



US00D857164S

(12) **United States Design Patent** (10) **Patent No.:** **US D857,164 S**
Fukuhara (45) **Date of Patent:** **** *Aug. 20, 2019**

(54) **OPENING AND CLOSING VALVE**
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(73) Assignee: **SMC CORPORATION**, Chiyoda-ku (JP)
(*) Notice: This patent is subject to a terminal disclaimer.
(**) Term: **15 Years**
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(22) Filed: **Jan. 3, 2018**
(30) **Foreign Application Priority Data**
Jul. 28, 2017 (JP) 2017-016384
(51) **LOC (12) Cl.** **23-01**
(52) **U.S. Cl.**
USPC **D23/235**
(58) **Field of Classification Search**
USPC D23/233-237, 241-249, 200, 207, 209, 251/210, 259-269, 310; 251/326, 118, 251/129.15, 129.01, 129.11, 62, 327, 213, 251/324, 63.5, 205, 215, 309-312, 904; 137/301, 315.18, 486, 487.5, 599.05, 137/601.14, 554, 630.12, 398, 545, 547, 137/549
CPC F16K 3/0281; F16K 3/0218; F16K 31/508; F16K 37/00
See application file for complete search history.

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(57) **CLAIM**

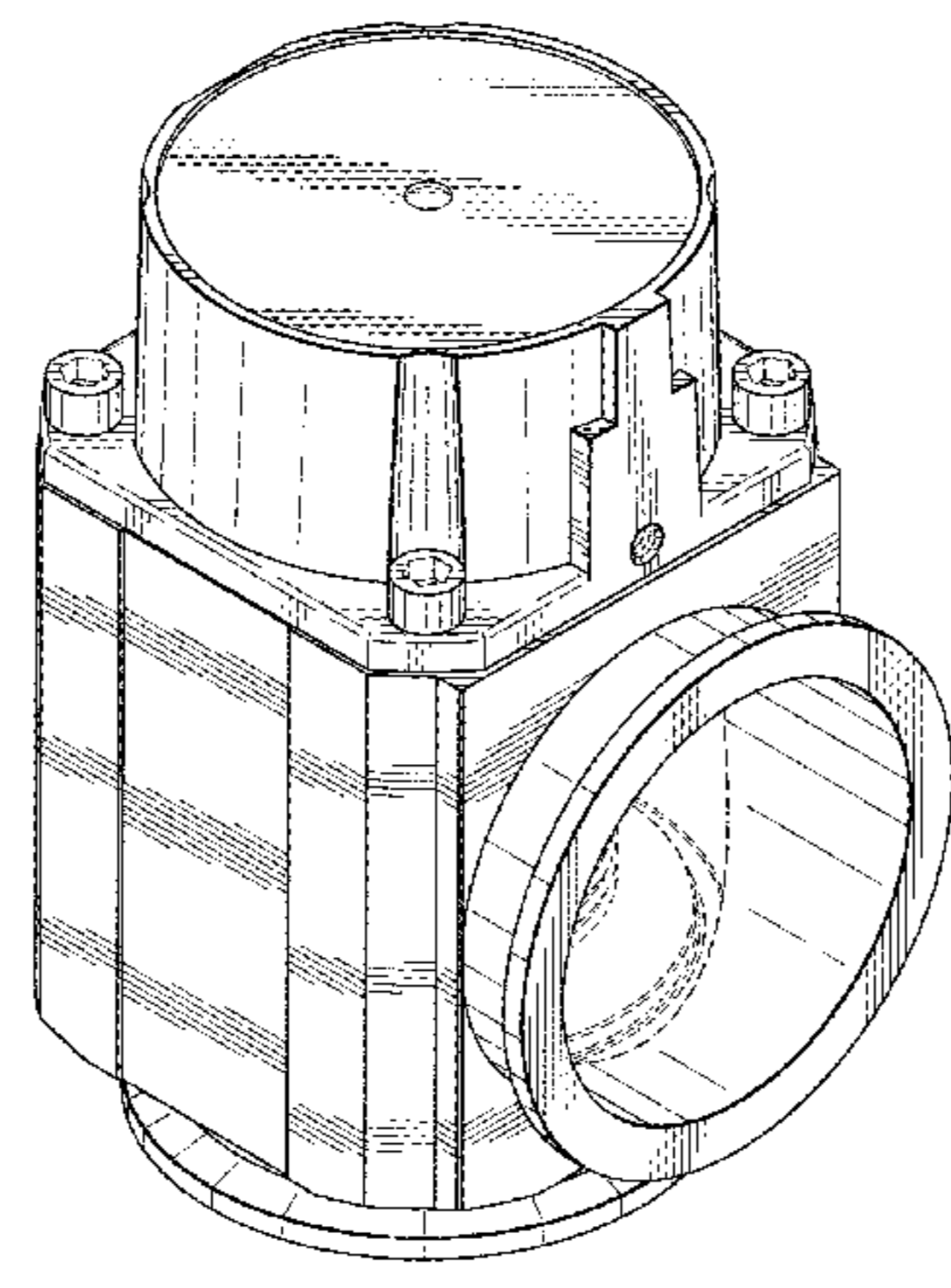
The ornamental design for an opening and closing valve, as shown and described.

