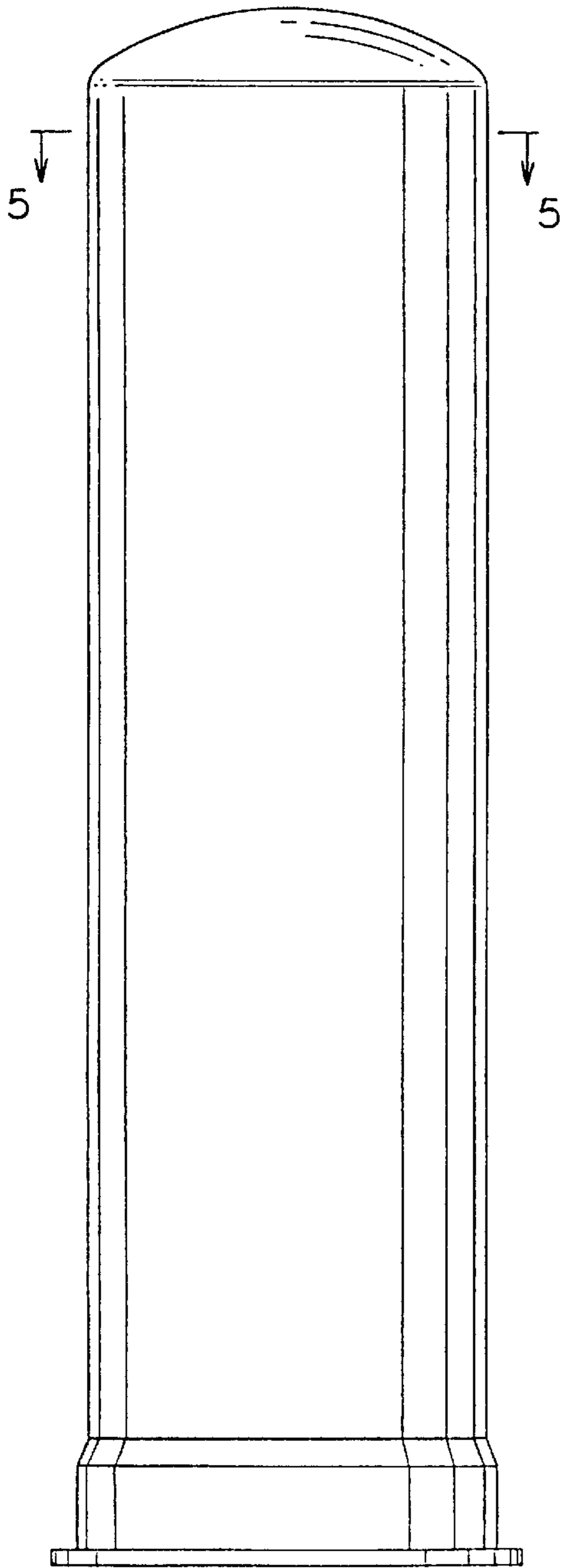


FIG. 3

