



US00D766404S

(12) **United States Design Patent** (10) **Patent No.:** **US D766,404 S**  
**Yamashita et al.** (45) **Date of Patent:** **\*\* Sep. 13, 2016**

(54) **SEAT RING FOR BUTTERFLY VALVE** 8,814,138 B2 \* 8/2014 Helfer ..... F16K 1/2266  
251/174  
(71) Applicant: **ASAHI ORGANIC CHEMICALS** 2004/0004204 A1 \* 1/2004 Wang ..... F16K 1/2263  
**INDUSTRY CO., LTD.**, Nobeoka-shi, 251/305  
Miyazaki (JP) 2005/0001195 A1 \* 1/2005 Blease ..... F16J 15/104  
251/171

(Continued)

(72) Inventors: **Seiji Yamashita**, Nobeoka (JP);  
**Kensuke Masuda**, Nobeoka (JP)

**FOREIGN PATENT DOCUMENTS**

(73) Assignee: **ASAHI ORGANIC CHEMICALS** JP 58-61369 A 4/1983  
**INDUSTRY CO., LTD.**, Miyazaki (JP) JP D8-15414 8/1991

(Continued)

(\*\*) Term: **14 Years**

*Primary Examiner* — Cynthia Ramirez

(21) Appl. No.: **29/523,120**

*Assistant Examiner* — Gino Colan

(22) Filed: **Apr. 7, 2015**

(74) *Attorney, Agent, or Firm* — Buchanan, Ingersoll & Rooney PC

(30) **Foreign Application Priority Data**

(57) **CLAIM**

Oct. 9, 2014 (JP) ..... 2014-022710

The ornamental design for a seat ring for butterfly valve, as shown and described.

(51) **LOC (10) Cl.** ..... **23-01**

**DESCRIPTION**

(52) **U.S. Cl.**

USPC ..... **D23/249**

(58) **Field of Classification Search**

USPC ..... D23/233, 235, 244, 247, 248, 249;  
251/314, 328, 359, 306, 305, 357, 900;  
123/188.6, 190.14; 137/15.22, 382;  
63/15, 15.4, 15.7, 15.1, 15.2, 15.3,  
63/15.45, 15.5, 15.6, 15.65, 15.8, 15.9,  
63/26-28, 3; D11/11, 3, 79, 1, 26-39, 4,  
D11/48, 109; 29/896.412

CPC ..... F16K 1/42; F16K 1/226; F16K 3/0227;  
F16K 15/08; F16K 1/36

See application file for complete search history.

FIG. 1 is a perspective view of a seat ring for a butterfly valve showing our new design;

FIG. 2 is a front view thereof, the rear view is identical thereto;

FIG. 3 is a right side view thereof, the left side view is identical thereto;

FIG. 4 is a top plan view thereof, the bottom plan view is identical thereto;

FIG. 5 is a cross-sectional view taken along line 5-5 shown in FIG. 2;

FIG. 6 is a cross-sectional view taken along line 6-6 shown in FIG. 3;

FIG. 7 is a cross-sectional view taken along line 7-7 shown in FIG. 3; and,

FIG. 8 is a cross-sectional view of the seat ring for a butterfly valve in use with the butterfly valve.

The broken lines shown in the figures are included for the purpose of illustrating environment and form no part of the claimed design.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

