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(12) **United States Design Patent**  
**Matsushita**

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(45) **Date of Patent:** **\*\* Jun. 11, 2019**

(54) **AUTOMATIC DRAIN VALVE**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **SMC CORPORATION**, Tokyo (JP)

JP D1442696 S 6/2012  
JP D1442697 S 6/2012

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(\*\*) Term: **15 Years**

(57) **CLAIM**

(21) Appl. No.: **29/589,715**

The ornamental design for an automatic drain valve, as shown.

(22) Filed: **Jan. 4, 2017**

**DESCRIPTION**

(30) **Foreign Application Priority Data**

Jul. 15, 2016 (CN) ..... 2016 3 0326060

(51) **LOC (11) Cl.** ..... **23-01**

(52) **U.S. Cl.**  
USPC ..... **D23/233**

(58) **Field of Classification Search**  
USPC ..... 137/204, 203, 195, 519, 607, 187;  
D23/233, 235  
CPC ..... F16T 1/00; B01D 45/08  
See application file for complete search history.

FIG. 1 is a front, top and right side perspective view of an automatic drain valve showing a first embodiment of my new design;

FIG. 2 is a rear, bottom and left side perspective view thereof;

FIG. 3 is a front view thereof;

FIG. 4 is a rear view thereof;

FIG. 5 is a top plan view thereof;

FIG. 6 is a bottom plan view thereof;

FIG. 7 is a left side view thereof;

FIG. 8 is a right side view thereof;

FIG. 9 is a partial cross sectional view taken along the line 9-9 of FIG. 5;

FIG. 10 is a front, top and right side perspective view of an automatic drain valve showing a second embodiment of my new design;

FIG. 11 is a rear, bottom and left side perspective view of FIG. 10;

FIG. 12 is a front view of FIG. 10;

FIG. 13 is a rear view of FIG. 10;

FIG. 14 is a top plan view of FIG. 10;

FIG. 15 is a bottom plan view of FIG. 10;

FIG. 16 is a left side view of FIG. 10;

FIG. 17 is a right side view of FIG. 10; and,

FIG. 18 is a partial cross sectional view taken along the line 18-18 of FIG. 14.

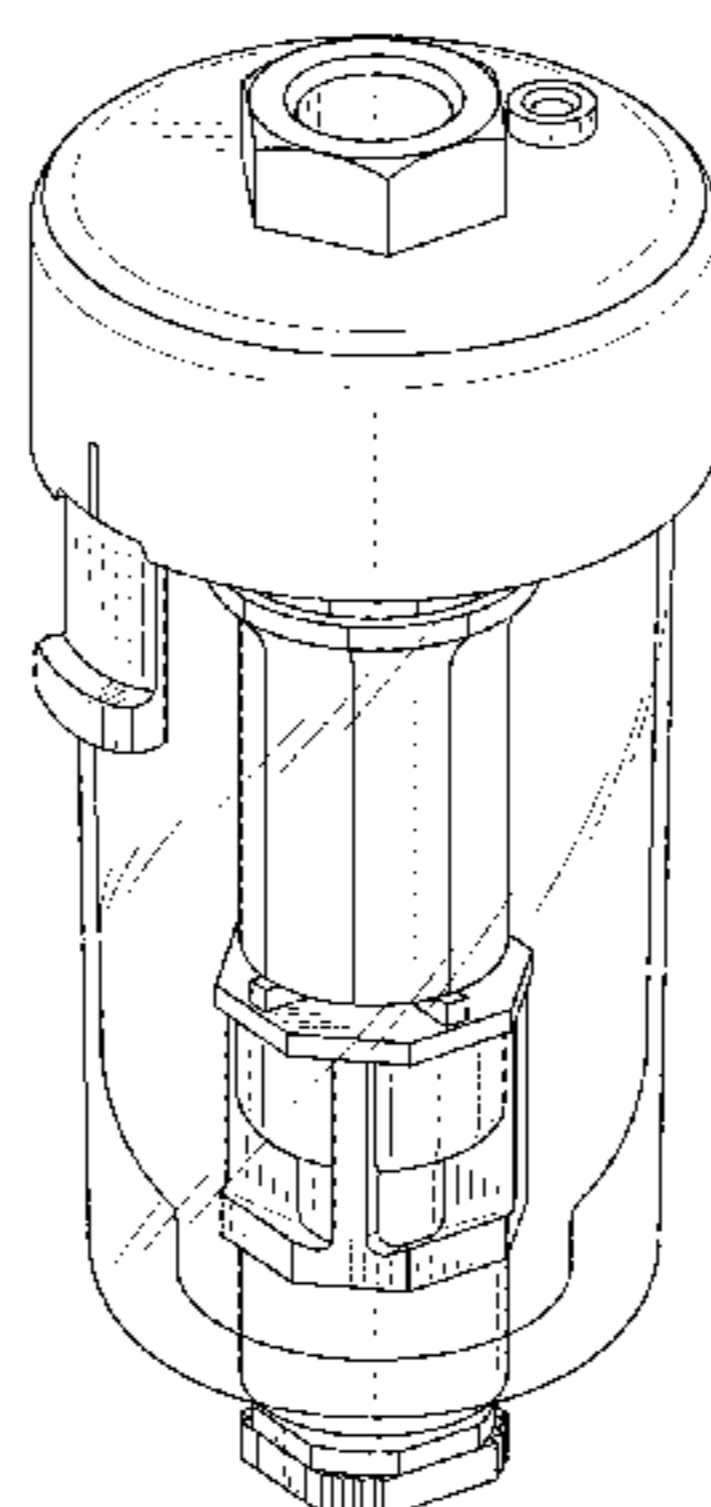
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**1 Claim, 18 Drawing Sheets**



