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(12) **United States Design Patent**  
**Ito et al.**

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(45) **Date of Patent:** **\*\* Mar. 5, 2019**

(54) **REGULATOR**

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

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(73) Assignee: **SMC CORPORATION**, Tokyo (JP)

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

(21) Appl. No.: **29/619,127**

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(30) **Foreign Application Priority Data**

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

(52) **U.S. Cl.**  
USPC ..... **D23/235**

(58) **Field of Classification Search**  
USPC ..... D23/233–237, 241–250, 365; 251/148,  
251/364, 45, 90, 93; 137/231, 371;  
D15/5

CPC ..... F16K 11/0716; F16K 1/126  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D592,680 S \* 5/2009 Ogawa ..... D15/5  
D595,739 S \* 7/2009 Ogawa ..... D15/5  
D596,200 S \* 7/2009 Ogawa ..... D15/5  
D596,201 S \* 7/2009 Ogawa ..... D15/5  
D632,362 S \* 2/2011 Ito ..... D23/233  
D633,986 S \* 3/2011 Ito ..... D23/233  
D662,196 S \* 6/2012 Ito ..... D23/365

D662,197 S \* 6/2012 Ito ..... D23/365  
9,133,942 B2 \* 9/2015 Ito ..... F16K 1/46  
D820,955 S \* 6/2018 Ito ..... D23/235  
D820,956 S \* 6/2018 Ito ..... D23/235

**FOREIGN PATENT DOCUMENTS**

JP D1340099 S 9/2008  
JP D1340379 S 9/2008  
JP D1430996 S 1/2012  
JP D1430997 S 1/2012  
JP D1430998 S 1/2012

\* cited by examiner

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(57) **CLAIM**

The ornamental design for a regulator, as shown and described.

**DESCRIPTION**

FIG. 1 is a front, top and left side perspective view of a regulator showing our new design;

FIG. 2 is a rear, bottom and right 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; and,

FIG. 8 is a right side view thereof.

The dash-dotted lines represent the bounds of the claimed design that form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**