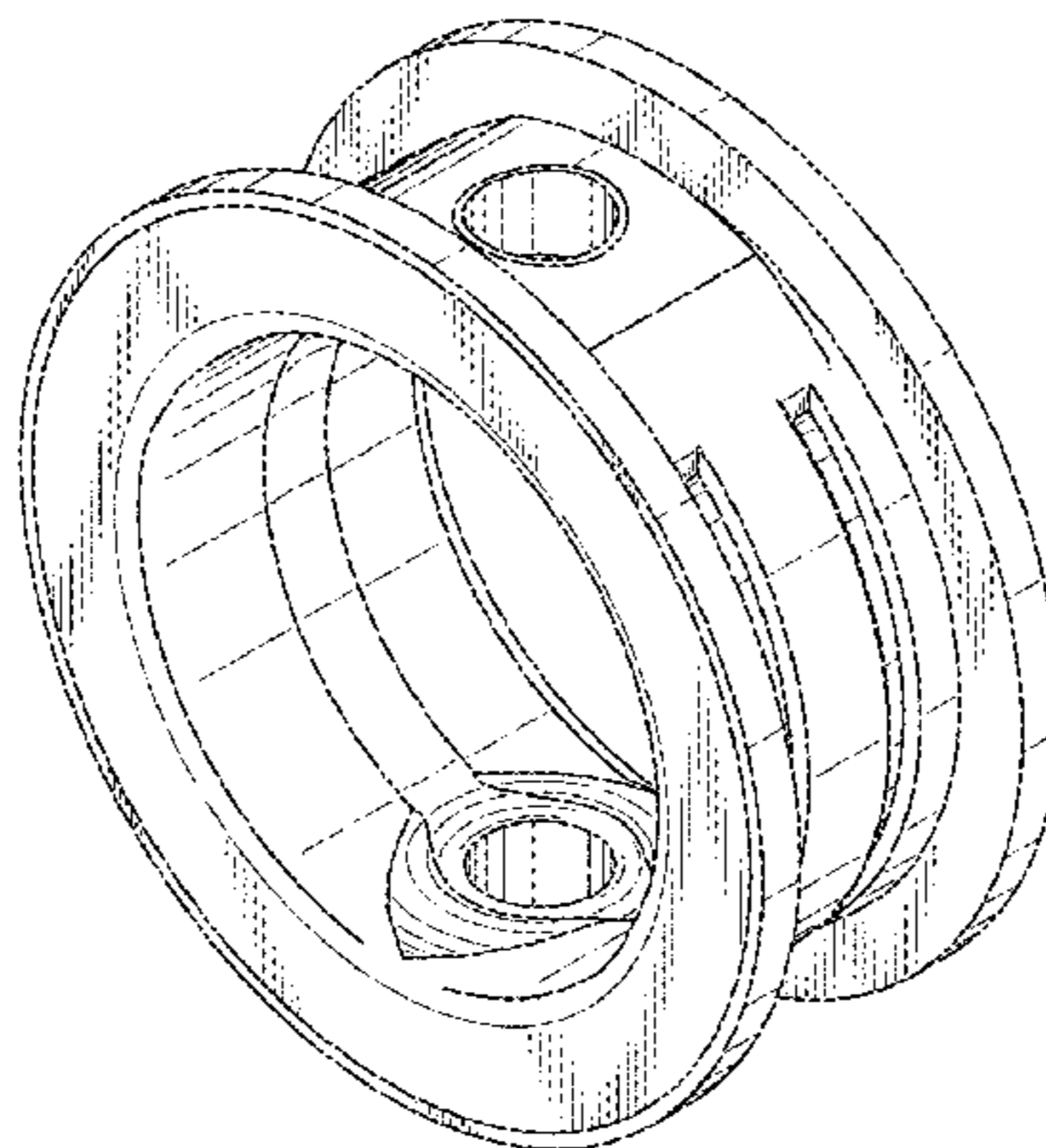
3,633,872 A \* 1/1972 Wright ..... F16K 1/2268  
251/306

5,918,857 A 7/1999 Wattignier et al.

D458,558 S \* 6/2002 Tschetter ..... D11/26

D652,337 S \* 1/2012 Molik ..... D11/3

**1 Claim, 4 Drawing Sheets**



# US D766,404 S

Page 2

(56)

## References Cited

### U.S. PATENT DOCUMENTS

2008/0073612 A1\* 3/2008 Day ..... F16J 15/061  
251/306  
2008/0173841 A1\* 7/2008 Sisk ..... F16K 1/2265  
251/306  
2012/0199780 A1\* 8/2012 Smith ..... F16K 1/2265  
251/359  
2012/0292550 A1\* 11/2012 Meek ..... F16K 3/0236  
251/359

2013/0168588 A1\* 7/2013 Hill ..... F16K 39/028  
251/298  
2016/0069493 A1\* 3/2016 Leseth ..... F16K 3/0218  
251/150