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FIG. 1

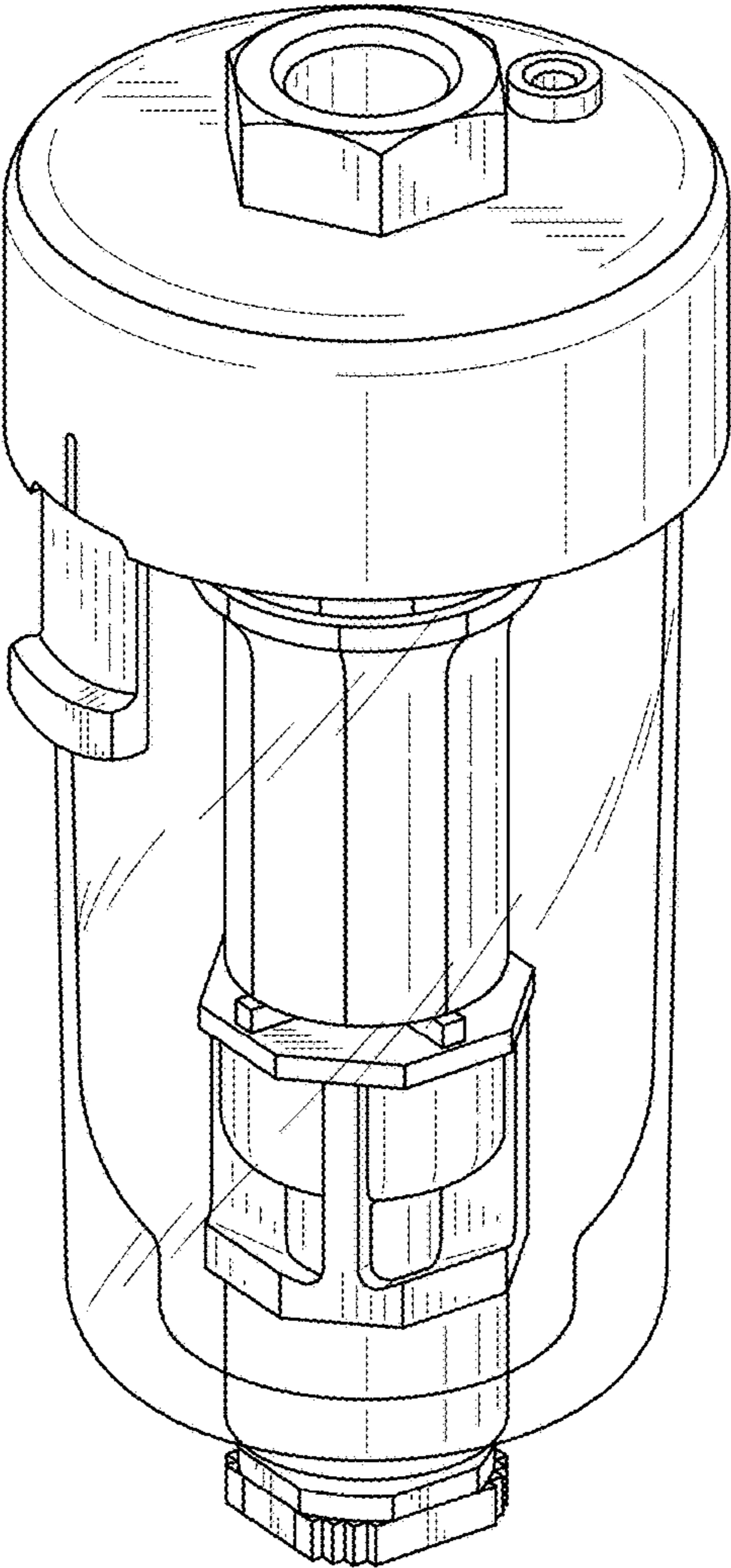


FIG. 2

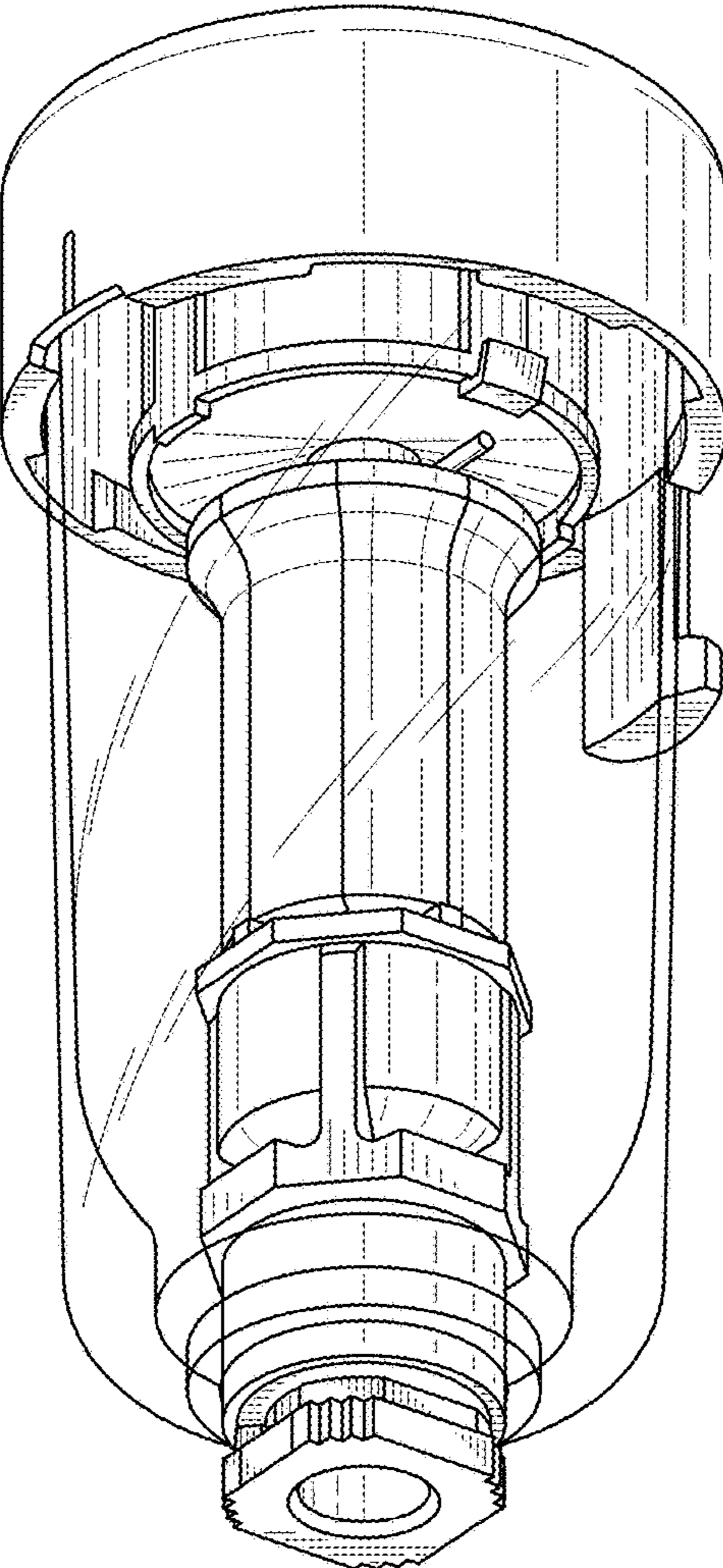


