



US00D435631S

United States Patent [19]

Janik et al.

[11] Patent Number: Des. 435,631

[45] Date of Patent: ** Dec. 26, 2000

[54] FILTER CARTRIDGE

[75] Inventors: **Leon P. Janik**, Suffield; **Michael J. Williams**, Glastonbury, both of Conn.

[73] Assignee: **Stanadyne Automotive Corp.**, Windsor, Conn.

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

[21] Appl. No.: **29/118,219**

[22] Filed: **Feb. 4, 2000**

[51] **LOC (7) Cl.** **23-01**

[52] **U.S. Cl.** **D23/209**

[58] **Field of Search** D23/207, 209;
210/435, 264, 460

[56] References Cited

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Primary Examiner—Robin V. Taylor

Attorney, Agent, or Firm—Alix, Yale & Ristas, LLP

[57] CLAIM

The ornamental design for a filter cartridge, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a filter cartridge showing my new design;

FIG. 2 is a top plan view of the filter cartridge of FIG. 1; FIG. 3 is a front elevational view of the filter cartridge of FIG. 1, a portion being broken away and shown in section to illustrate the contour thereof;

FIG. 4 is a front elevational view of a second embodiment of the filter cartridge;

FIG. 5 is a side elevational view of the filter cartridge of FIG. 4 viewed from the left thereof;

FIG. 6 is a side elevational view of the filter cartridge of FIG. 4 viewed from the right thereof;

FIG. 7 is a front elevational view of a third embodiment of the filter cartridge;

FIG. 8 is a front elevational view of a fourth embodiment of the filter cartridge;

FIG. 9 is a bottom plan view of the filter cartridges of FIGS. 1–8 thereof;

FIG. 10 is a top plan view of a filter cartridge configured with four retention tabs showing my new design;

FIG. 11 is a front elevational view of the filter cartridge of FIG. 10, the left and right side elevational views being identical;

FIG. 12 is a bottom plan view of the filter cartridge of FIG. 10;

FIG. 13 is a top plan view of a filter cartridge incorporating five retention tabs showing my new design;

FIG. 14 is a front elevational view of the filter cartridge of FIG. 13;

FIG. 15 is a bottom plan view of the Figure cartridge of FIG. 13;

FIG. 16 is a front elevational view of the filter cartridge of FIG. 4 with an optional drain cock illustrated in broken lines mounted thereto and an optional representative radially protruding key represented in broken lines;

FIG. 17 is a bottom plan view of the filter cartridge of FIG. 16 with the drain cock illustrated in broken lines;

FIG. 18 is a front elevational view of a modified embodiment of the filter cartridge showing my new design;

FIG. 19 is a side elevational view of the filter cartridge of FIG. 18 viewed from the right thereof;

FIG. 20 is a side elevational view of the filter cartridge of FIG. 18 viewed from the left thereof;

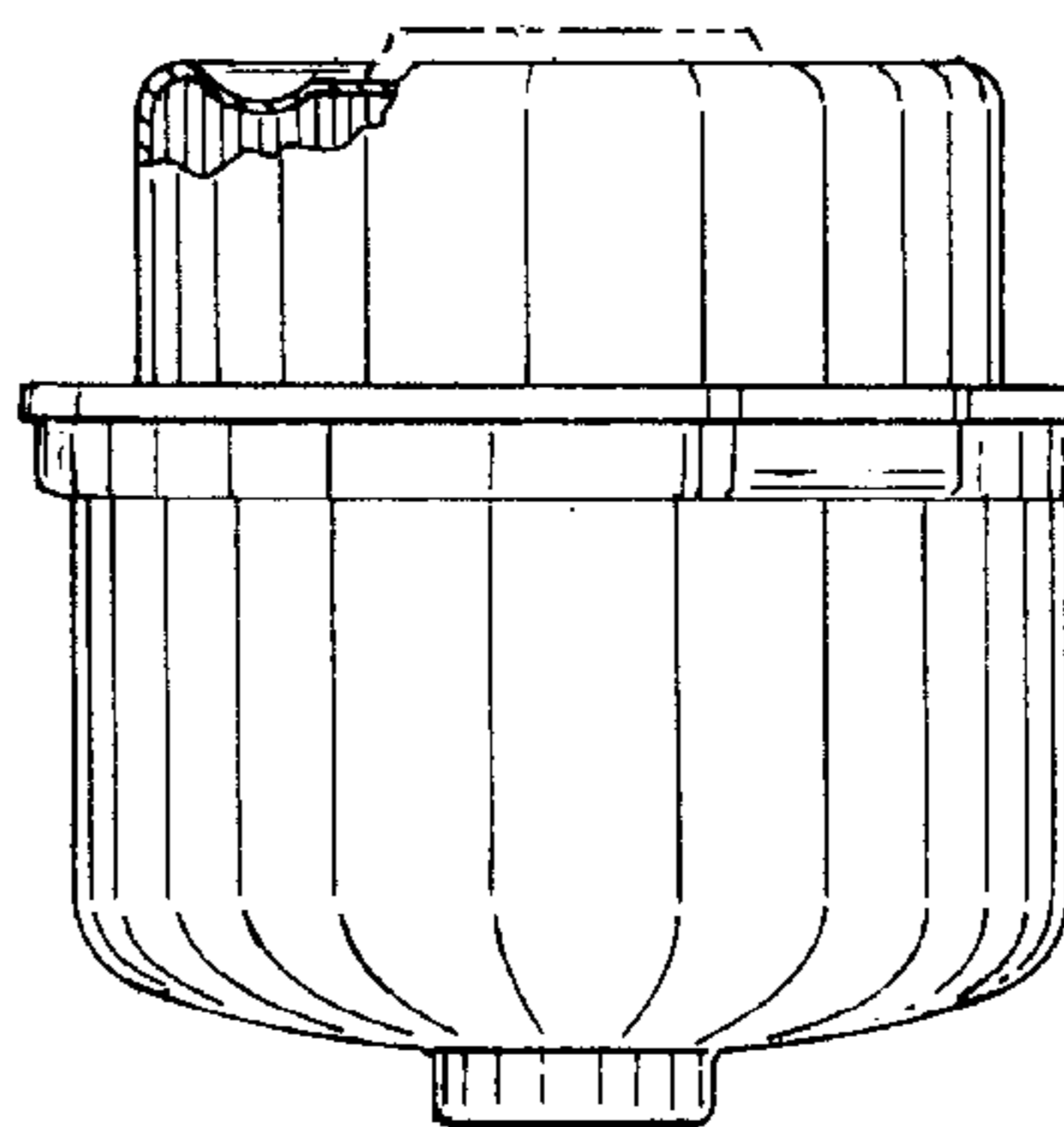
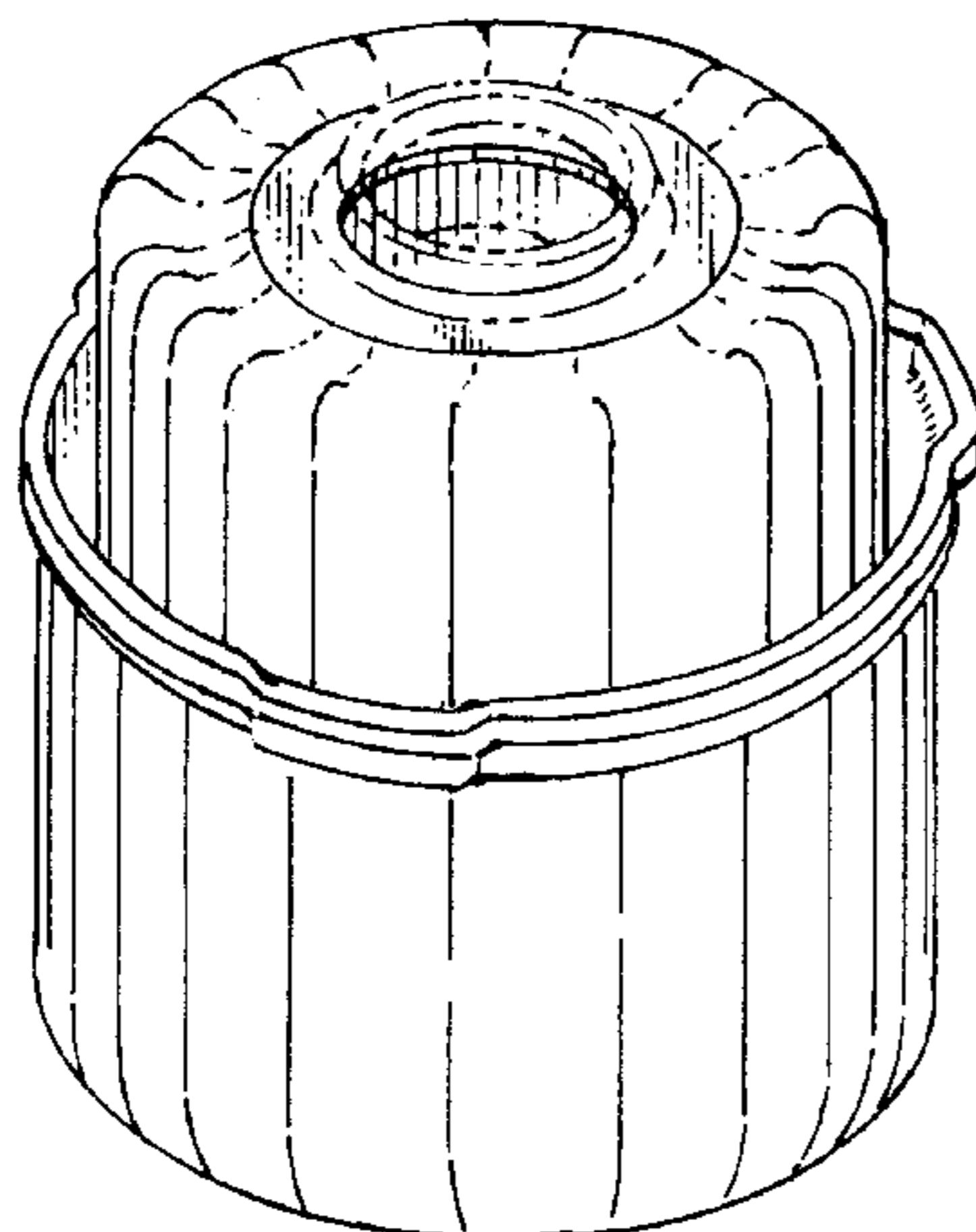
FIG. 21 is a bottom plan view of the filter cartridge of FIG. 18;

FIG. 22 is a top plan view of the filter cartridge of FIG. 18 which is modified to show a new grommet design; and,

FIG. 23 is a side elevational view of the filter cartridge of FIG. 19 which has been modified with the grommet of FIG. 22, the corresponding front and left side views being analogous to that of FIGS. 18 and 20 with the modified grommet therein.

The portions shown in broken lines form no part of the claimed design.