### FOREIGN PATENT DOCUMENTS

JP 7-501606 A 2/1995  
JP 7-12766 Y2 3/1995  
WO WO 93/22587 A1 11/1993

\* cited by examiner

FIG. 1

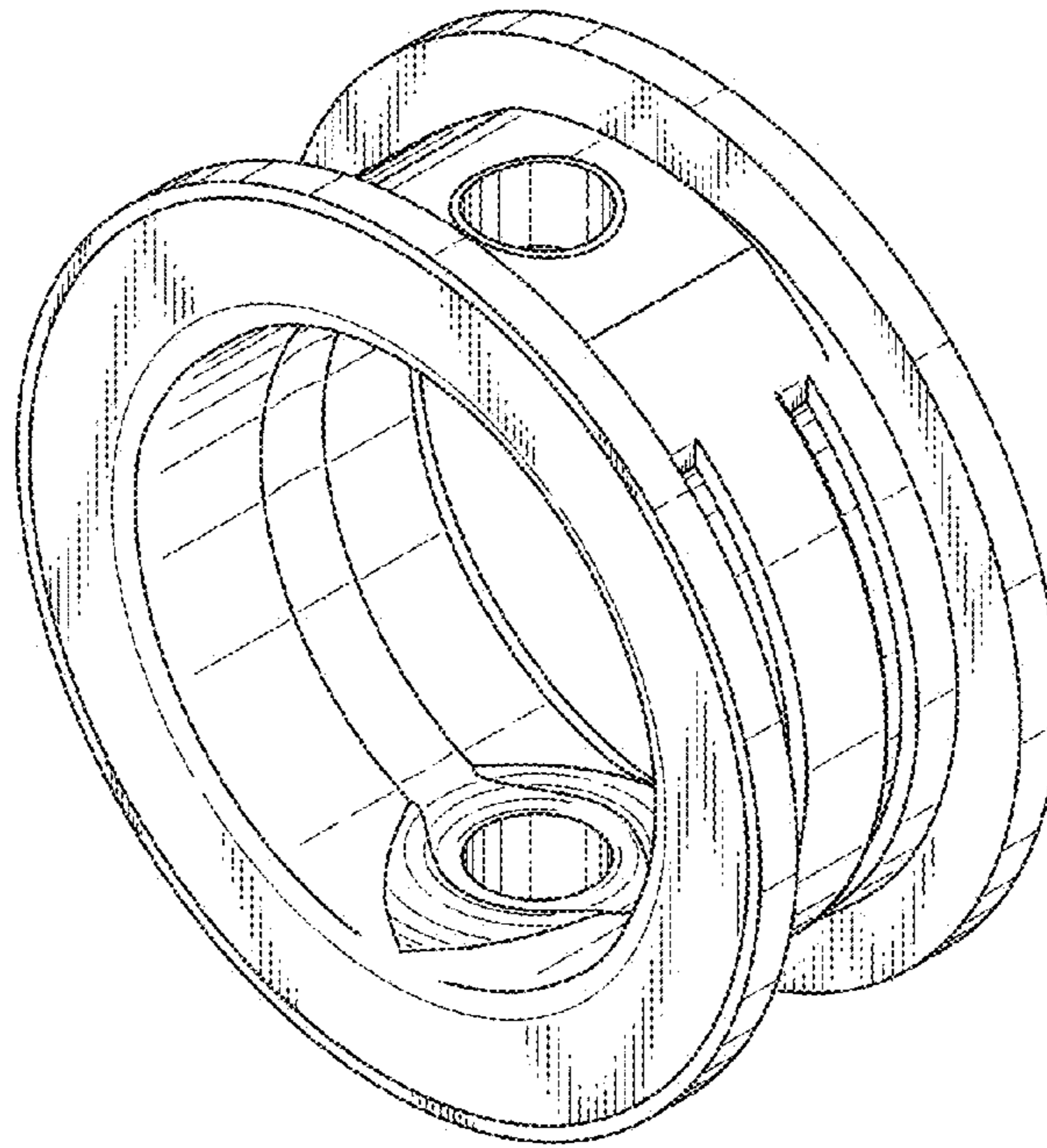