DESCRIPTION

FIG. 1 is a front, top, and right side perspective view of an opening and closing valve;
FIG. 2 is a rear, bottom, and left side perspective view thereof;
FIG. 3 is a front elevational view thereof, the rear elevational view being a mirror image of the front elevational view;
FIG. 4 is a top plan view thereof;
FIG. 5 is a bottom plan view thereof;
FIG. 6 is a left side elevational view thereof; and,
FIG. 7 is a right side elevational view thereof.
The broken lines in the drawings illustrate subject matter that forms no part of the claimed design.

1 Claim, 6 Drawing Sheets

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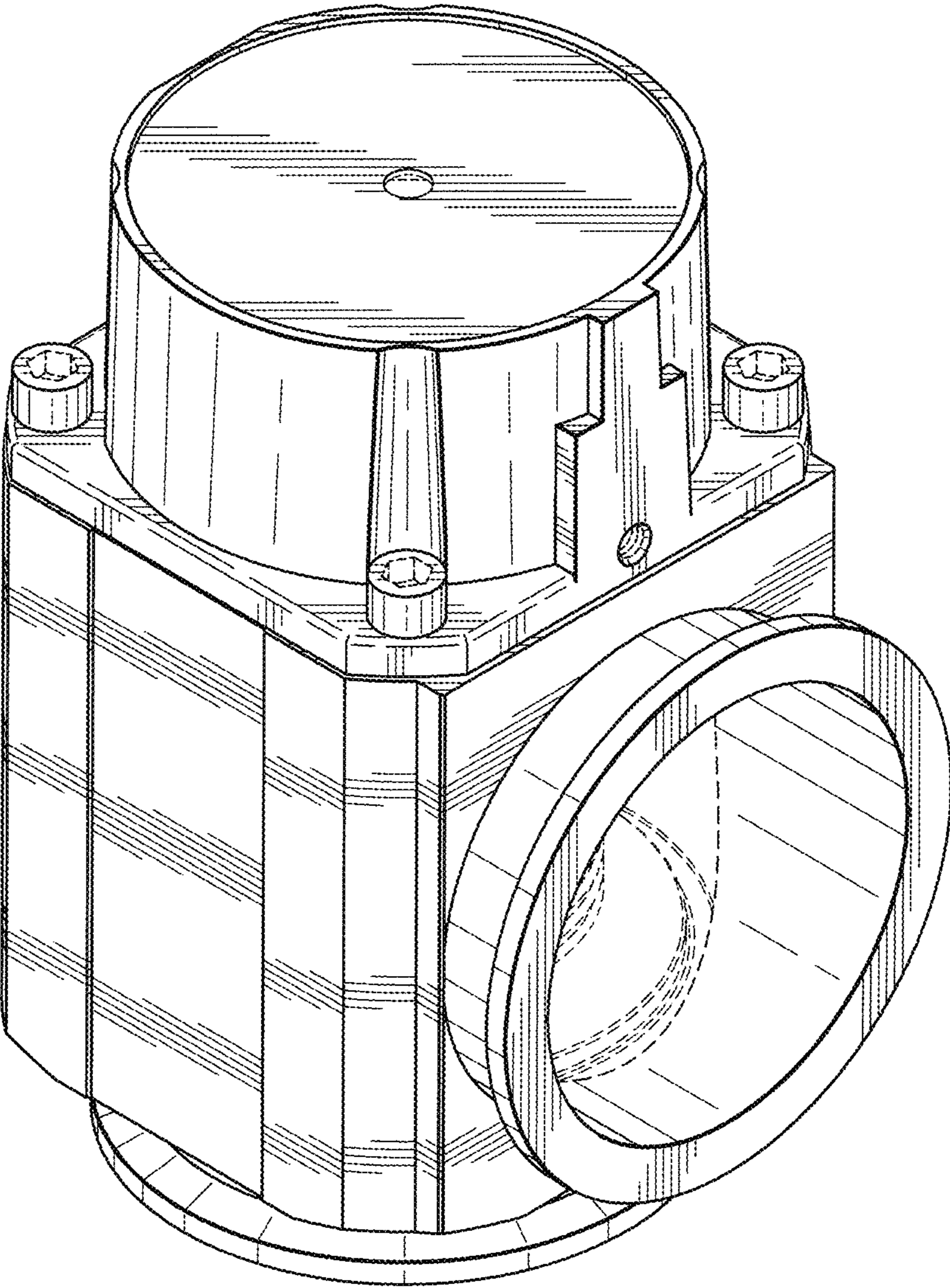


