



US00D936110S

(12) **United States Design Patent** (10) **Patent No.:** **US D936,110 S**  
**Jenner** (45) **Date of Patent:** **\*\* Nov. 16, 2021**

(54) **CENTRALIZER**

(71) Applicant: **CEN TEK LIMITED**, Newton Abbot (GB)

(72) Inventor: **Andrew Jenner**, Vechta (DE)

(73) Assignee: **CEN TEK LIMITED**, Newton Abbot (GB)

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

(21) Appl. No.: **29/642,459**

(22) Filed: **Mar. 29, 2018**

**Related U.S. Application Data**

(62) Division of application No. 29/526,558, filed on May 11, 2015, now Pat. No. Des. 851,131.

(30) **Foreign Application Priority Data**

Jan. 27, 2015 (WO) ..... DM/085448  
Jan. 27, 2015 (WO) ..... DM/085449  
Feb. 26, 2015 (WO) ..... DM/085736

(51) **LOC (13) Cl.** ..... **15-04**

(52) **U.S. Cl.**  
USPC ..... **D15/21; D8/354**

(58) **Field of Classification Search**  
USPC ..... D8/354, 349, 356; D15/10, 21; 166/384, 166/241.1-241.7, 213, 173, 208, 382  
(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,209,836 A 10/1965 Hall, Sr.  
3,358,768 A 12/1967 Solum  
(Continued)

*Primary Examiner* — Keli L Hill  
*Assistant Examiner* — Harold E Blackwell, II

(74) *Attorney, Agent, or Firm* — Dickinson Wright PLLC; Mark E. Scott

(57) **CLAIM**

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

**DESCRIPTION**

FIG. 1 is a front elevation view of an embodiment of a centralizer showing the new design; FIG. 2 is a back elevation view thereof; FIG. 3 is a right elevation view thereof; FIG. 4 is a left elevation view thereof; FIG. 5 is top elevation view thereof, the bottom elevation view being identical thereto; FIG. 6 is a perspective view thereof; FIG. 7 is a front elevation view of an alternative embodiment of a centralizer showing the new design; FIG. 8 is a back elevation view thereof; FIG. 9 is a right elevation view thereof; FIG. 10 is a left elevation view thereof; FIG. 11 is top elevation view thereof, the bottom elevation view being identical thereto; FIG. 12 is a perspective view thereof; FIG. 13 is a front elevation view of an alternative embodiment of a centralizer showing the new design; FIG. 14 is a back elevation view thereof; FIG. 15 is a right elevation view thereof; FIG. 16 is a left elevation view thereof; FIG. 17 is top elevation view thereof, the bottom elevation view being identical thereto; FIG. 18 is a perspective view thereof; FIG. 19 is a front elevation view of an alternative embodiment of a centralizer showing the new design; FIG. 20 is a back elevation view thereof; FIG. 21 is a right elevation view thereof; FIG. 22 is a left elevation view thereof; FIG. 23 is a top elevation view thereof, the bottom elevation view being identical thereto; FIG. 24 is a perspective view thereof; FIG. 25 is a front elevation view of an alternative embodiment of a centralizer showing the new design;

(Continued)

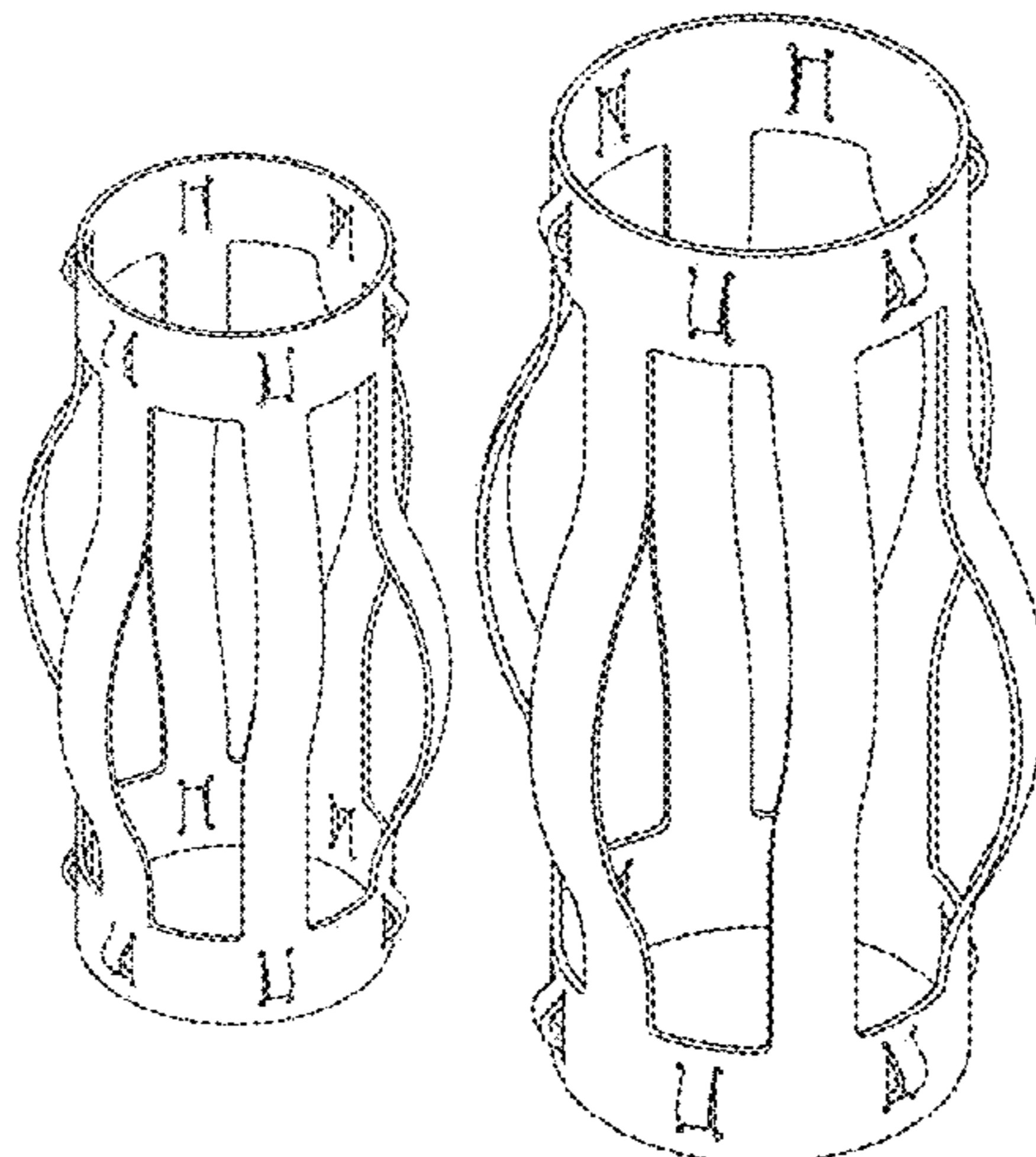


FIG. 26 is a back elevation view thereof;  
 FIG. 27 is a right elevation view thereof;  
 FIG. 28 is a left elevation view thereof;  
 FIG. 29 is a top elevation view thereof, the bottom elevation view being identical thereto;  
 FIG. 30 is a perspective view thereof;  
 FIG. 31 is a front elevation view of an alternative embodiment of a centralizer showing the new design;  
 FIG. 32 is a back elevation view thereof;  
 FIG. 33 is a right elevation view thereof;  
 FIG. 34 is a left elevation view thereof;  
 FIG. 35 is a top elevation view thereof, the bottom elevation view being identical thereto;  
 FIG. 36 is a perspective view thereof;  
 FIG. 37 is a front elevation view of an alternative embodiment of a centralizer showing the new design;  
 FIG. 38 is a back elevation view thereof;  
 FIG. 39 is a right elevation view thereof;  
 FIG. 40 is a left elevation view thereof;  
 FIG. 41 is a top elevation view thereof, the bottom elevation view being identical thereto;  
 FIG. 42 is a perspective view thereof;  
 FIG. 43 is a front elevation view of an alternative embodiment of a centralizer showing the new design;  
 FIG. 44 is a back elevation view thereof;  
 FIG. 45 is a right elevation view thereof;  
 FIG. 46 is a left elevation view thereof;  
 FIG. 47 is a top elevation view thereof, the bottom elevation view being identical thereto;  
 FIG. 48 is a perspective view thereof;  
 FIG. 49 is a front elevation view of an alternative embodiment of a centralizer showing the new design;  
 FIG. 50 is a back elevation view thereof;  
 FIG. 51 is a right elevation view thereof;  
 FIG. 52 is a left elevation view thereof;  
 FIG. 53 is a top elevation view thereof, the bottom elevation view being identical thereto;  
 FIG. 54 is a perspective view thereof;  
 FIG. 55 is a front elevation view of a forty-fourth embodiment of a centralizer showing the new design;  
 FIG. 56 is a back elevation view thereof;  
 FIG. 57 is a right elevation view thereof;  
 FIG. 58 is a left elevation view thereof;  
 FIG. 59 is a top elevation view thereof, the bottom elevation view being identical thereto;  
 FIG. 60 is a perspective view thereof;  
 FIG. 61 is a front elevation view of an alternative embodiment of a centralizer showing the new design;  
 FIG. 62 is a back elevation view thereof;  
 FIG. 63 is a right elevation view thereof;  
 FIG. 64 is a left elevation view thereof;

FIG. 65 is a top elevation view thereof, the bottom elevation view being identical thereto;  
 FIG. 66 is a perspective view thereof;  
 FIG. 67 is a front elevation view of an alternative embodiment of a centralizer showing the new design;  
 FIG. 68 is a back elevation view thereof;  
 FIG. 69 is a right elevation view thereof;  
 FIG. 70 is a left elevation view thereof;  
 FIG. 71 is a top elevation view thereof, the bottom elevation view being identical thereto;  
 FIG. 72 is a perspective view thereof;  
 FIG. 73 is a front elevation view of an alternative embodiment of a centralizer showing the new design;  
 FIG. 74 is a back elevation view thereof;  
 FIG. 75 is a right elevation view thereof;  
 FIG. 76 is a left elevation view thereof;  
 FIG. 77 is a top elevation view thereof, the bottom elevation view being identical thereto; and,  
 FIG. 78 is a perspective view thereof.

**1 Claim, 78 Drawing Sheets**

(58) **Field of Classification Search**  
 CPC ..... E21B 17/1078; E21B 17/1035; E21B  
 17/1064; E21B 17/1057  
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,369,607	A	2/1968	Turbyfill
4,143,713	A	3/1979	Kreff
6,997,254	B2	2/2006	Jenner
D671,960	S	12/2012	Kirk et al.
8,360,161	B2	1/2013	Buytaert et al.
8,770,280	B2	7/2014	Buytaert et al.
8,832,920	B2	9/2014	Goldberg
8,833,446	B2	9/2014	Lively et al.
D718,342	S	11/2014	Buytaert et al.
D743,447	S	11/2015	Neel et al.
9,297,218	B2	3/2016	Jordan et al.
9,341,032	B2	5/2016	Jewett
9,534,456	B2	1/2017	Eidem et al.
9,556,687	B2	1/2017	Buytaert et al.
9,664,001	B2	5/2017	Jenner
9,745,803	B2	8/2017	Buytaert et al.
10,047,574	B2 *	8/2018	Jenner ..... E21B 17/1028
D851,131	S *	6/2019	Jenner ..... D15/21
2003/0000607	A1	1/2003	Jenner
2011/0030973	A1	2/2011	Jenner
2016/0060974	A1	3/2016	Jenner
2016/0084020	A1	3/2016	Jenner