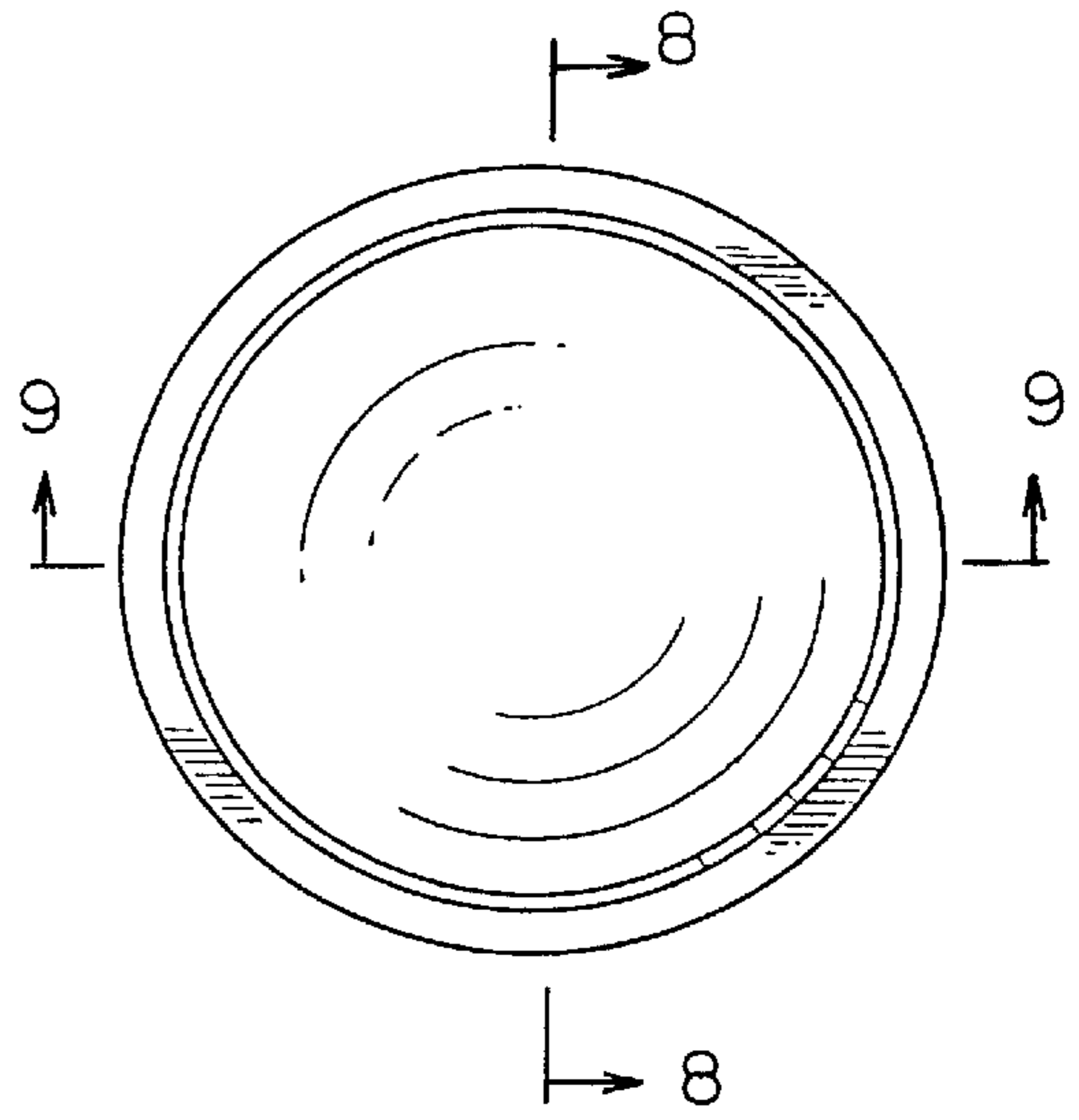


FIG. 4

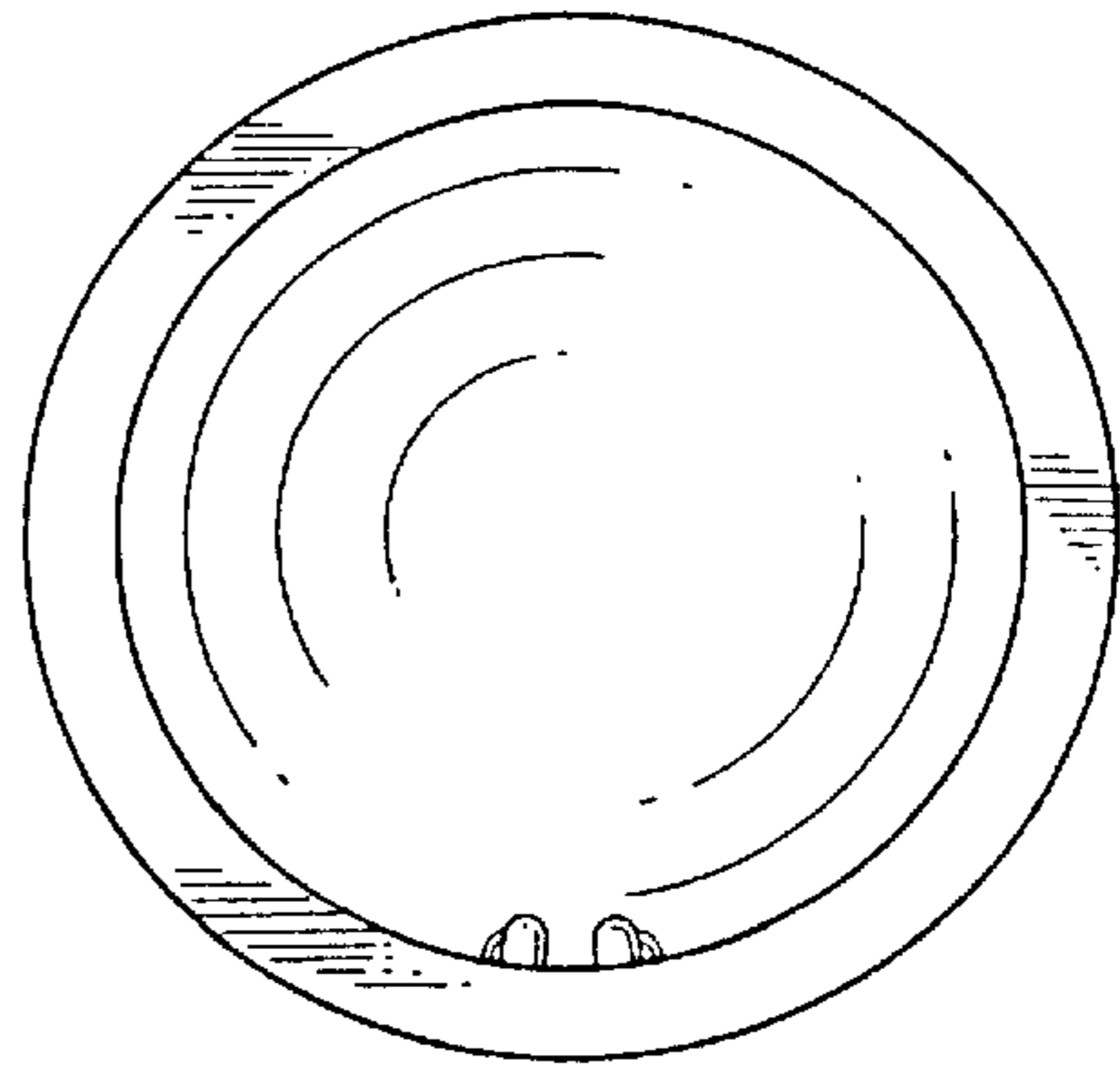


