



US00D842259S

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

(10) **Patent No.:** **US D842,259 S**  
(45) **Date of Patent:** **\*\* Mar. 5, 2019**

- (54) **PLASMA CHAMBER LINER**
- (71) Applicant: **Applied Materials, Inc.**, Santa Clara, CA (US)
- (72) Inventor: **Eric Kihara Shono**, San Mateo, CA (US)
- (73) Assignee: **Applied Materials, Inc.**, Santa Clara, CA (US)
- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/602,207**
- (22) Filed: **Apr. 28, 2017**
- (51) **LOC (11) Cl.** ..... **13-03**
- (52) **U.S. Cl.**  
USPC ..... **D13/182**
- (58) **Field of Classification Search**  
USPC ..... D13/182; D7/550.1, 587; D15/138; 118/715, 728, 50, 500, 501, 428, 722, 118/504, 505, 506, 719, 733, 309, 723 R; 156/345.51, 916  
CPC . C23C 16/00; C23C 16/4401; C23C 16/0245; C23C 14/564; C23F 1/02; C23F 1/04; C23F 1/38; B65B 1/04; B65B 3/04  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 5,964,947 A \* 10/1999 Zhao ..... C23C 16/4411 118/715
- 6,277,237 B1 \* 8/2001 Schoepp ..... H01J 37/32495 118/723 R
- 6,374,871 B2 \* 4/2002 Donohoe ..... H01J 37/321 118/715
- 7,011,039 B1 \* 3/2006 Mohn ..... H01J 37/321 118/723 R
- D583,838 S 12/2008 Schmitz
- D658,691 S \* 5/2012 Suzuki ..... D15/138

- D658,692 S \* 5/2012 Suzuki ..... D15/138
- D658,693 S \* 5/2012 Suzuki ..... D15/138
- D678,228 S \* 3/2013 Suzuki ..... D13/199
- D699,692 S \* 2/2014 Yousif ..... D13/182
- D716,239 S \* 10/2014 Lau ..... D13/182
- D716,240 S \* 10/2014 Lau ..... D13/182
- 8,858,754 B2 \* 10/2014 Horiguchi ..... H01J 37/3244 118/723 E
- D717,746 S \* 11/2014 Lau ..... D13/182
- 8,980,005 B2 3/2015 Carlson et al.
- D802,545 S \* 11/2017 Tauchi ..... D13/182
- D804,436 S \* 12/2017 Tauchi ..... D13/182
- D812,578 S \* 3/2018 Uemura ..... D13/182
- 2001/0054381 A1 \* 12/2001 Umotoy ..... C23C 16/4401 118/715

(Continued)

**OTHER PUBLICATIONS**

Search Report for Taiwan Design Application No. 106306241 dated Jun. 6, 2018.

(Continued)

*Primary Examiner* — Elizabeth J Oswecki  
(74) *Attorney, Agent, or Firm* — Patterson + Sheridan, LLP