\* cited by examiner



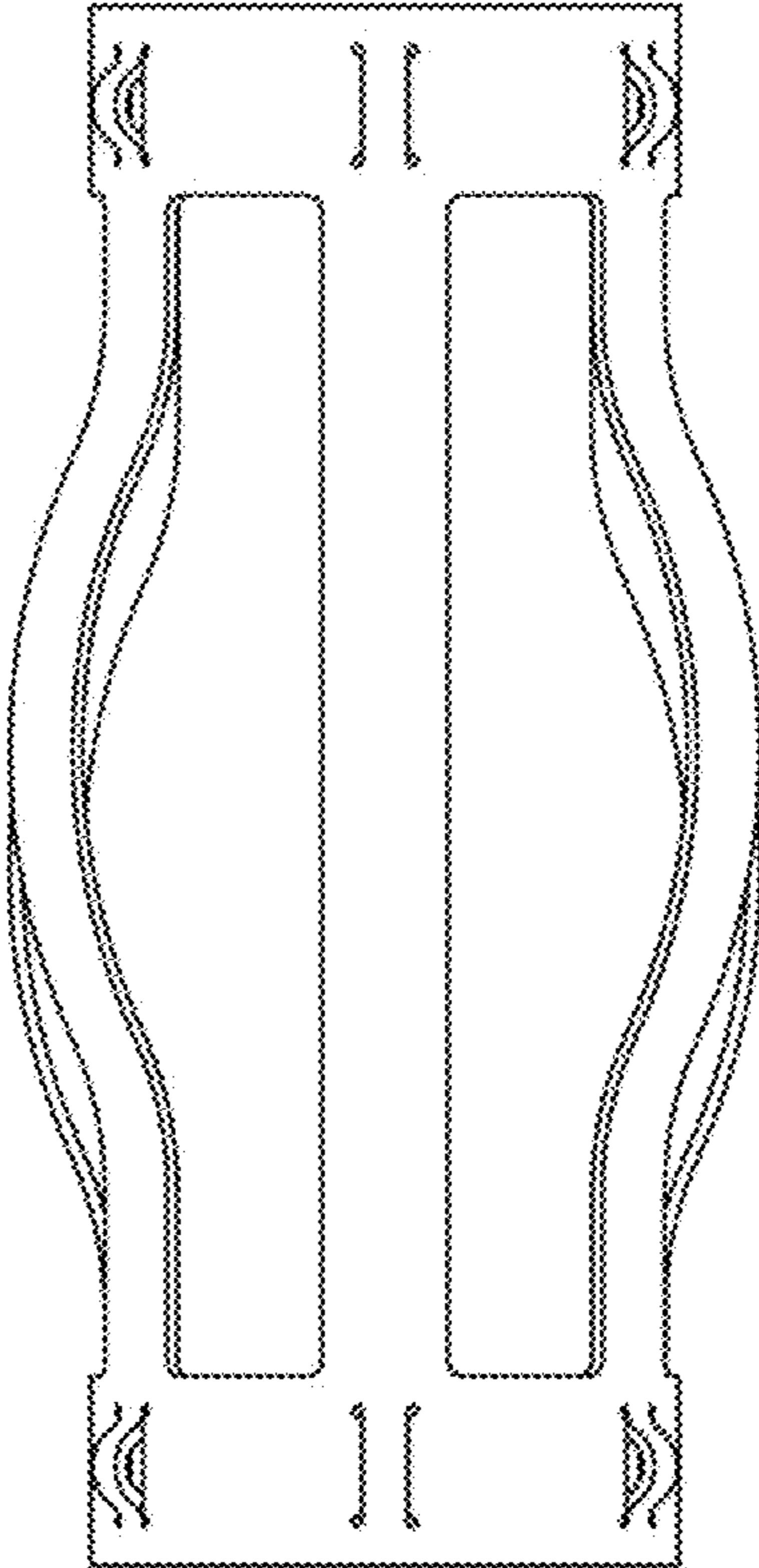


Figure 1

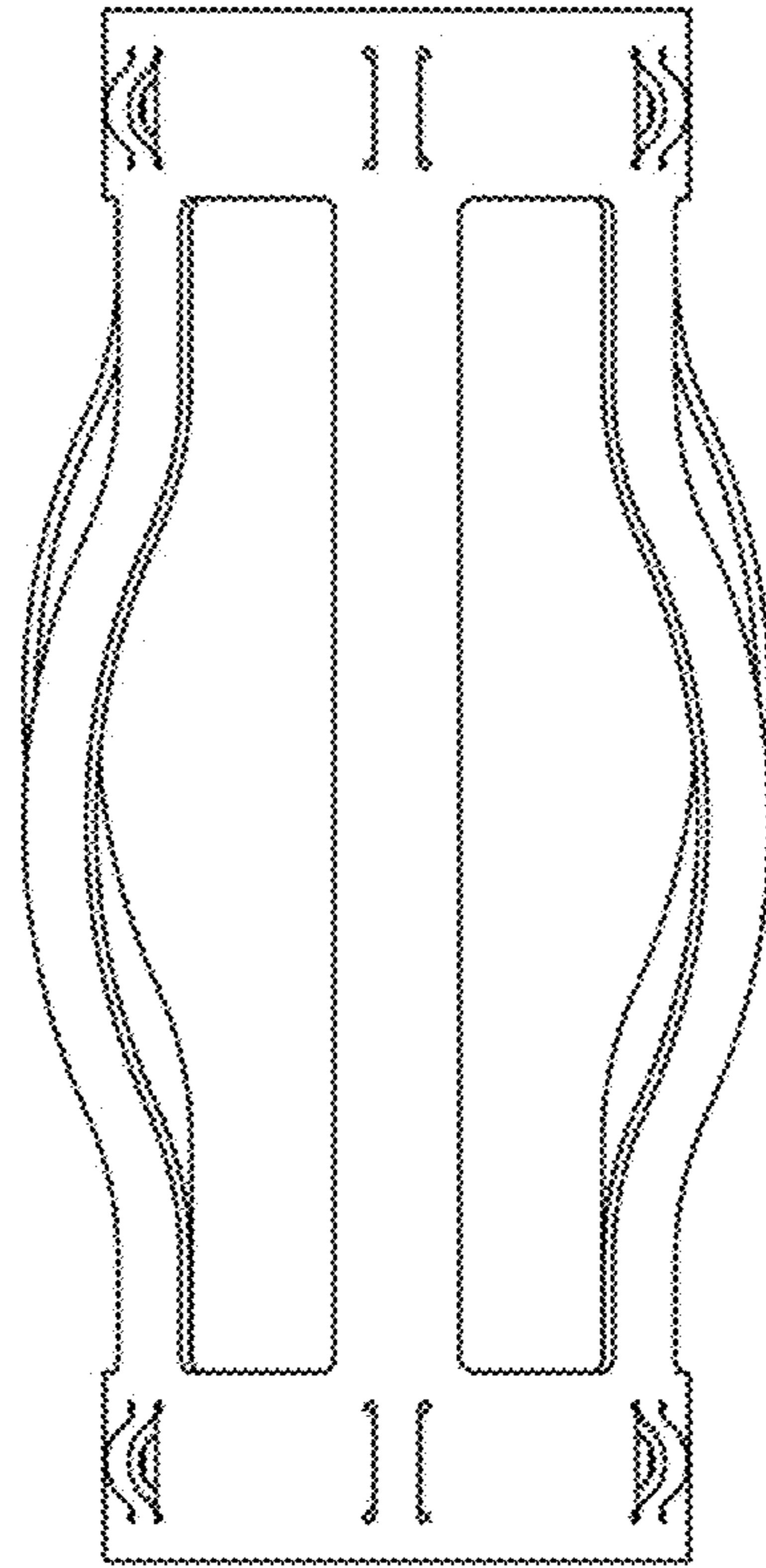


Figure 2

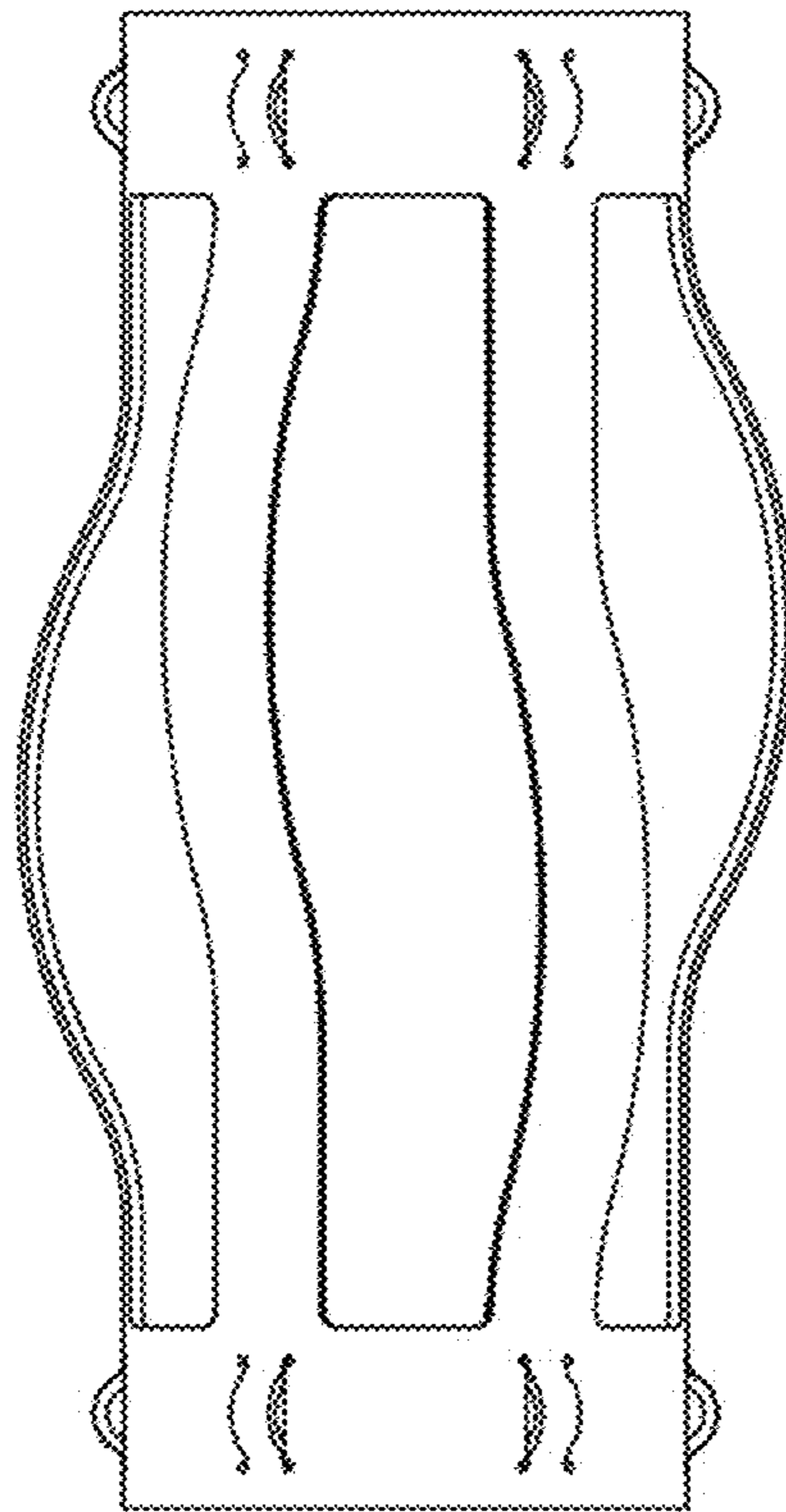


Figure 3