FIG. 1

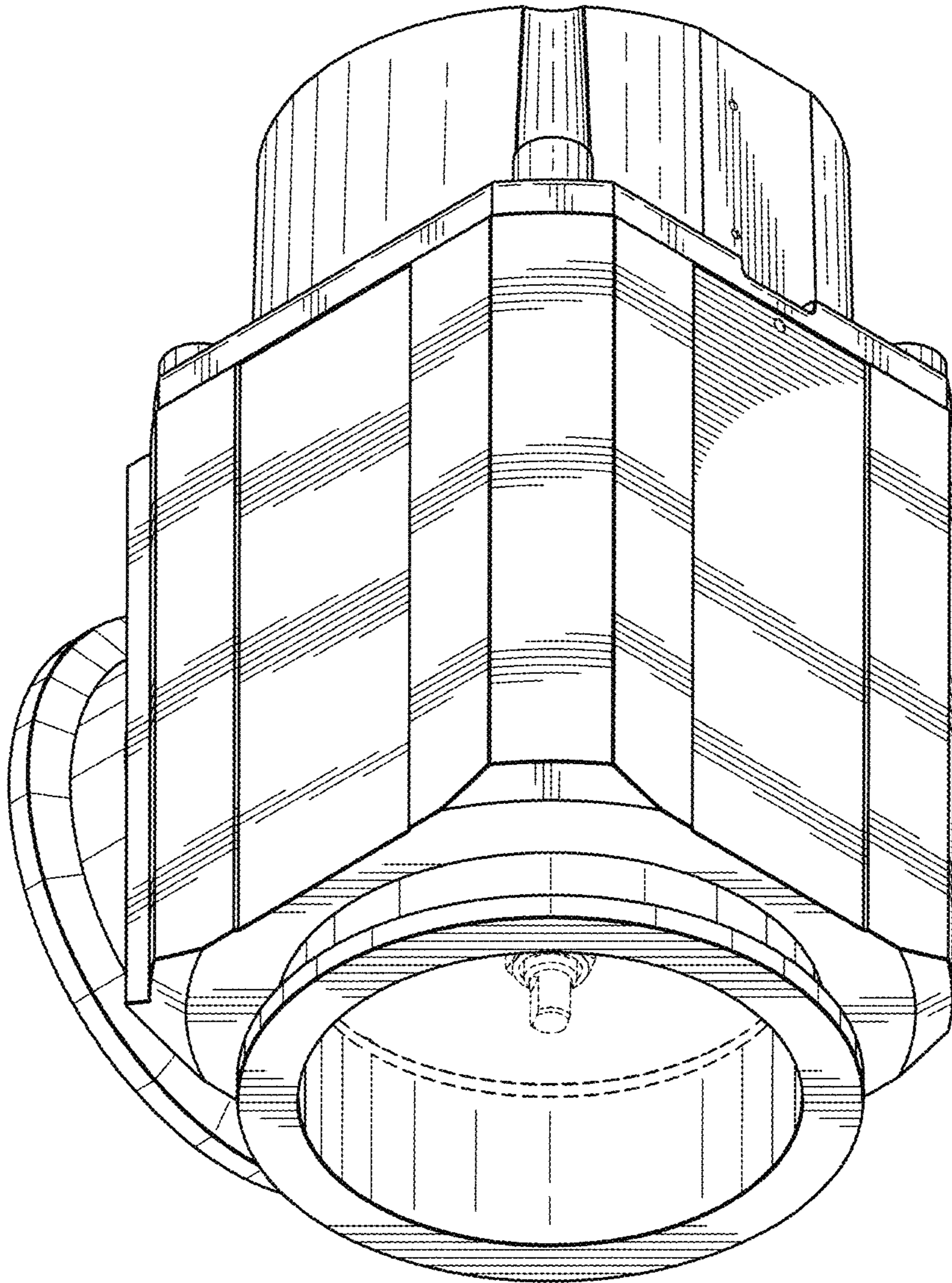