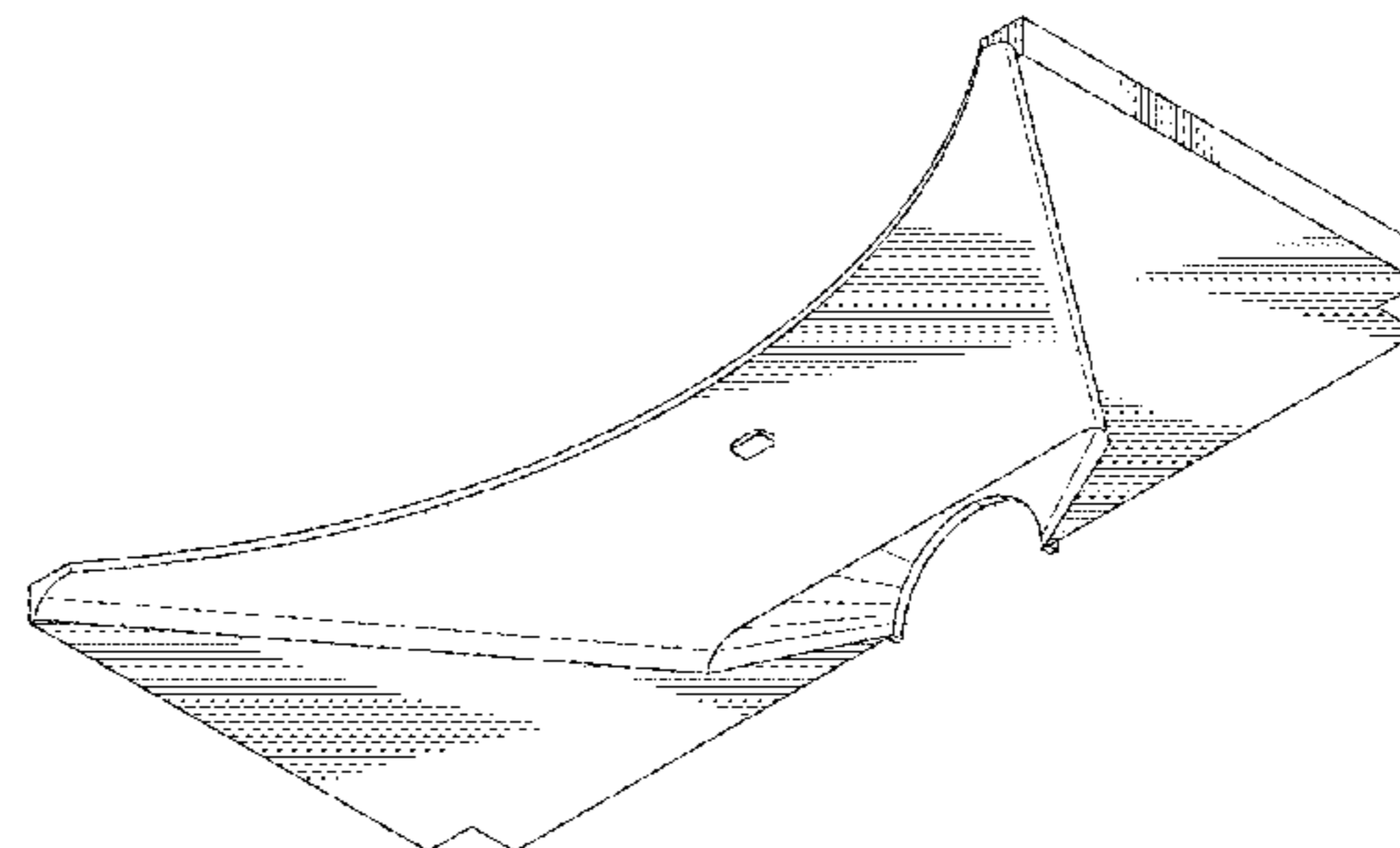
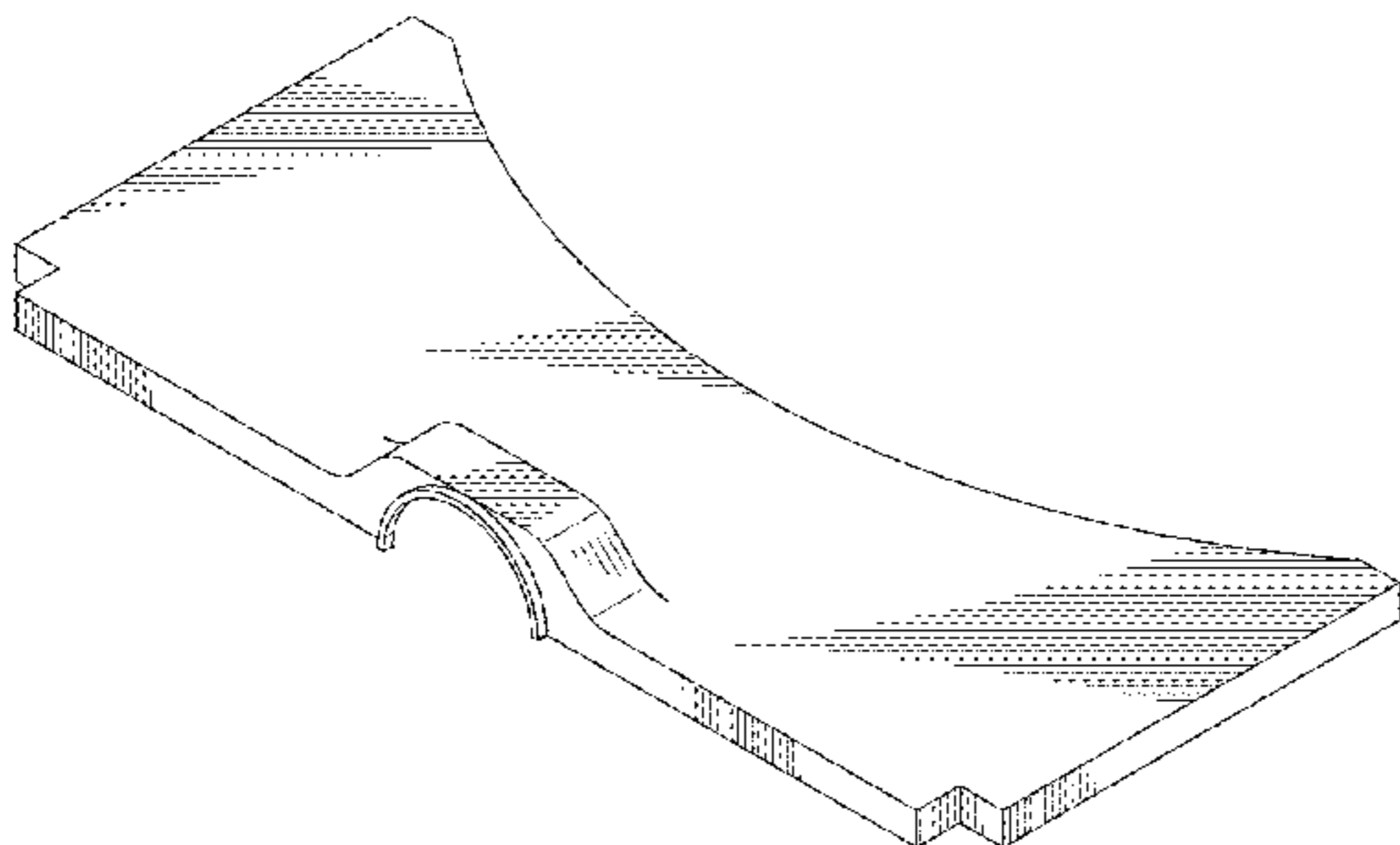
(57) **CLAIM**