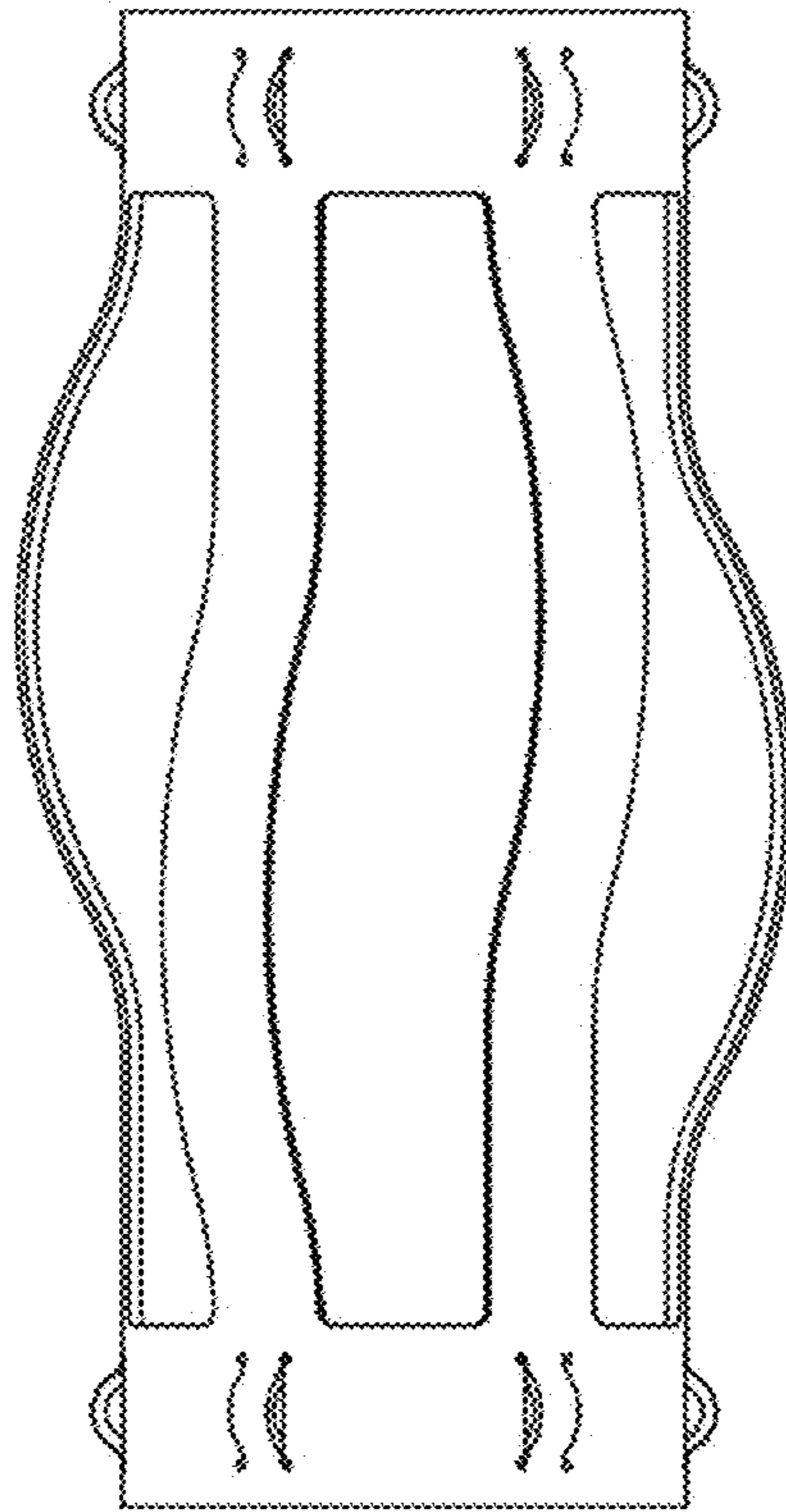


Figure 4

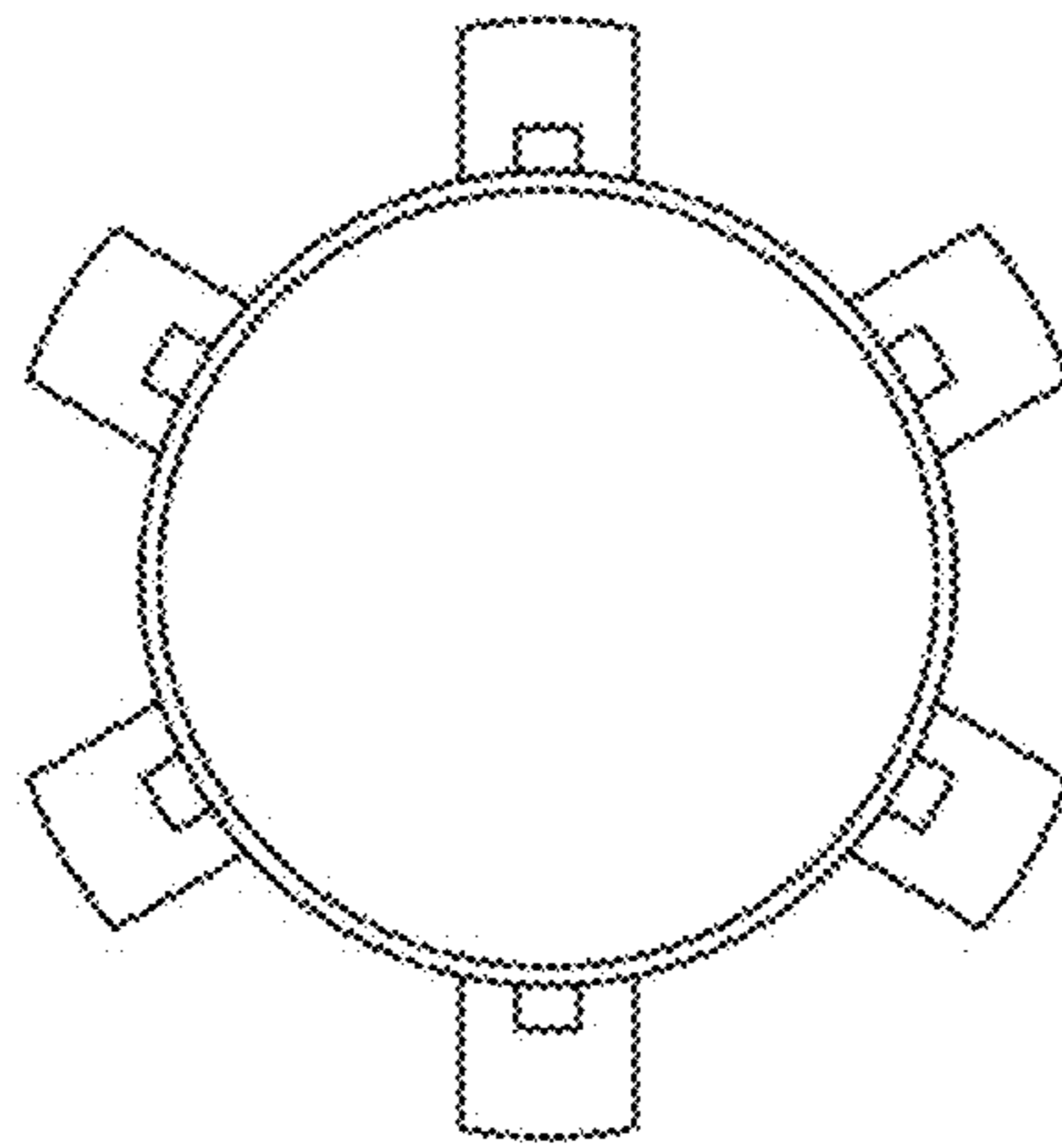


Figure 5

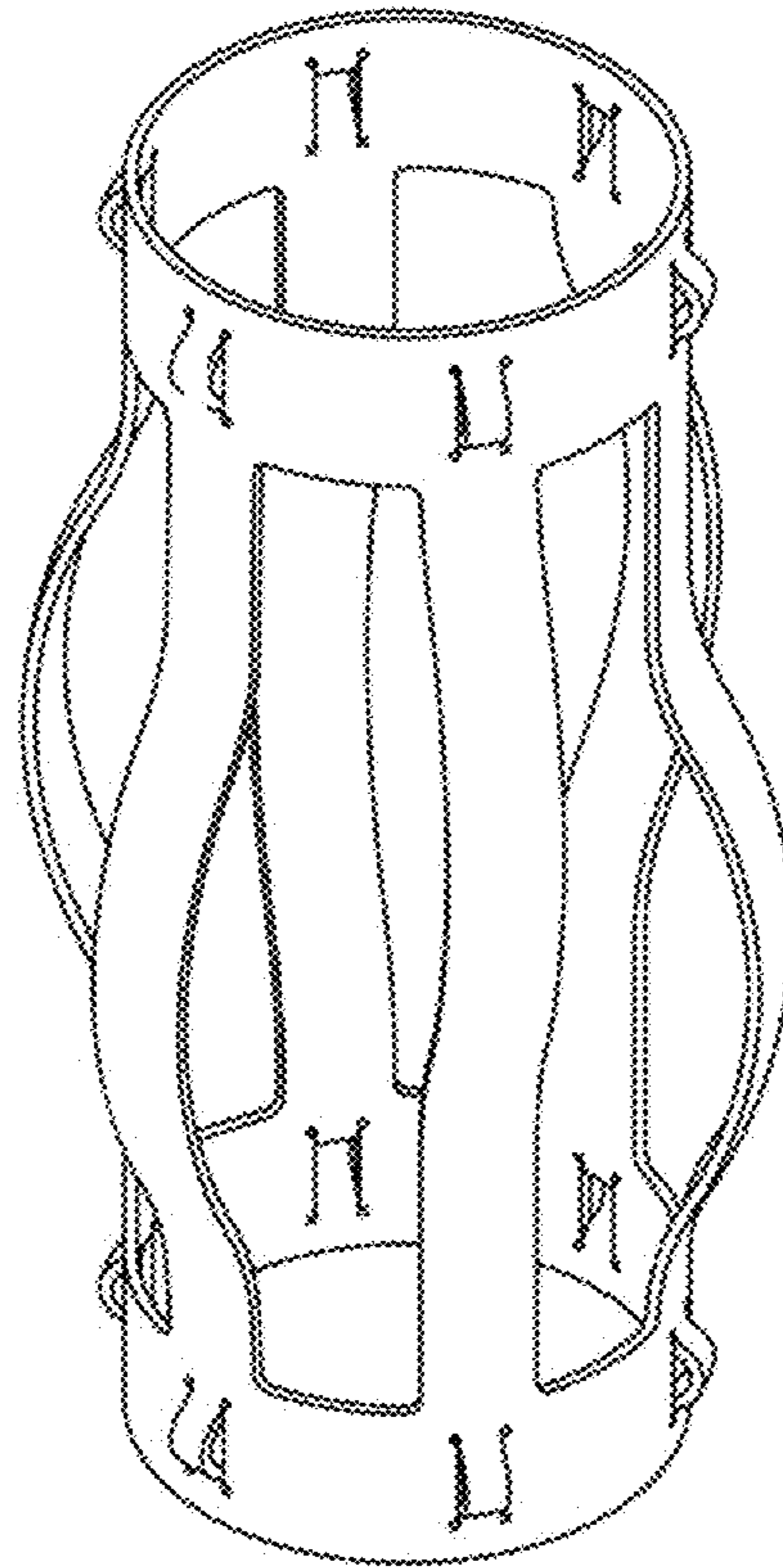


Figure 6



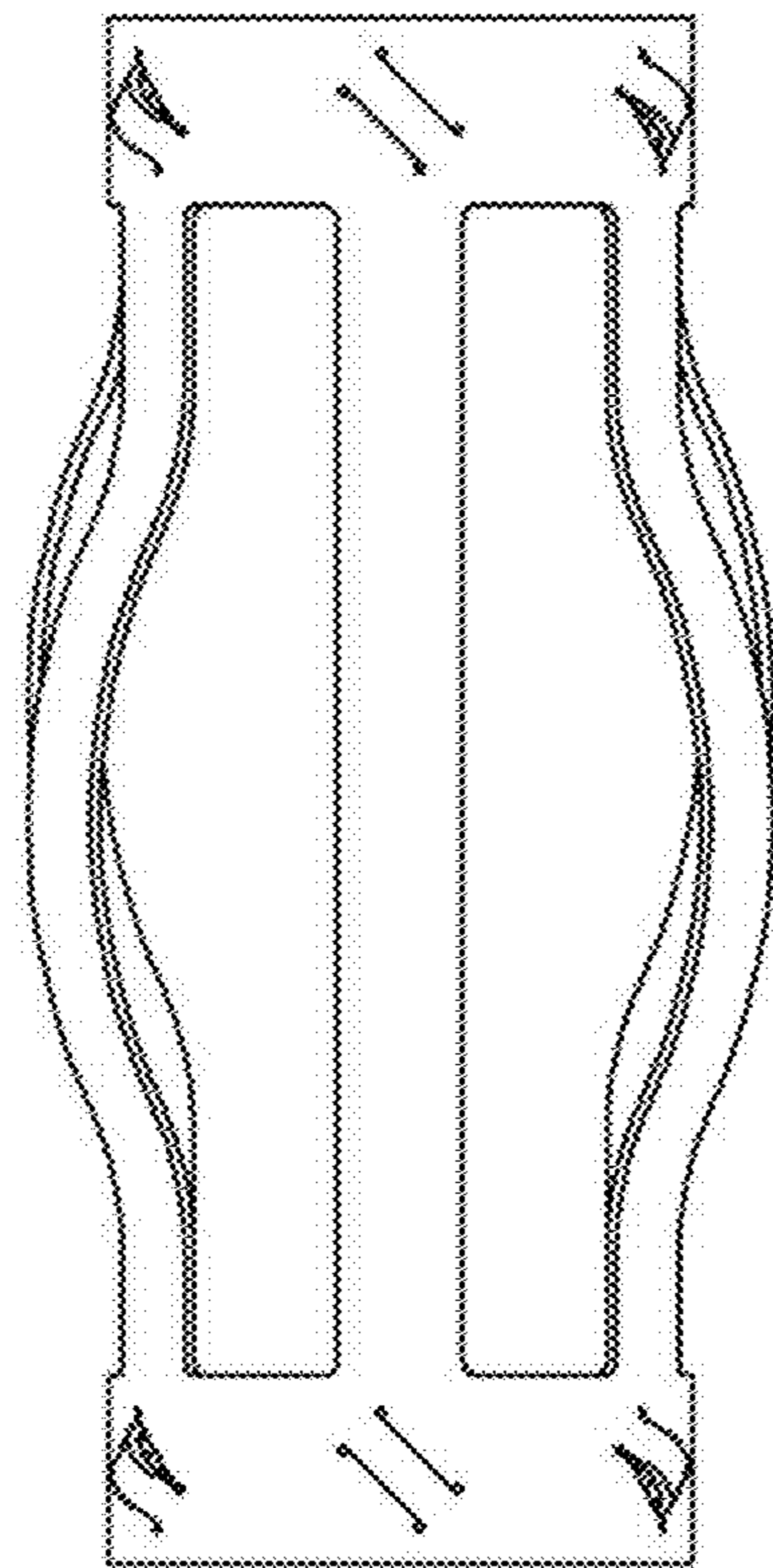