1 Claim, 8 Drawing Sheets



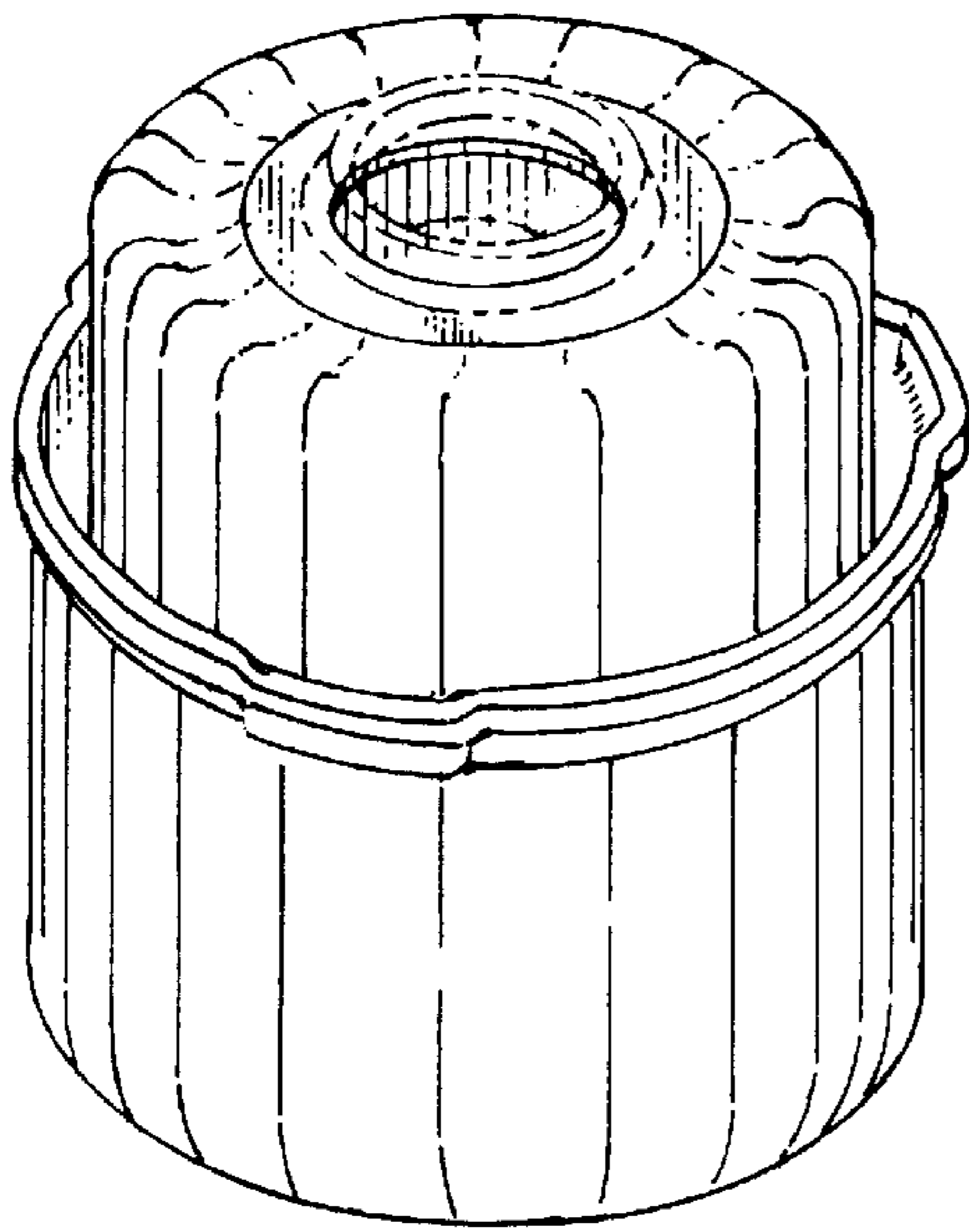


FIG. 1

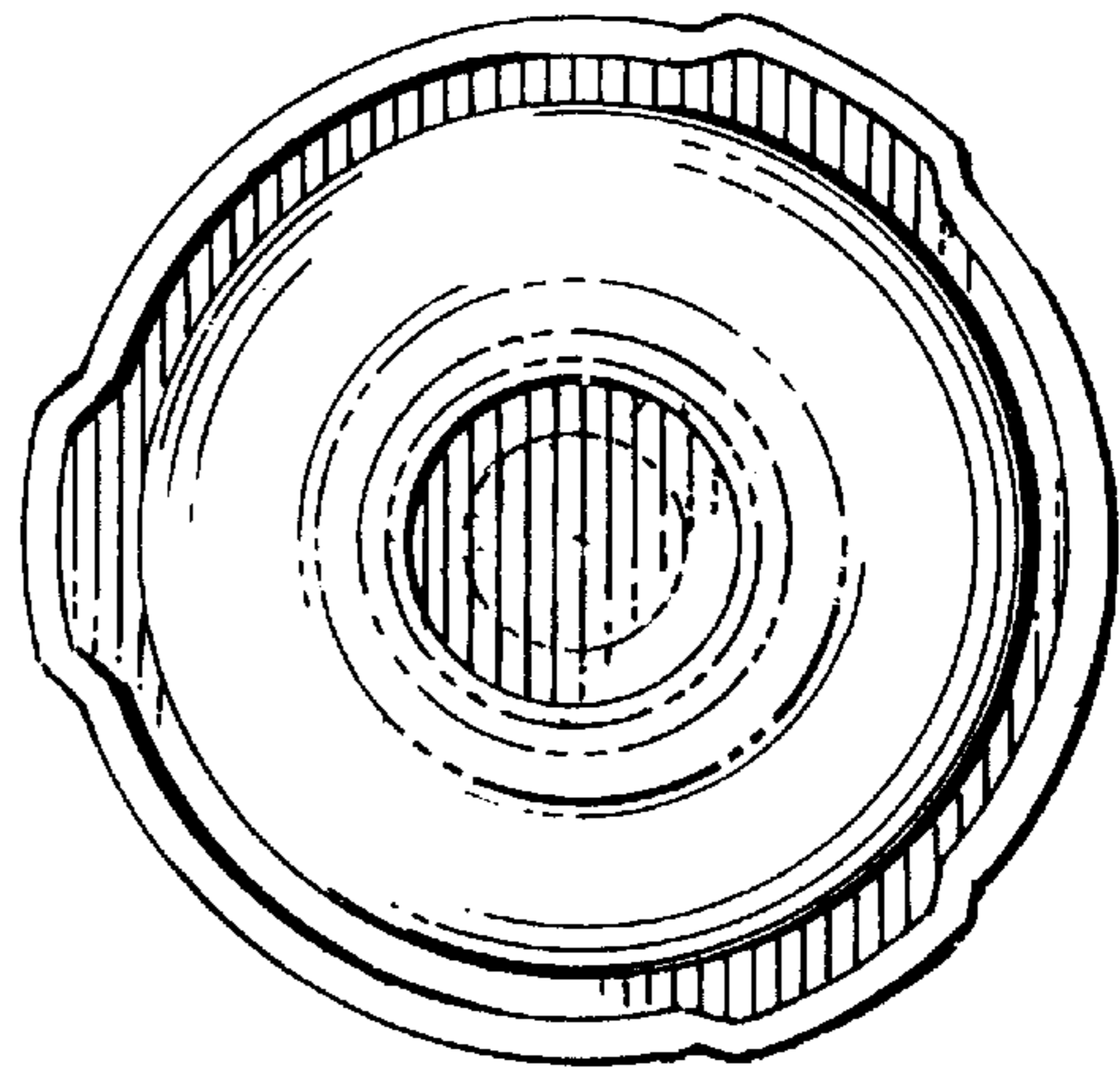


FIG. 2

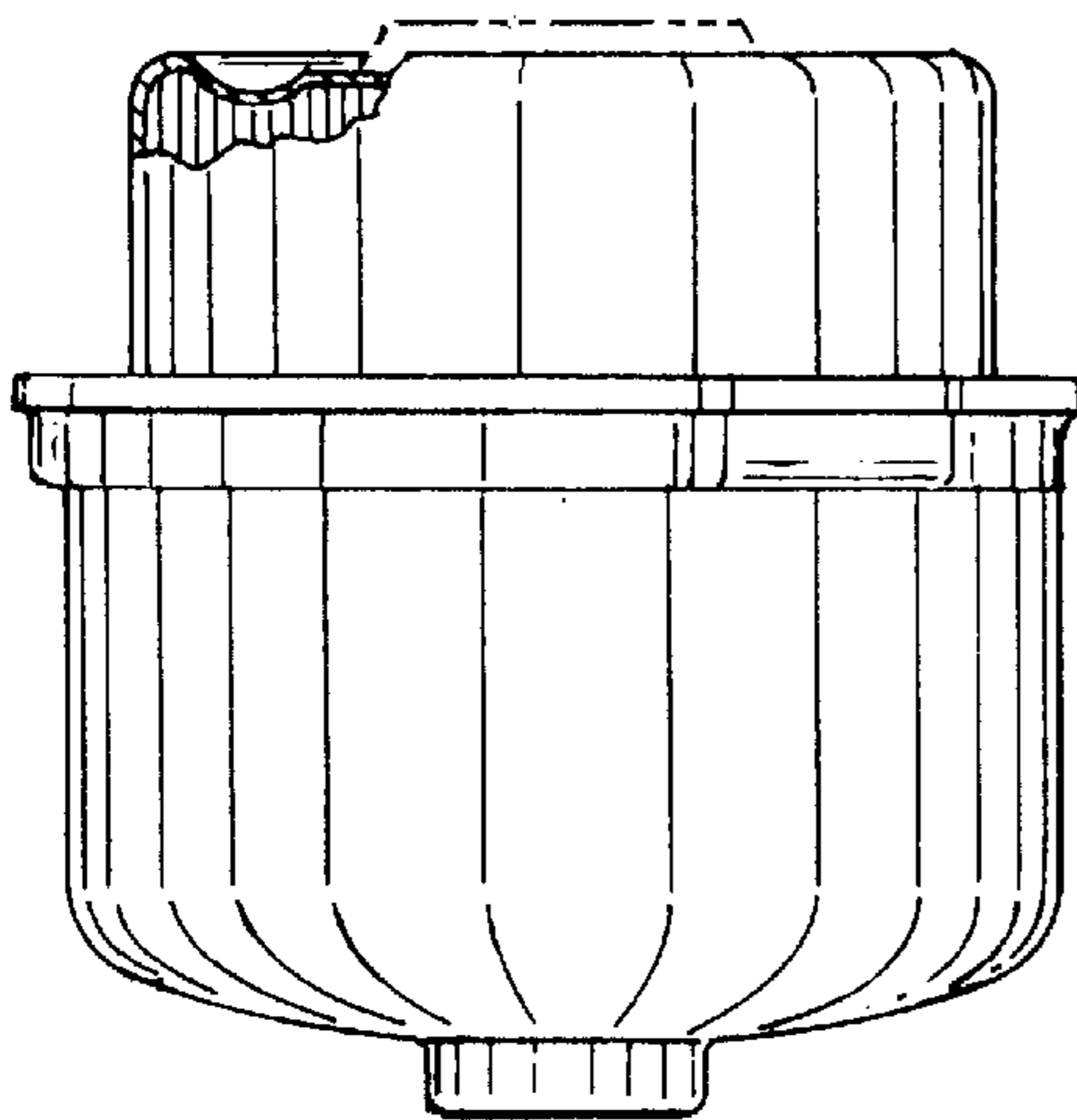