The ornamental design for a plasma chamber liner, as shown and described.

**DESCRIPTION**

FIG. 1 is a top isometric view of a plasma chamber liner showing my new design;  
FIG. 2 is a bottom isometric view thereof;  
FIG. 3 is a top plan view thereof;  
FIG. 4 is a bottom plan view thereof;  
FIG. 5 is a side elevational view thereof;  
FIG. 6 is an opposite side elevational view thereof; and,  
FIG. 7 is a front elevational view thereof, a rear elevational view being identical.

**1 Claim, 6 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

2002/0069970 A1\* 6/2002 Noorbakhsh ..... C23C 16/4401  
156/345.37  
2004/0033385 A1\* 2/2004 Kaushal ..... H01J 37/32467  
428/627  
2004/0206309 A1\* 10/2004 Bera ..... H01J 37/321  
118/728  
2005/0224180 A1\* 10/2005 Bera ..... C23C 16/4412  
156/345.33  
2005/0229849 A1\* 10/2005 Silveti ..... C23C 16/4404  
118/715  
2009/0188625 A1\* 7/2009 Carducci ..... H01J 37/32467  
156/345.34  
2014/0116366 A1 5/2014 Harman  
2014/0322897 A1 10/2014 Samir et al.

OTHER PUBLICATIONS

Japanese Office Action for Application No. JP 2017-024106 dated  
Apr. 10, 2018.

Japanese Office Action for Application No. JP 2017-024107 dated  
Apr. 10, 2018.