Figure 7

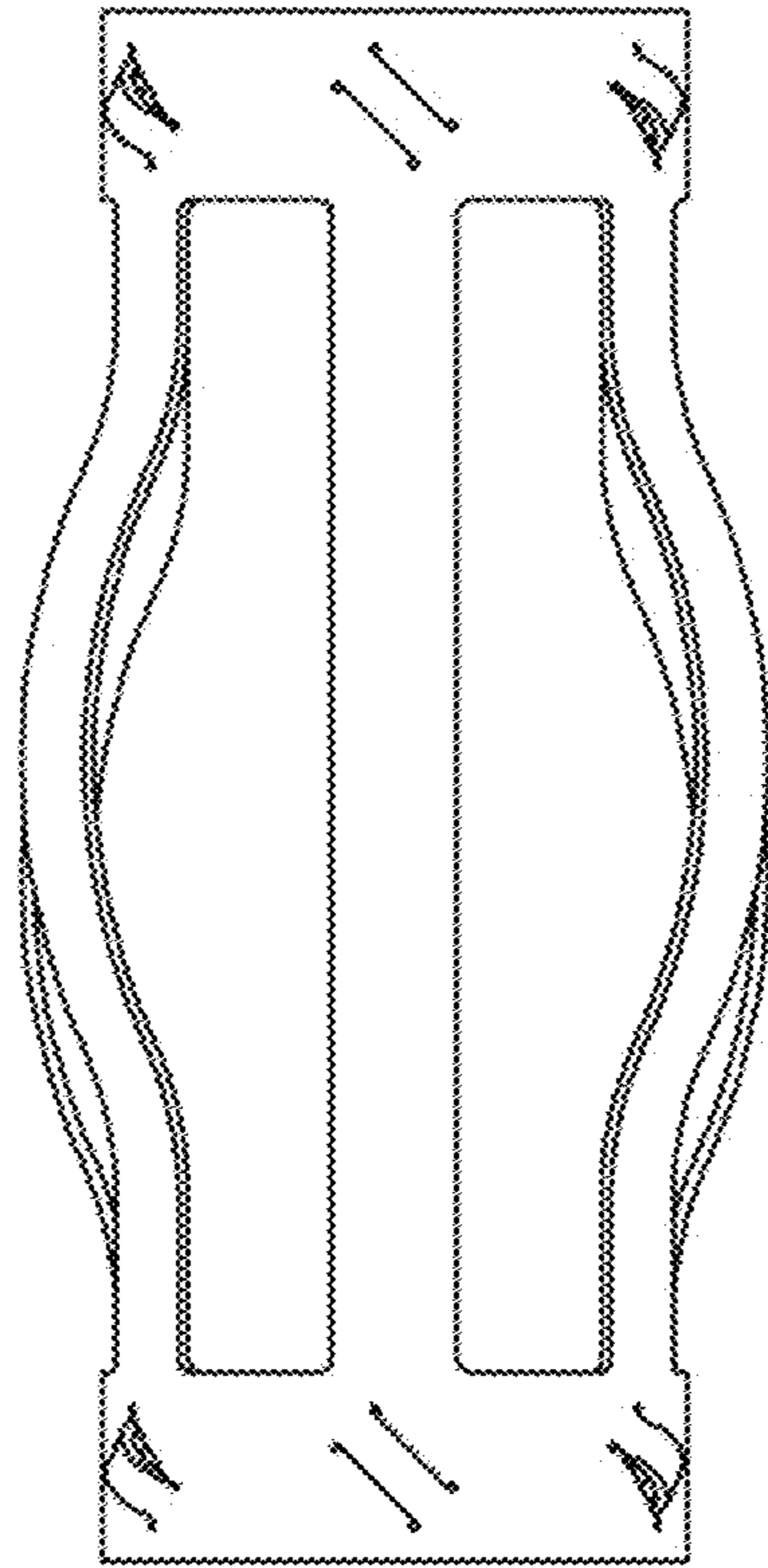


Figure 8

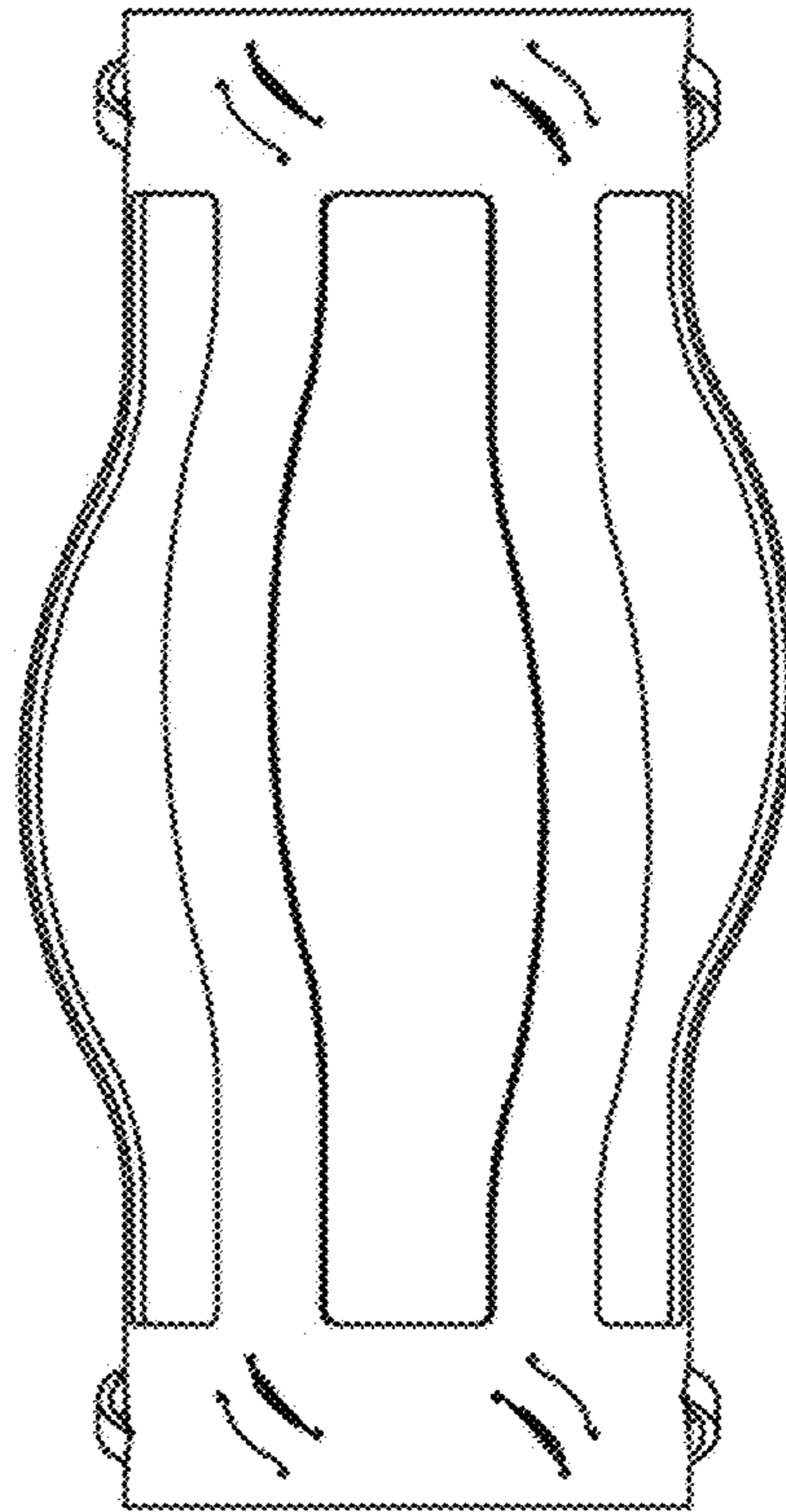


Figure 9

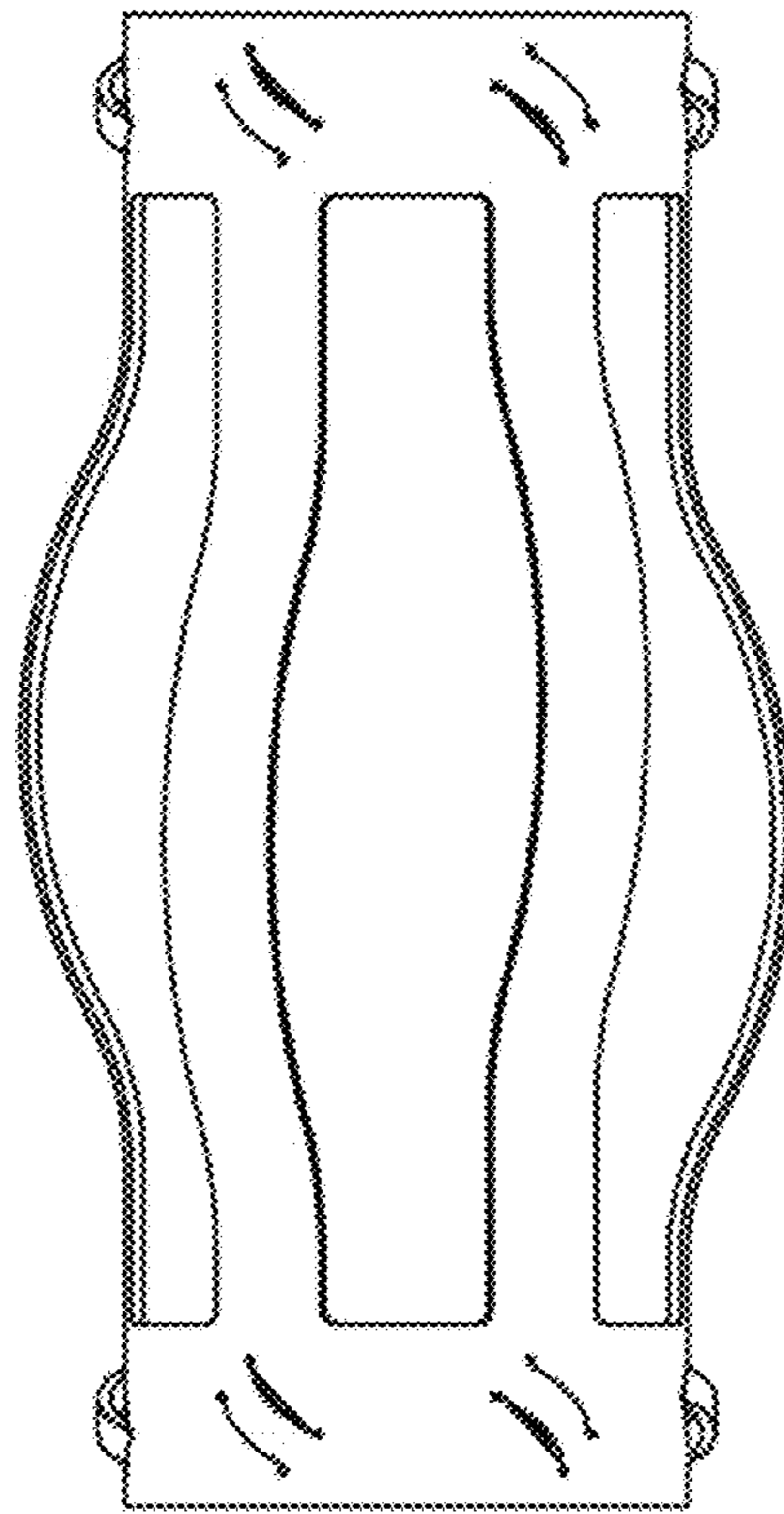


Figure 10