FIG. 2

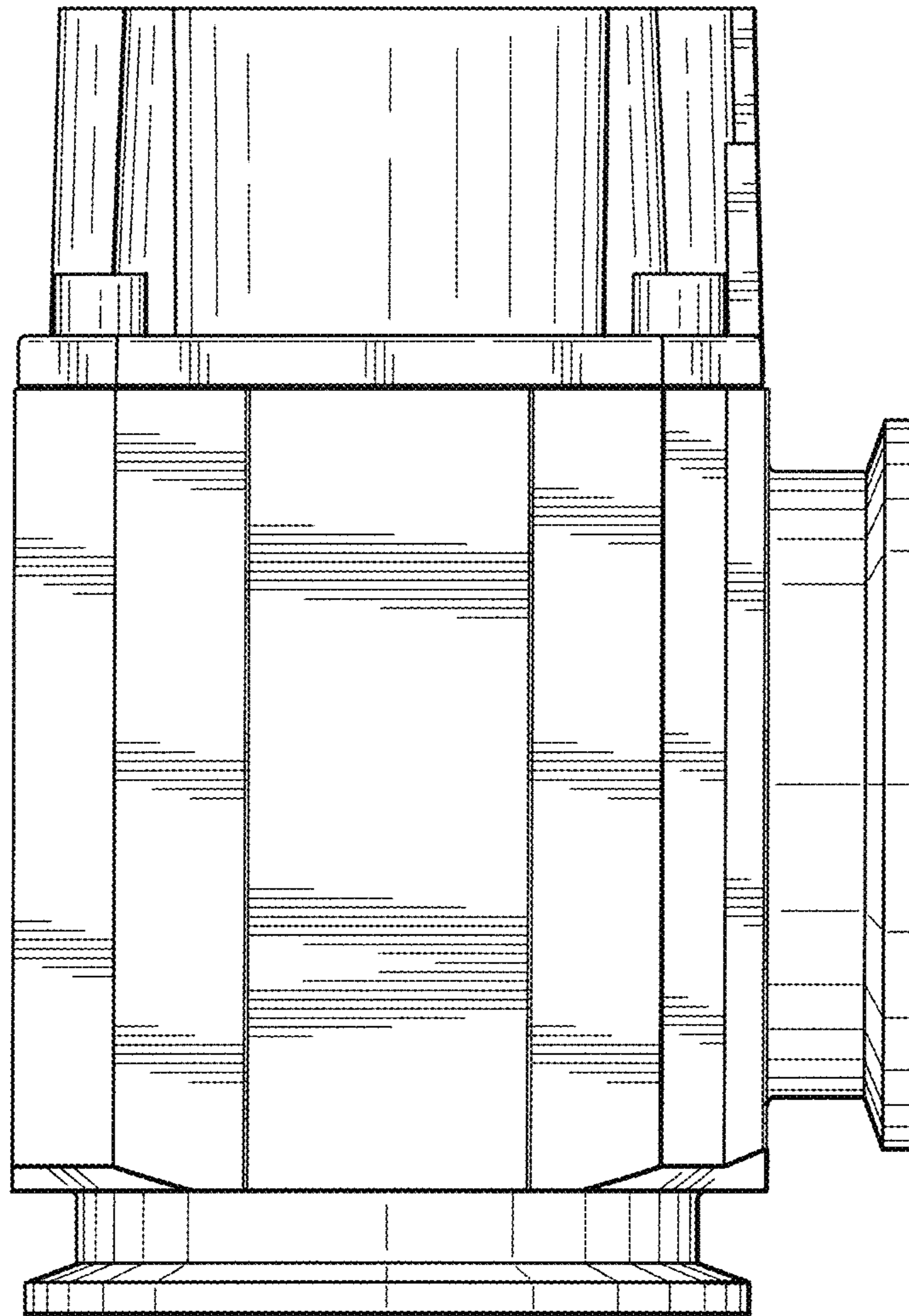


