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(12) **United States Design Patent** (10) **Patent No.:** **US D856,313 S**  
**Keyrouz et al.** (45) **Date of Patent:** **\*\* Aug. 13, 2019**

(54) **DUAL PORT ANTENNA**  
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D815,620 S \* 4/2018 Podduturi ..... D14/230  
D820,817 S \* 6/2018 Hsieh ..... D14/230  
2001/0007445 A1 7/2001 Pankinaho  
2004/0056804 A1 3/2004 Kadambi et al.  
2004/0080457 A1 4/2004 Guo et al.  
2004/0085244 A1 5/2004 Kadambi et al.  
(Continued)

(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/612,467**

**FOREIGN PATENT DOCUMENTS**

CN 106299727 A 1/2017  
WO 2017061869 A1 4/2017

(22) Filed: **Aug. 1, 2017**  
(30) **Foreign Application Priority Data**

**OTHER PUBLICATIONS**

Zarghooni, et al. "Supershaped Metamaterial Unit-cells Using the  
Gielis Formula", 2015, IEEE International Symposium on Antennas  
and Propagation & USNC/URSI National Radio Science Meeting,  
Jul. 19, 2015, pp. 458-459.

Apr. 25, 2017 (NL) ..... 2018779  
(51) **LOC (12) Cl.** ..... **14-03**  
(52) **U.S. Cl.**  
USPC ..... **D14/230**  
(58) **Field of Classification Search**  
USPC ..... D14/230-238, 203.6, 204, 216, 221,  
D14/238.1, 240, 242, 299, 343, 358, 509;  
D13/182  
CPC ..... H01Q 7/00; H01Q 13/10; H01Q 9/285;  
H01Q 19/30; H01Q 19/12; H01Q 1/36;  
H01Q 1/38; H01Q 1/0475; H01Q 1/034;  
H05K 11/00; G05D 1/0234; G06K  
19/07749  
See application file for complete search history.

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(56) **References Cited**

(57) **CLAIM**

The ornamental design for a dual port antenna, as shown and  
described.

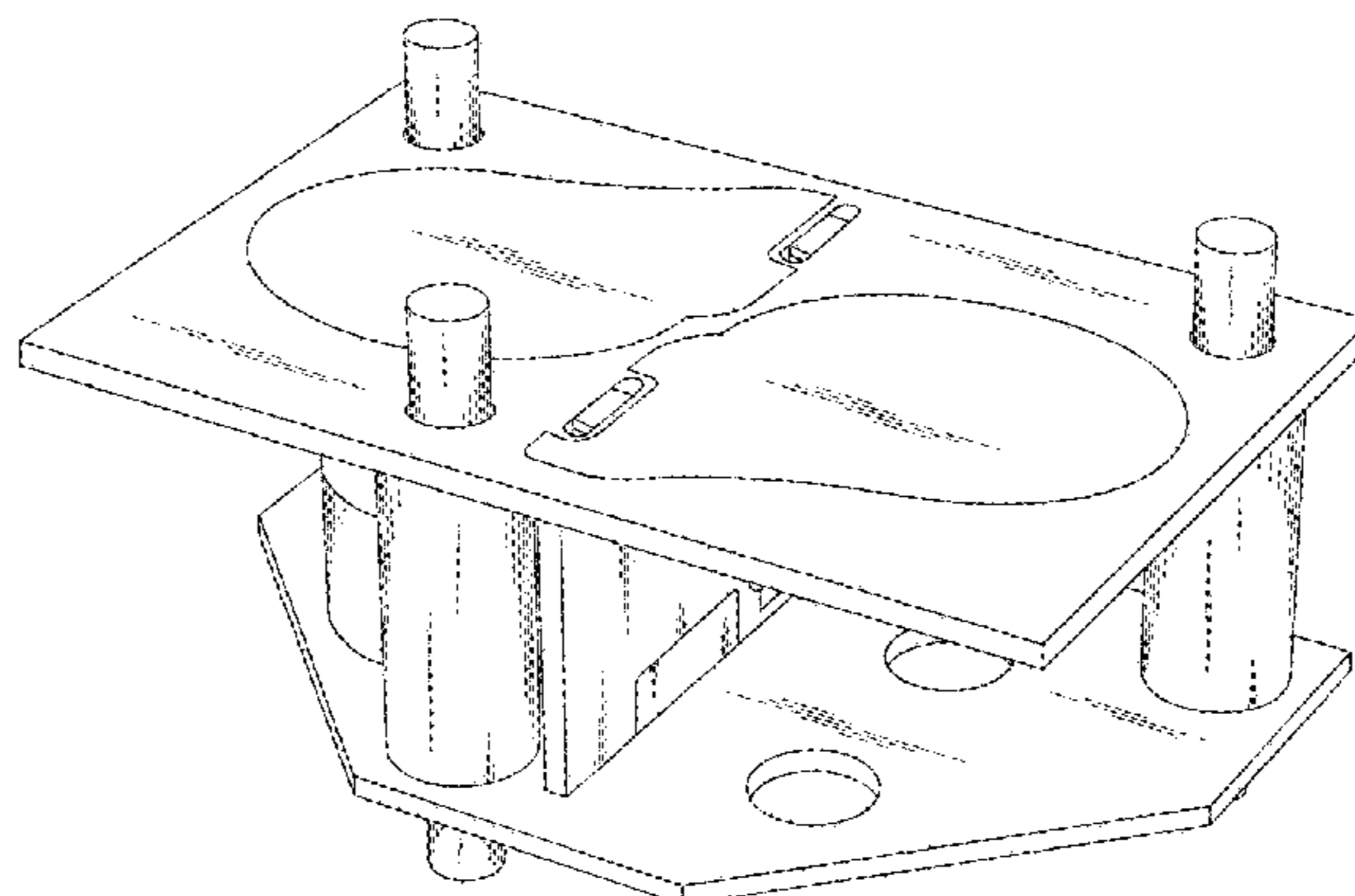
**U.S. PATENT DOCUMENTS**

**DESCRIPTION**

D483,745 S \* 12/2003 Sergi ..... D14/238  
D518,819 S \* 4/2006 Gray ..... D14/230  
D580,416 S \* 11/2008 Shinkawa ..... D14/230  
D713,392 S \* 9/2014 Podduturi ..... D14/230  
D769,215 S \* 10/2016 Andrews ..... D14/204  
D782,449 S \* 3/2017 Bian ..... D14/238  
D802,569 S \* 11/2017 Zheng ..... D14/230

FIG. 1 is a top perspective view of a dual port antenna,  
showing our new design;  
FIG. 2 is a front perspective view thereof;  
FIG. 3 is another top perspective view thereof;  
FIG. 4 is another front perspective view thereof;  
FIG. 5 is a top rear perspective view thereof;  
FIG. 6 is a rear perspective view thereof;  
FIG. 7 is a rear view thereof;  
FIG. 8 is a front view thereof;  
FIG. 9 is a right side view thereof;  
FIG. 10 is a left side view thereof; and,  
FIG. 11 is a top view thereof.