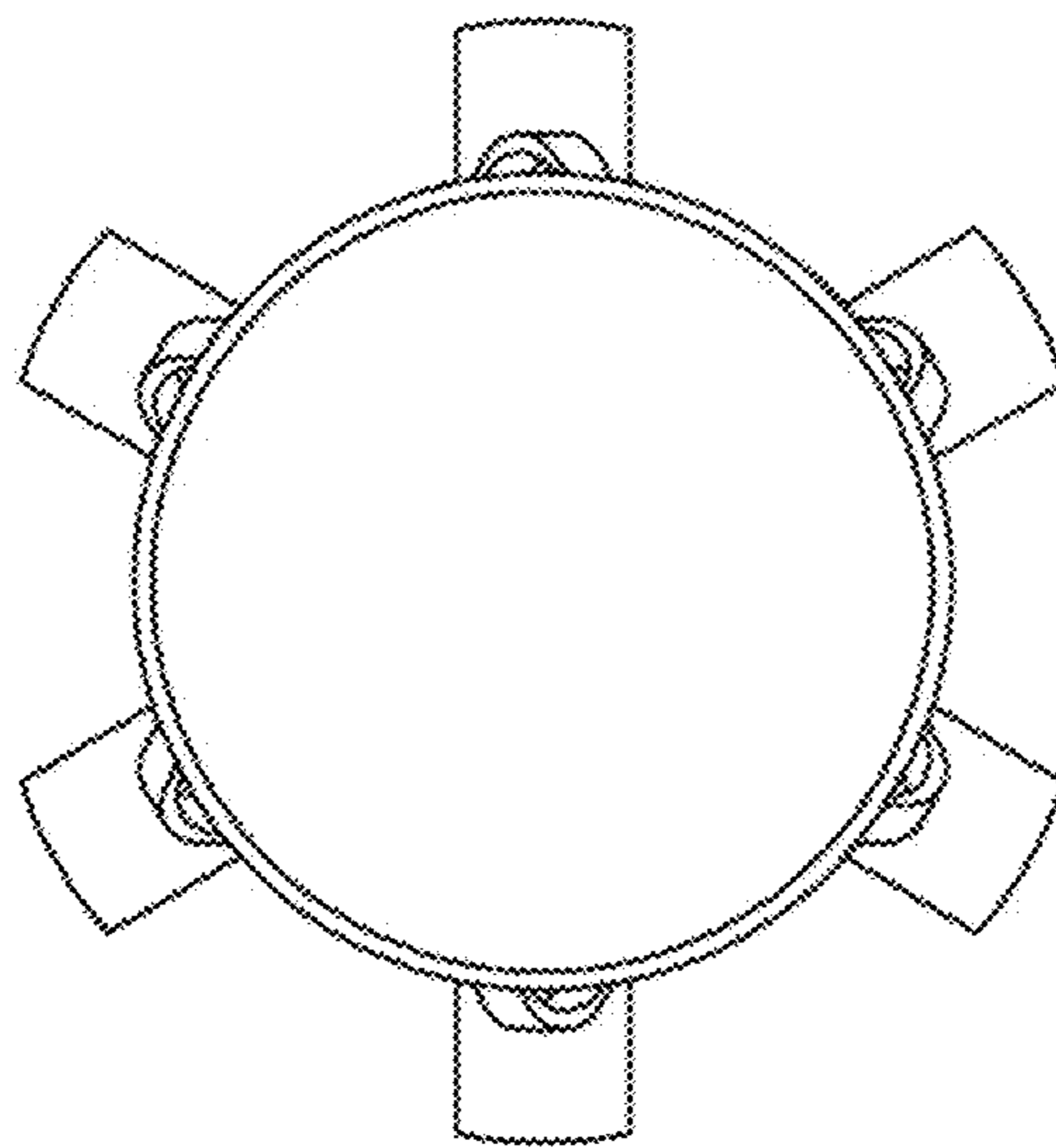


Figure 11



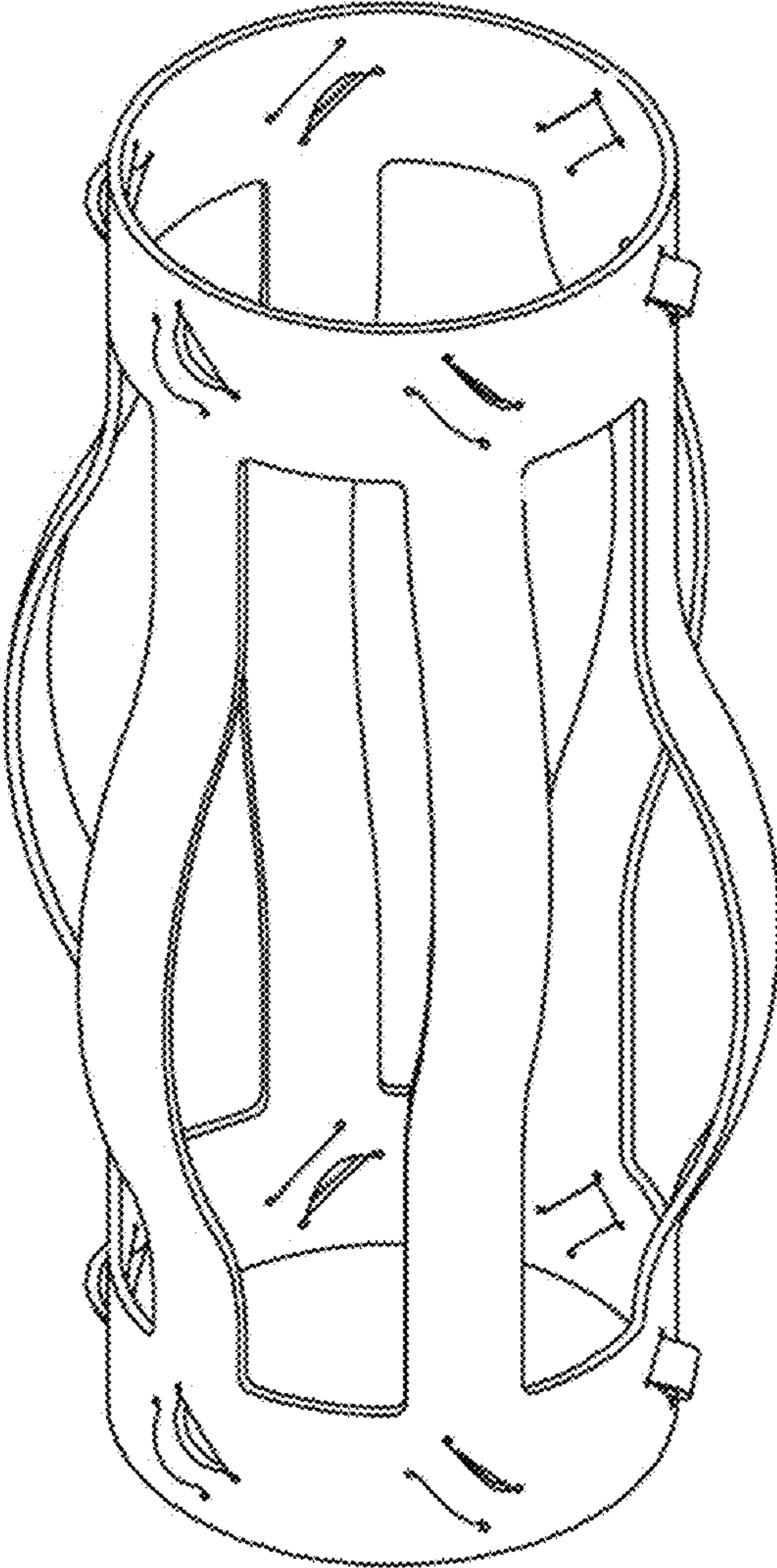


Figure 12

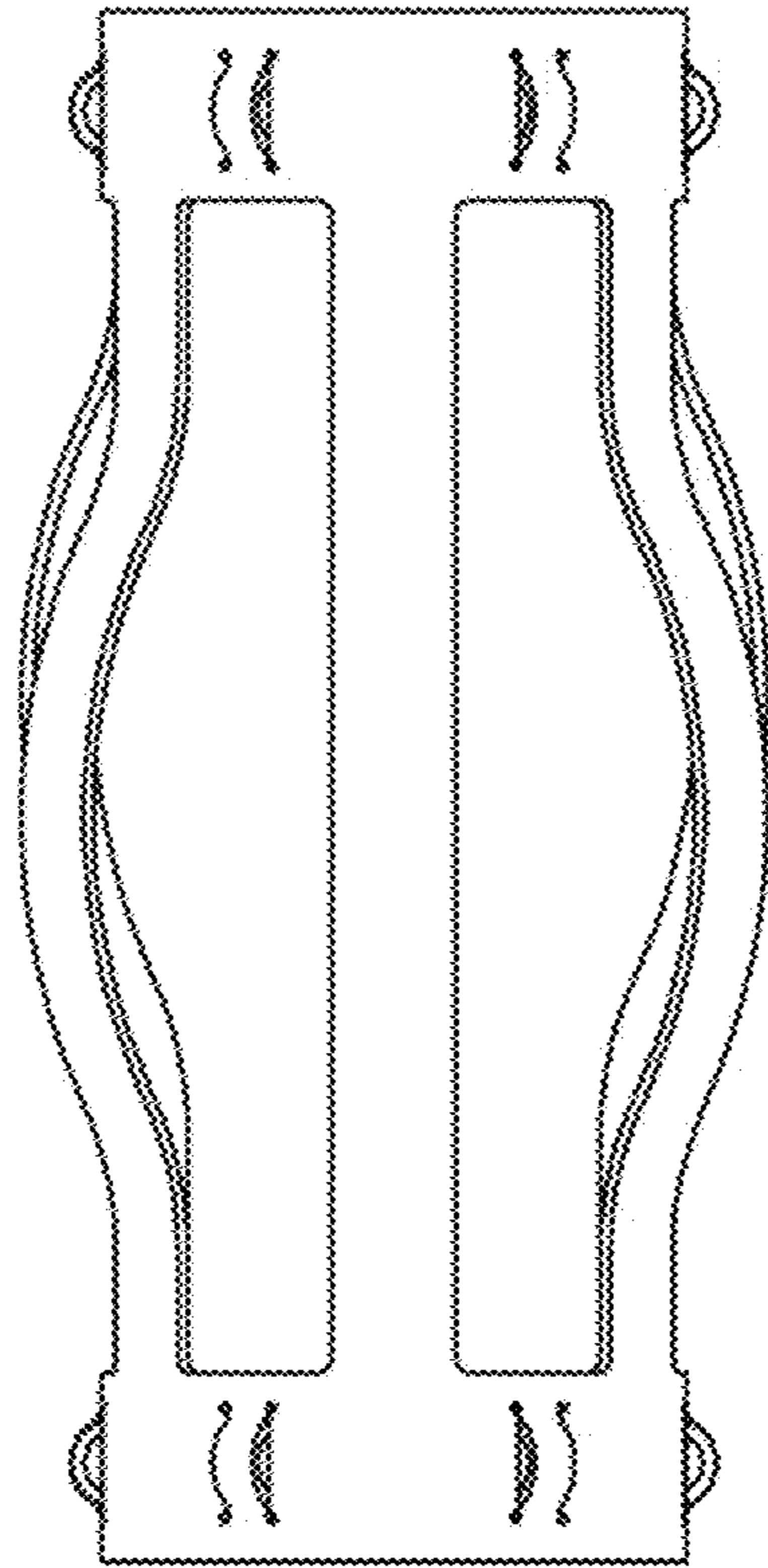


Figure 13

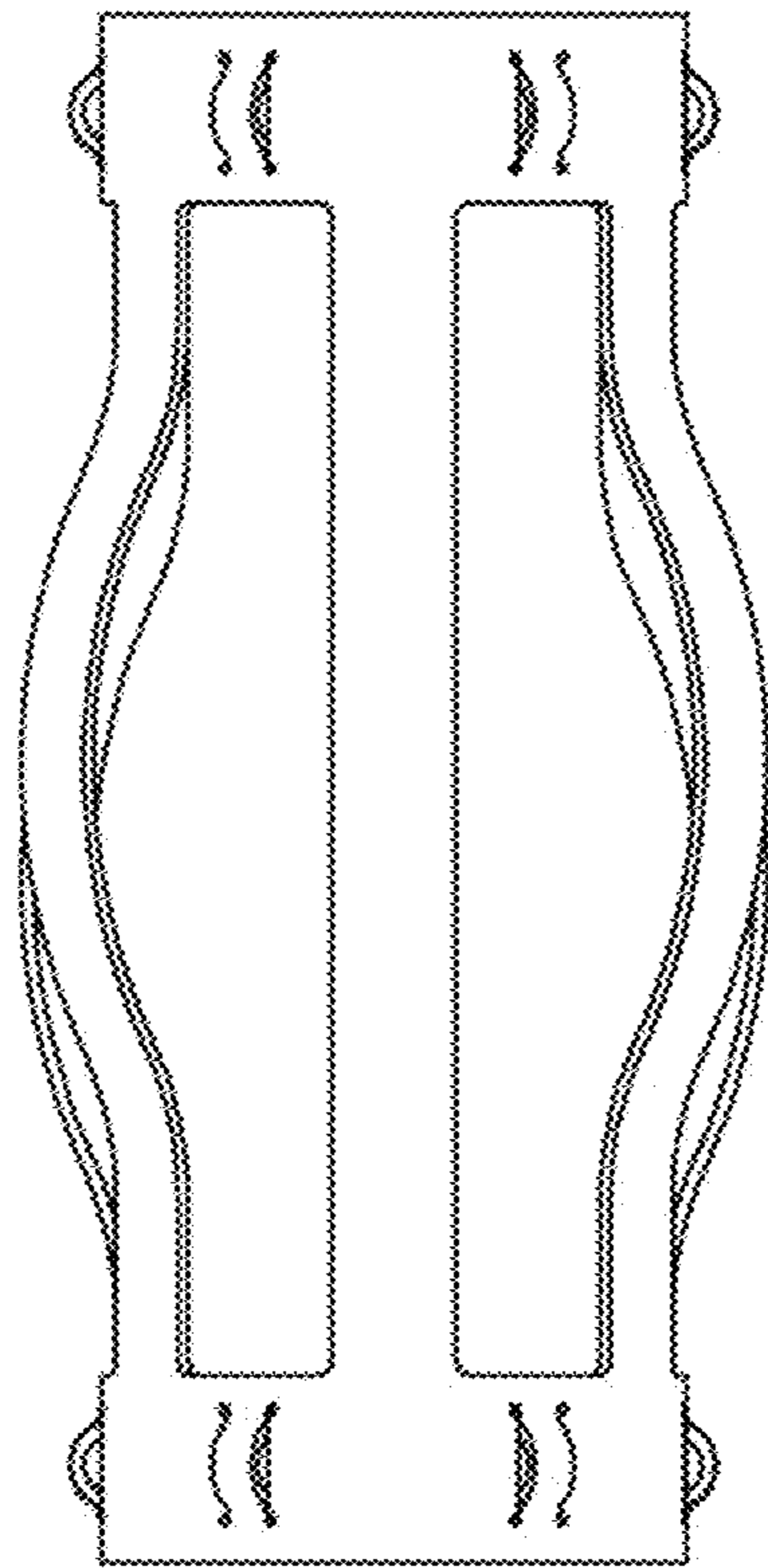