FIG. 3

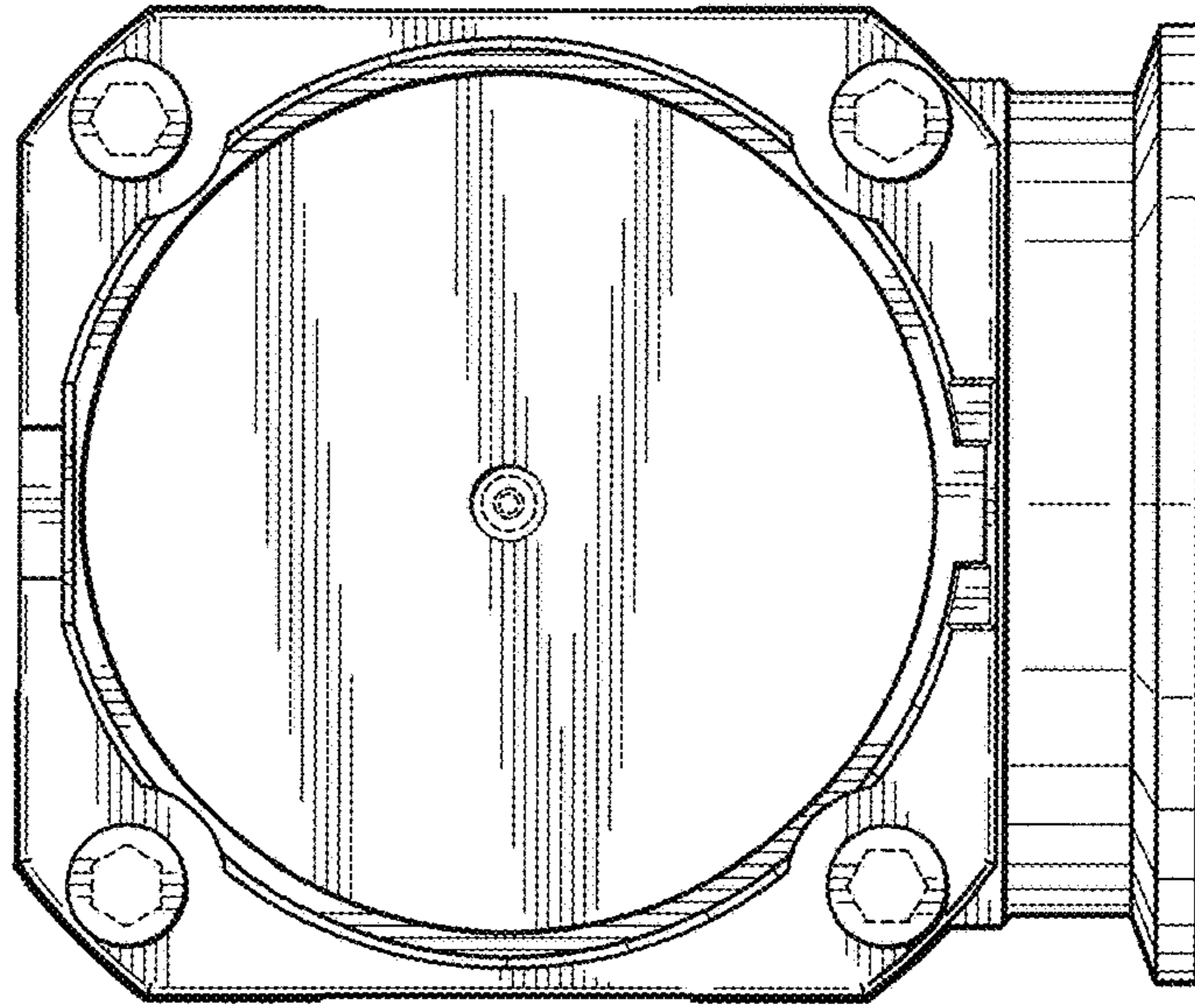