**1 Claim, 11 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

2004/0125030 A1 7/2004 Sung et al.  
2004/0263396 A1 12/2004 Sung  
2006/0030173 A1\* 2/2006 Kawakita ..... H01R 13/6658  
439/76.1  
2006/0290572 A1 12/2006 Chan  
2009/0051595 A1 2/2009 Wang et al.  
2015/0214630 A1 7/2015 Shimura  
2015/0380815 A1\* 12/2015 Boutayeb ..... H01Q 3/24  
343/777  
2016/0344093 A1 11/2016 Tagi et al.  
2017/0141480 A1\* 5/2017 Ng ..... H01Q 21/065

\* cited by examiner

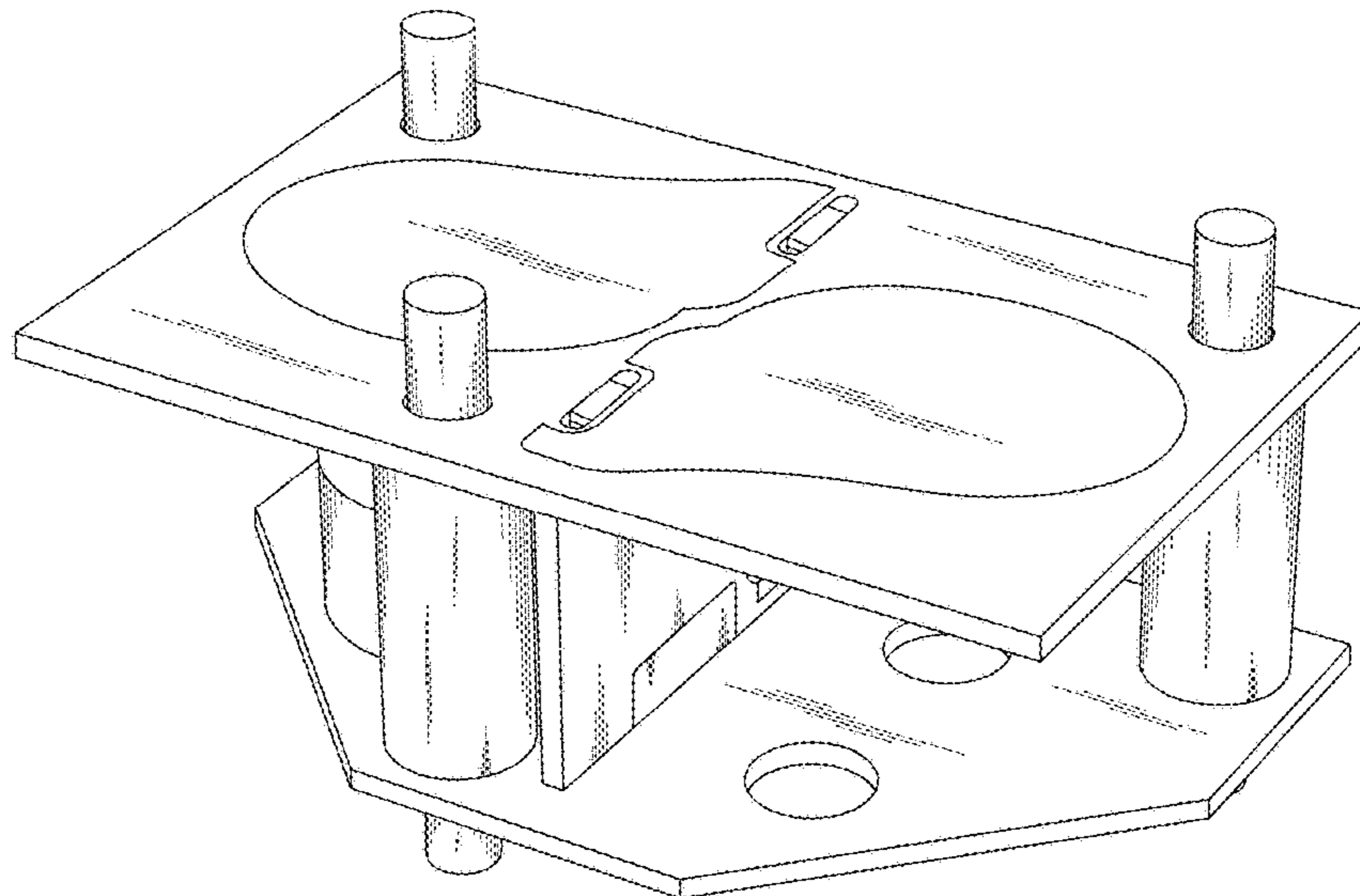


FIG. 1

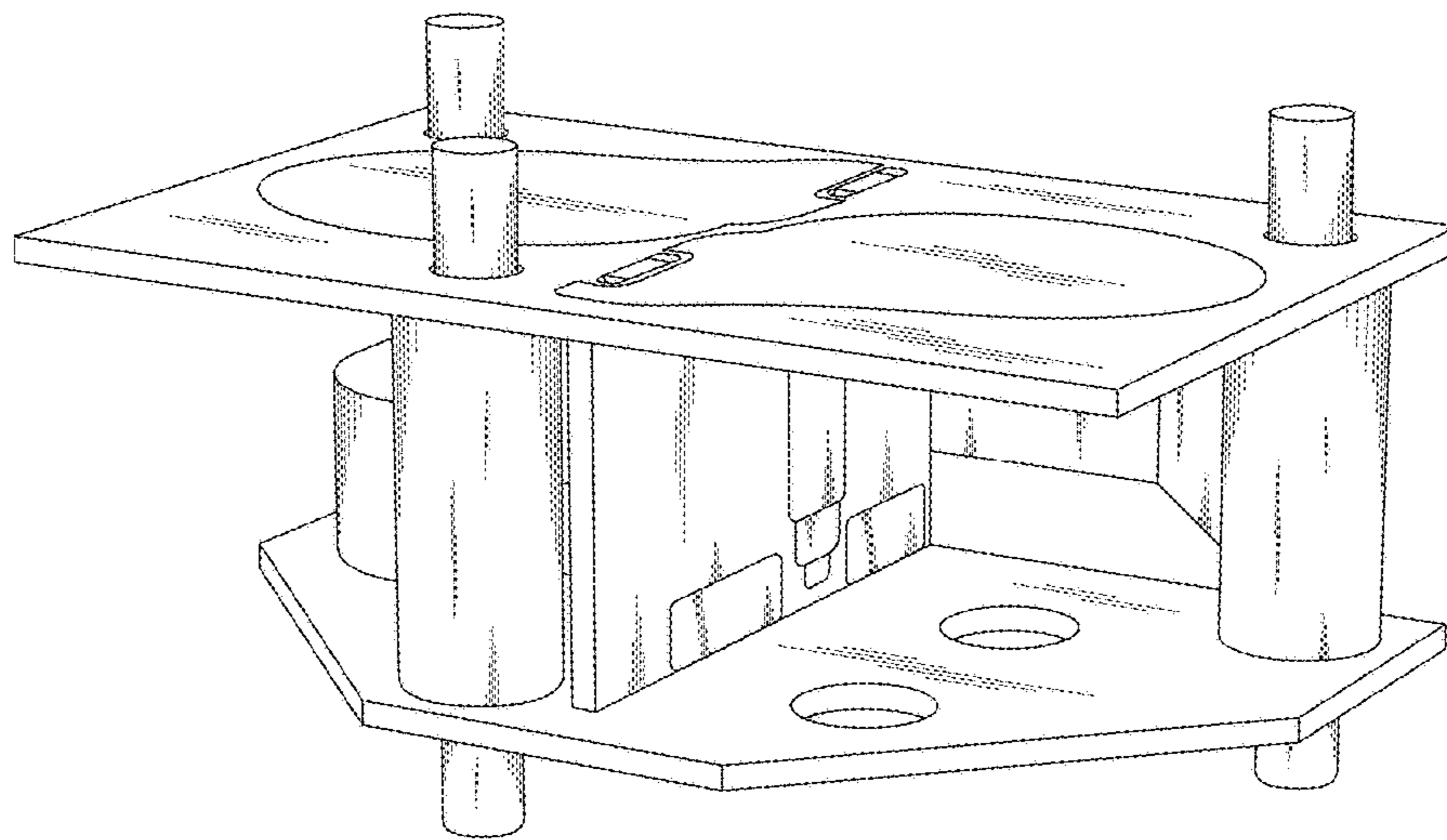


FIG. 2