FIG. 3

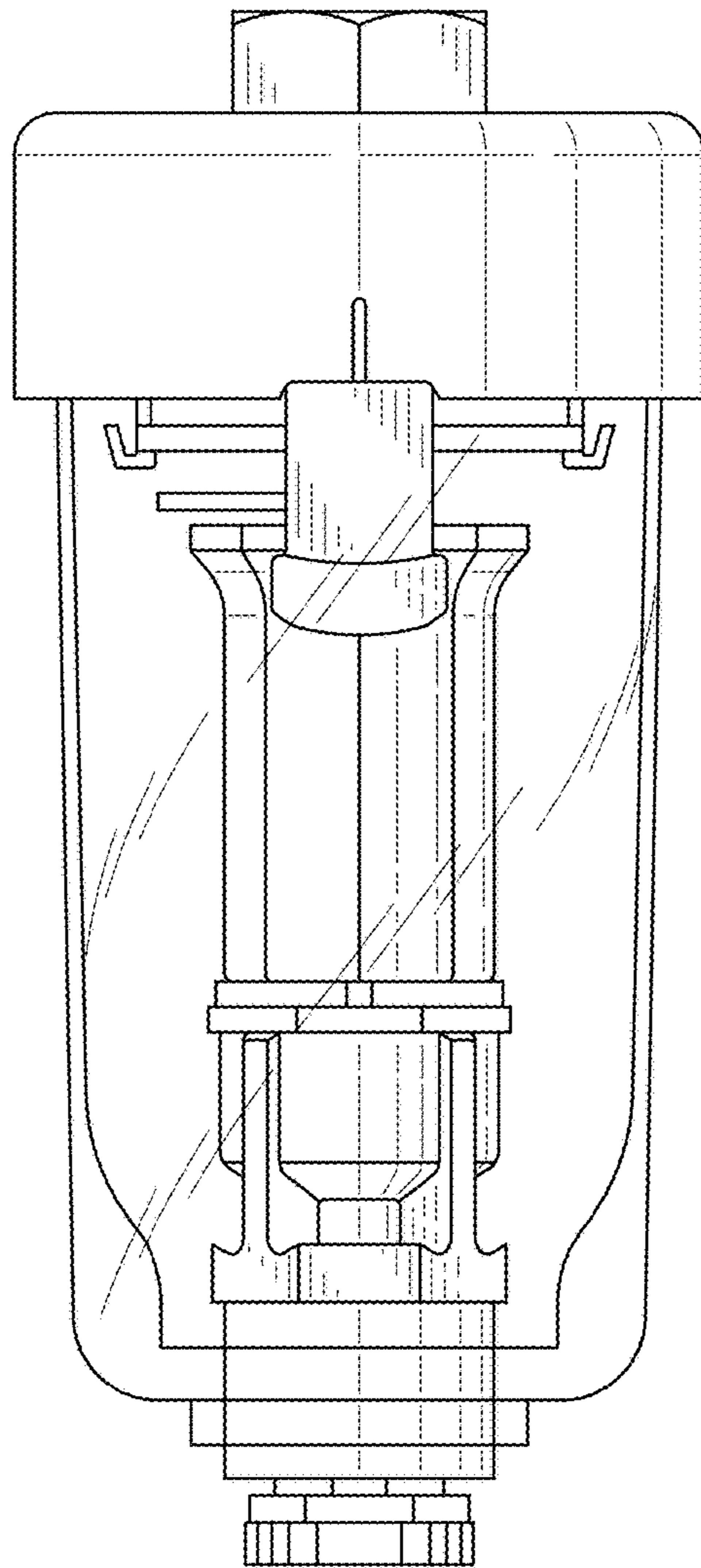


FIG. 4

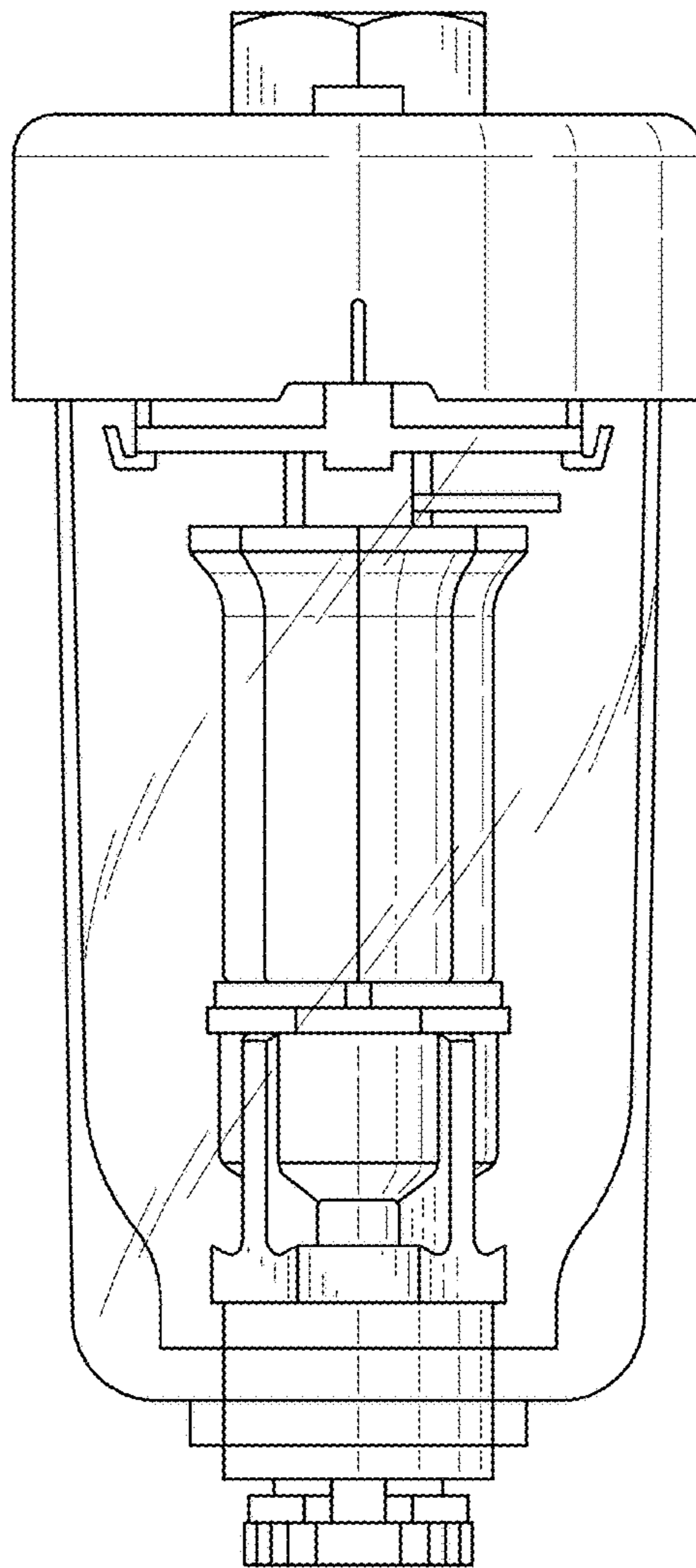




FIG. 5