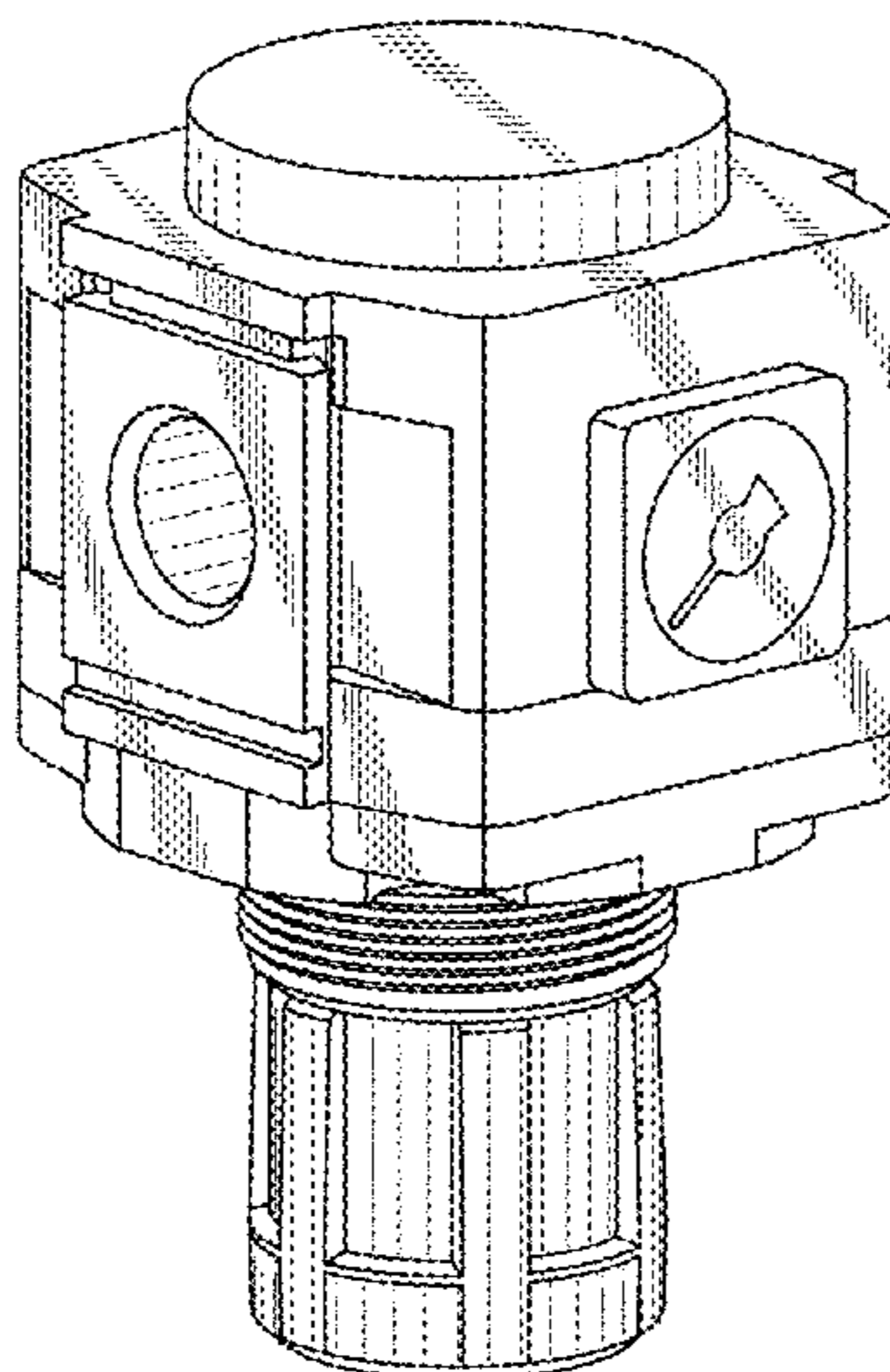


FIG. 1