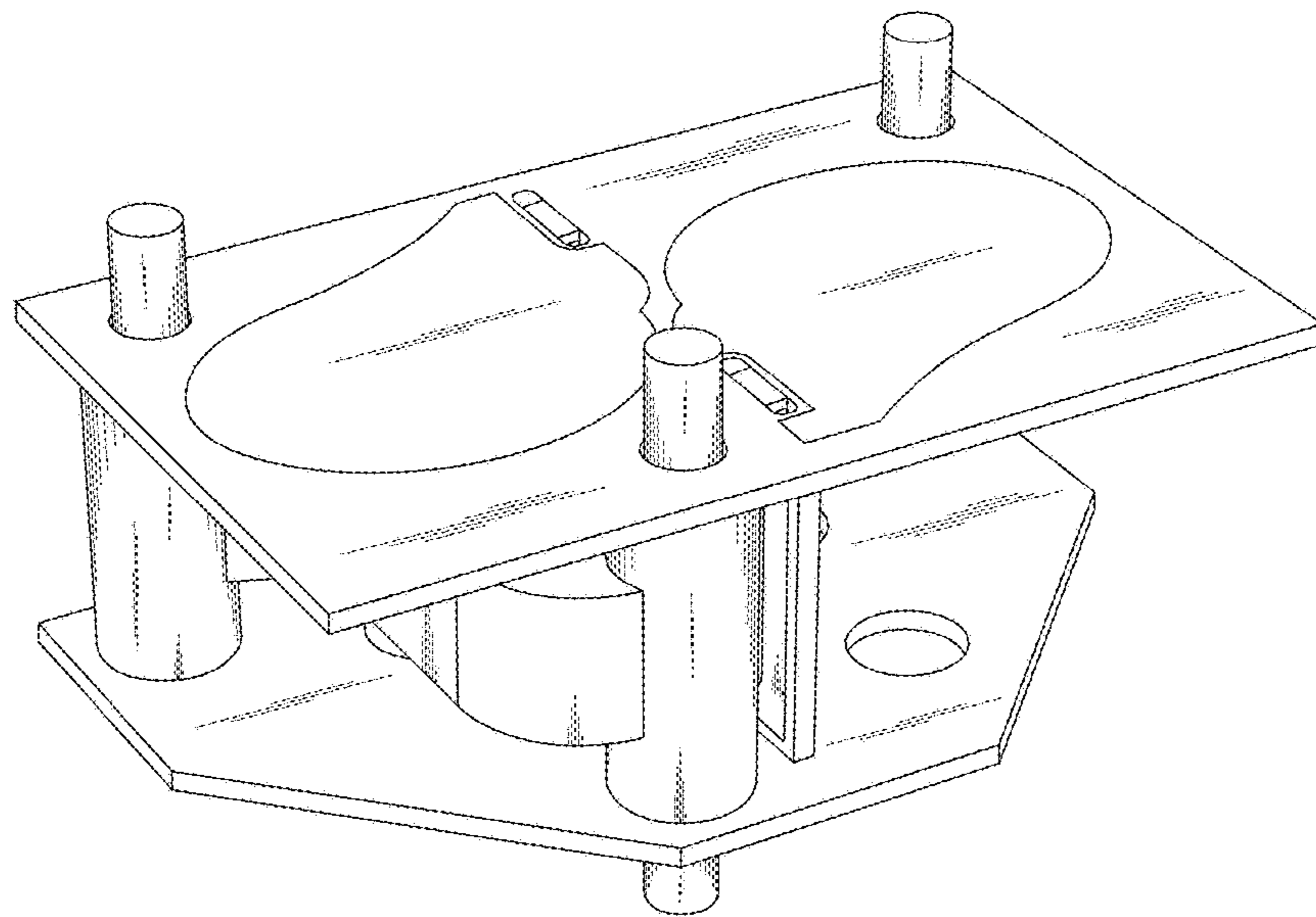


FIG. 3

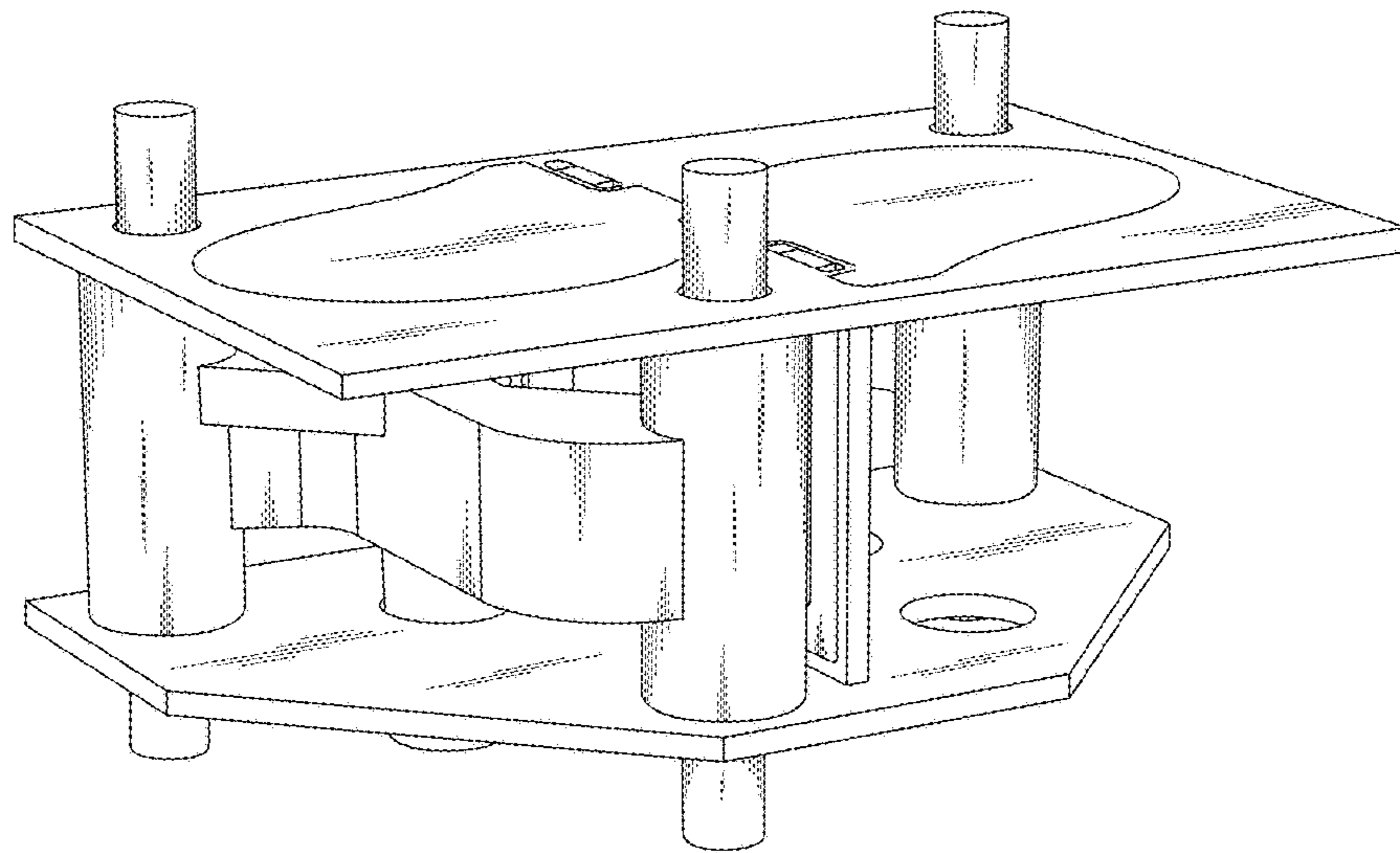


FIG. 4

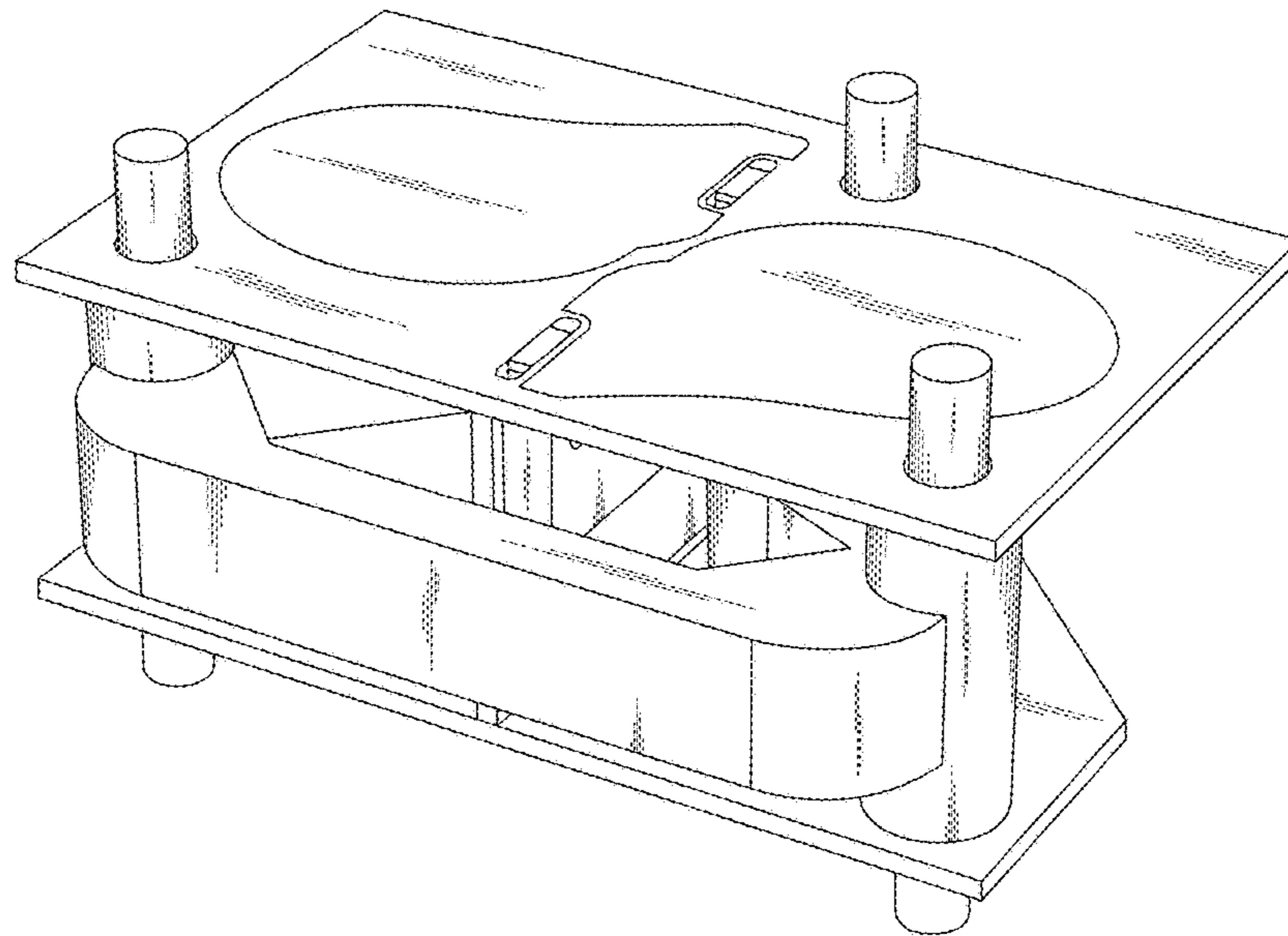


FIG. 5