\* cited by examiner

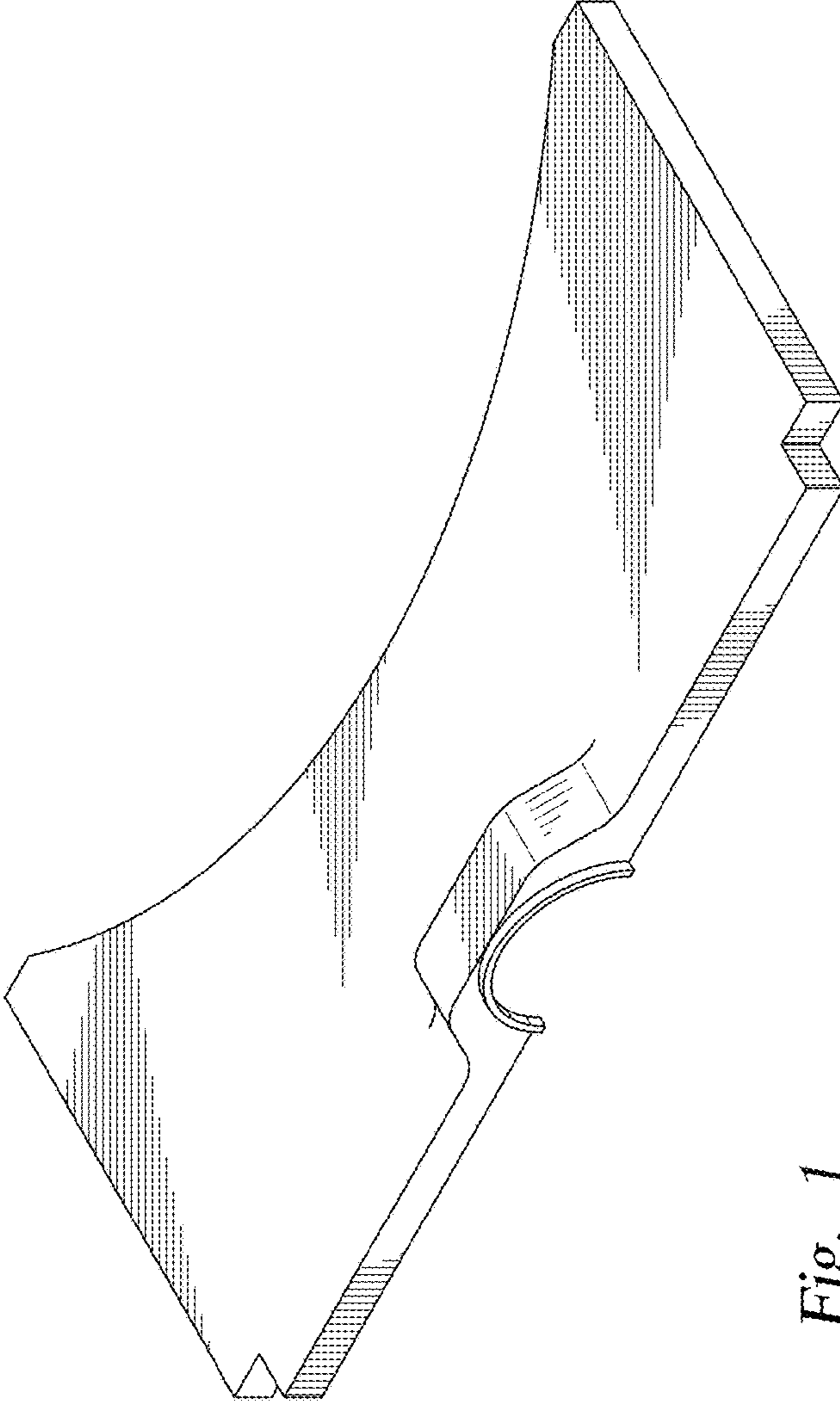


Fig. 1

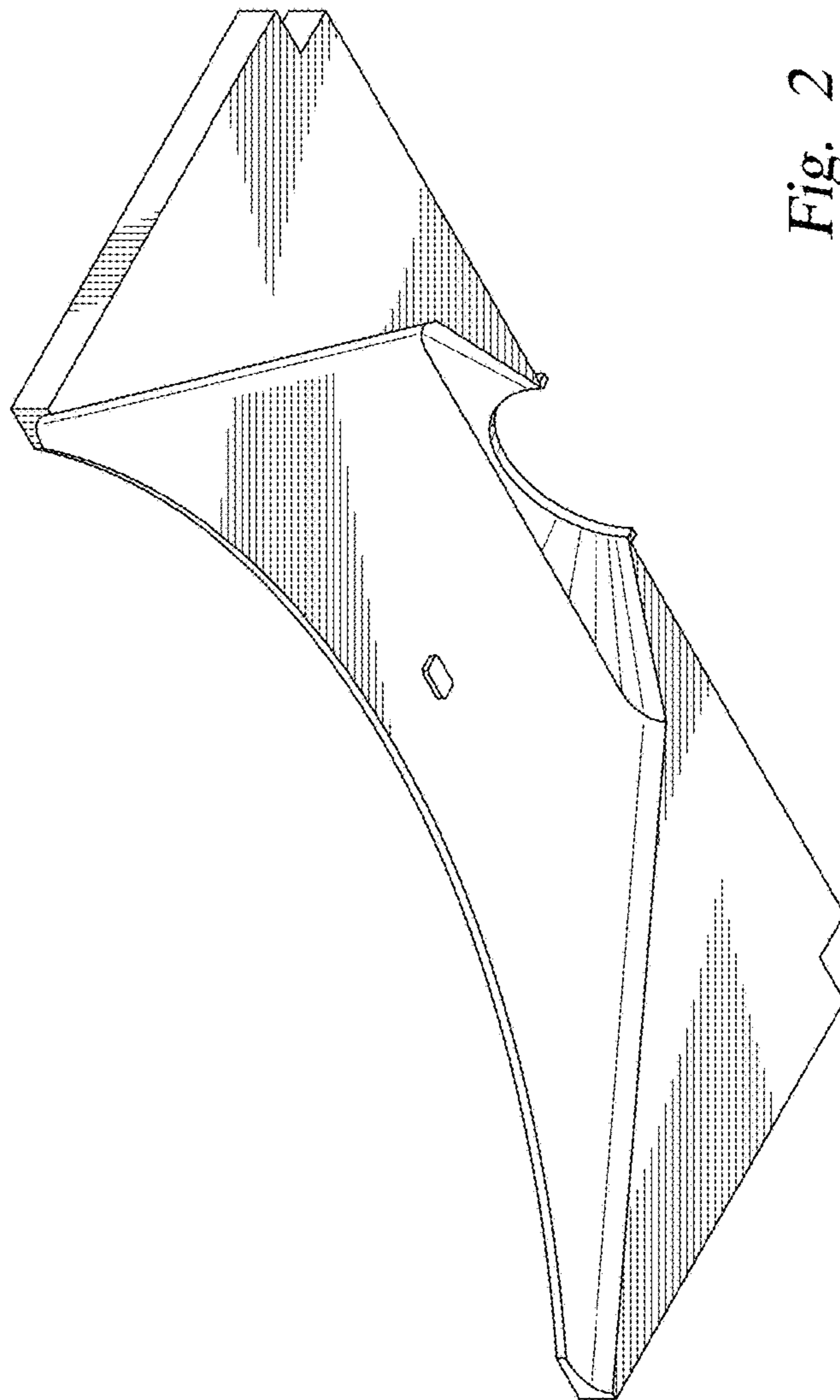