FIG. 4

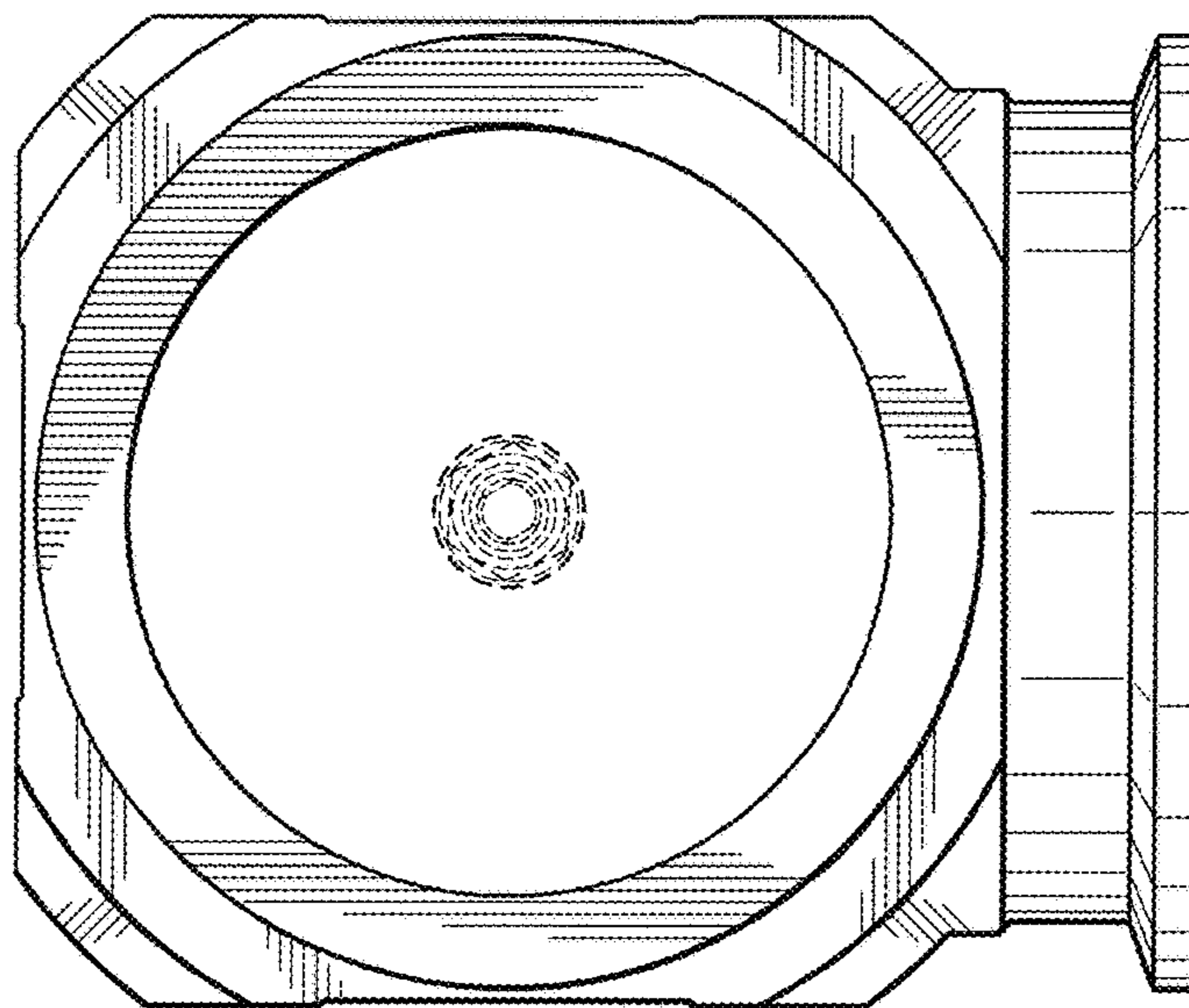