Figure 14

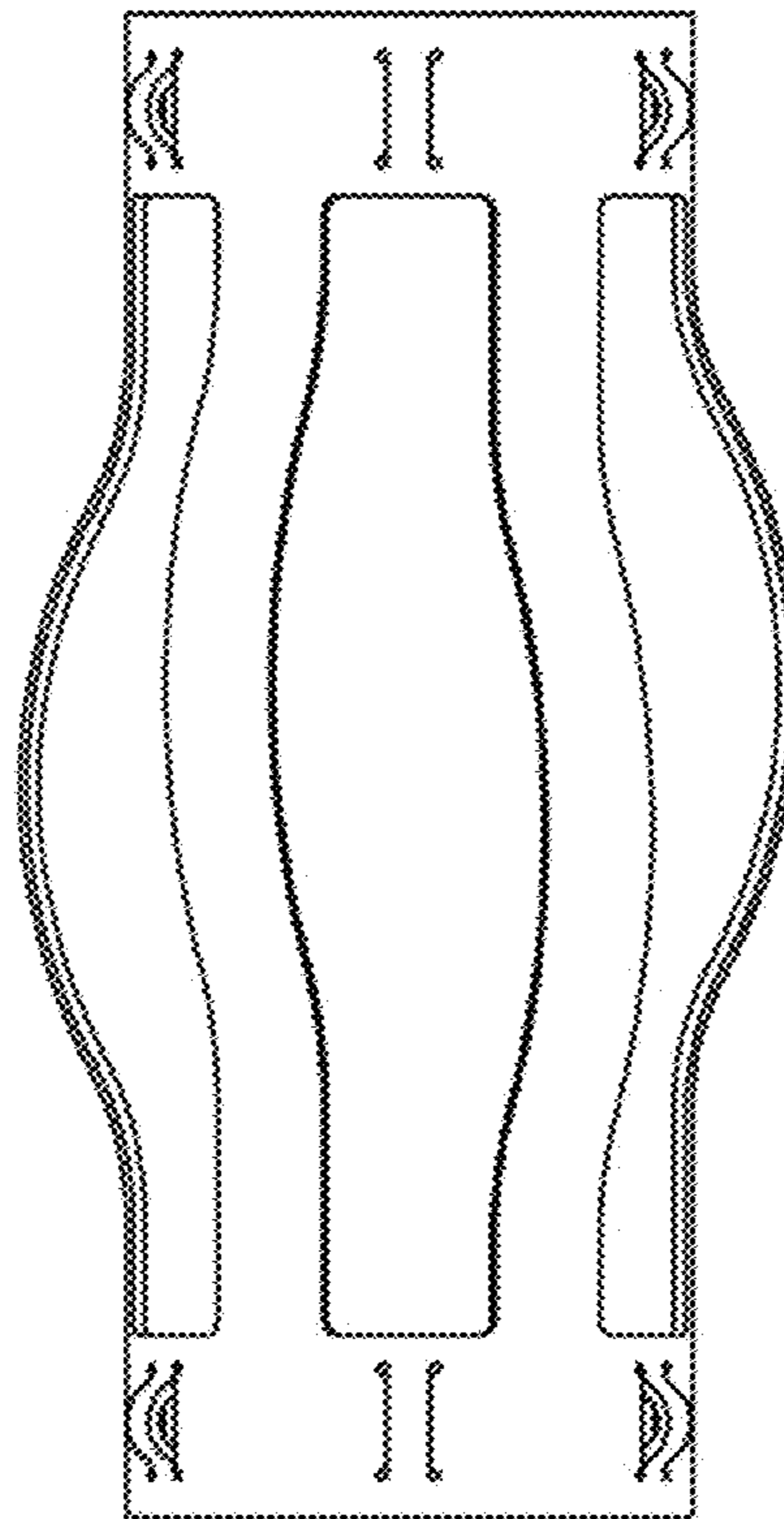


Figure 15

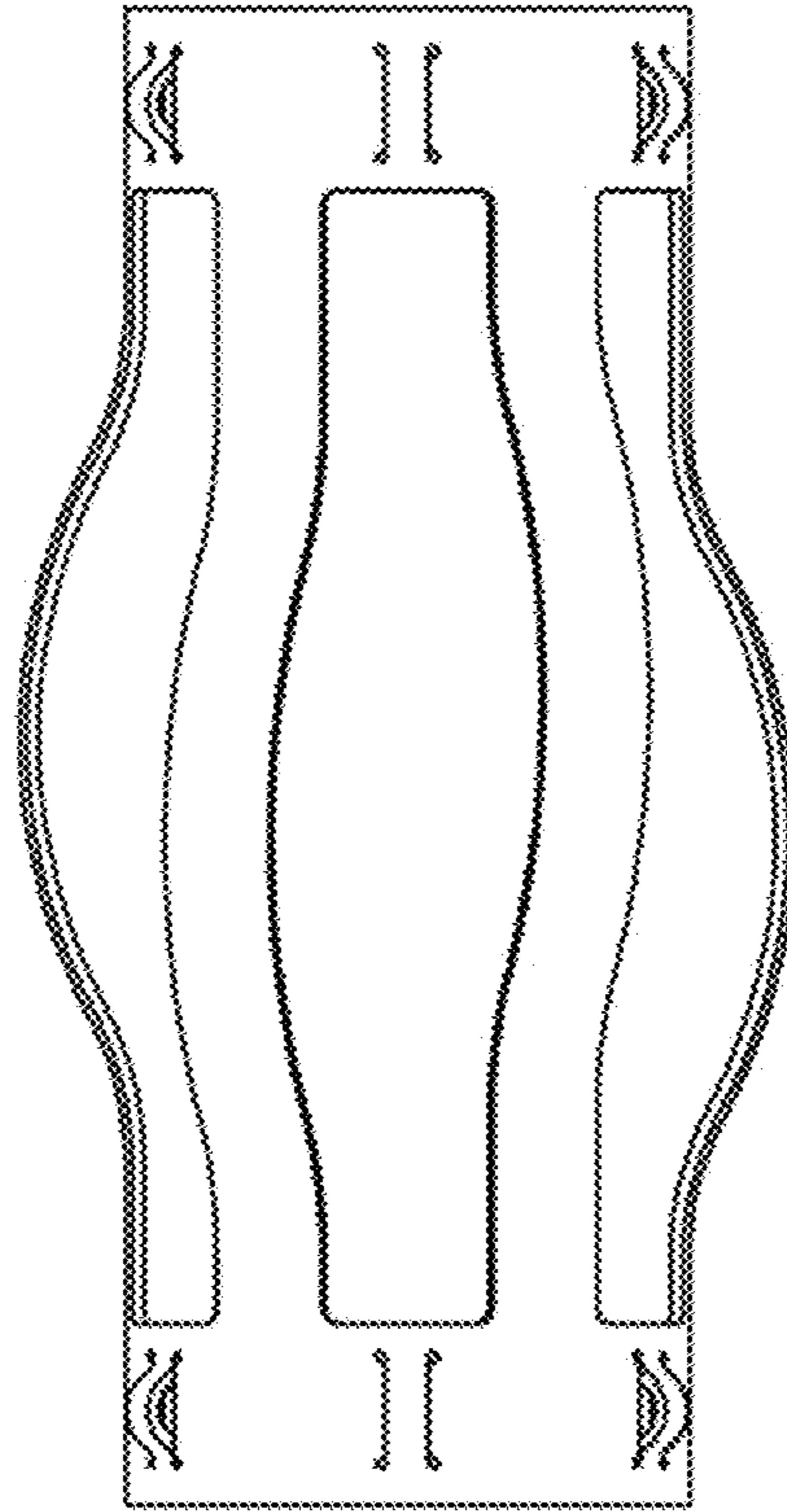


Figure 16



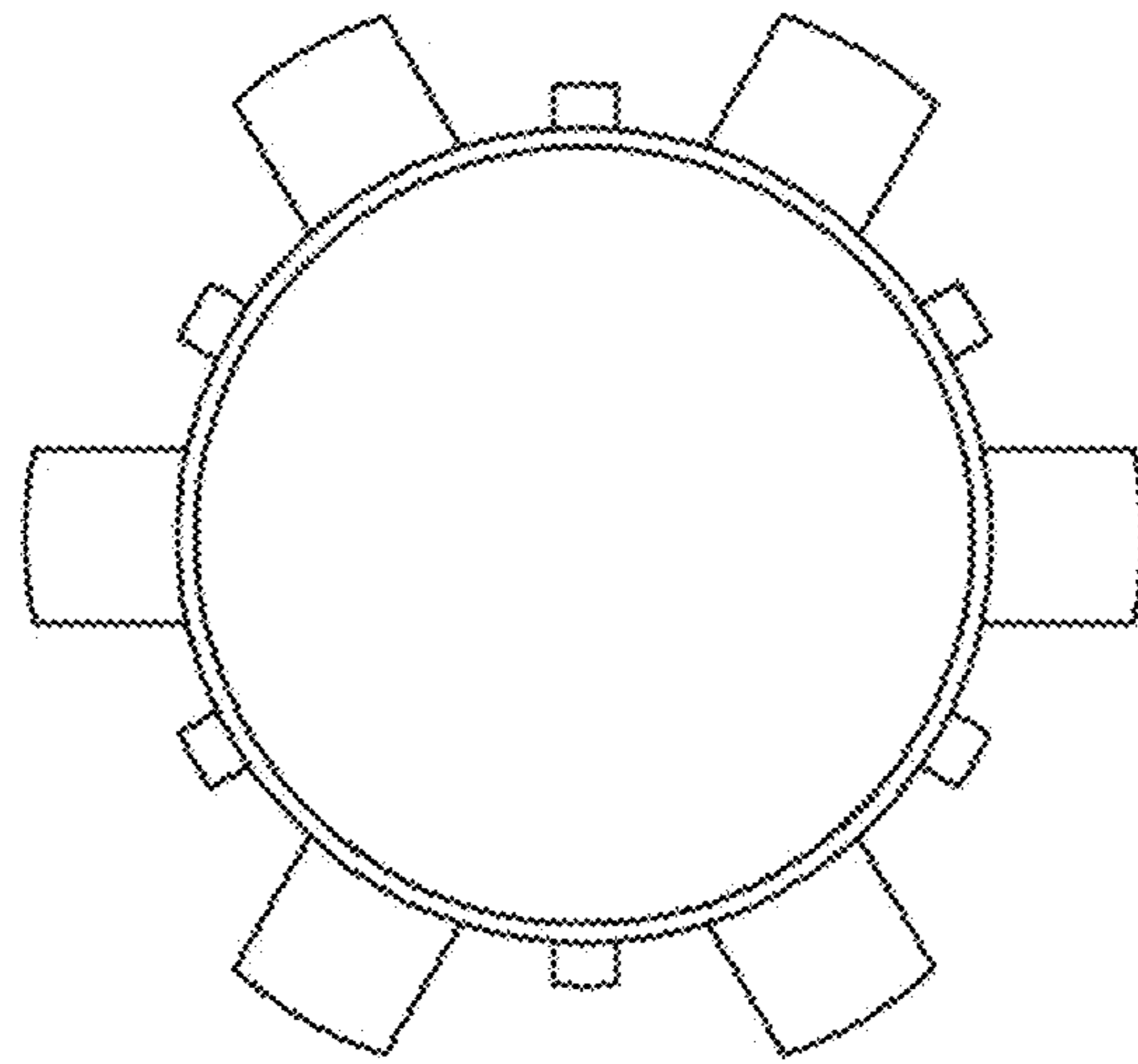


Figure 17