FIG. 2

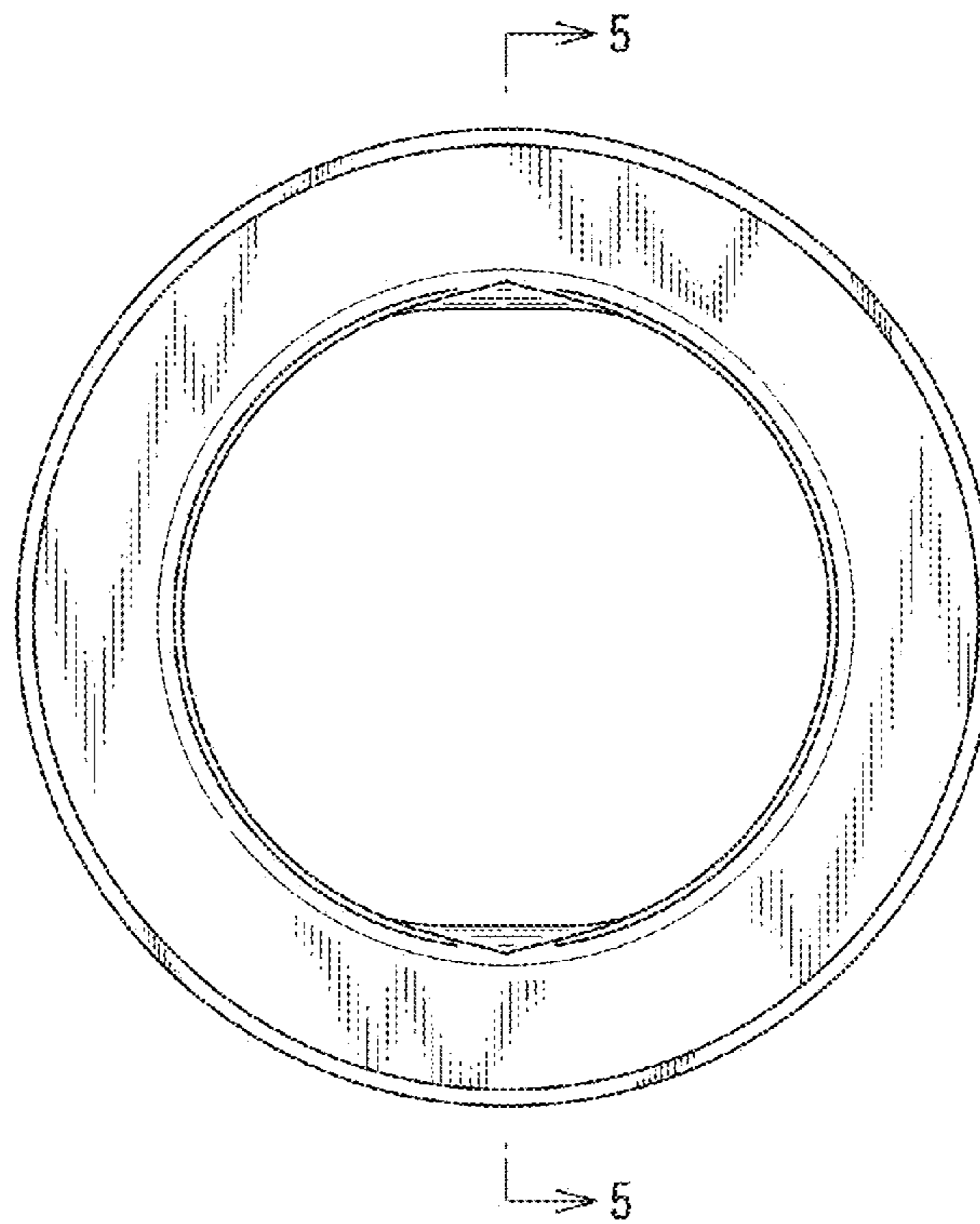


FIG. 3