FIG. 5

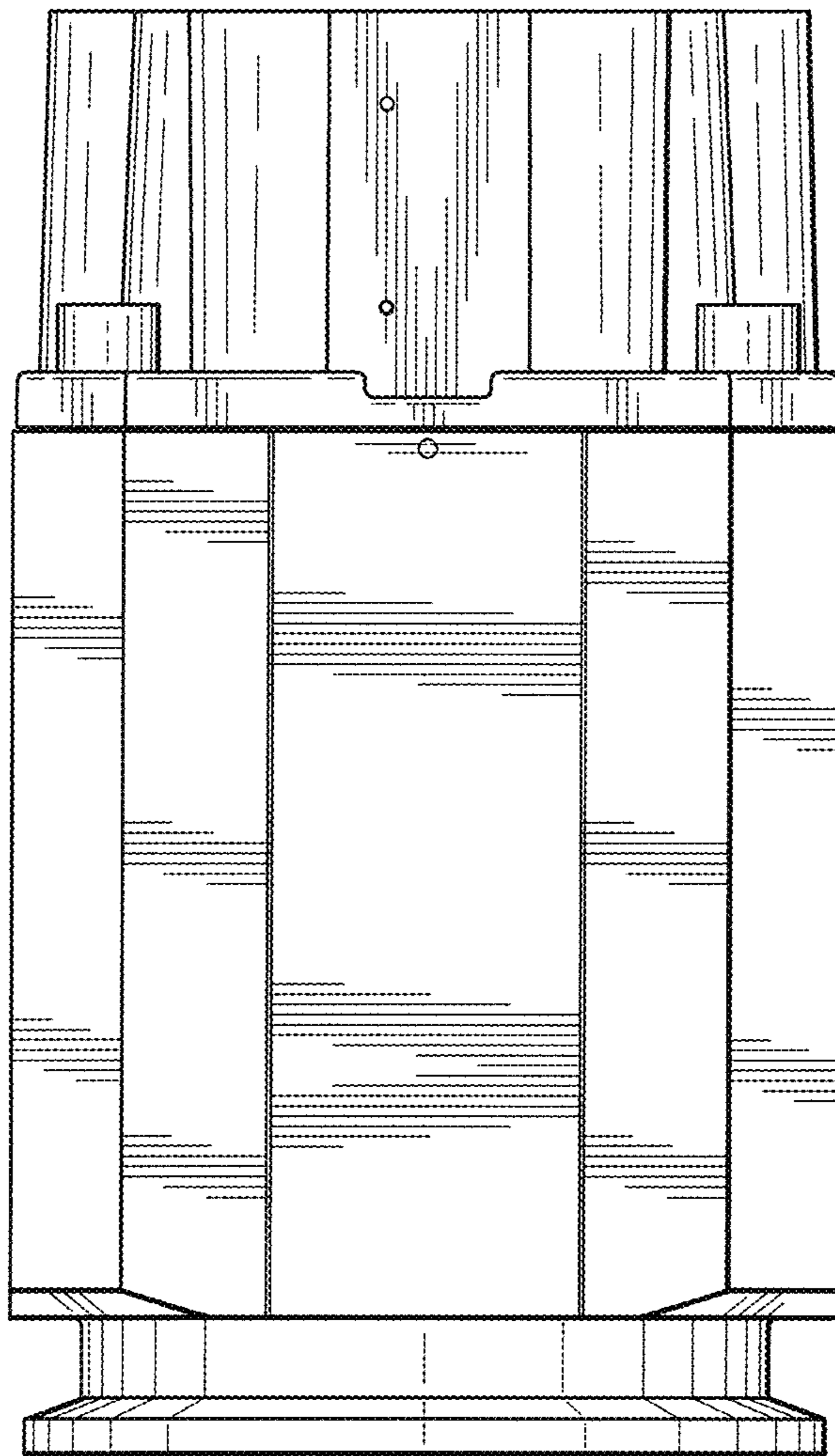


FIG. 6