FIG. 3

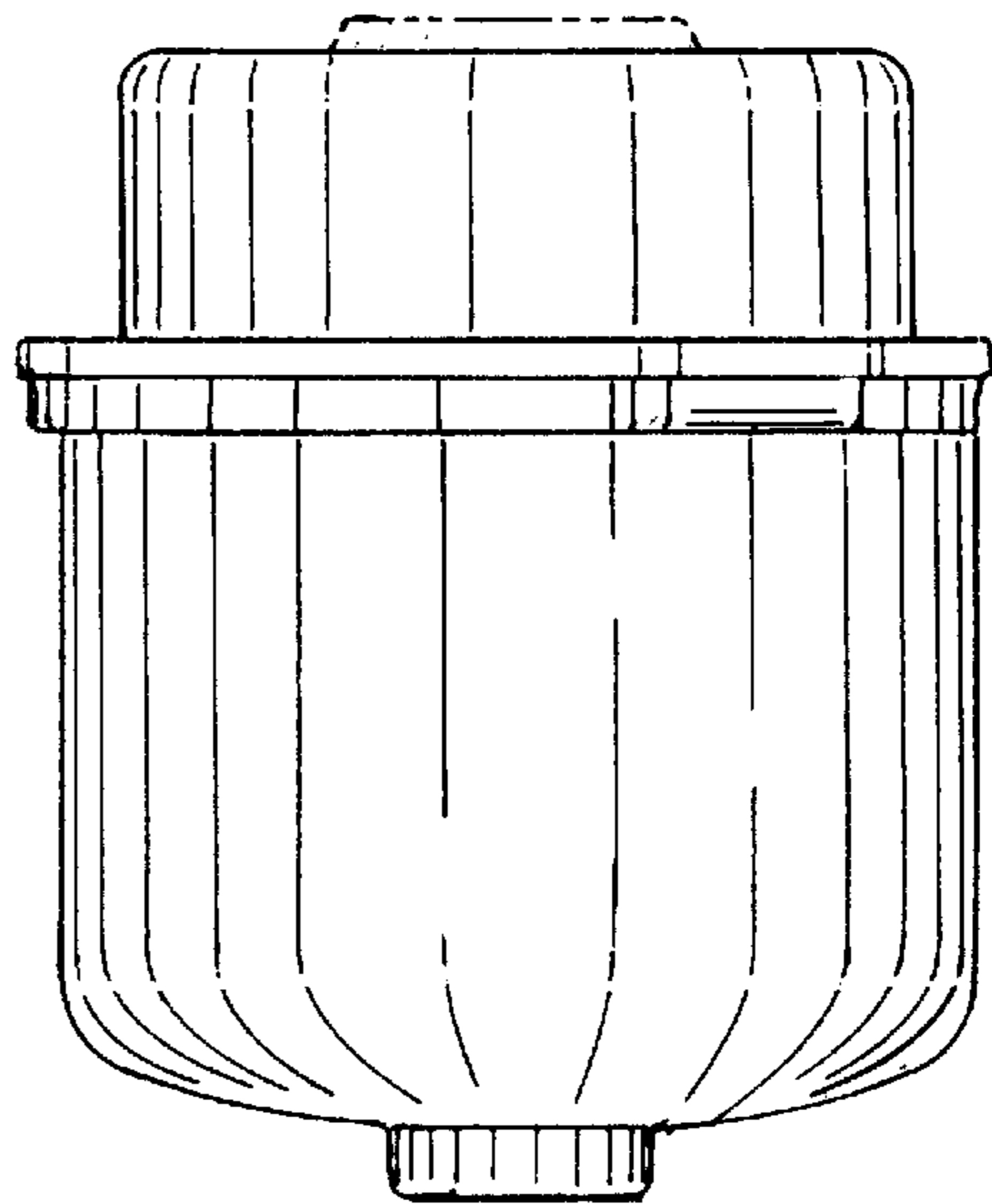


FIG. 4

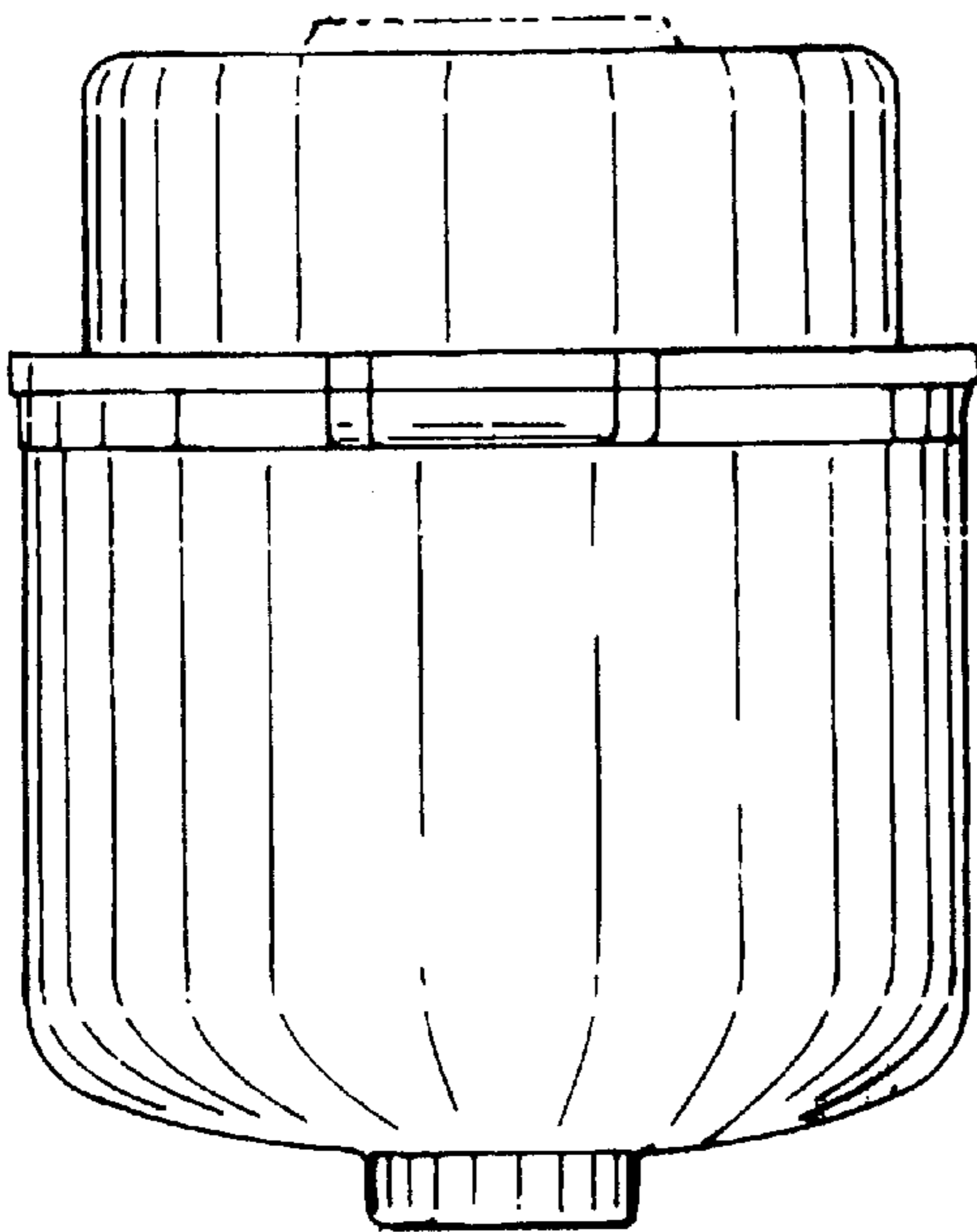


FIG. 5

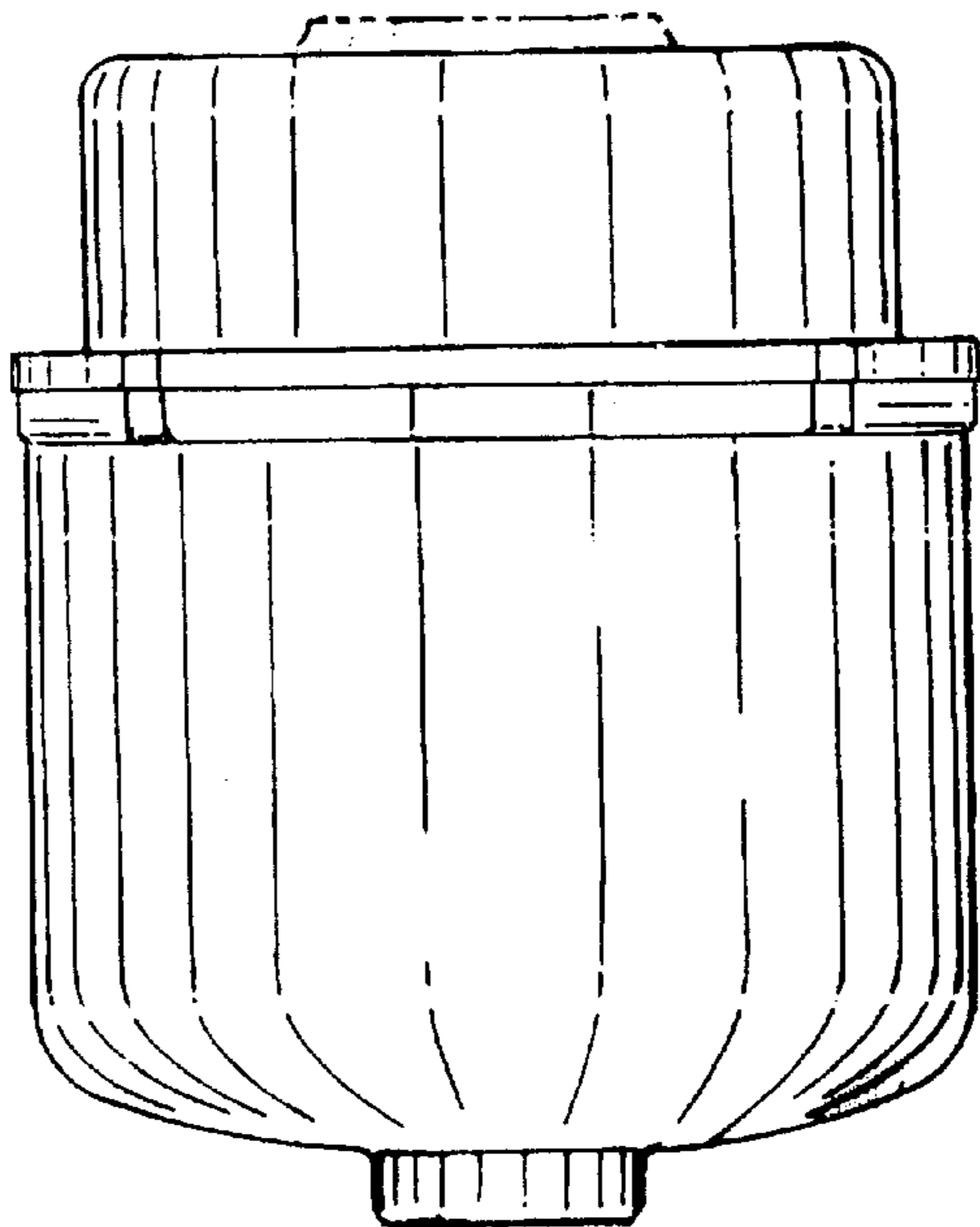


FIG. 6