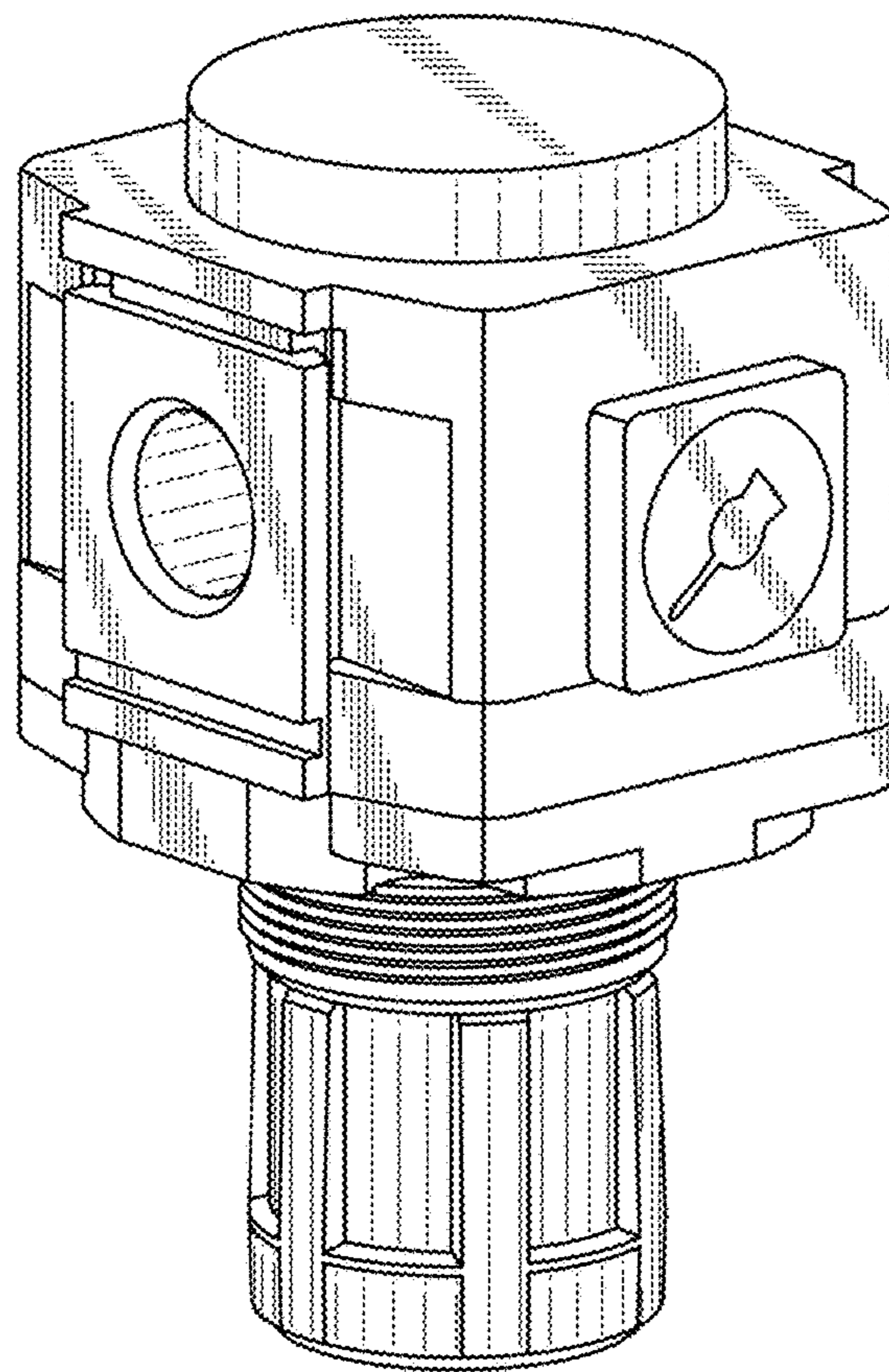


FIG. 2