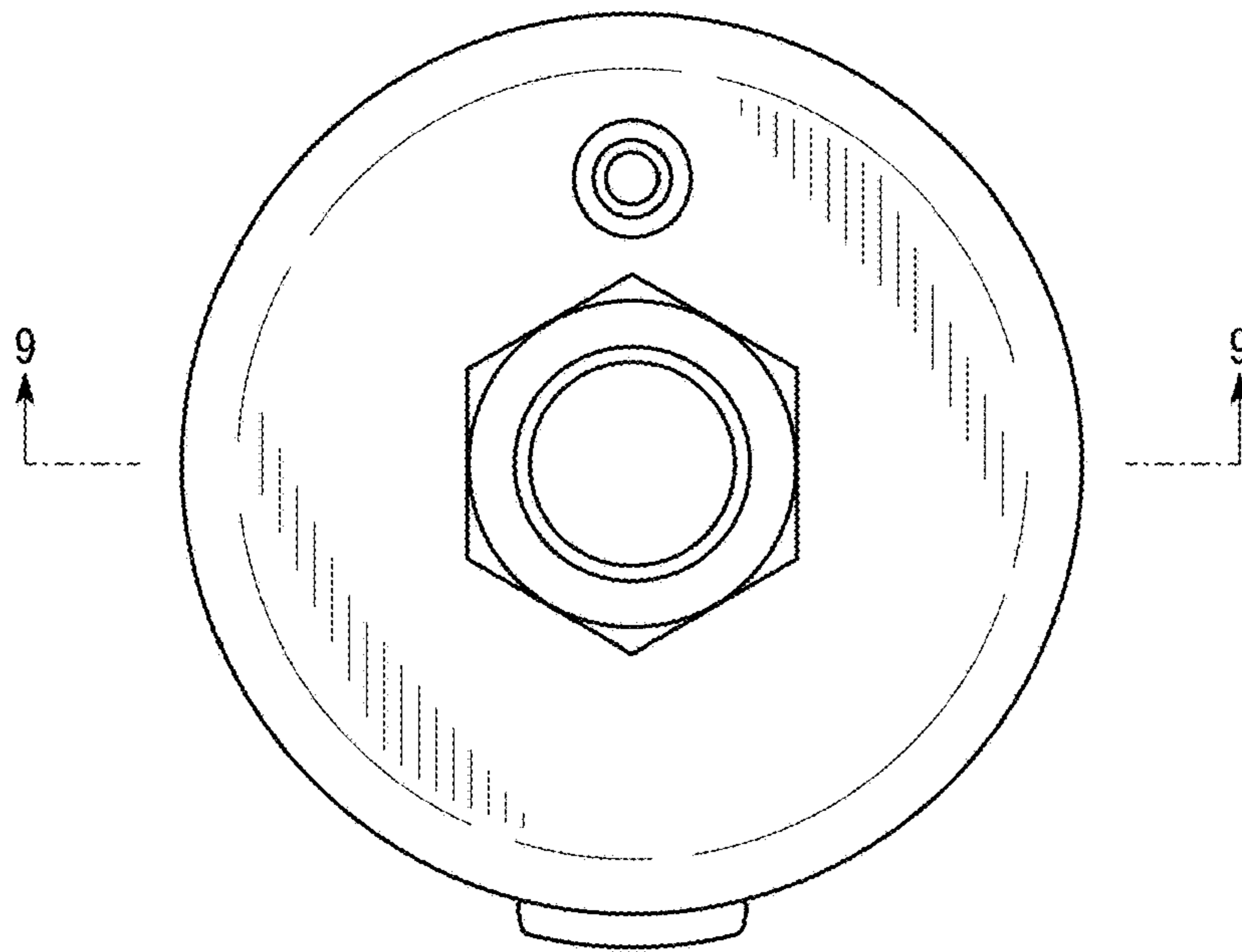


FIG. 6

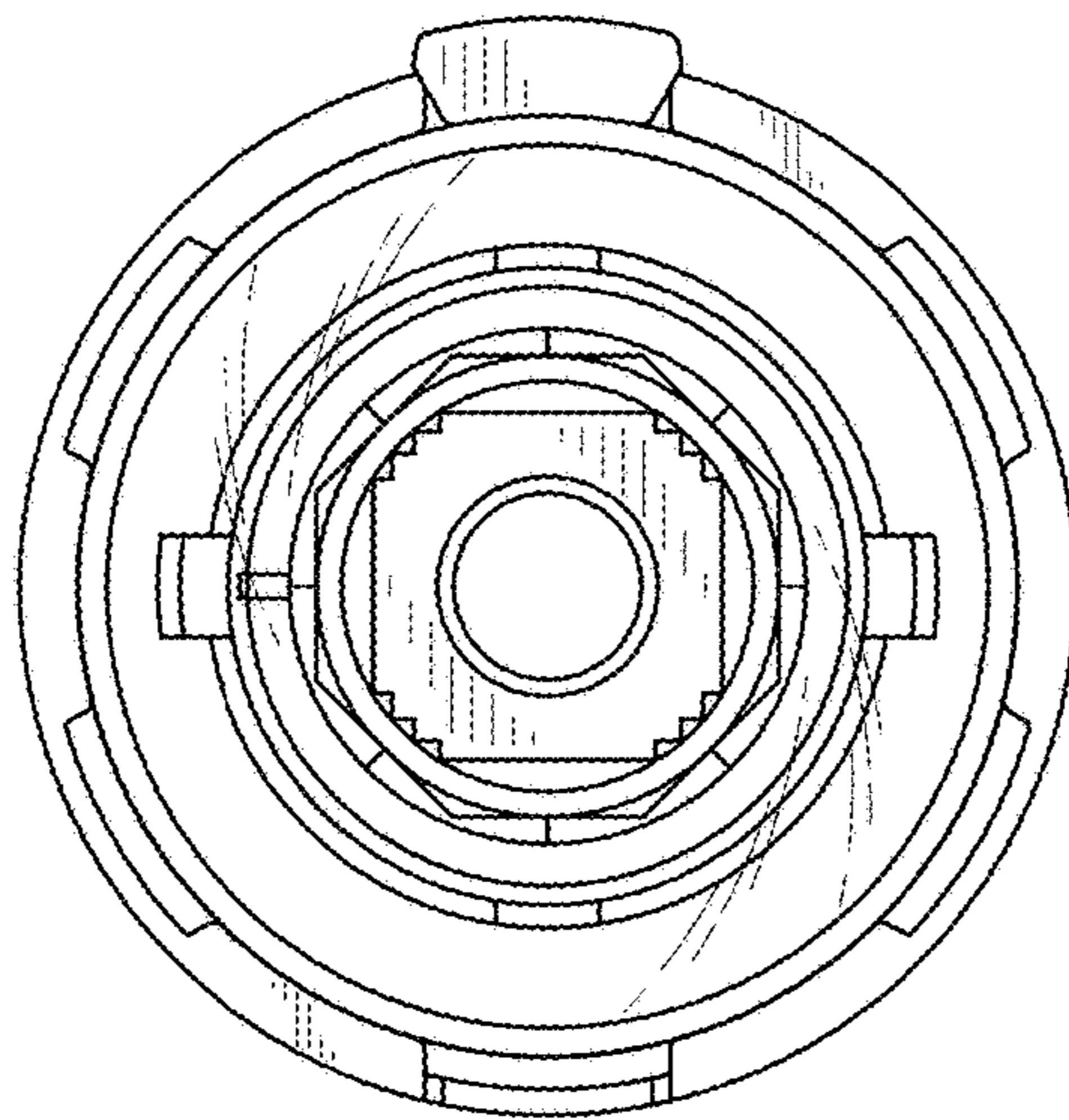




FIG. 7

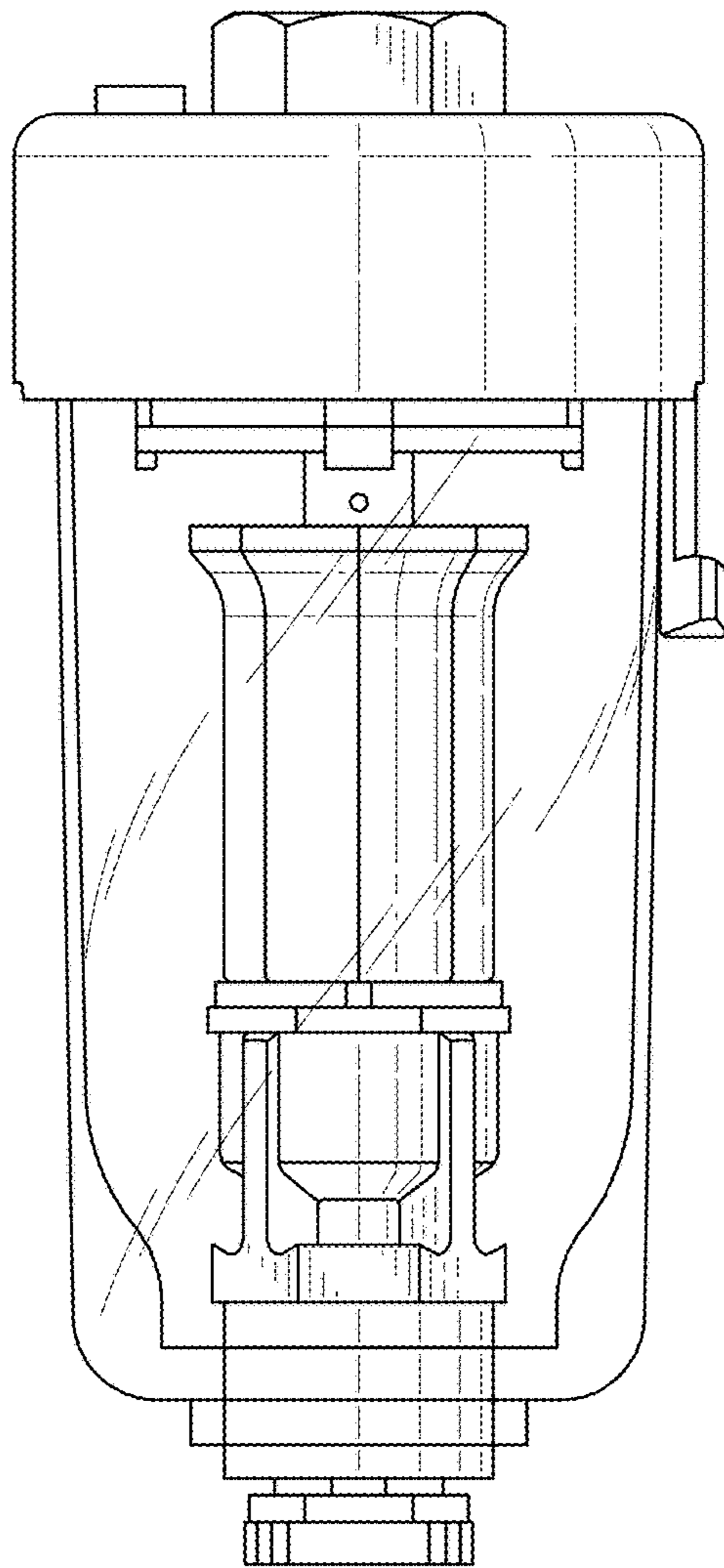