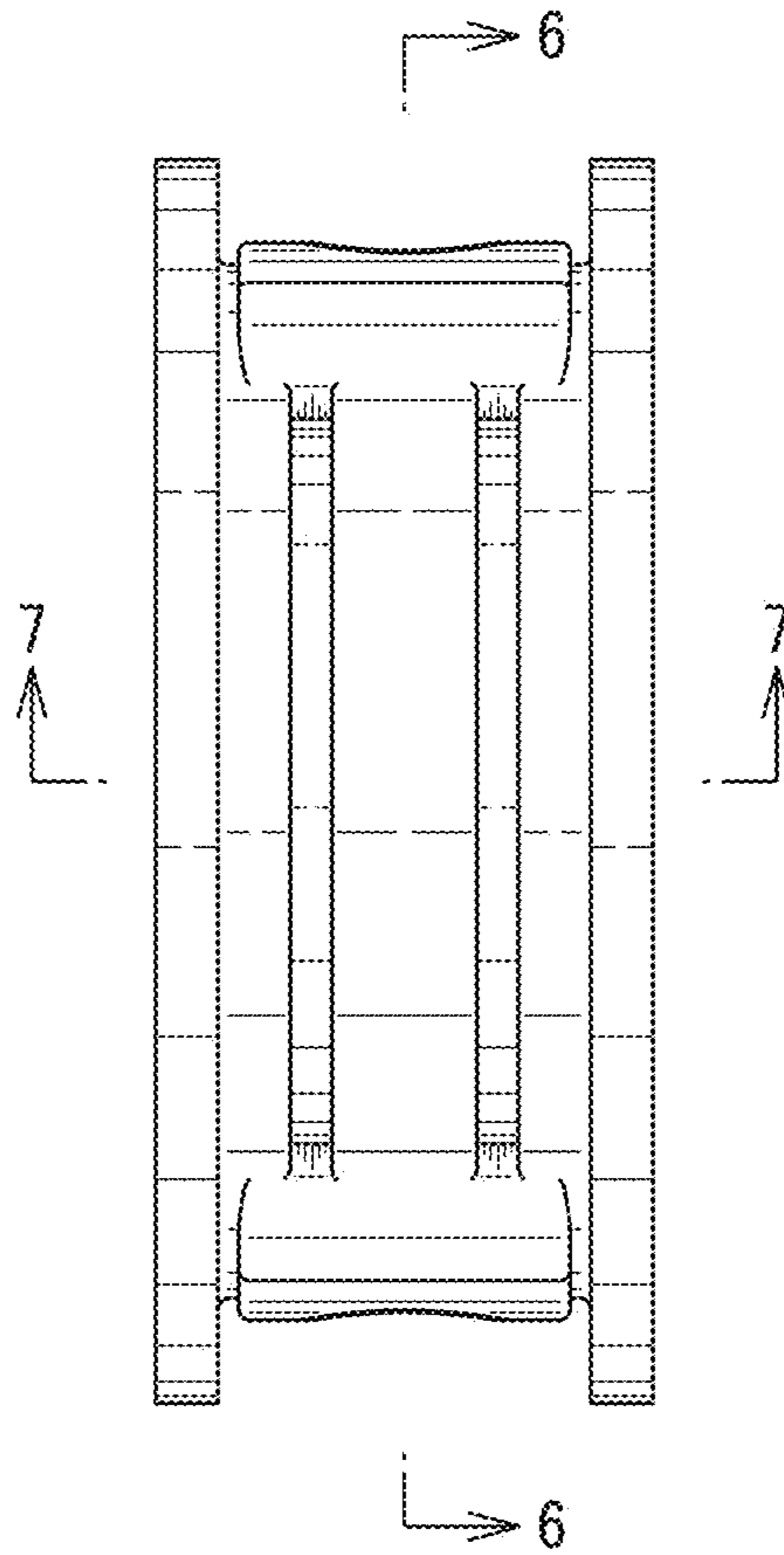


FIG. 4

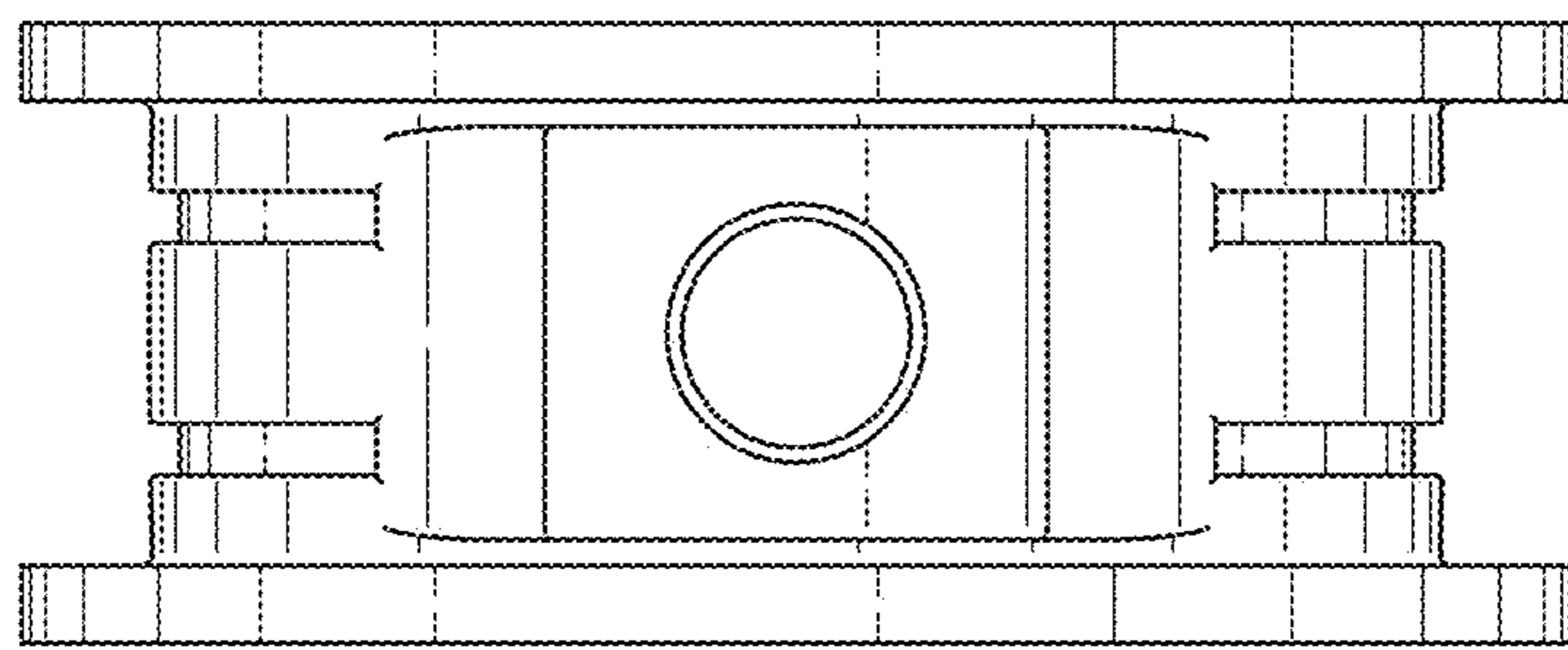