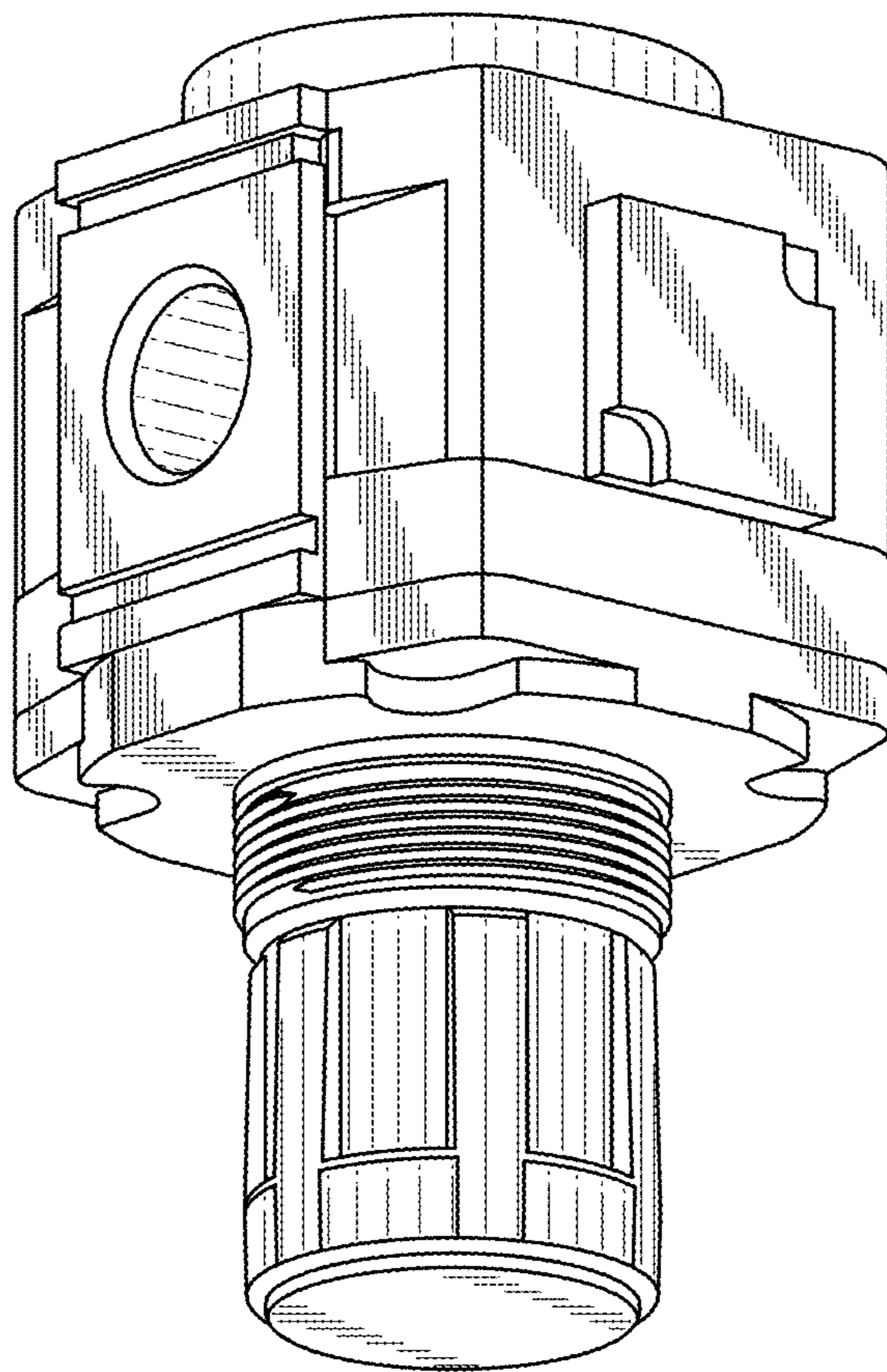


FIG. 3

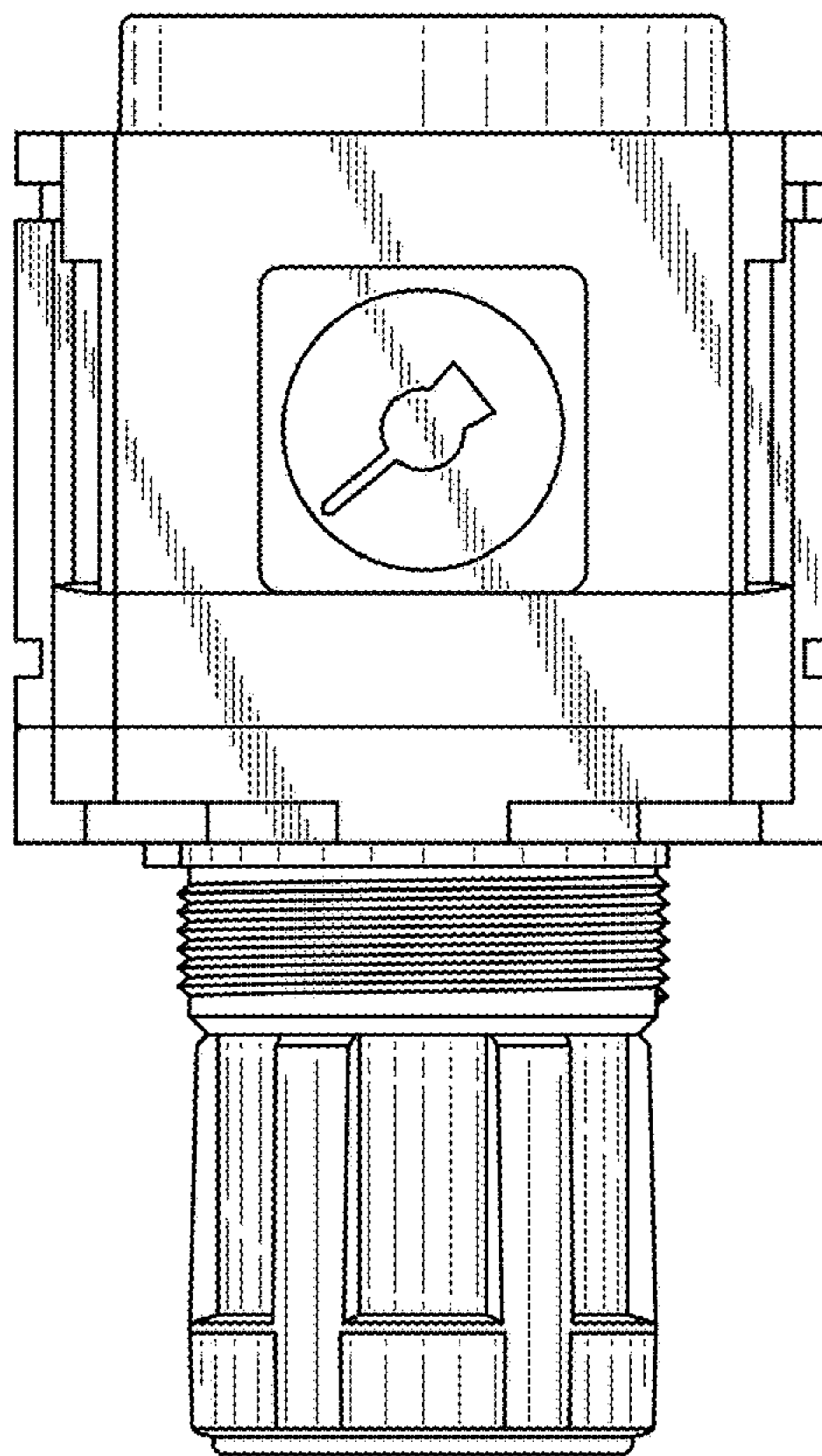