FIG. 8

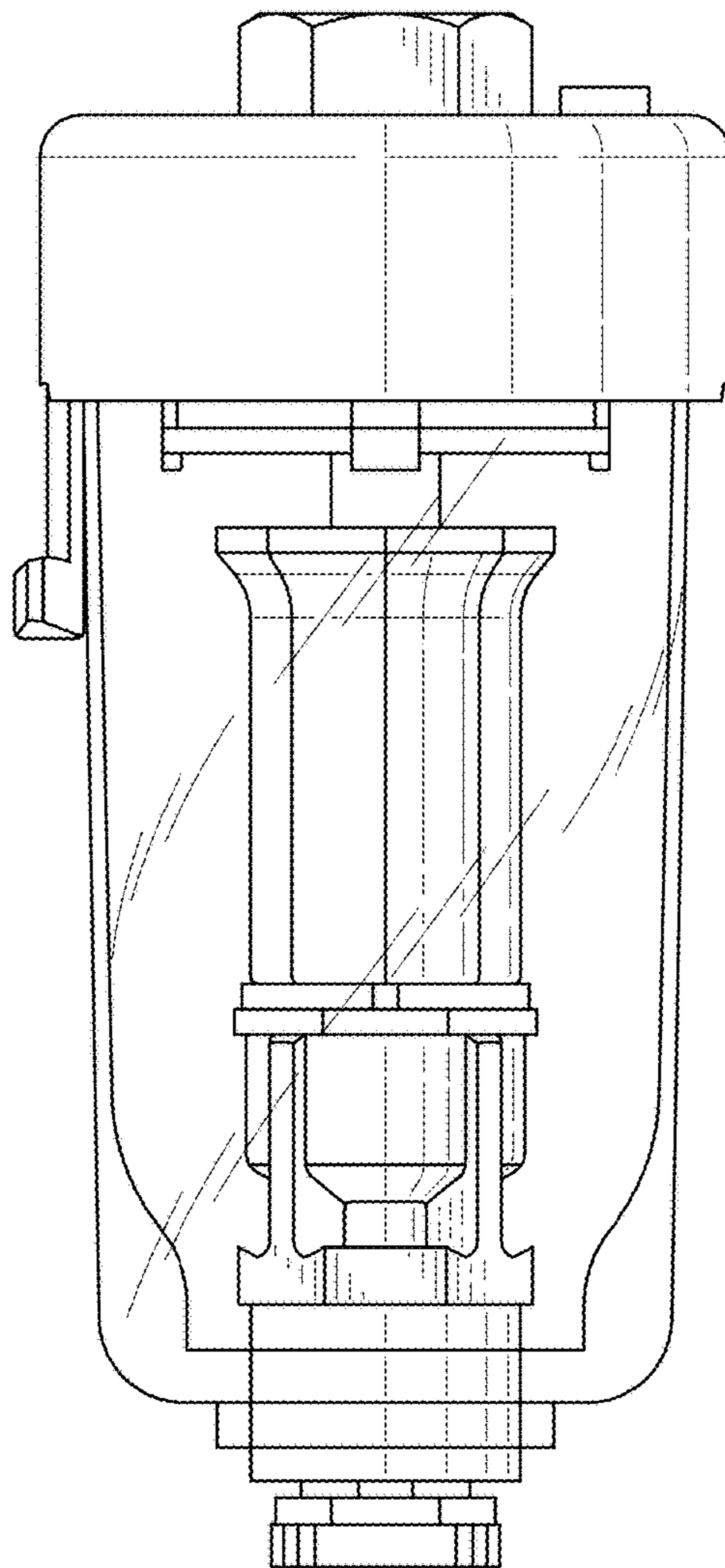


FIG. 9

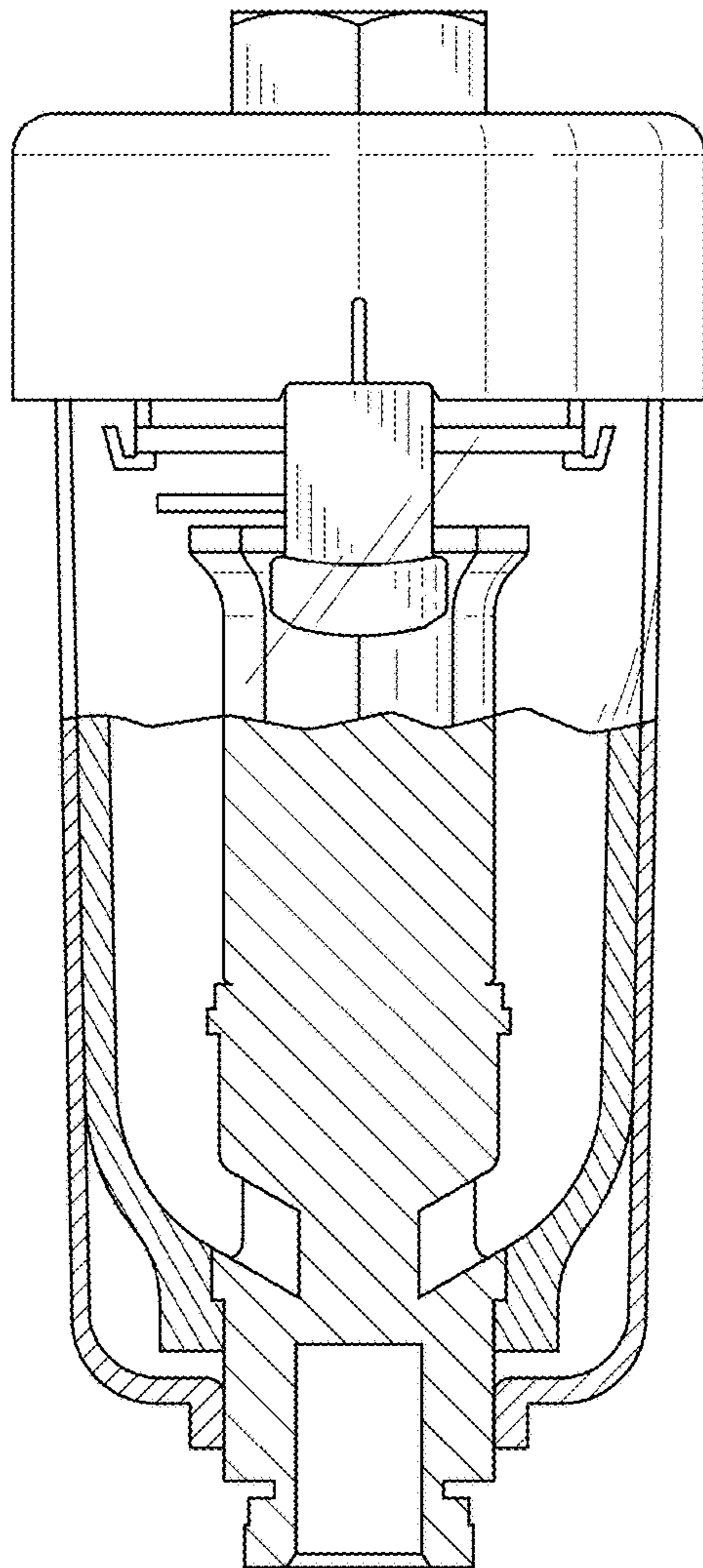


FIG. 10