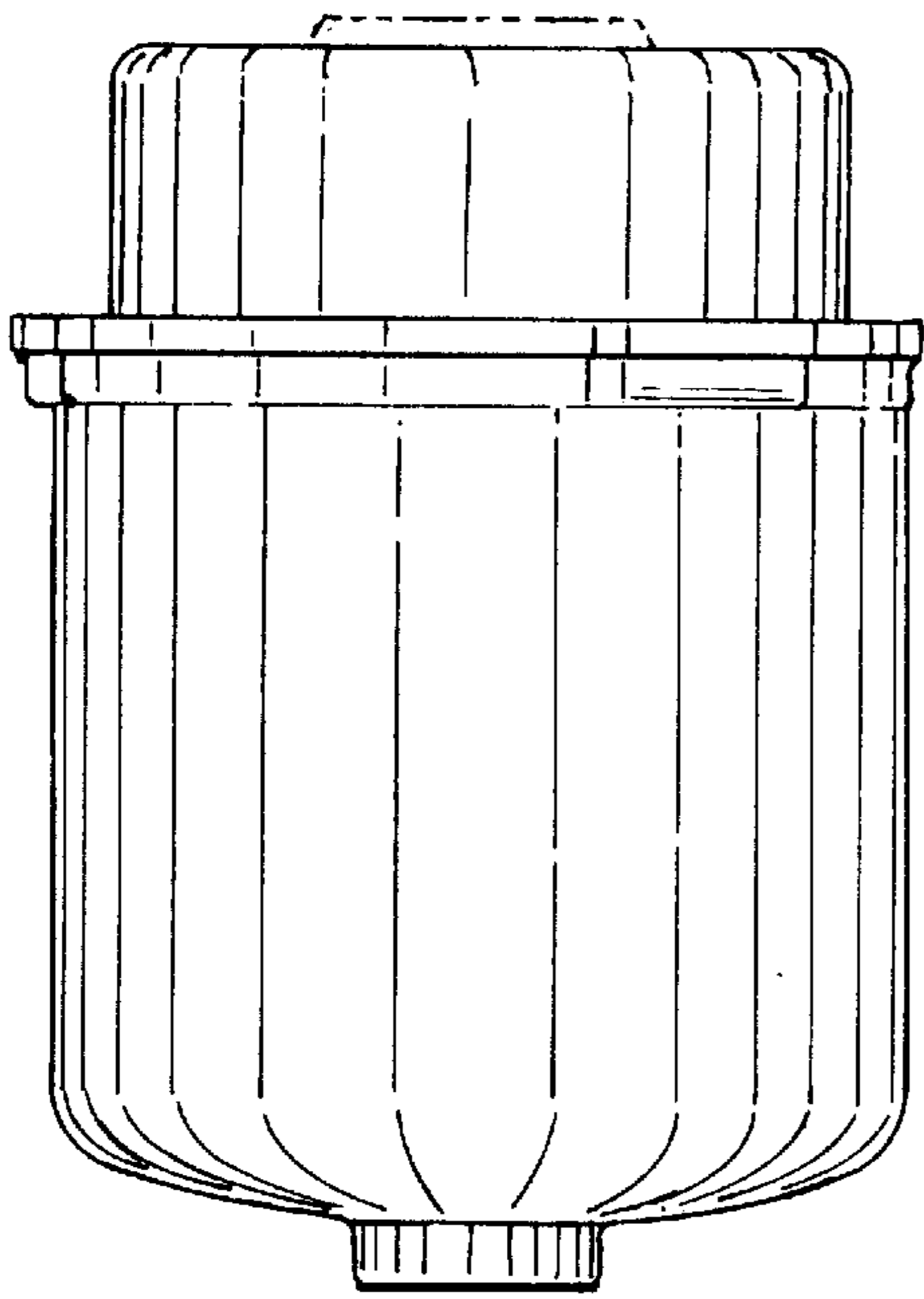


FIG. 7

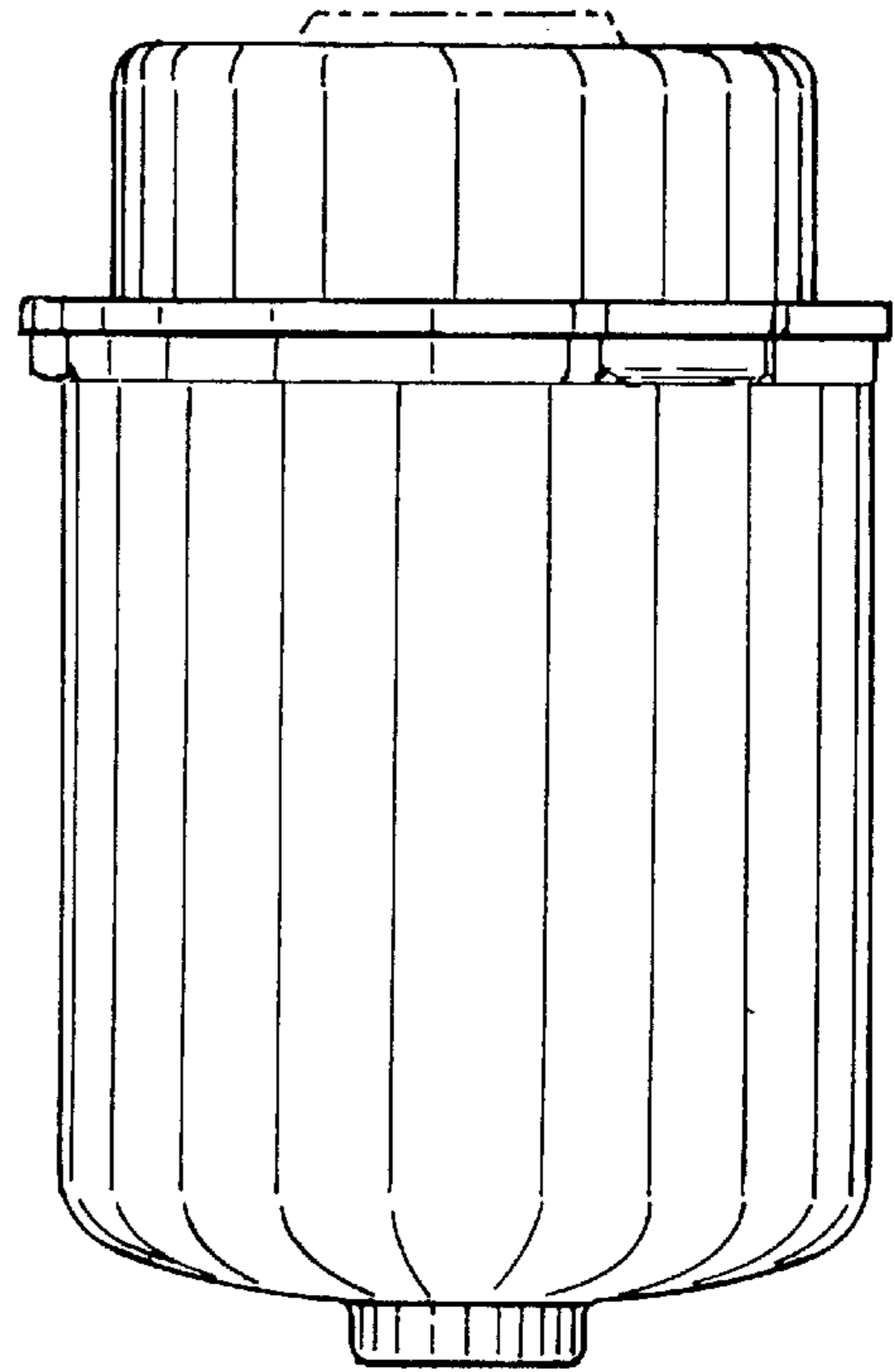


FIG. 8

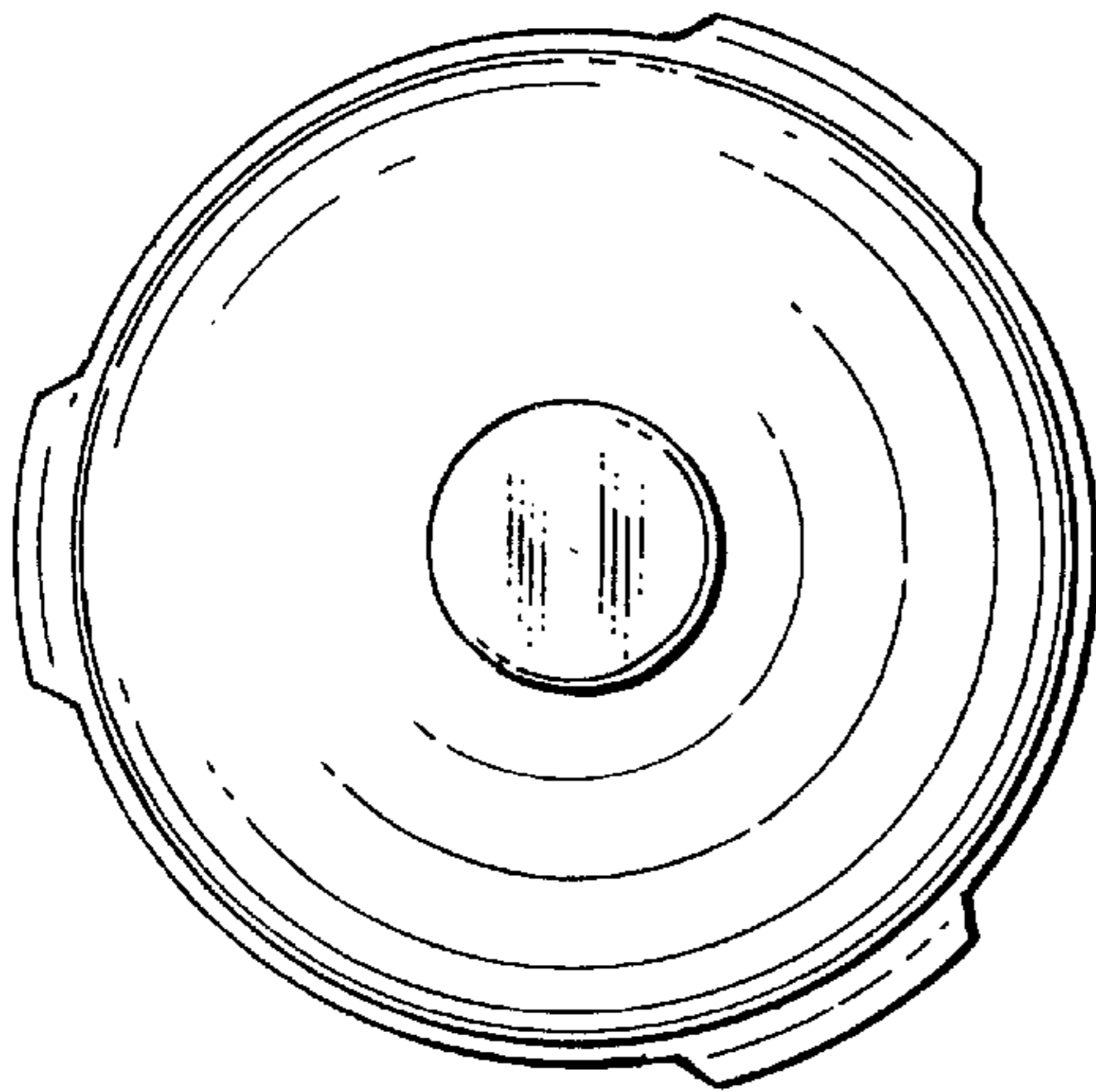


FIG. 9

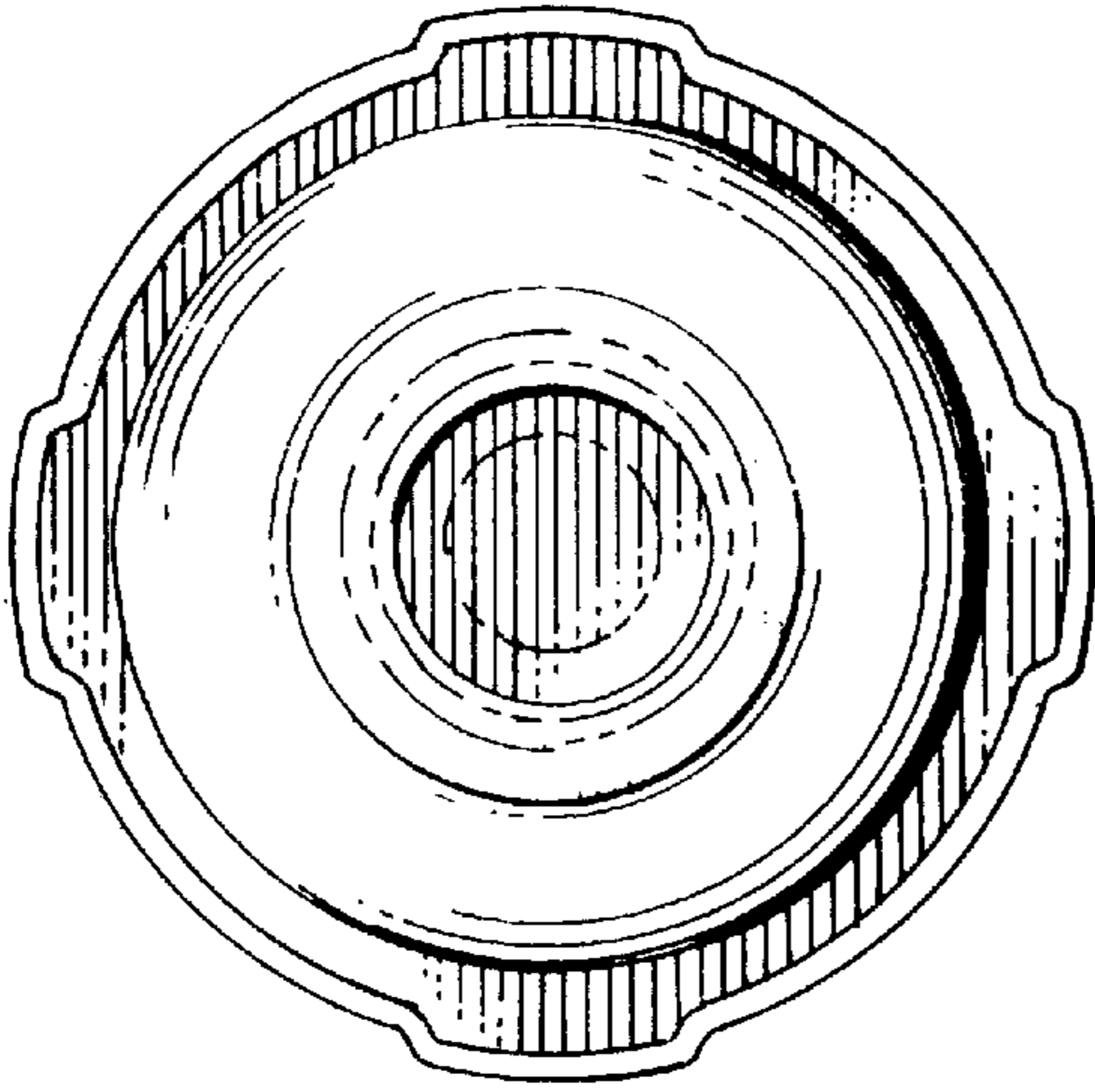