FIG. 4

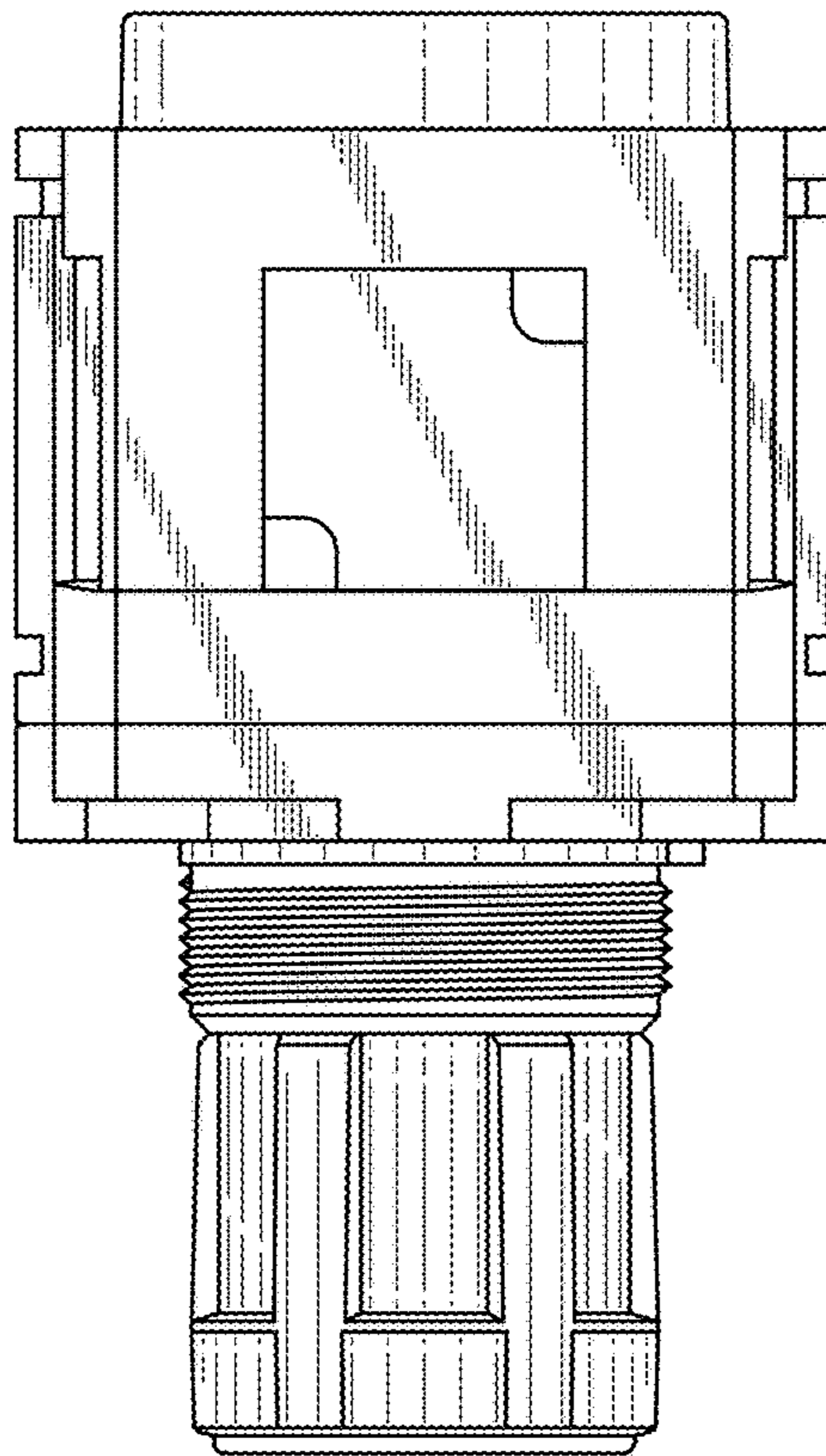