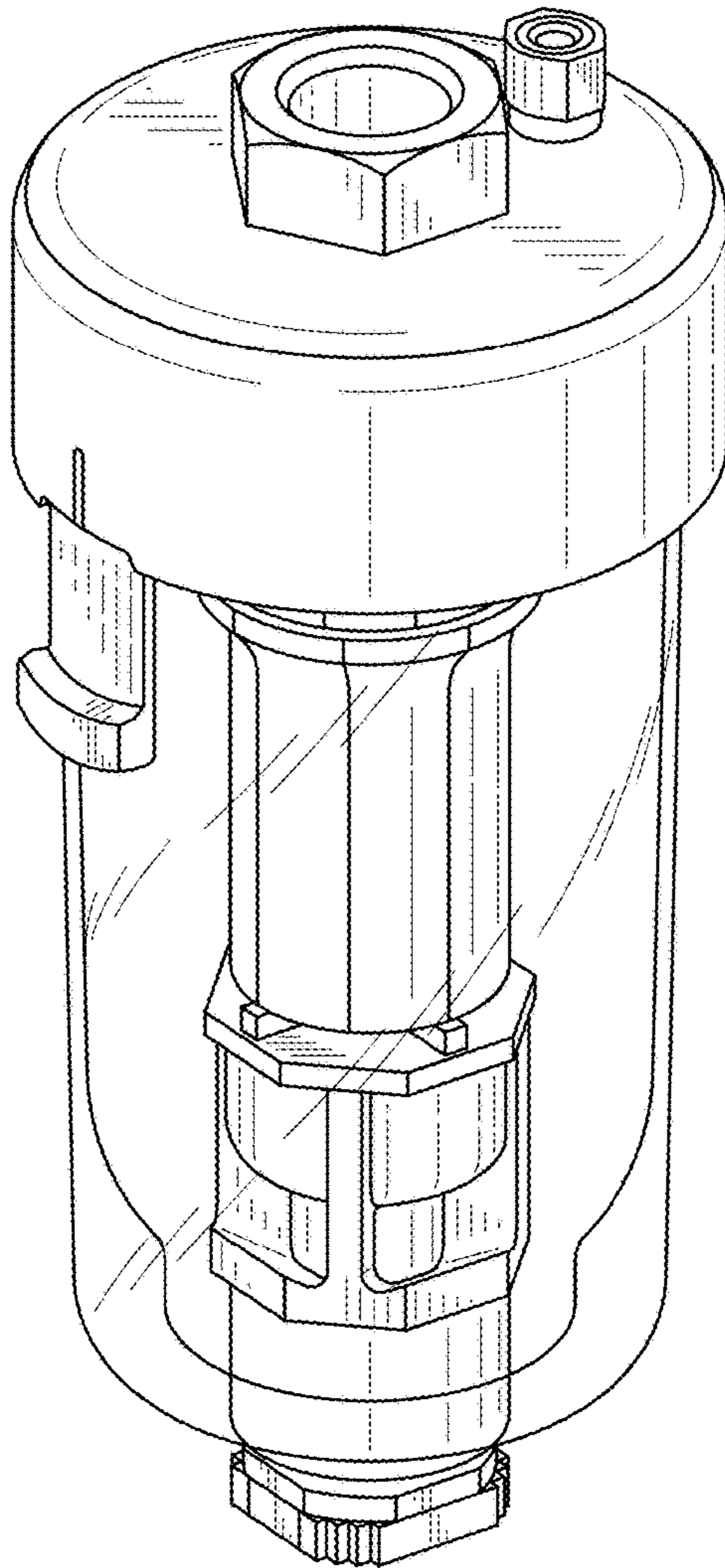


FIG. 11

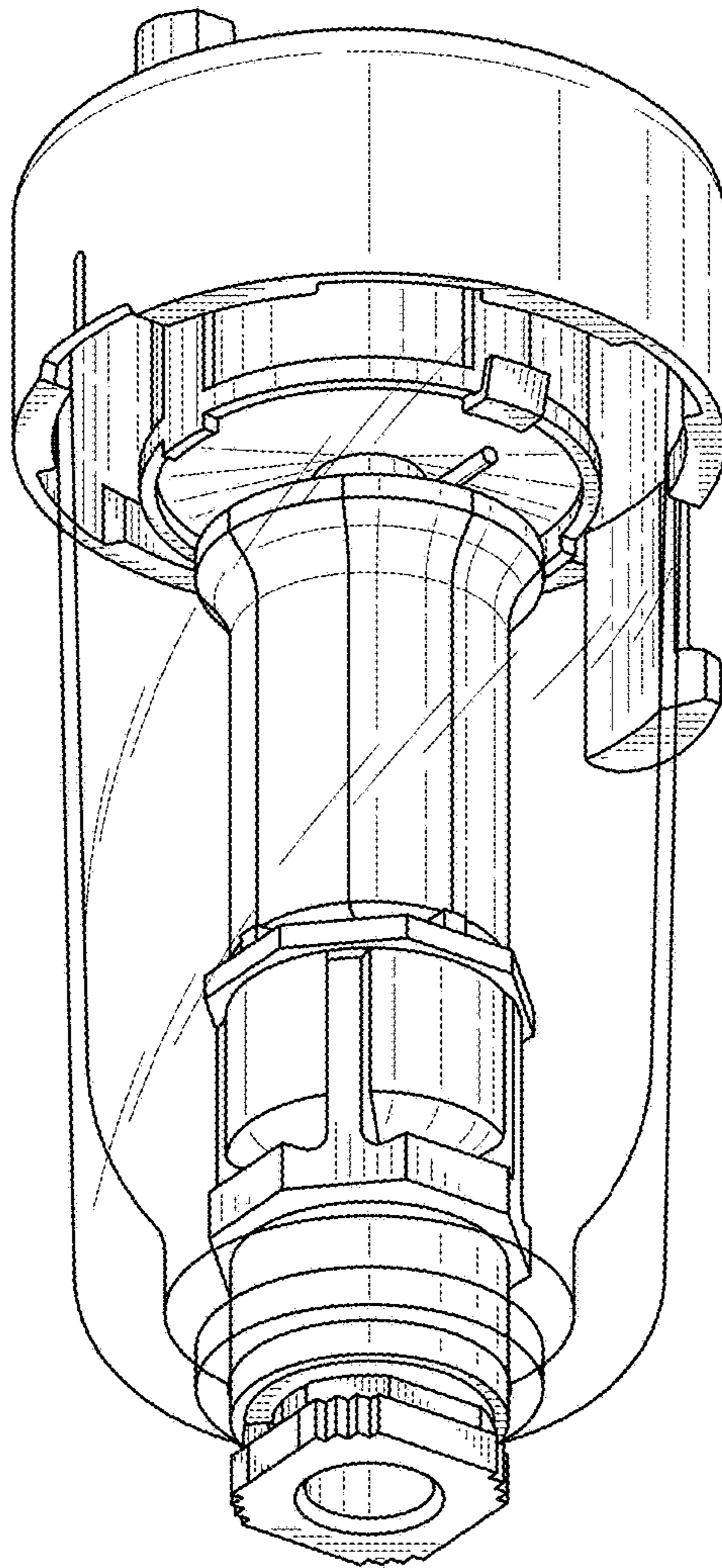


FIG. 12

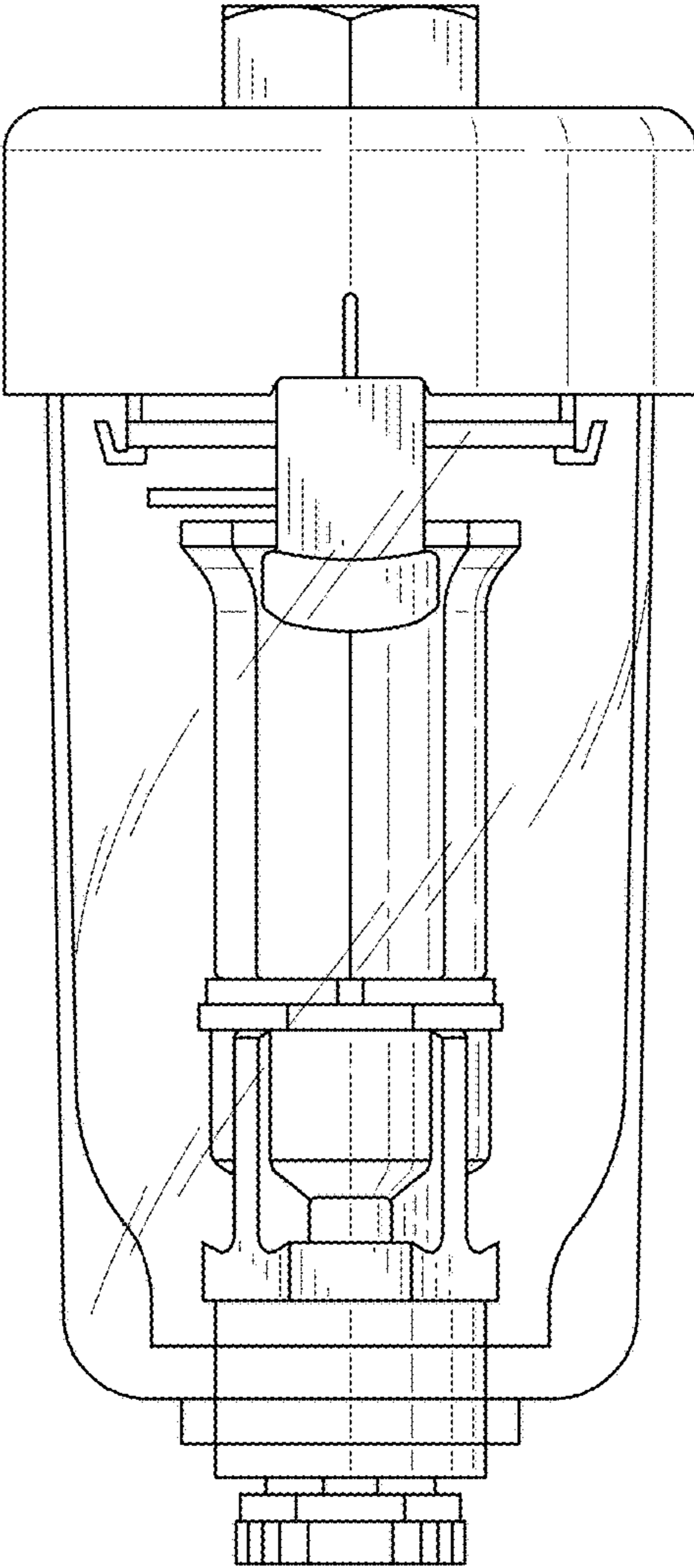