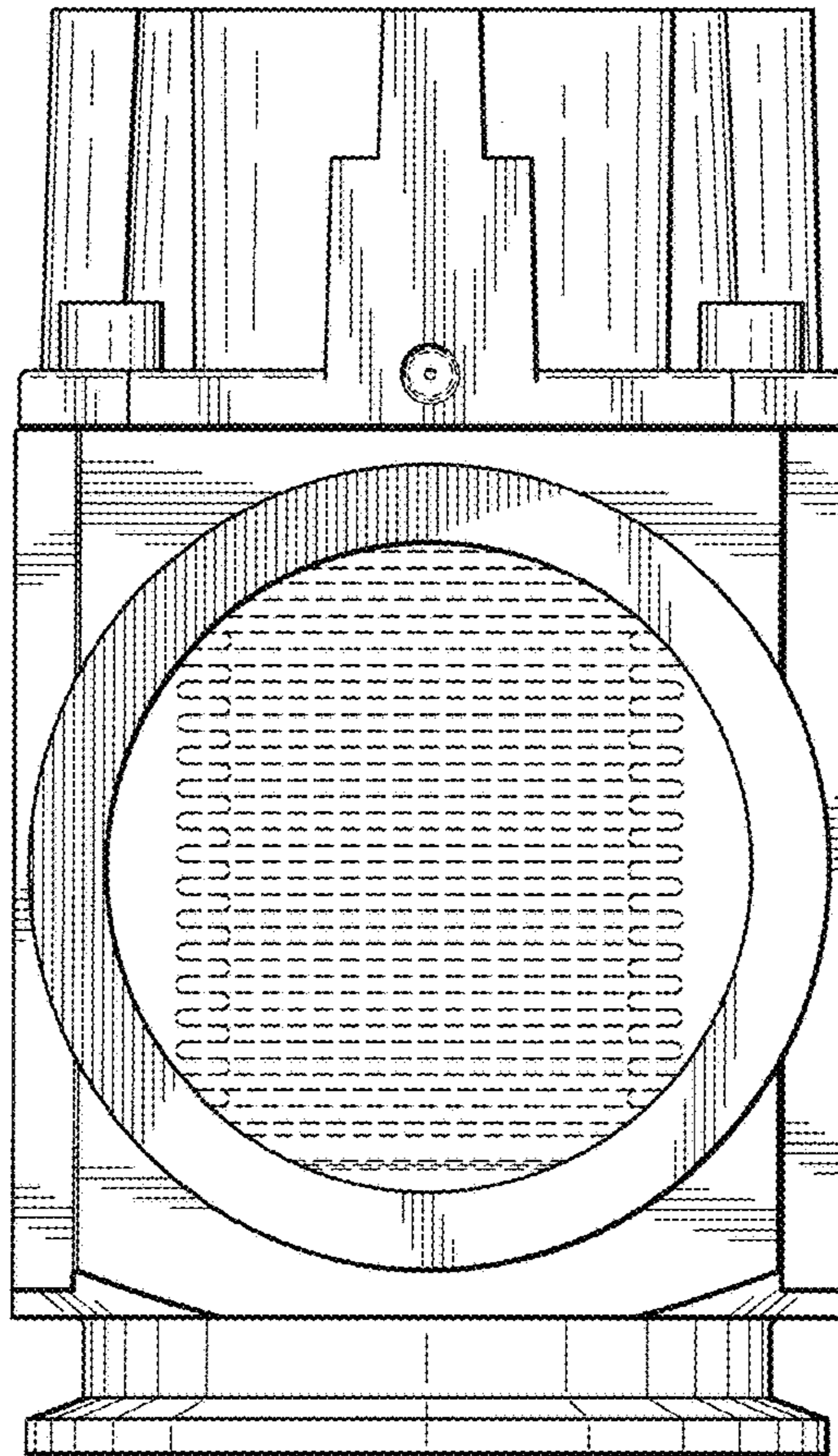


FIG. 7