FIG. 5

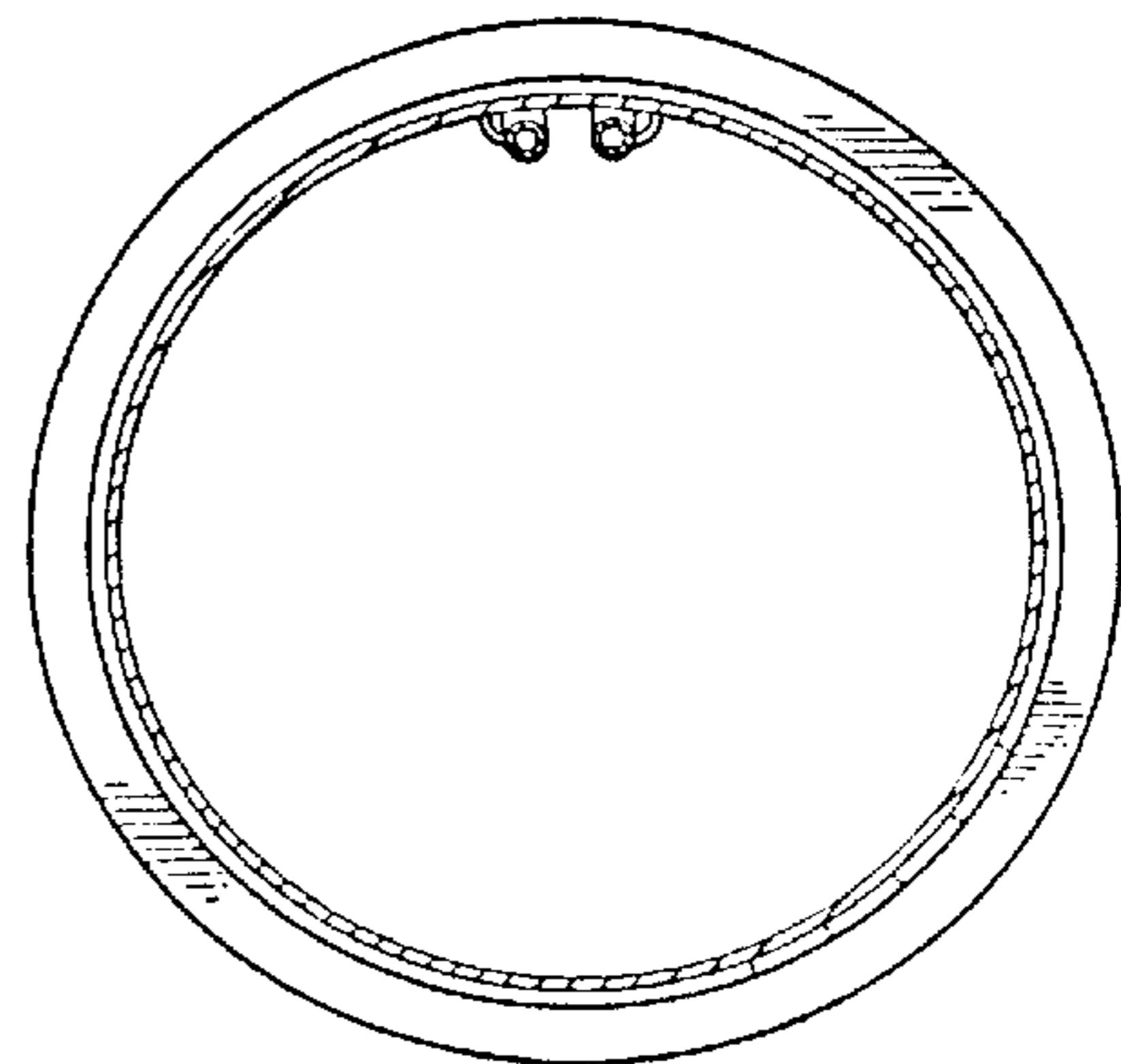


FIG. 6