FIG. 13

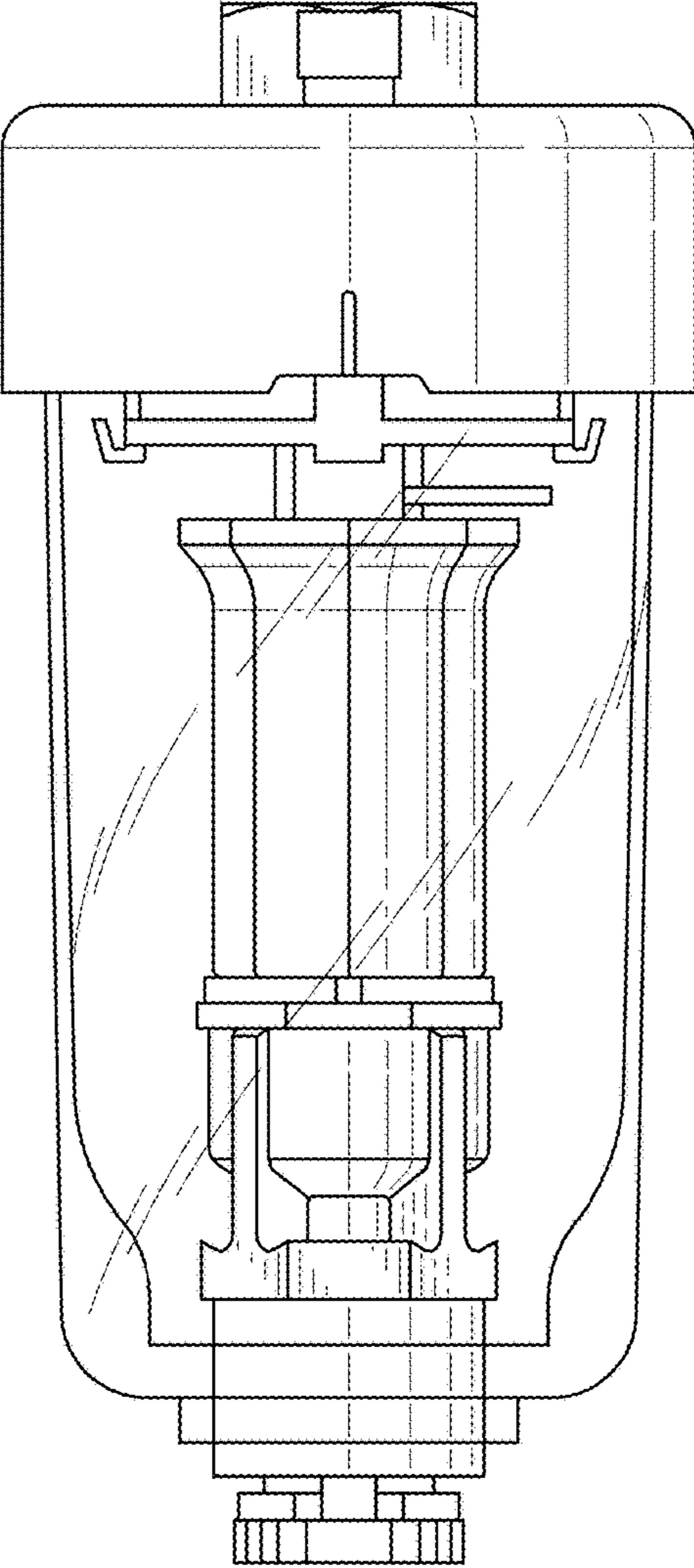


FIG. 14

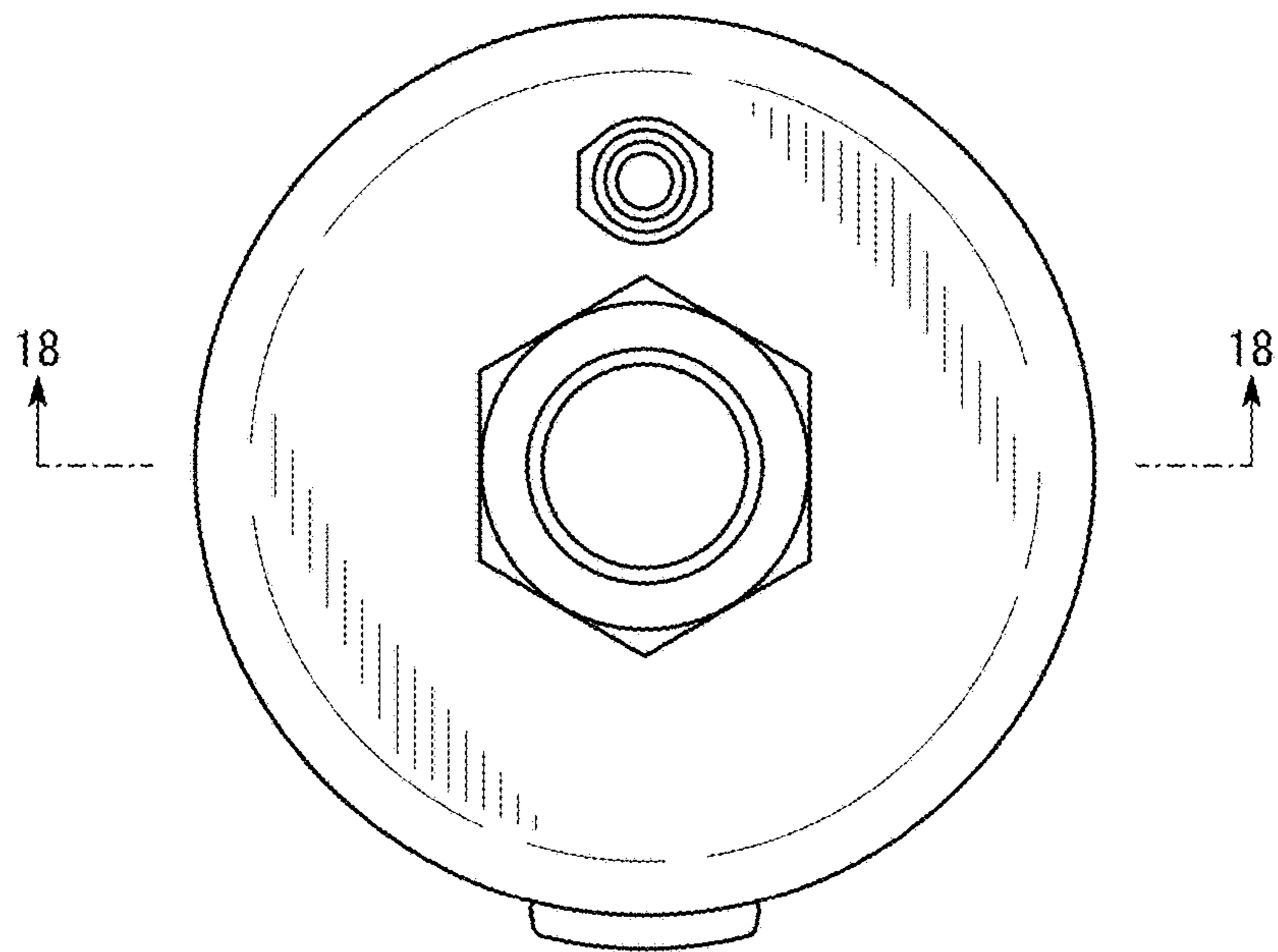


FIG. 15

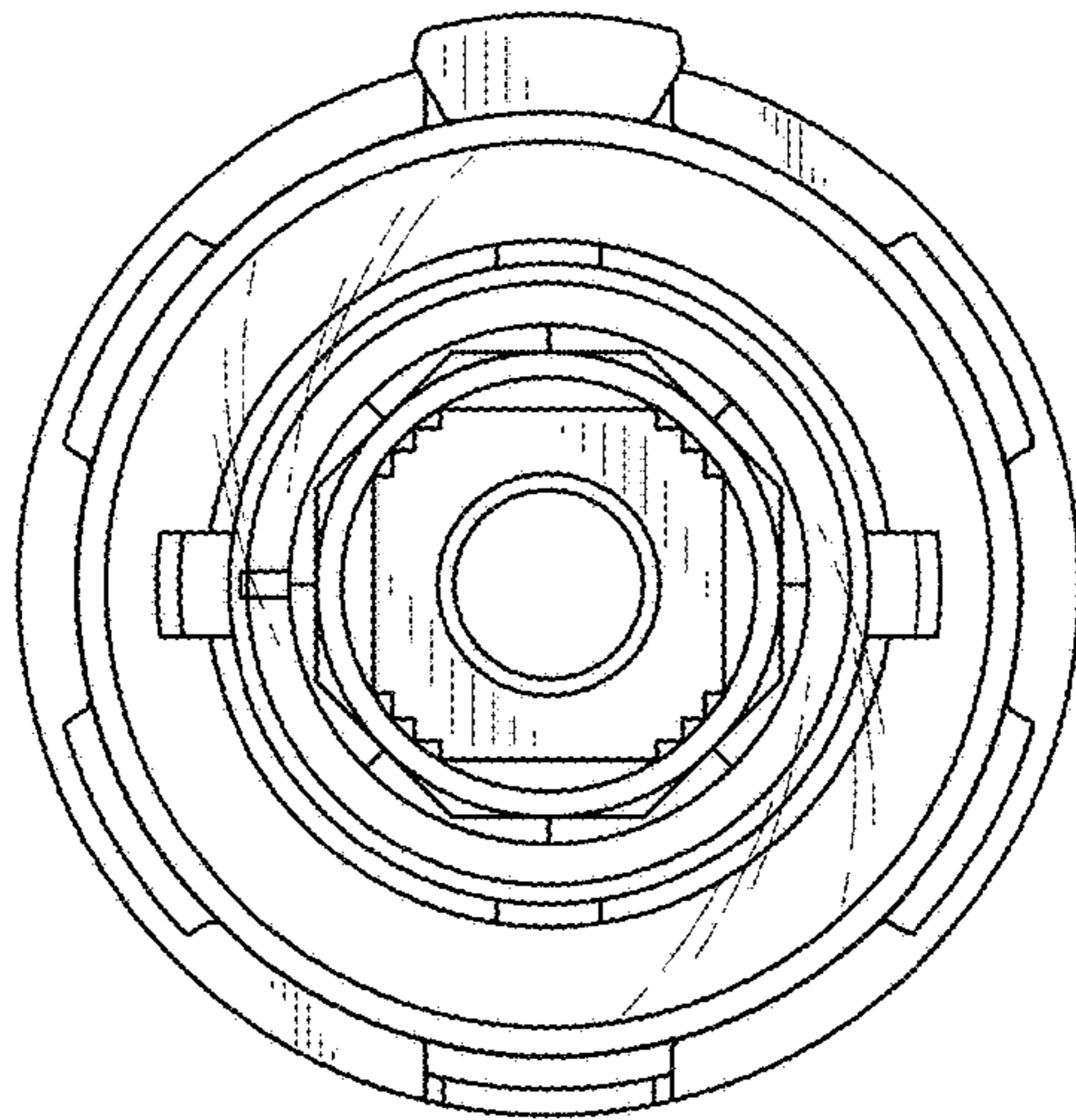