FIG. 5

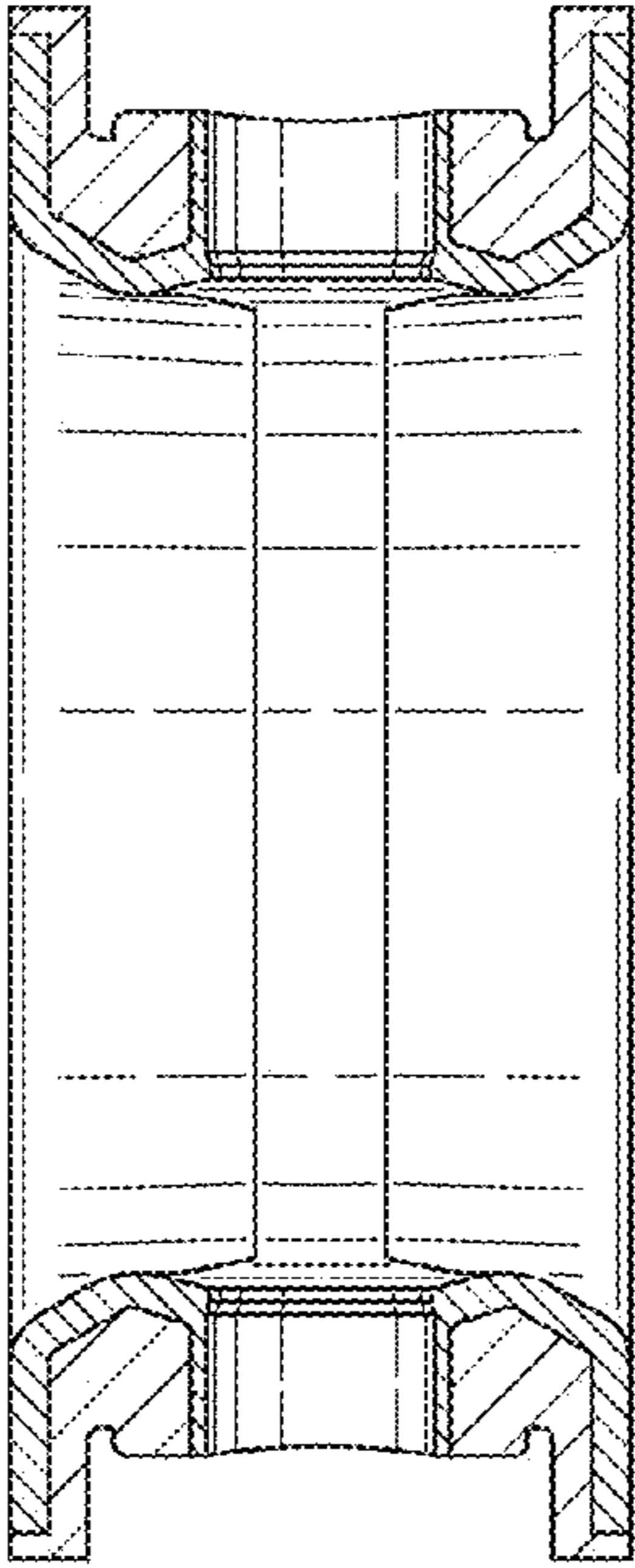


FIG. 6