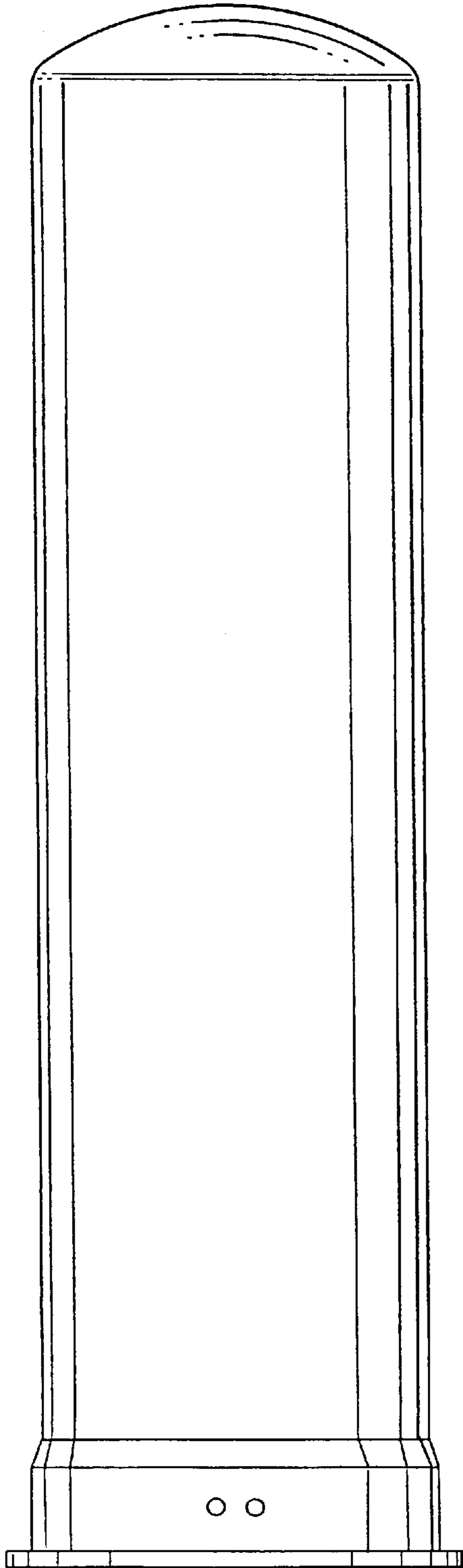


FIG. 7

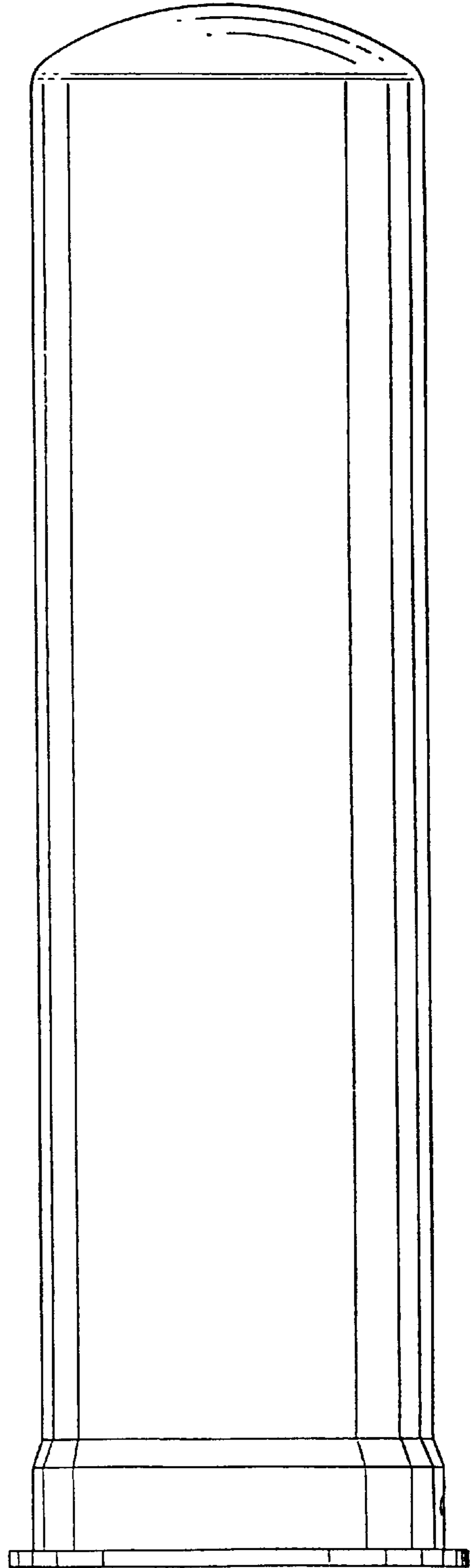