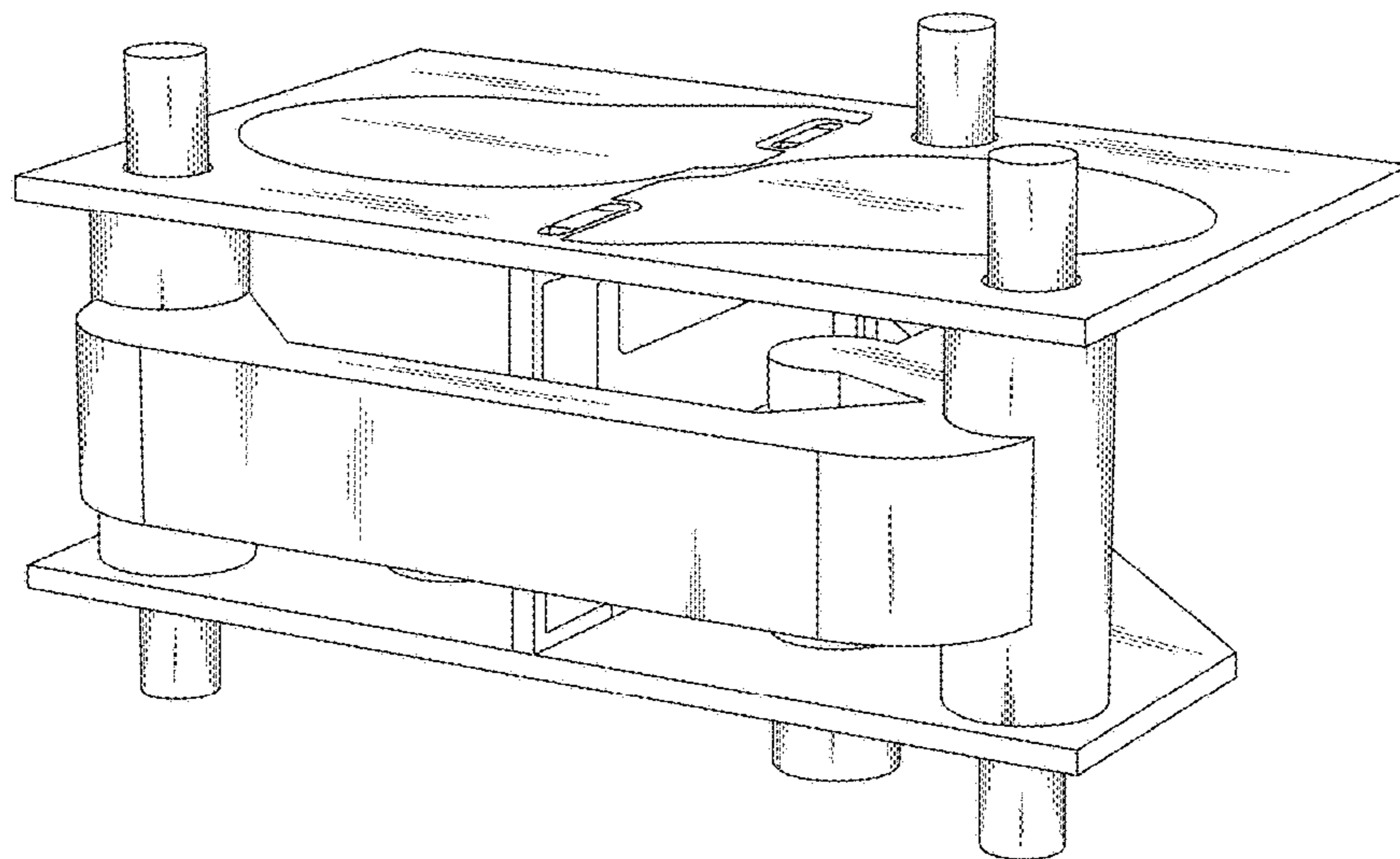


FIG. 6



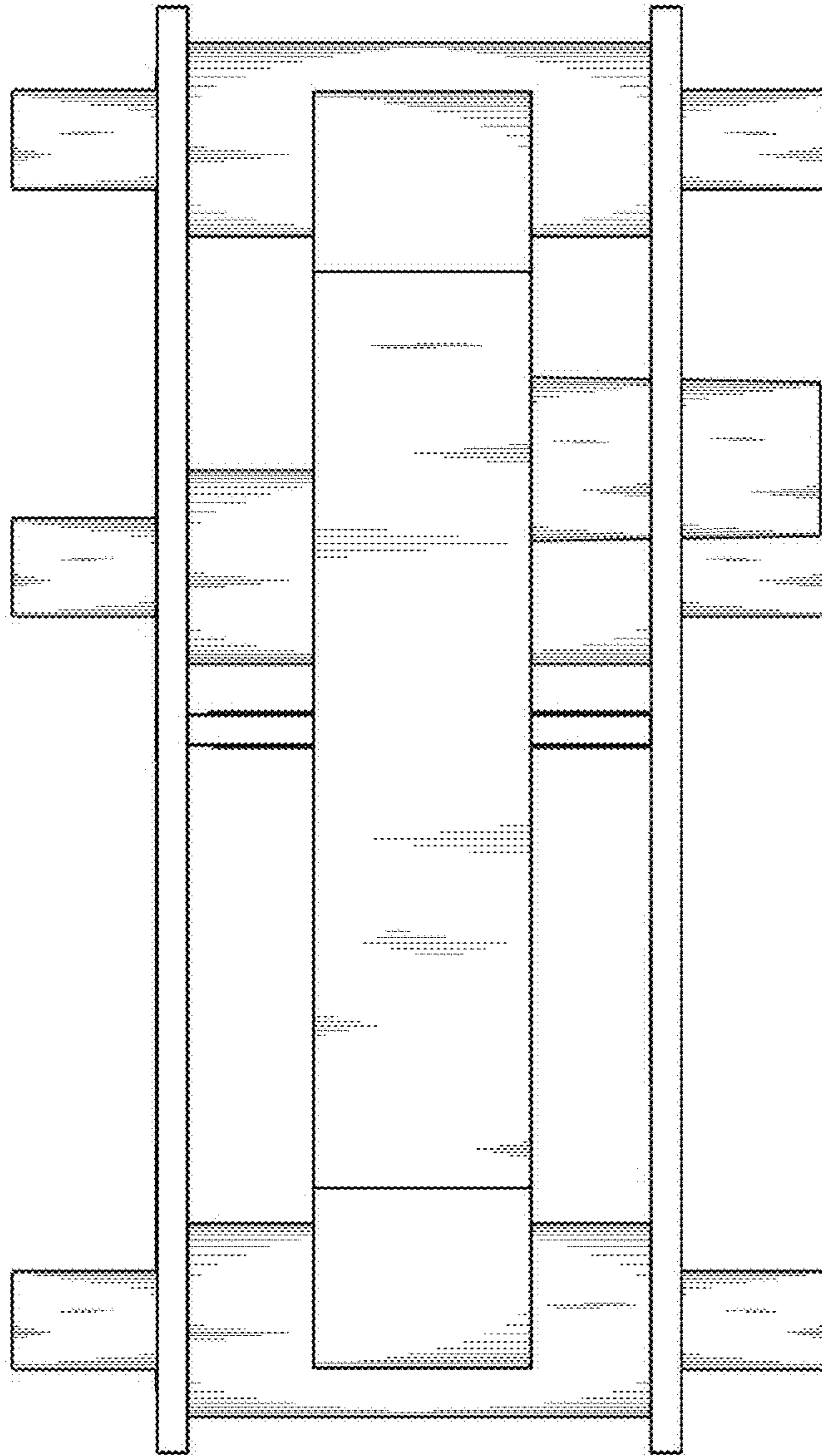


FIG. 7

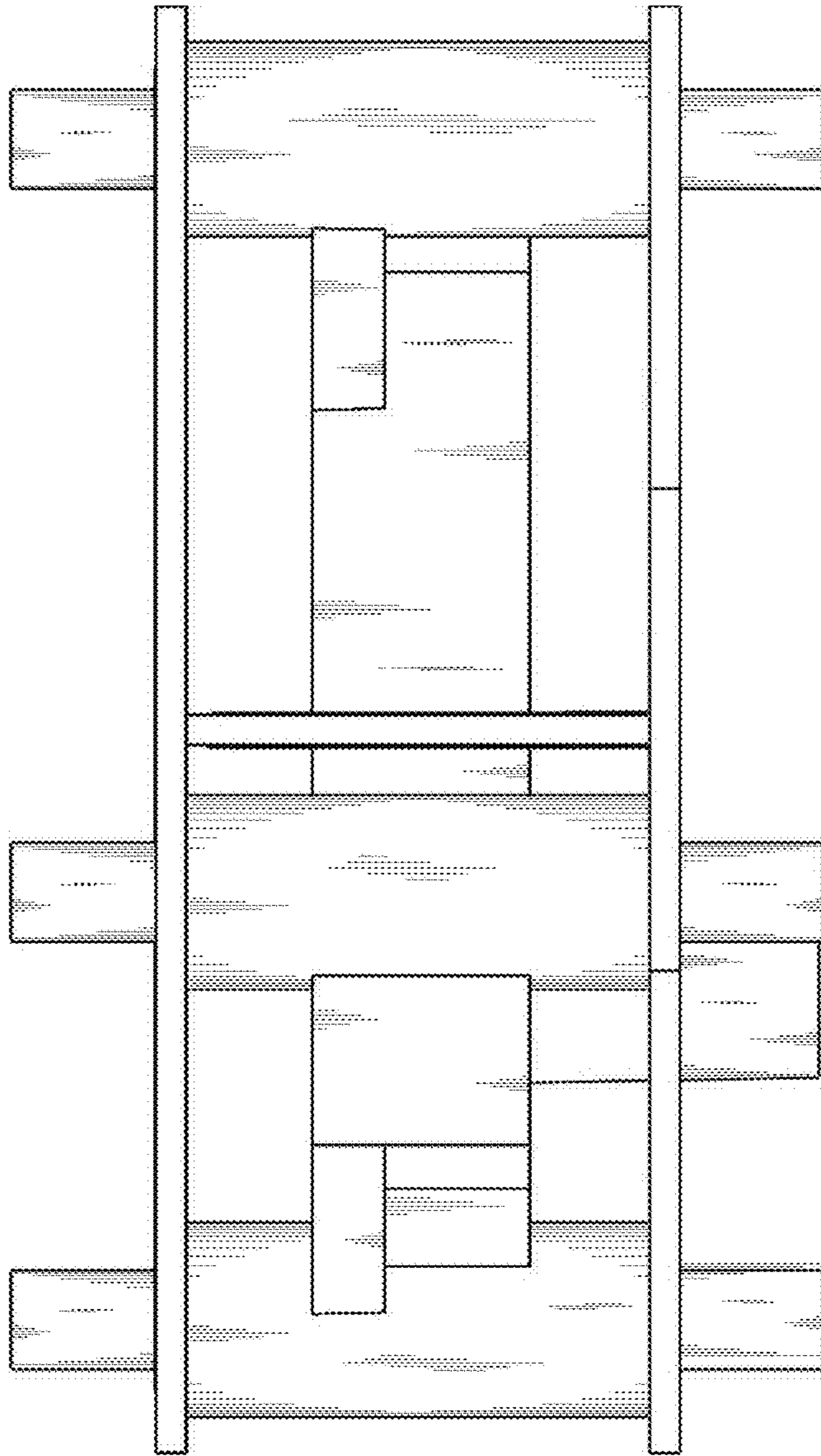


FIG. 8