FIG. 5

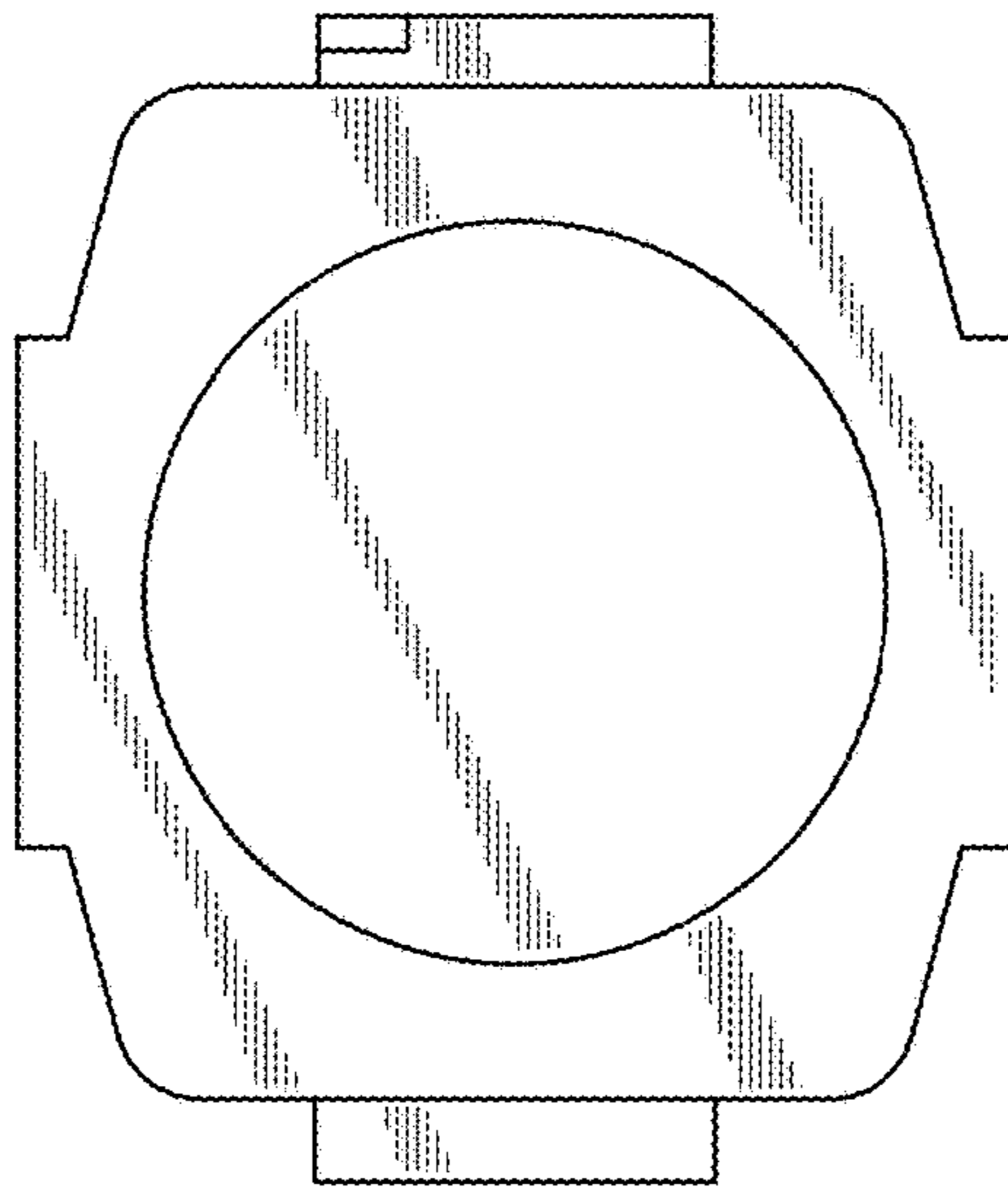