FIG. 16

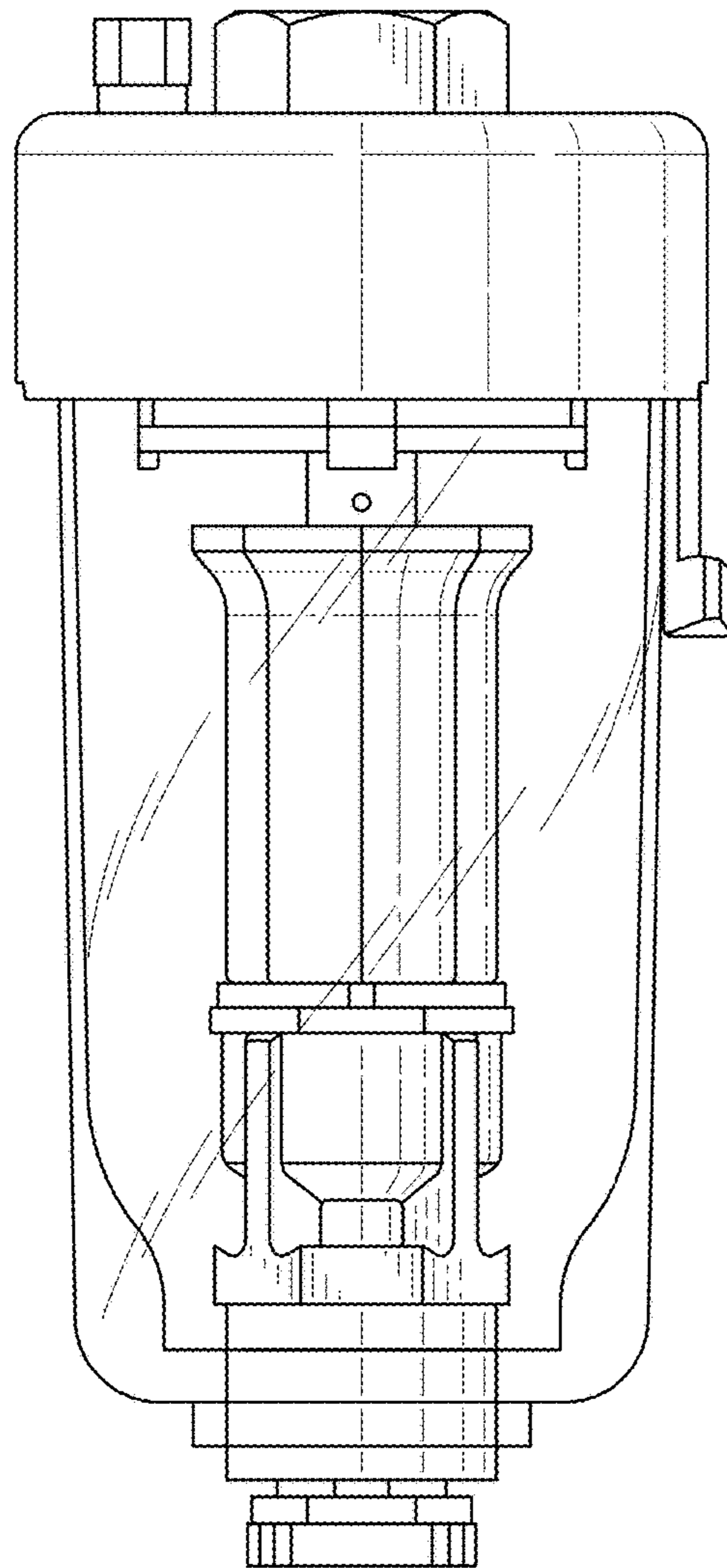


FIG. 17

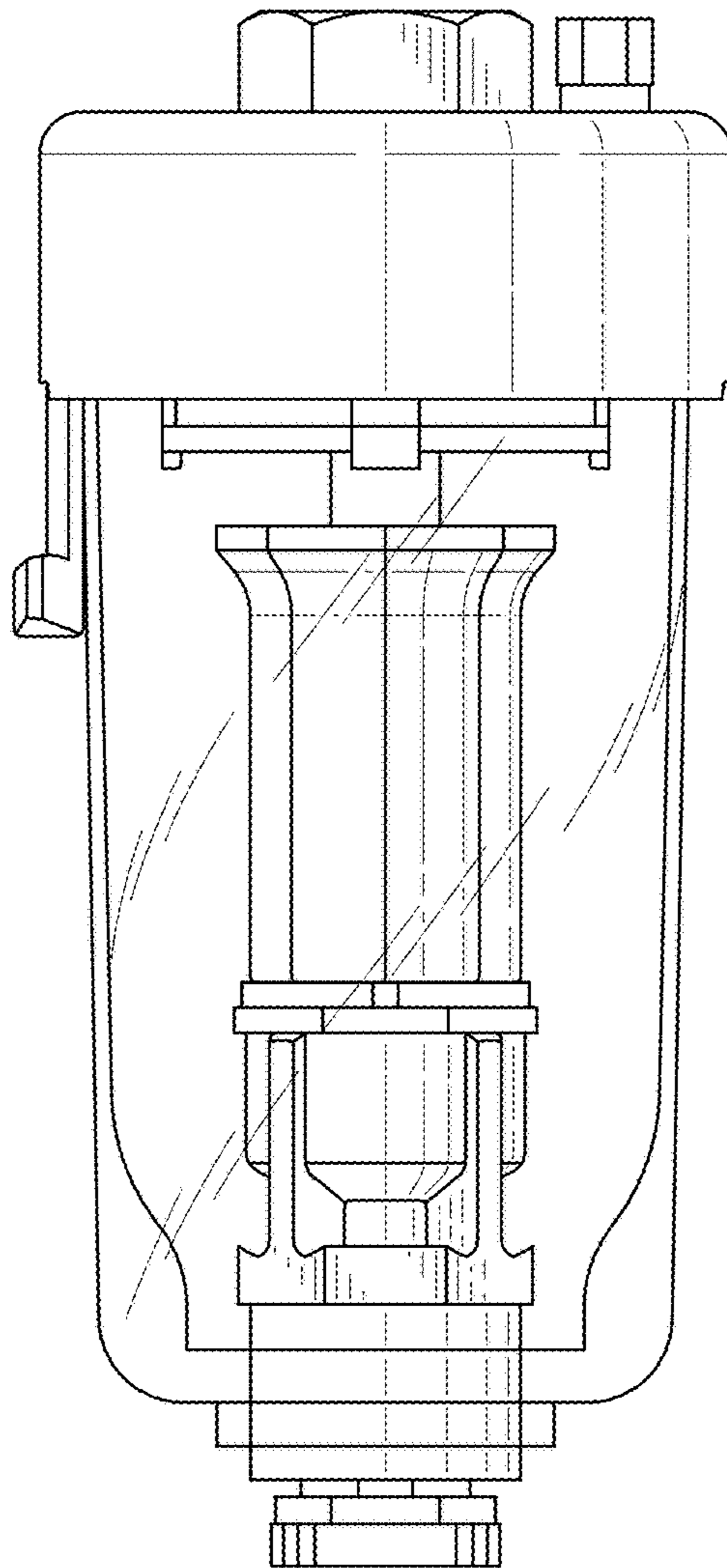


FIG. 18