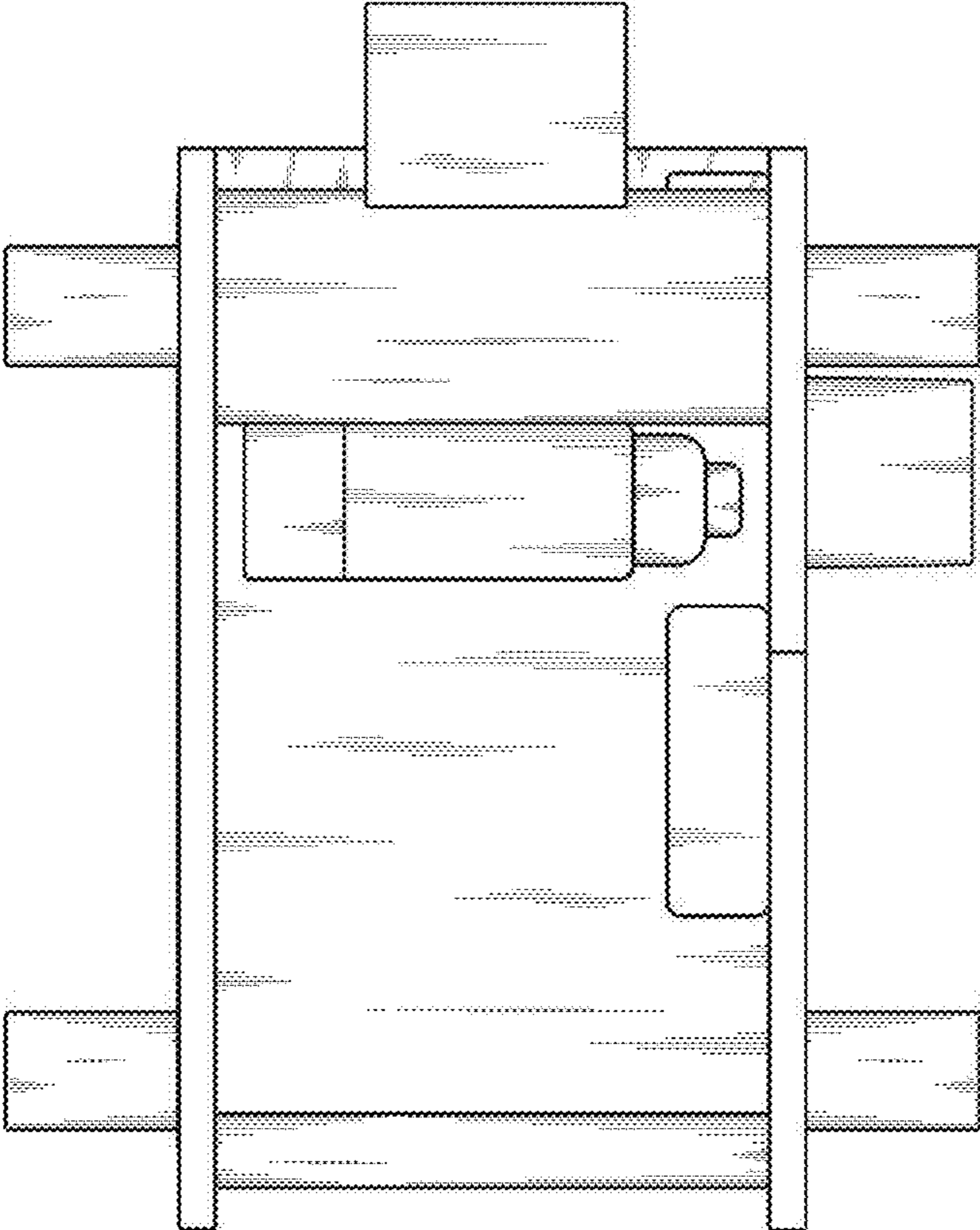


FIG. 9

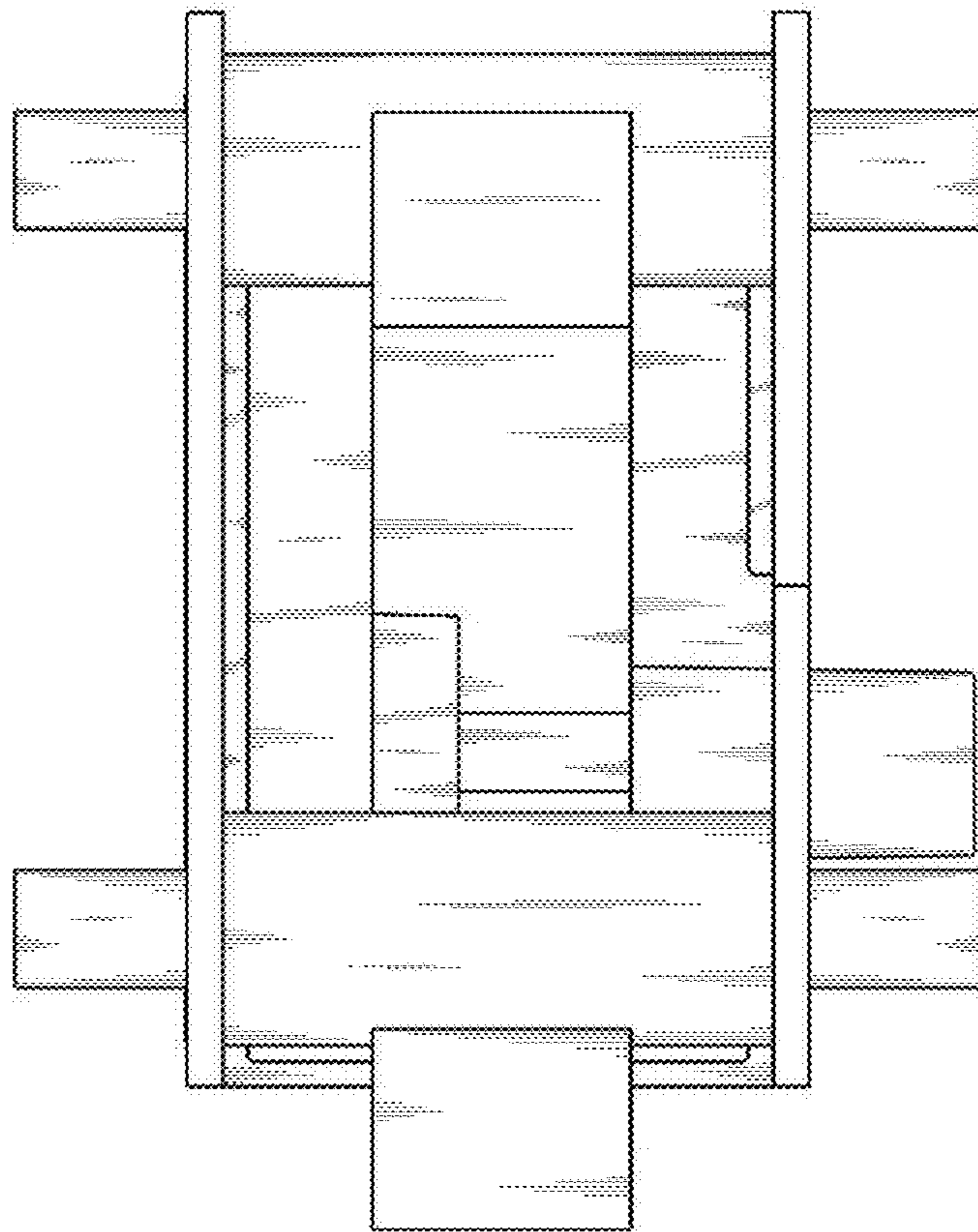


FIG. 10

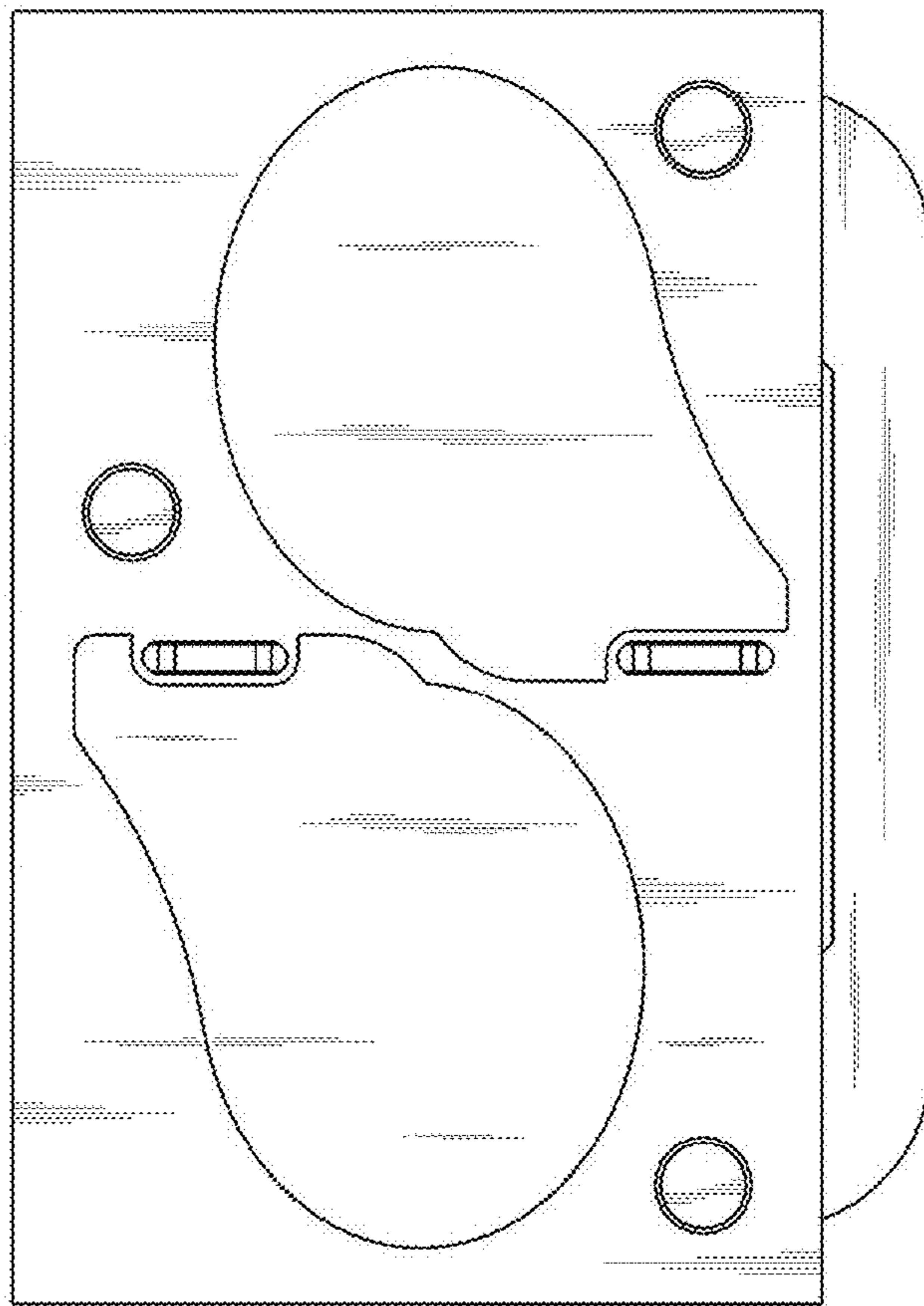


FIG. 11