FIG. 6

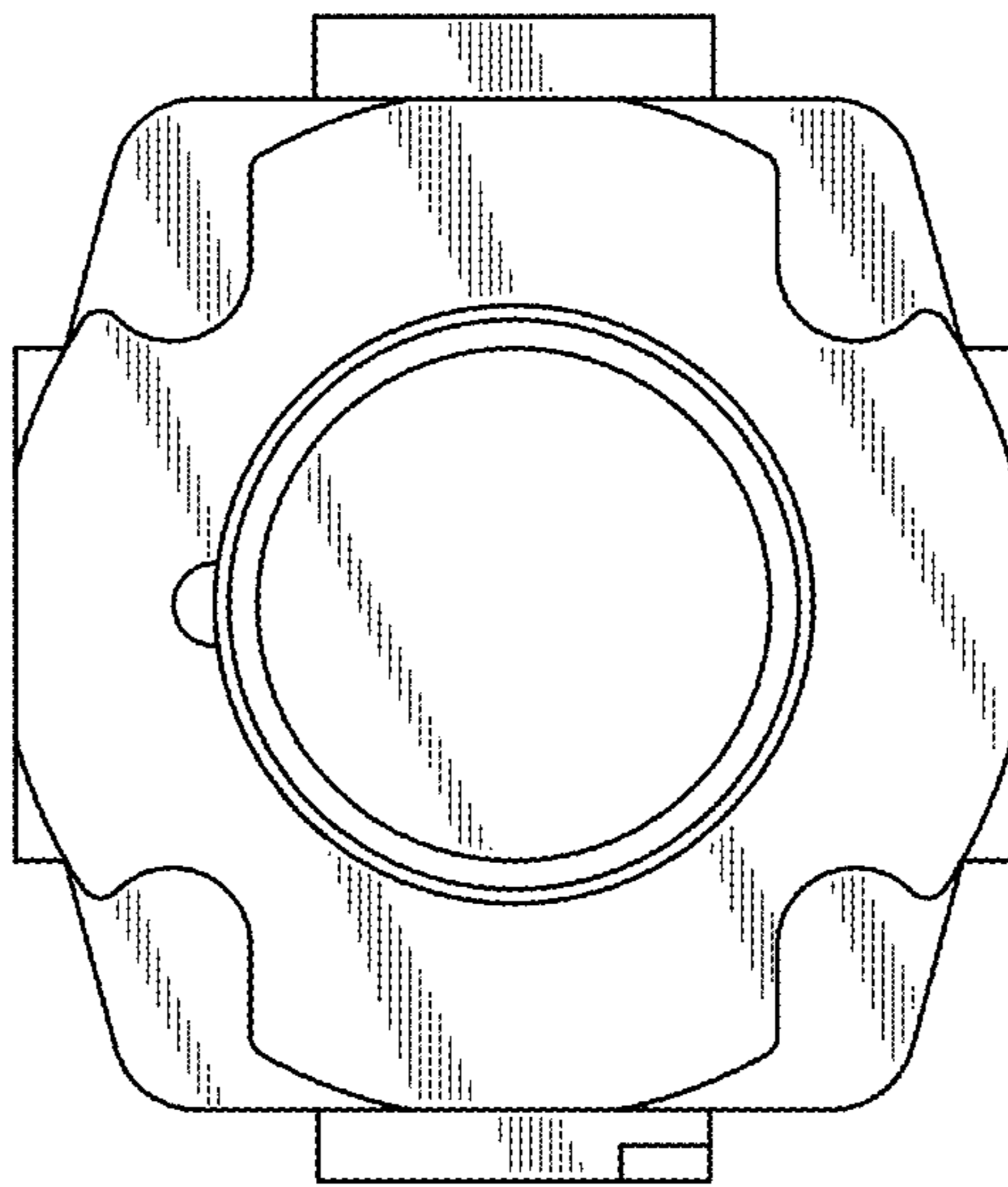