FIG. 10

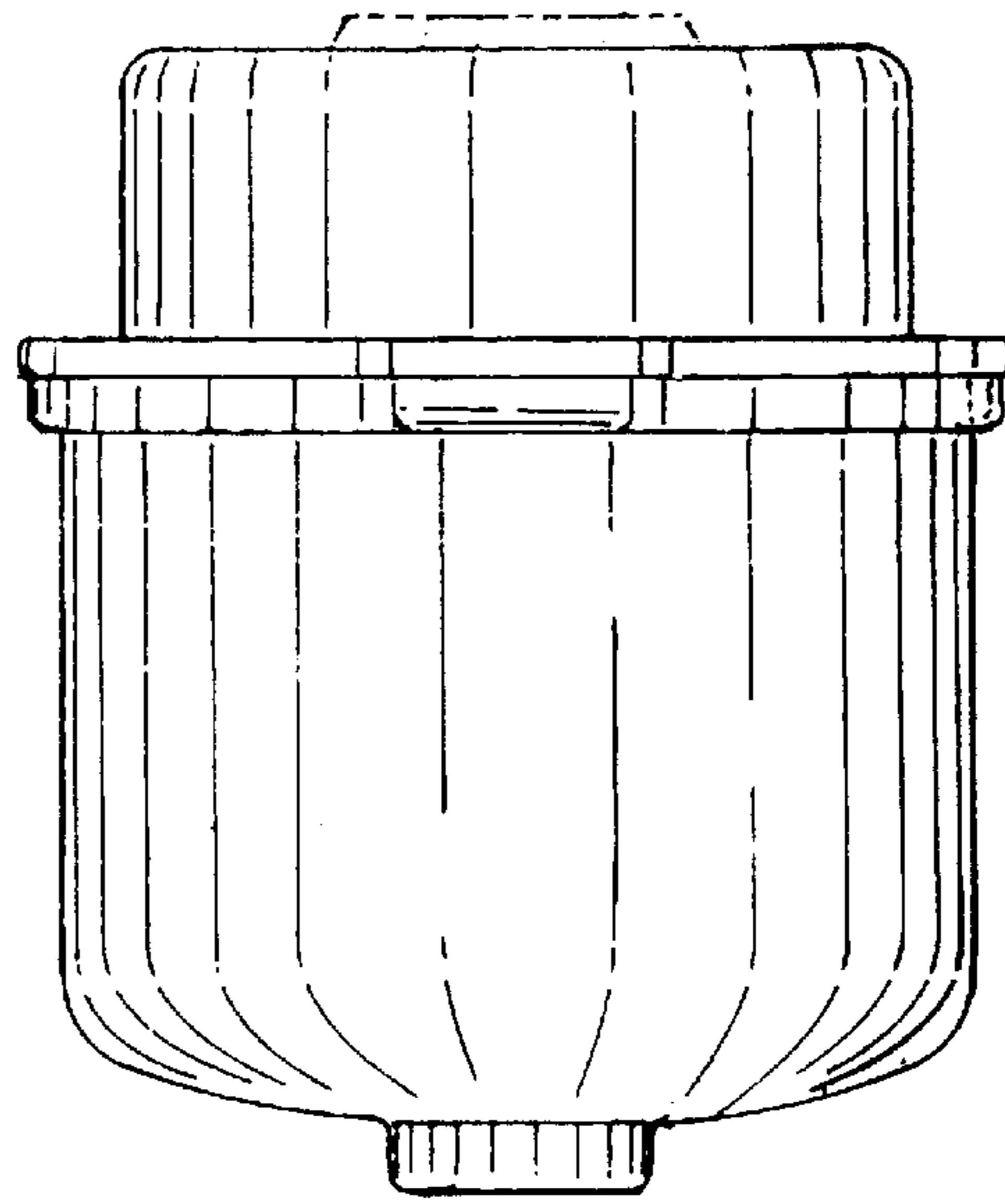


FIG. 11

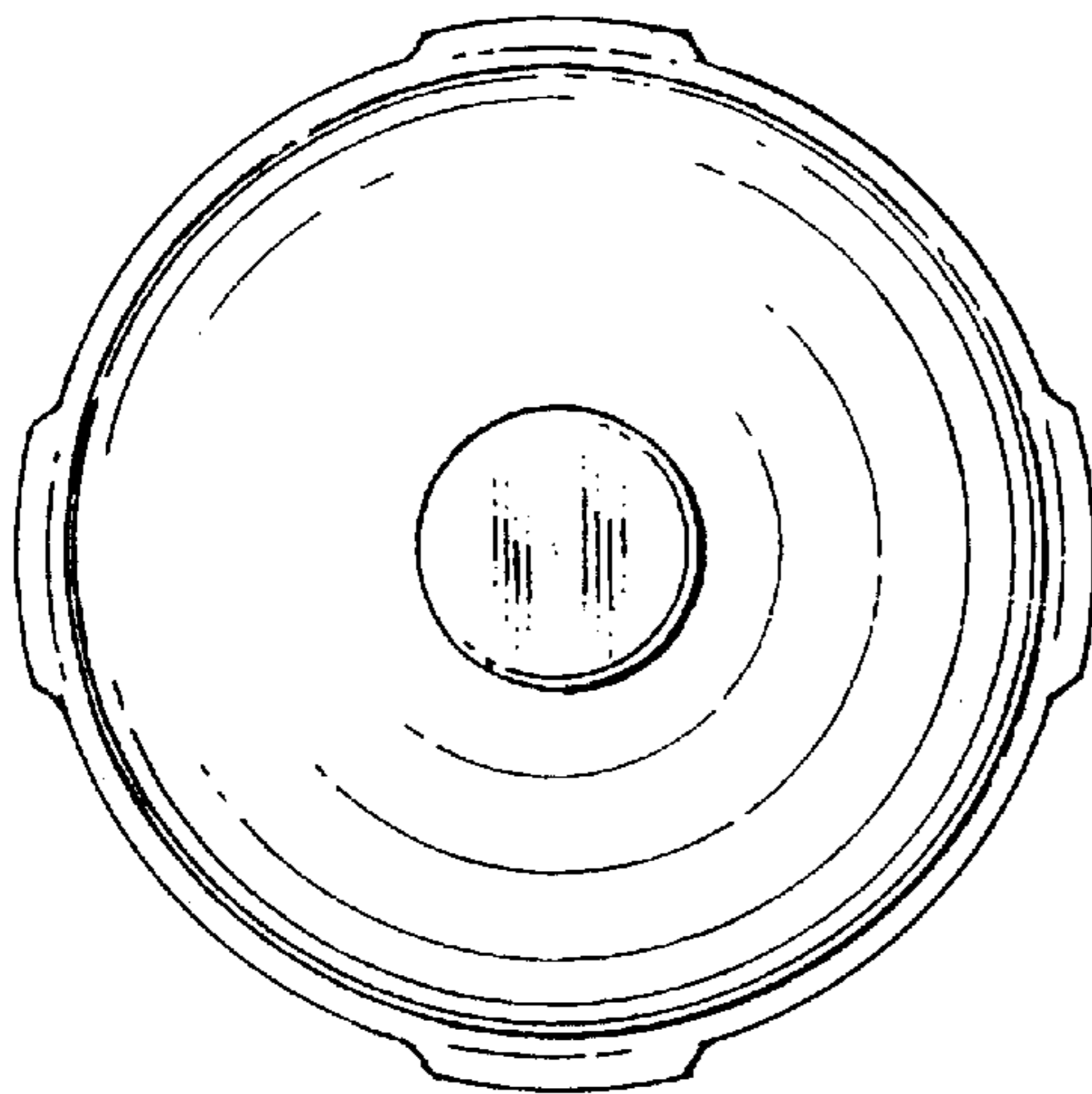


FIG. 12

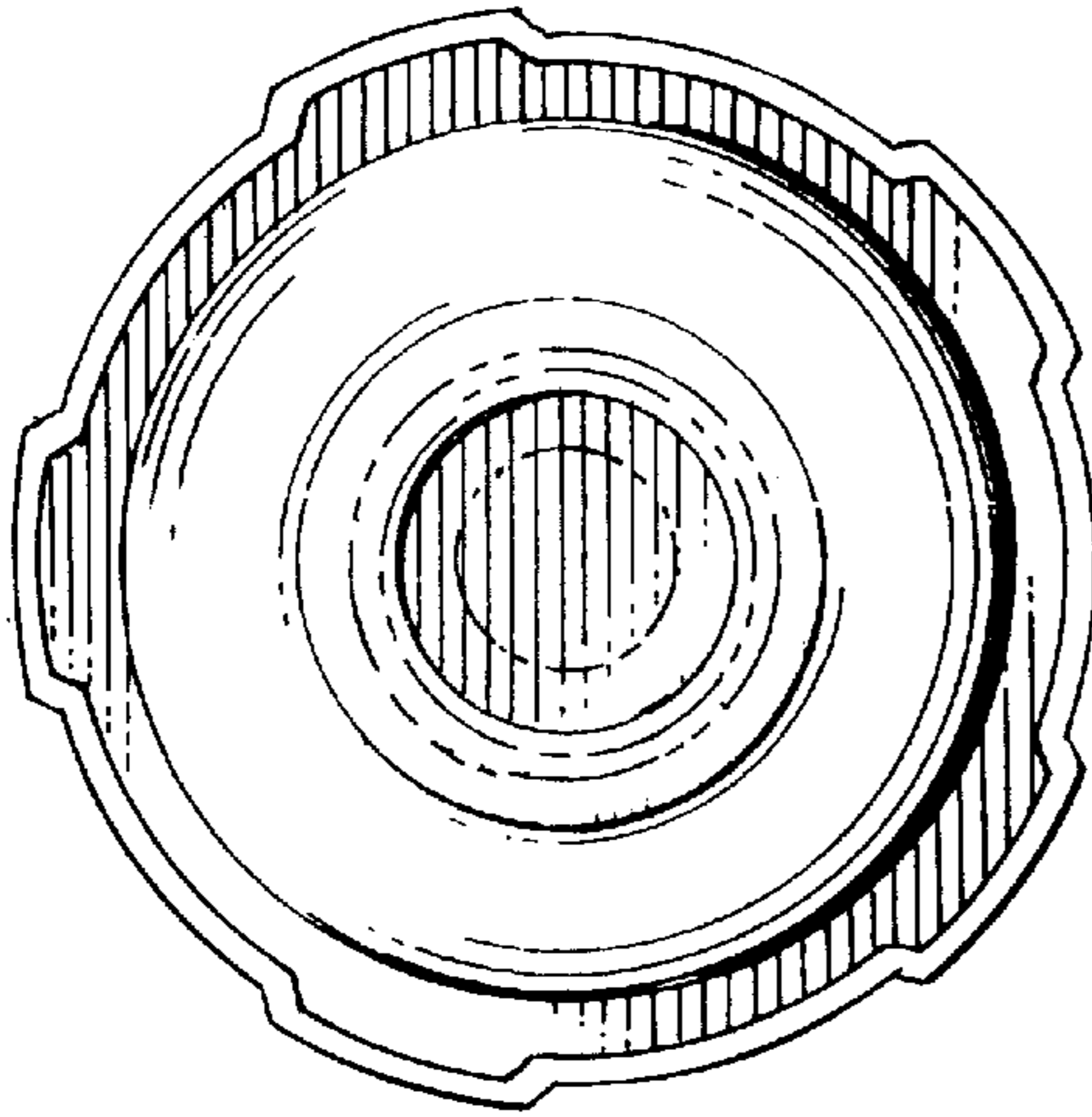


FIG. 13