Fig. 2

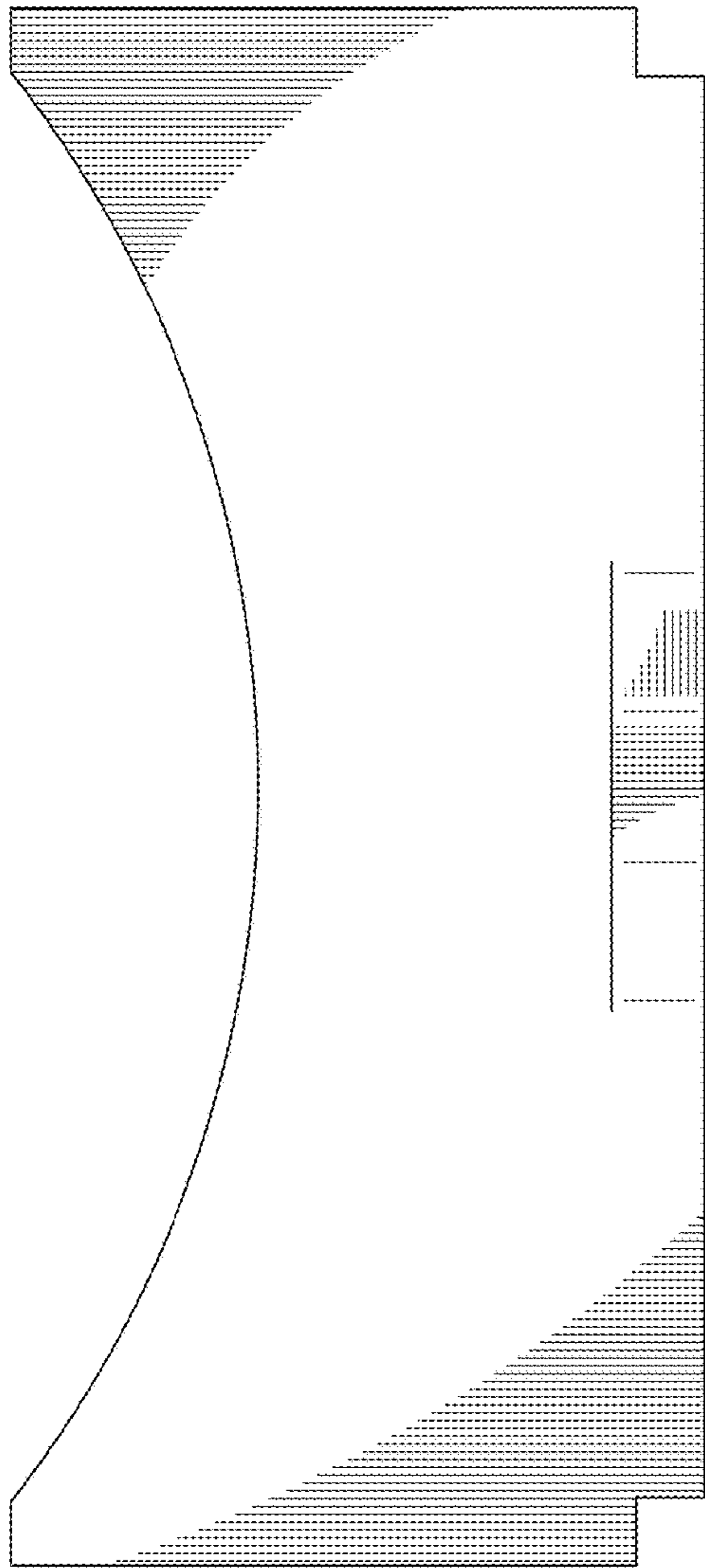


Fig. 3