FIG. 7

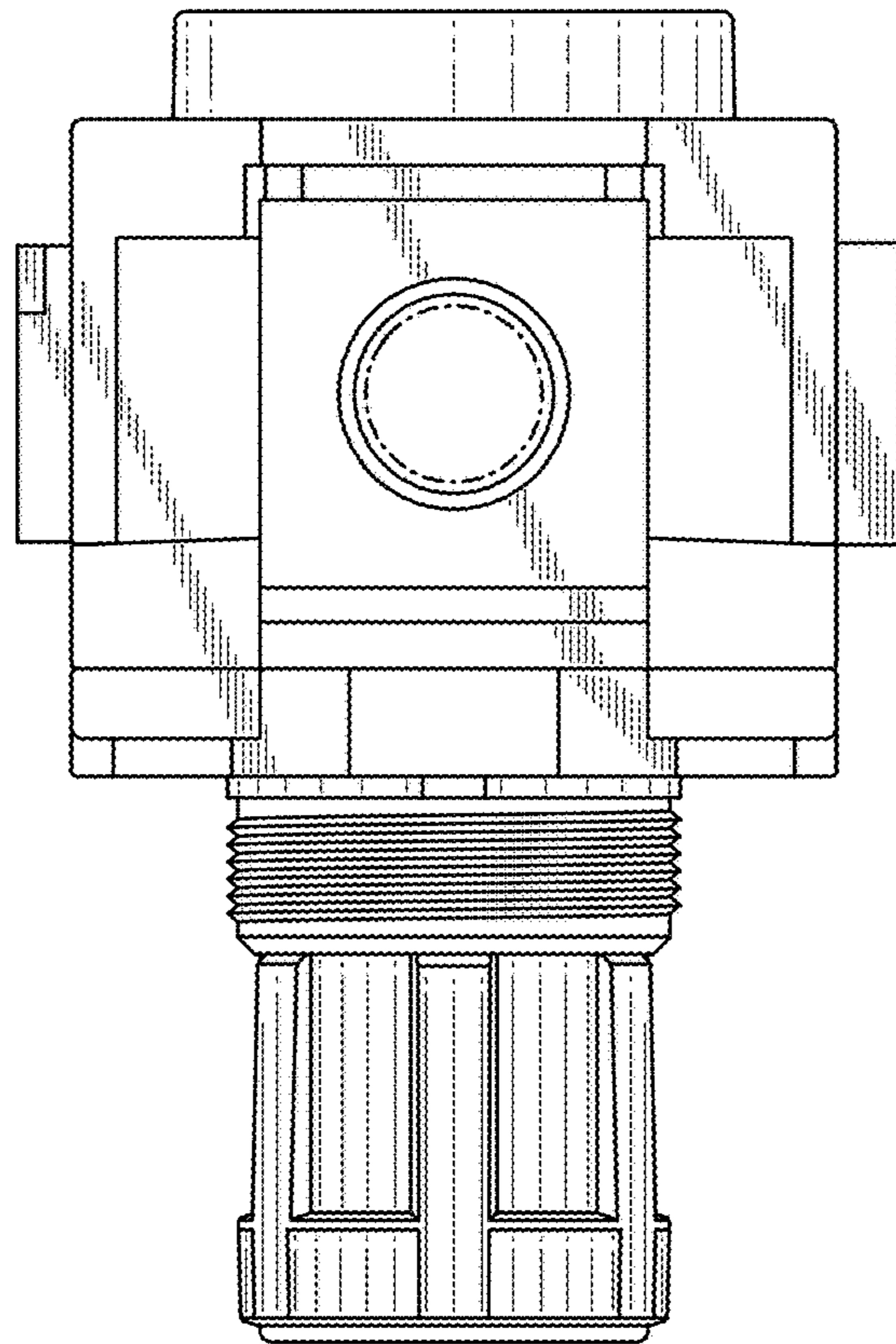




FIG. 8