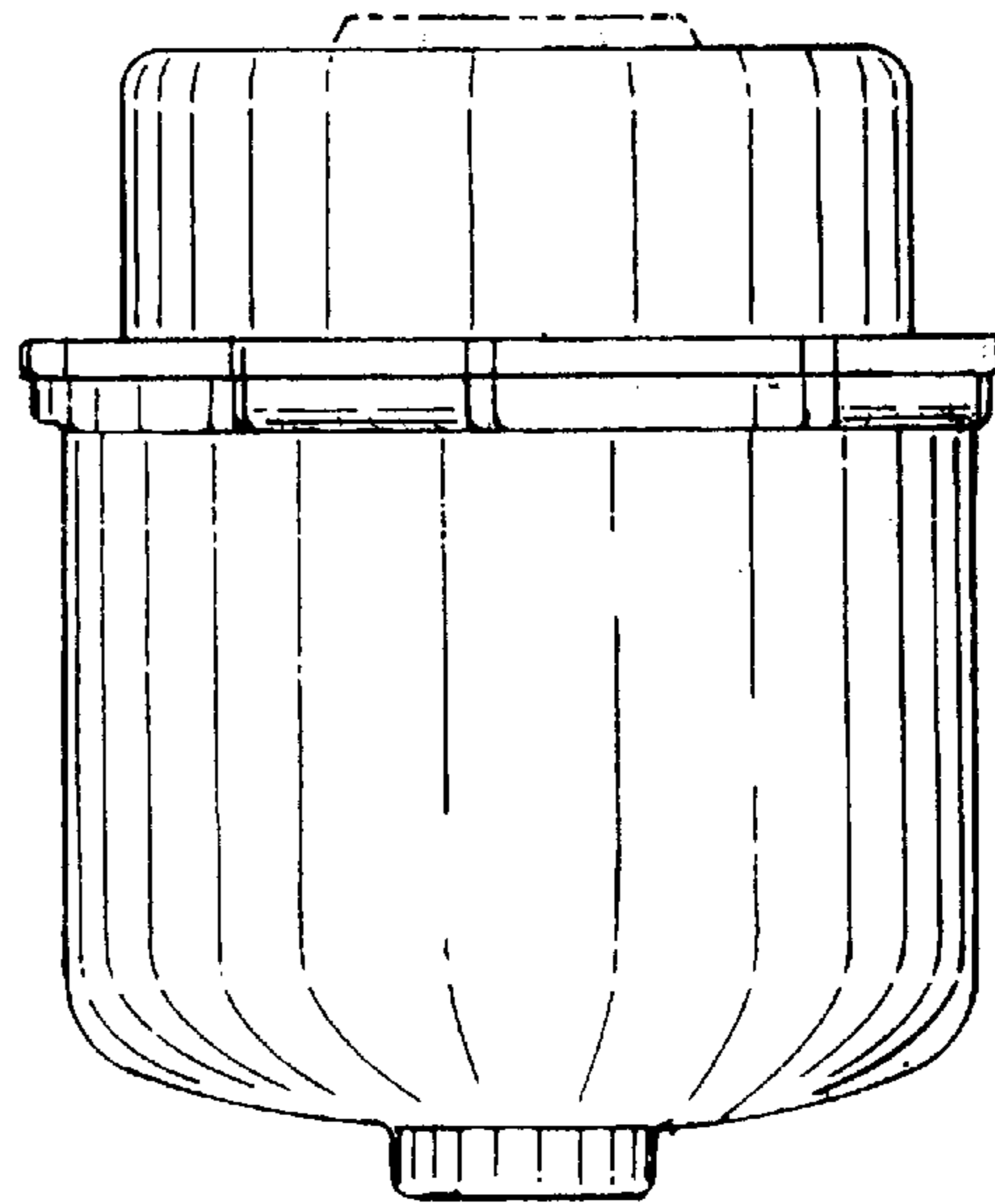


FIG. 14

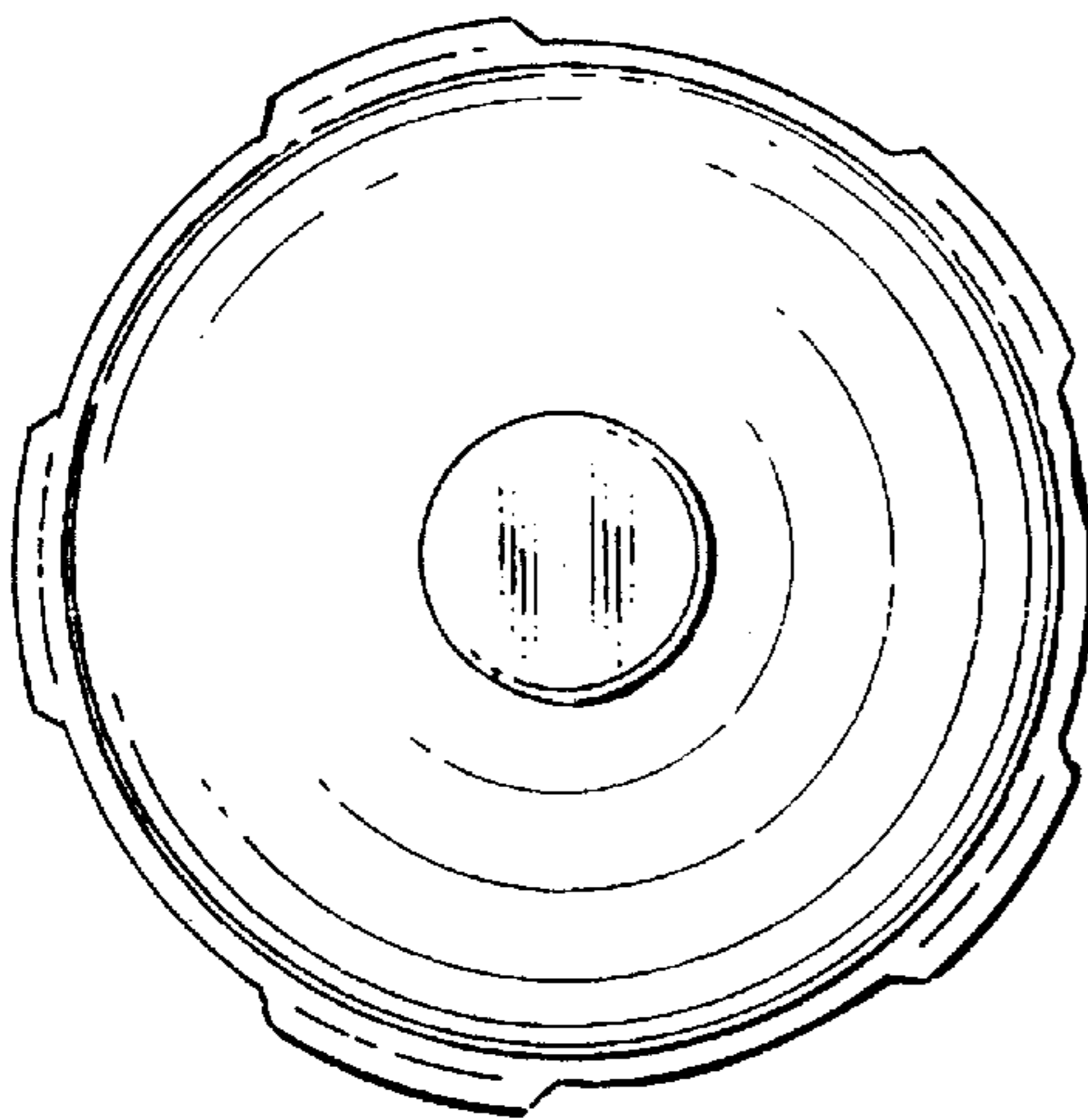


FIG. 15

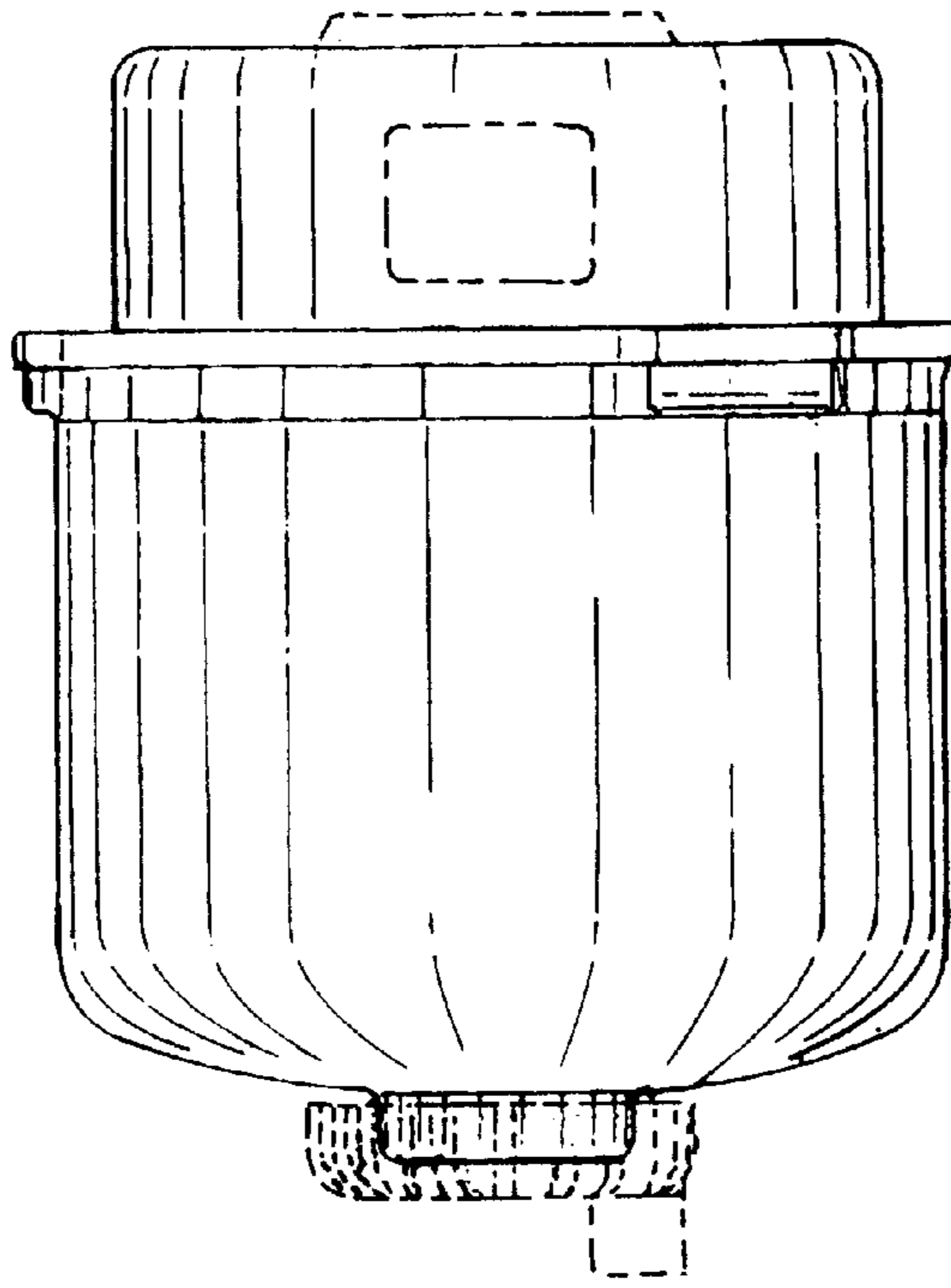


FIG. 16