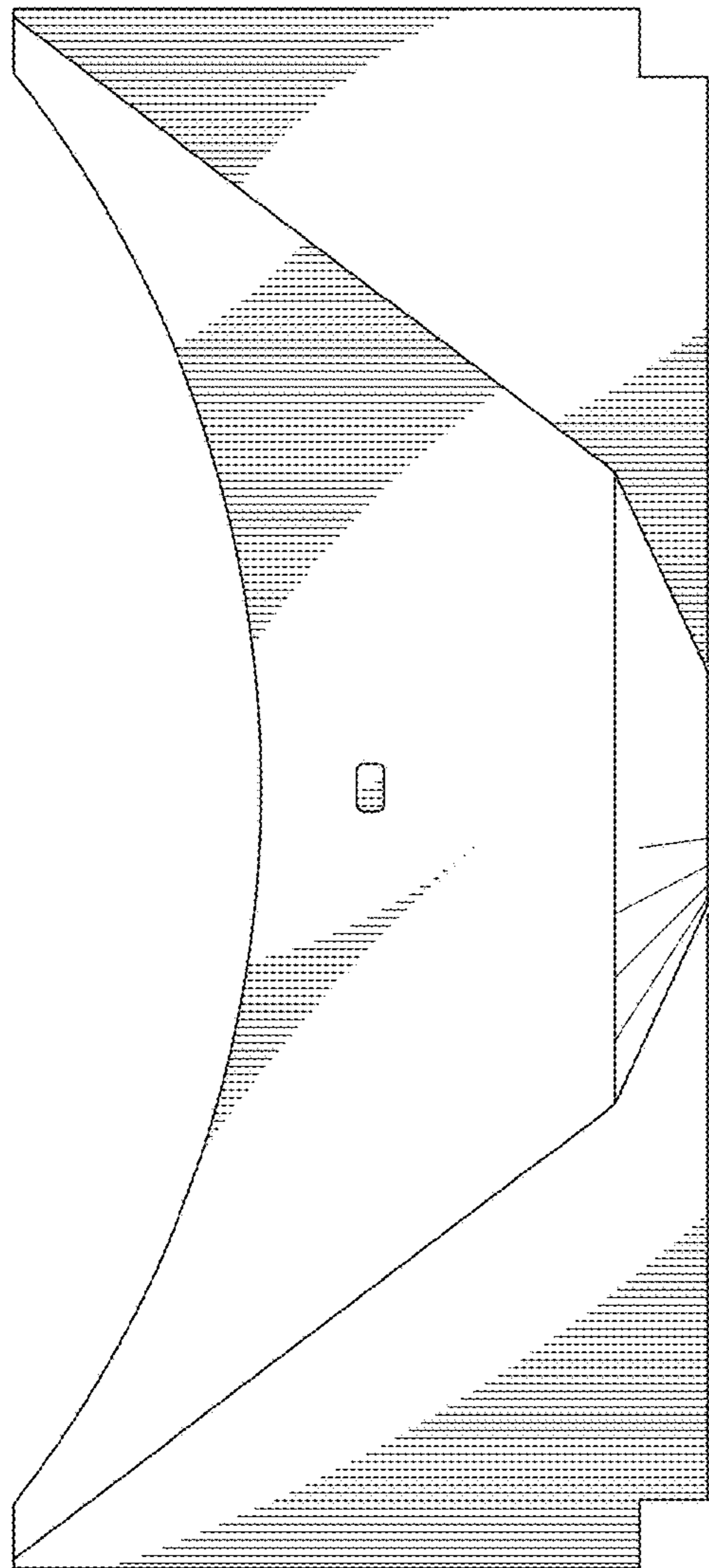


Fig. 4

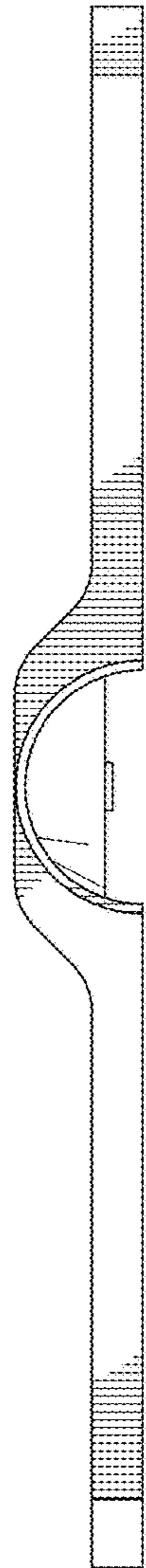


Fig. 5