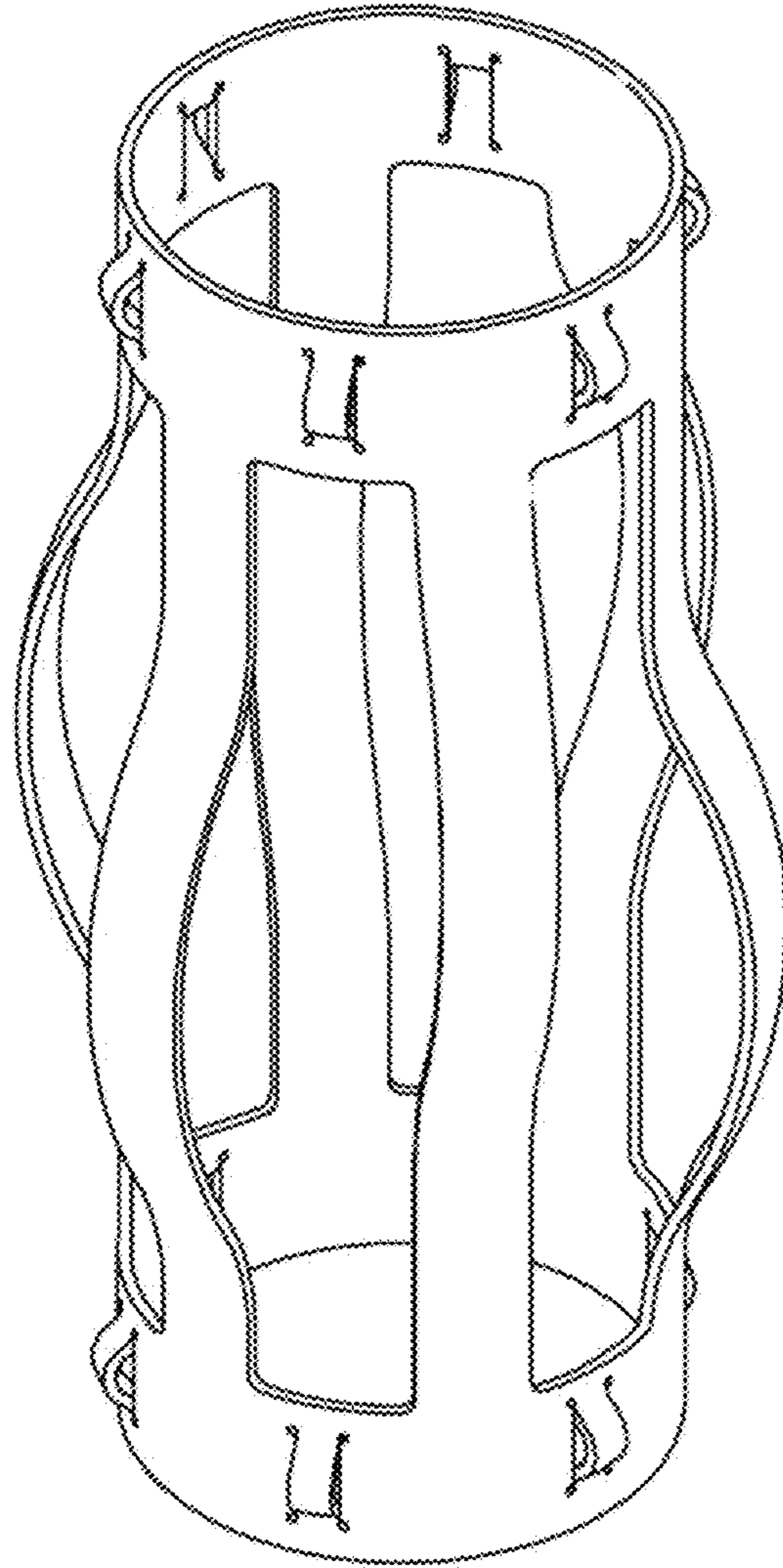


Figure 18

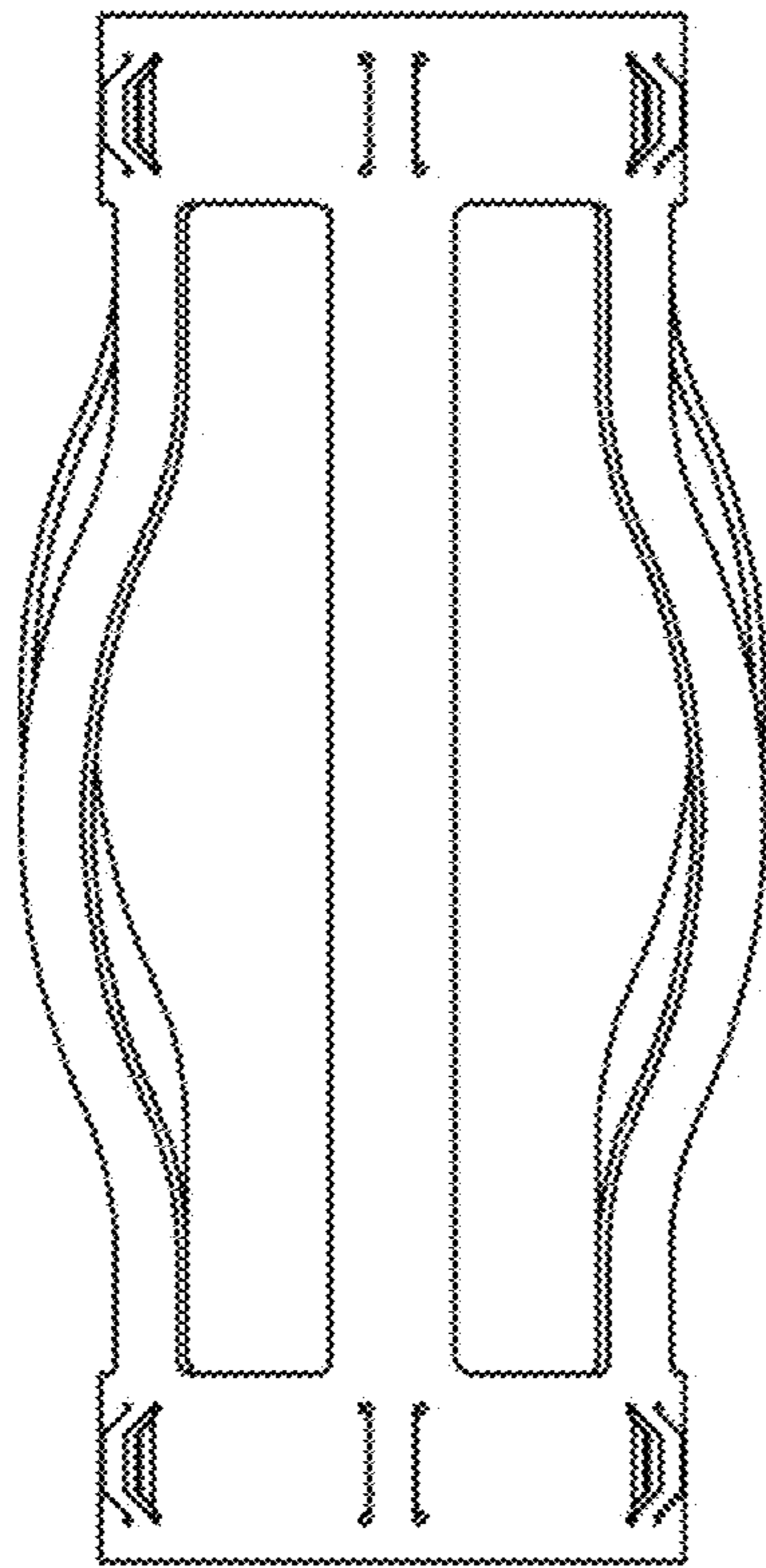


Figure 19

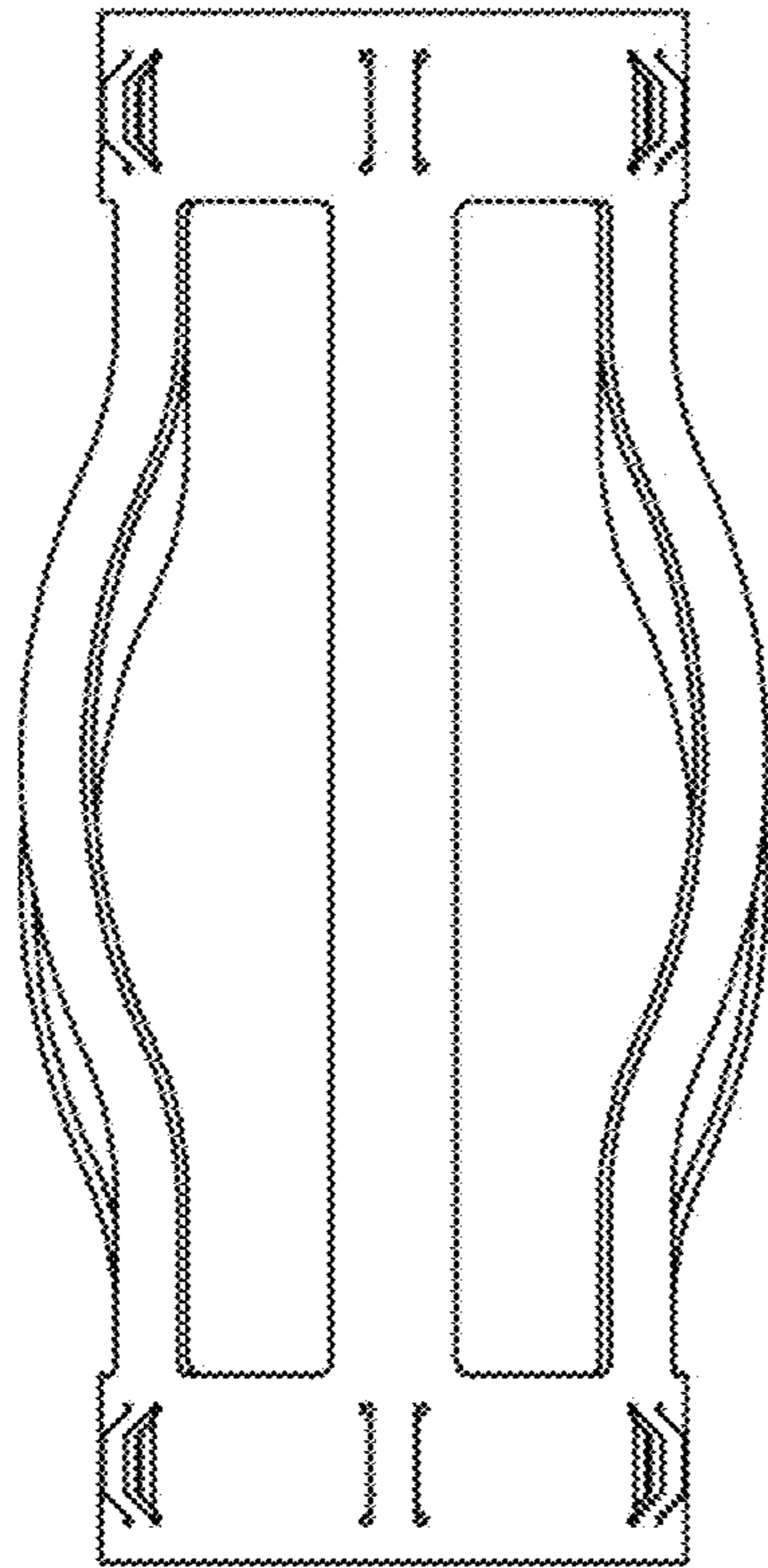


Figure 20

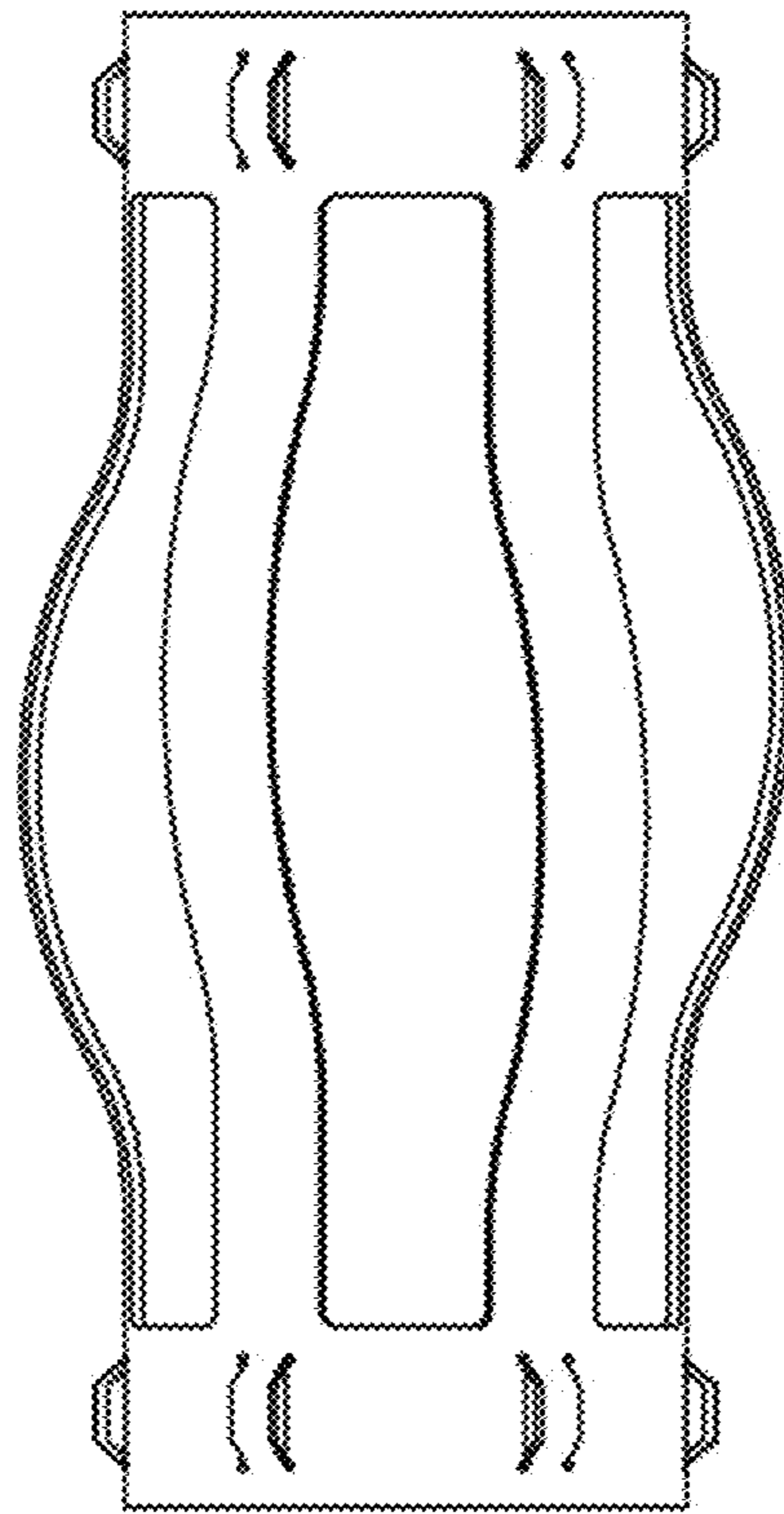