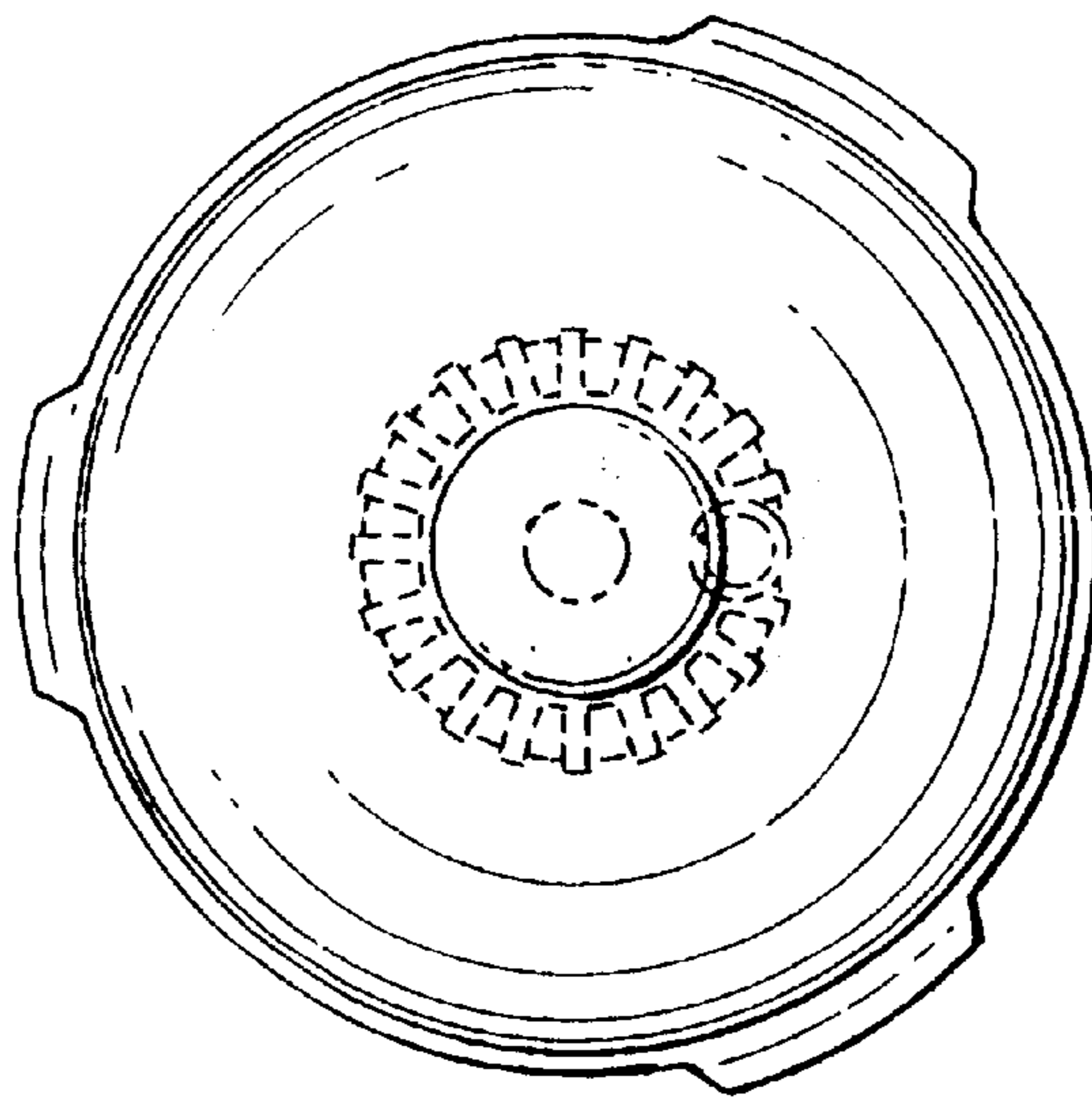


FIG. 17

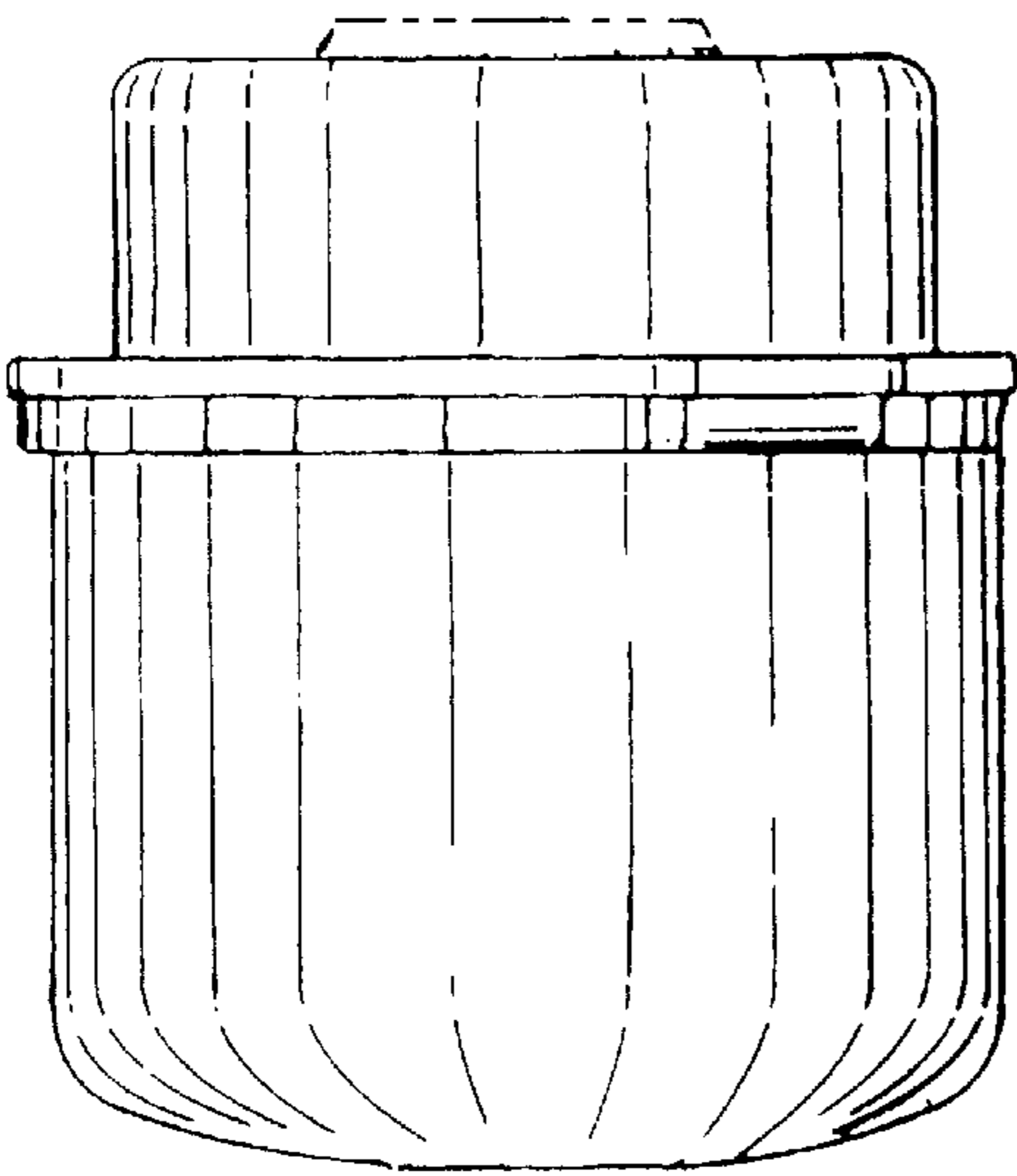


FIG. 18

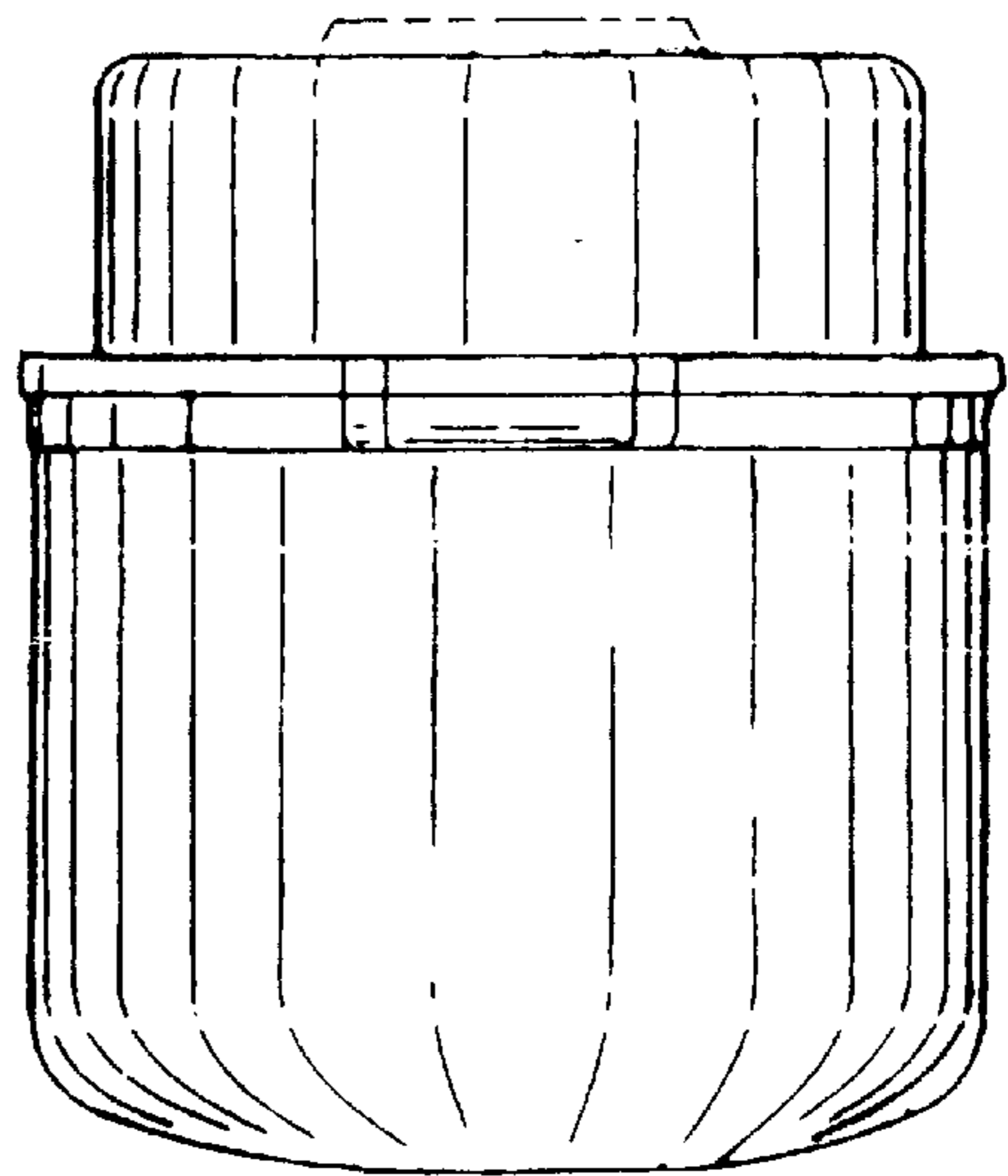


FIG. 19

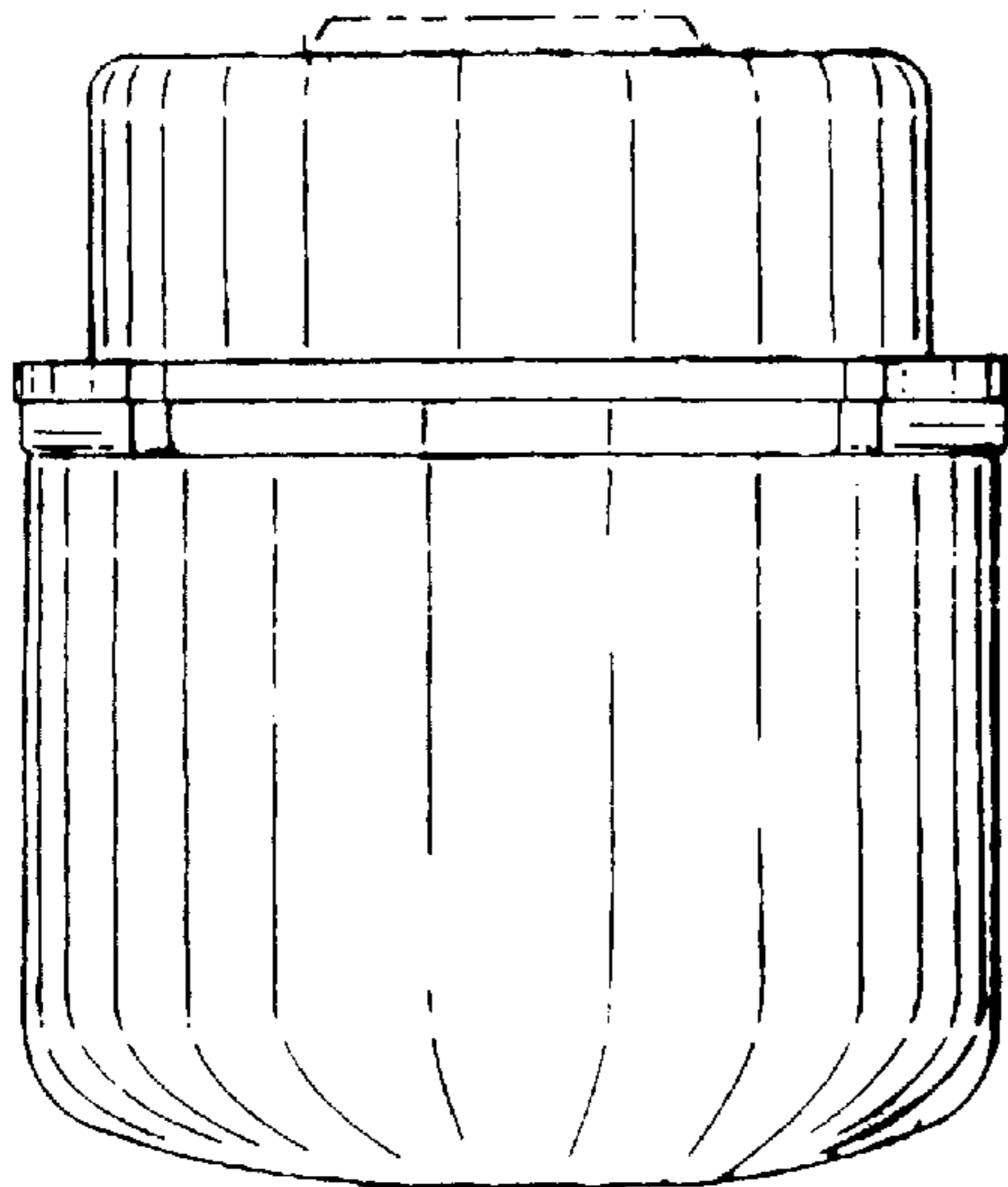