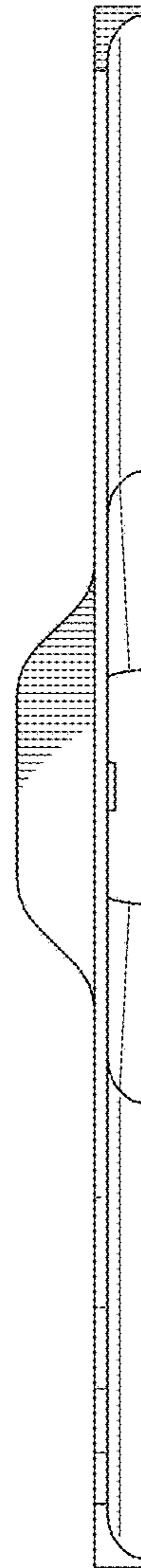
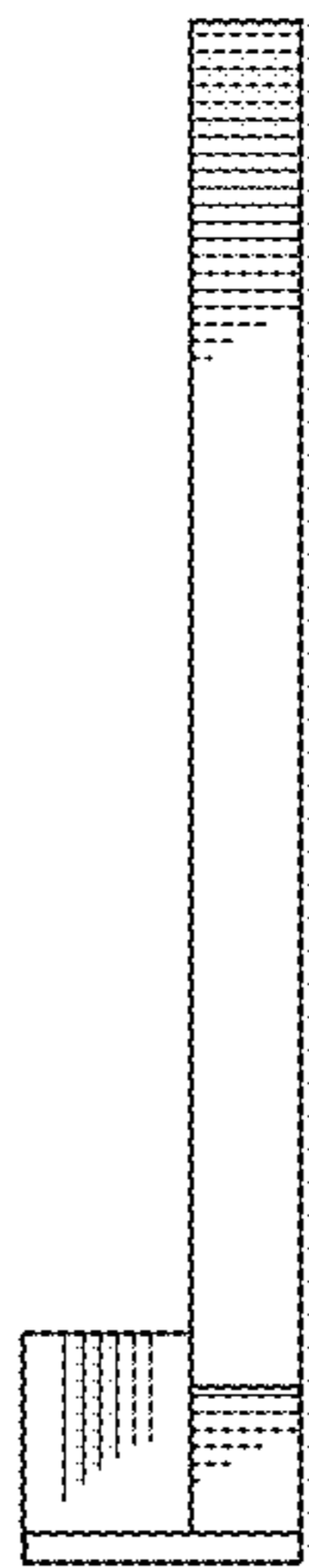


Fig. 6



*Fig. 7*