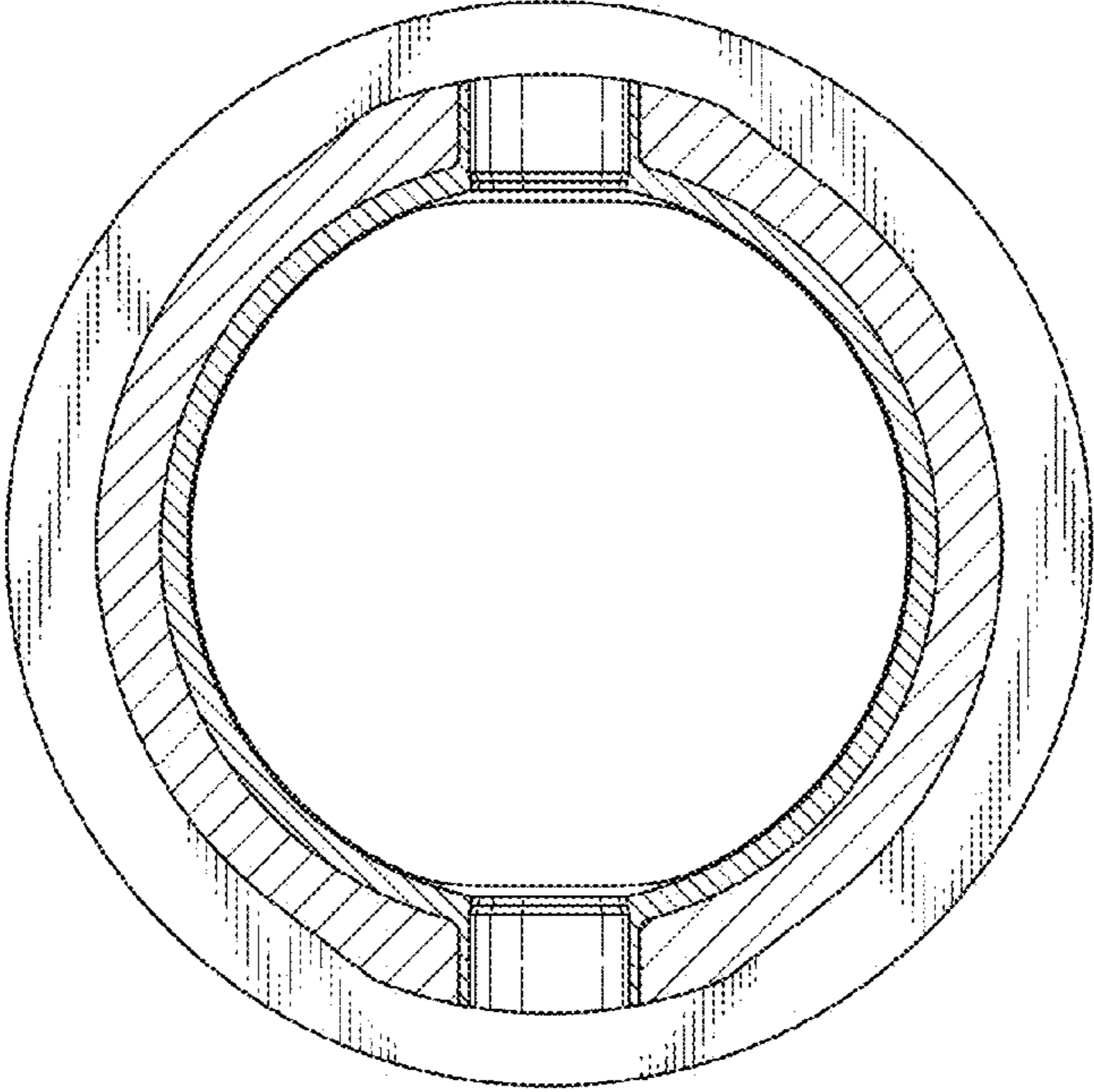


FIG. 7

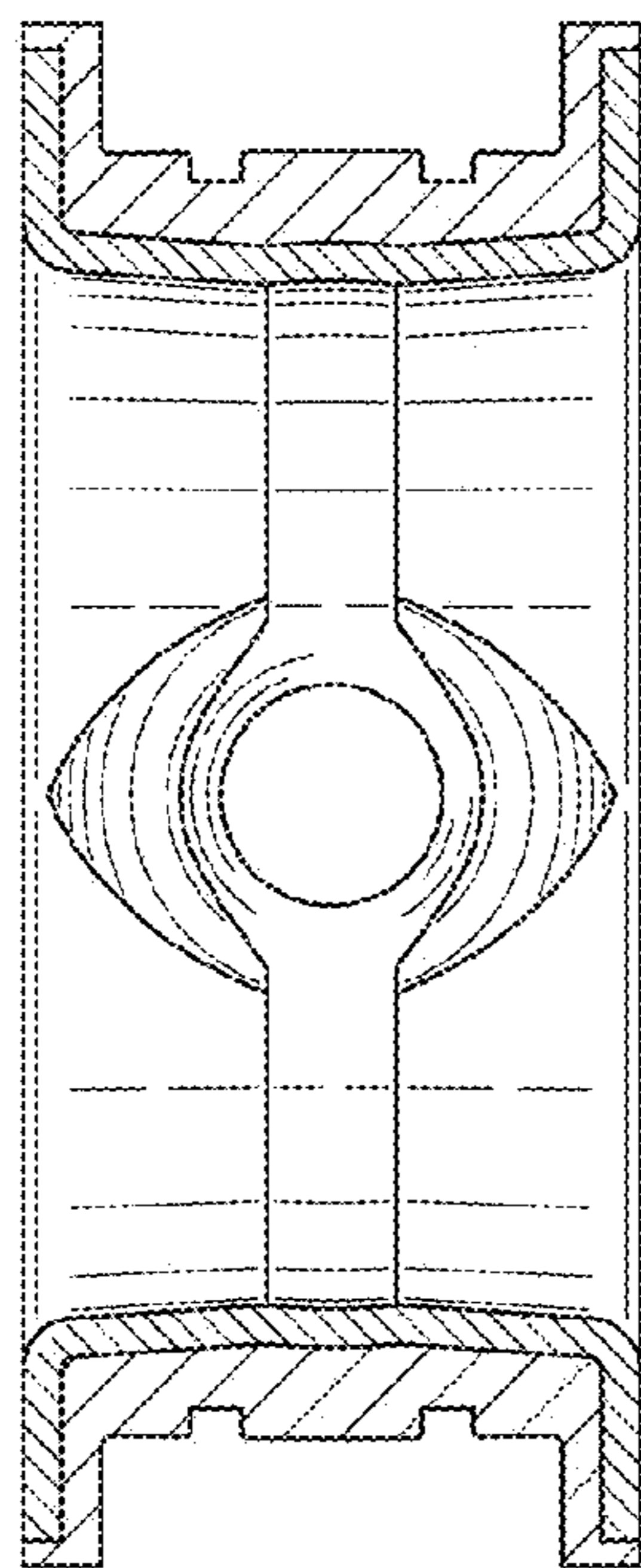


FIG. 8