FIG. 20

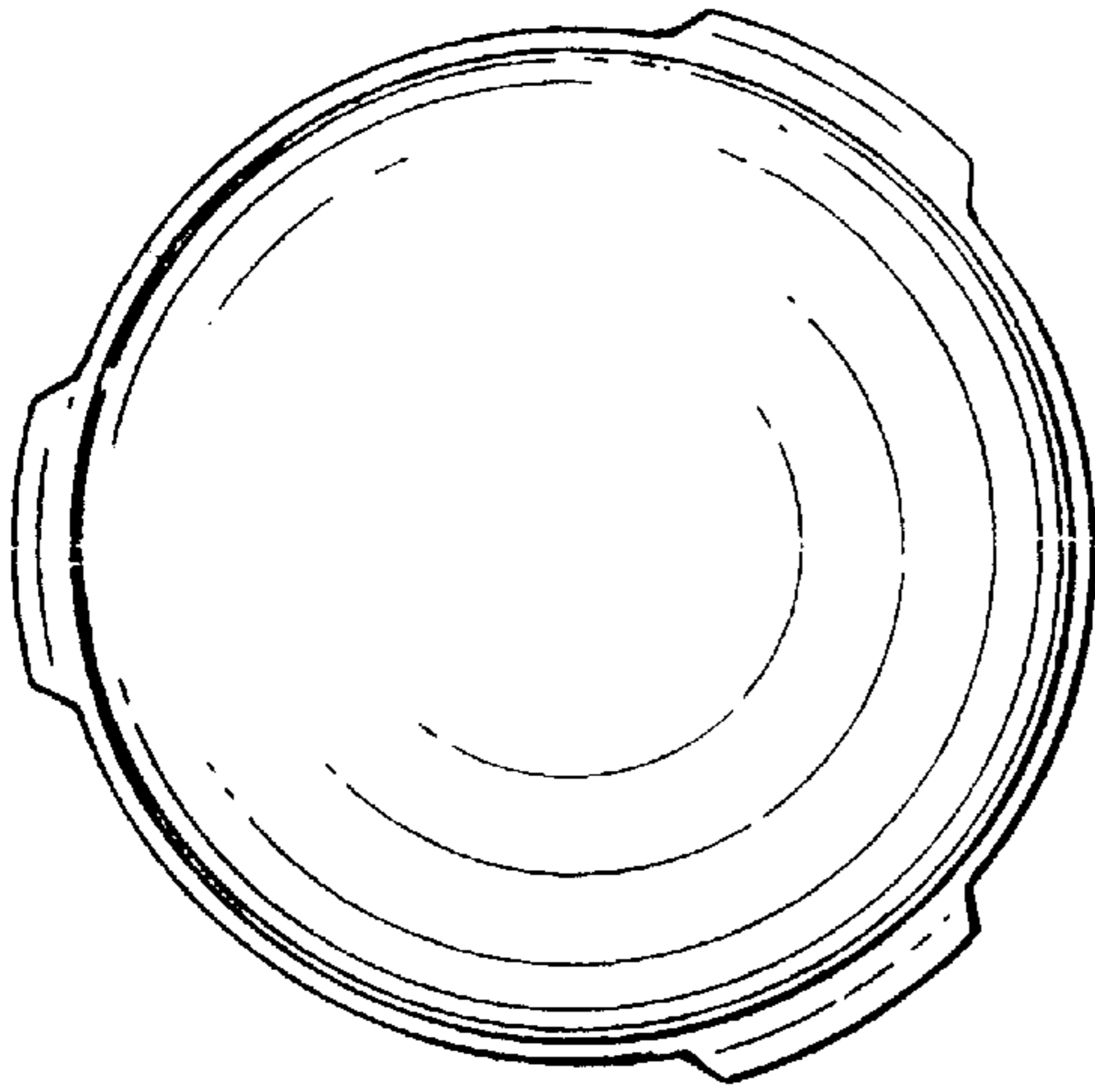


FIG. 21

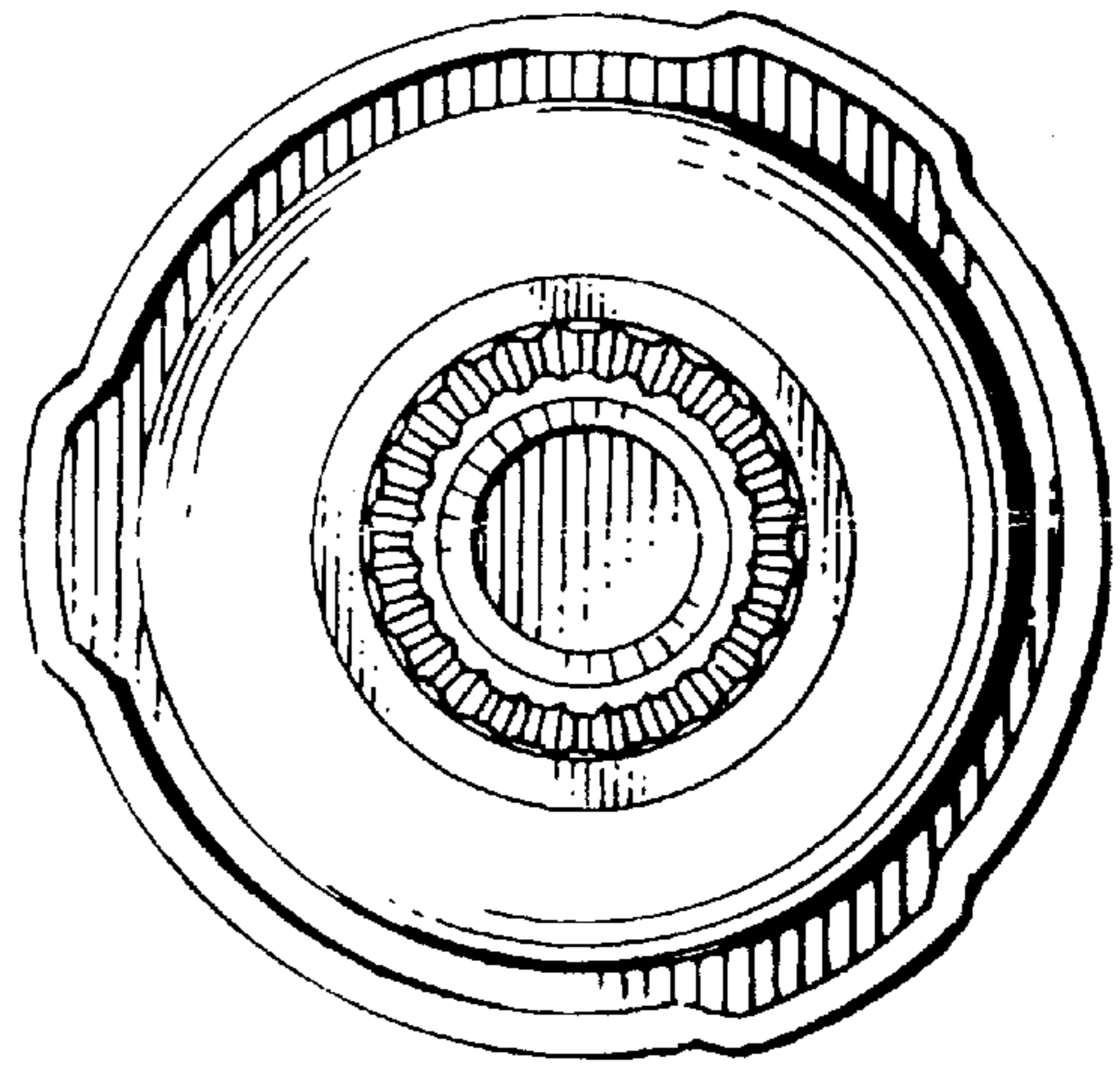


FIG. 22

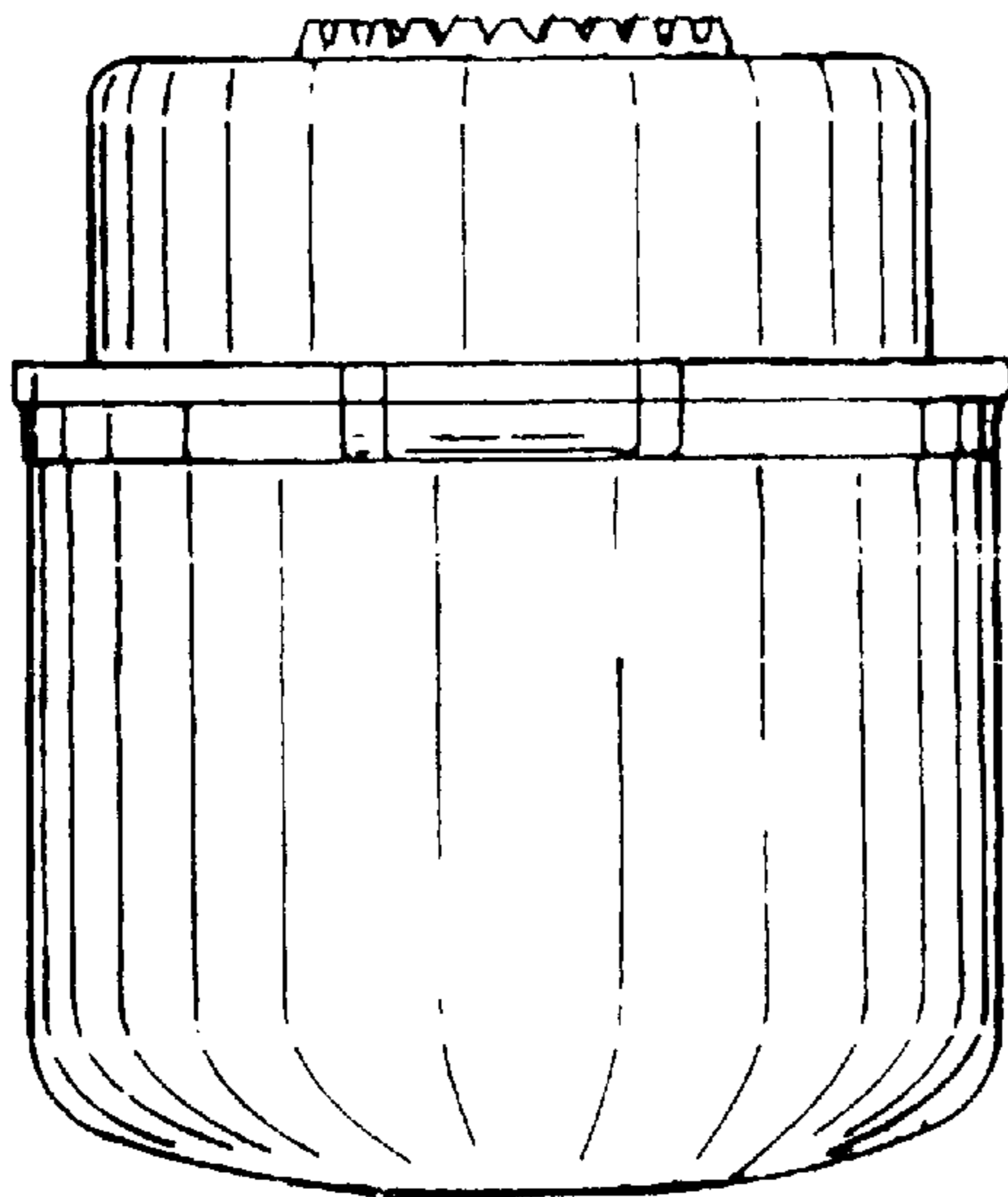


FIG. 23