FIG. 8

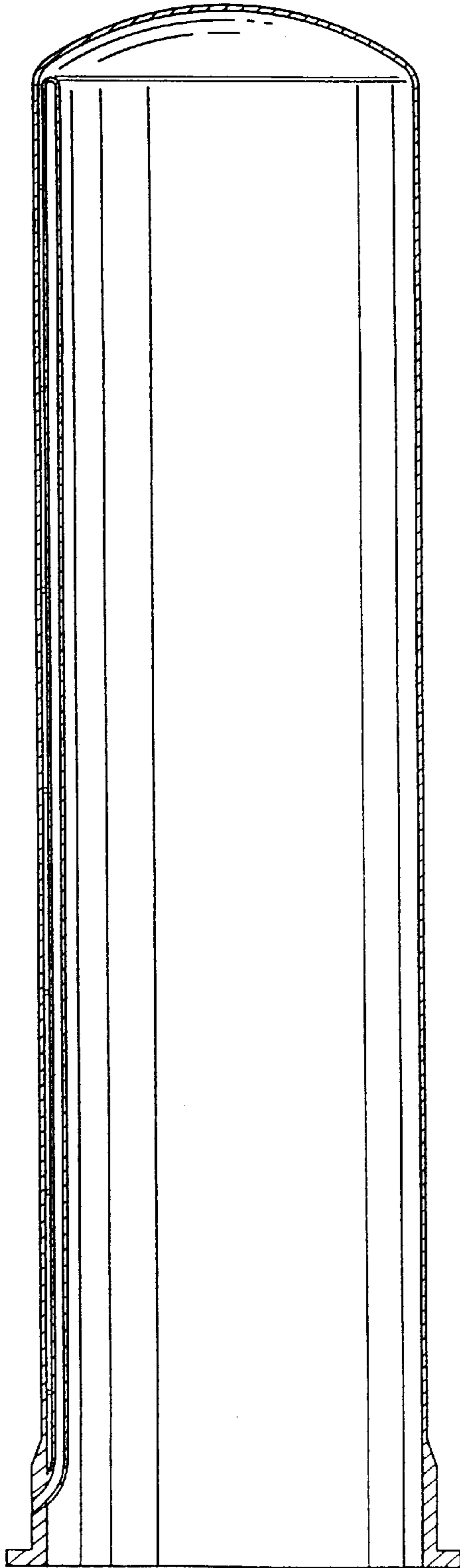


FIG. 9