Figure 21



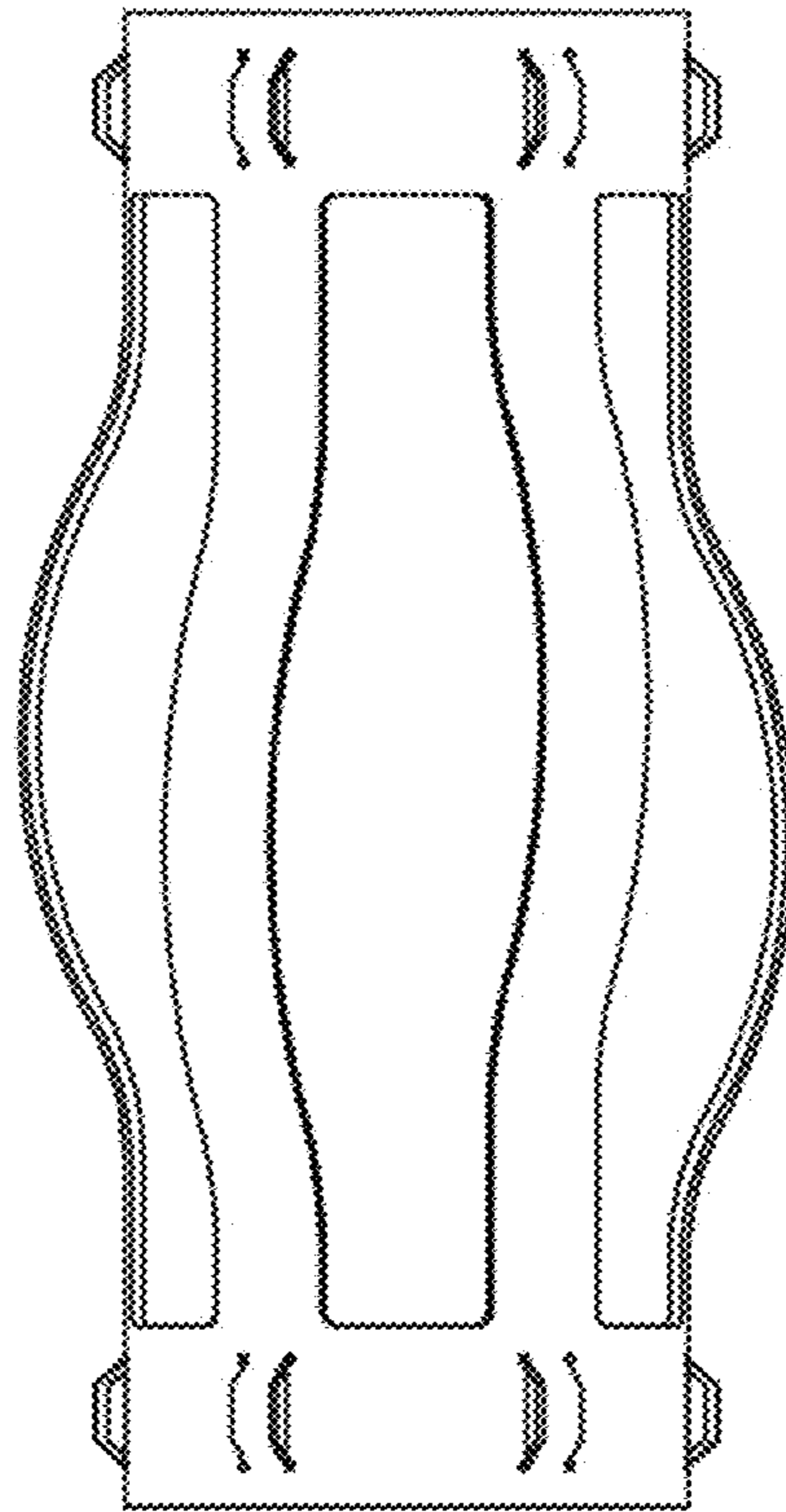


Figure 22

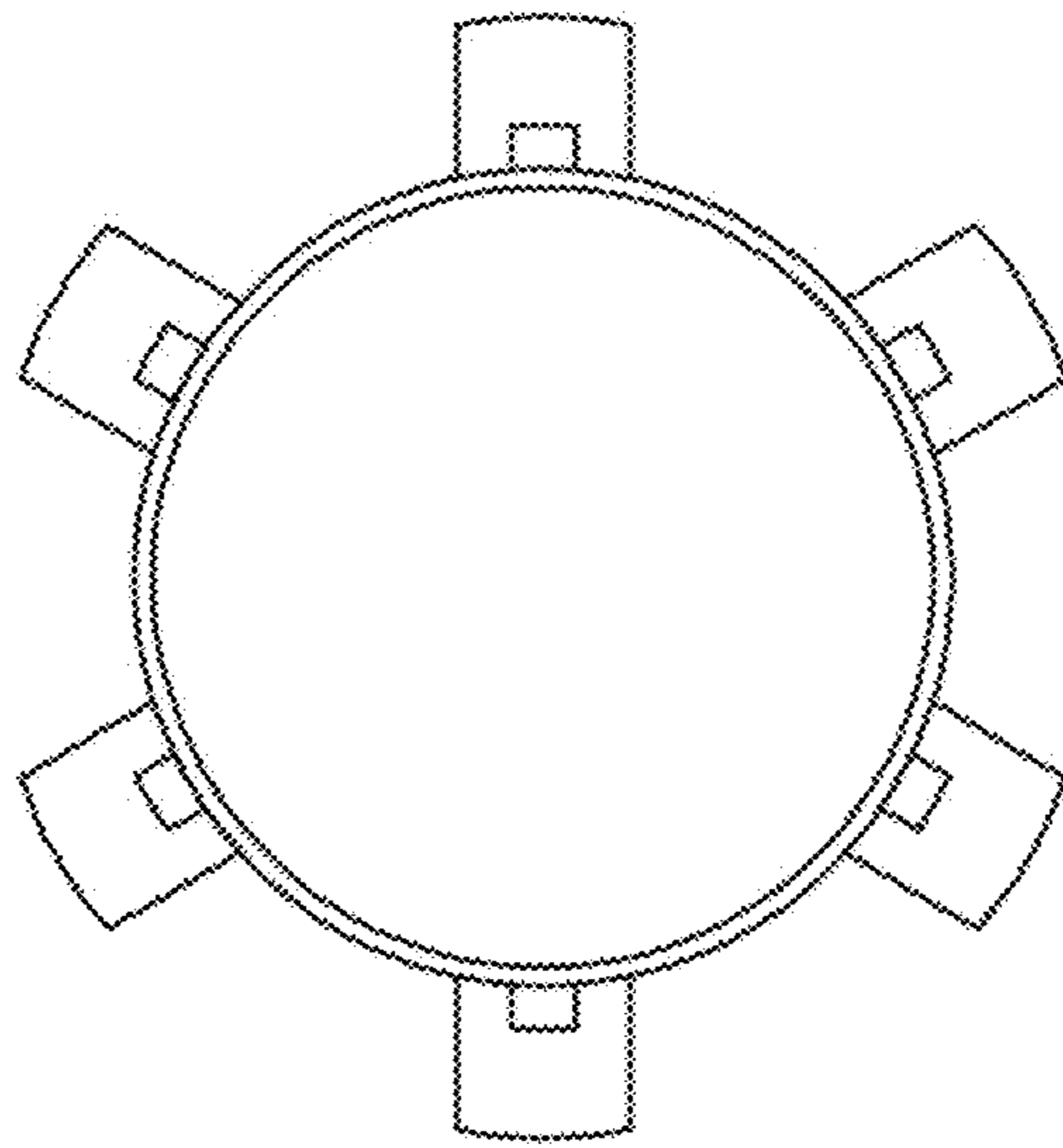


Figure 23

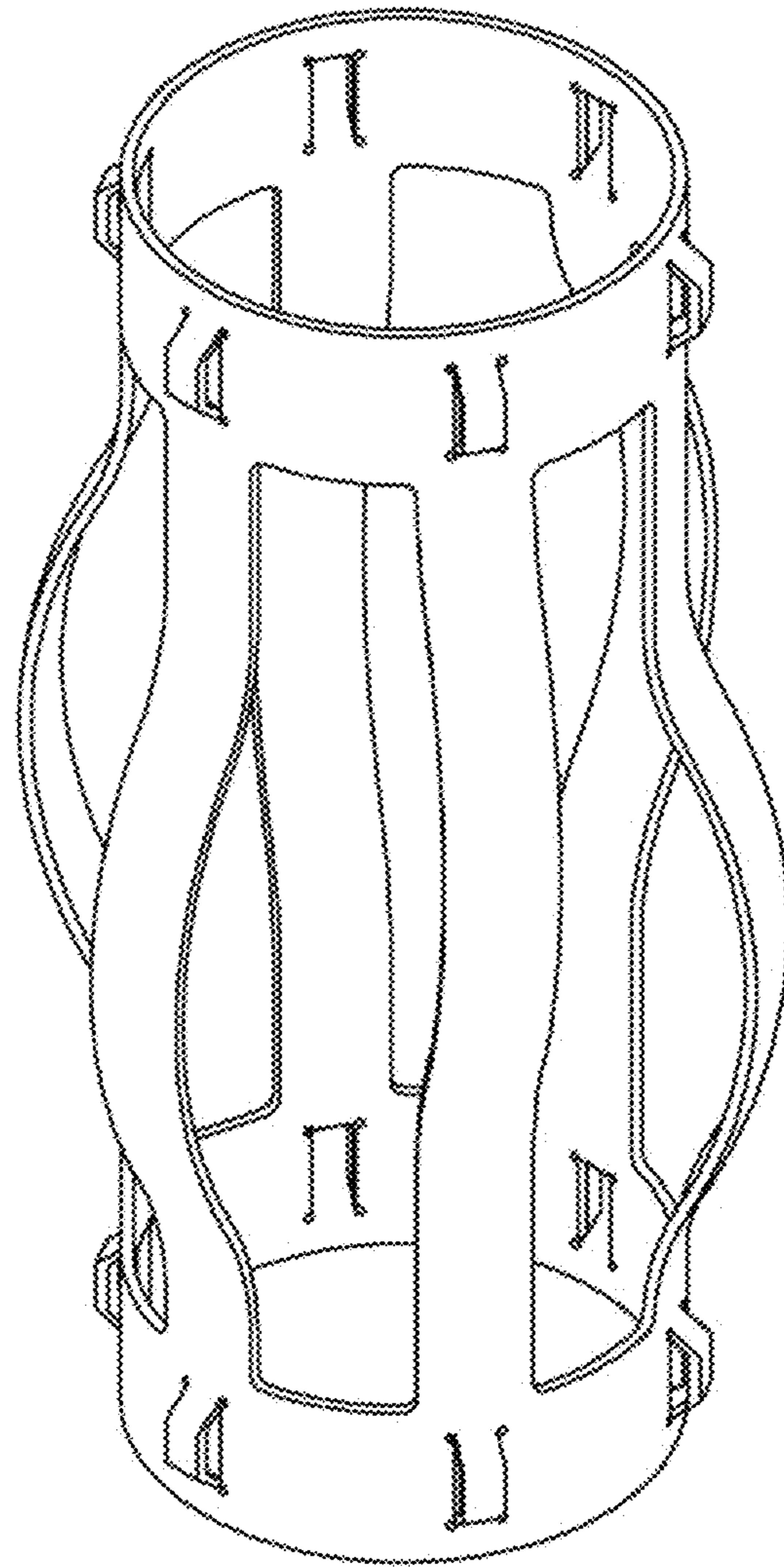


Figure 24

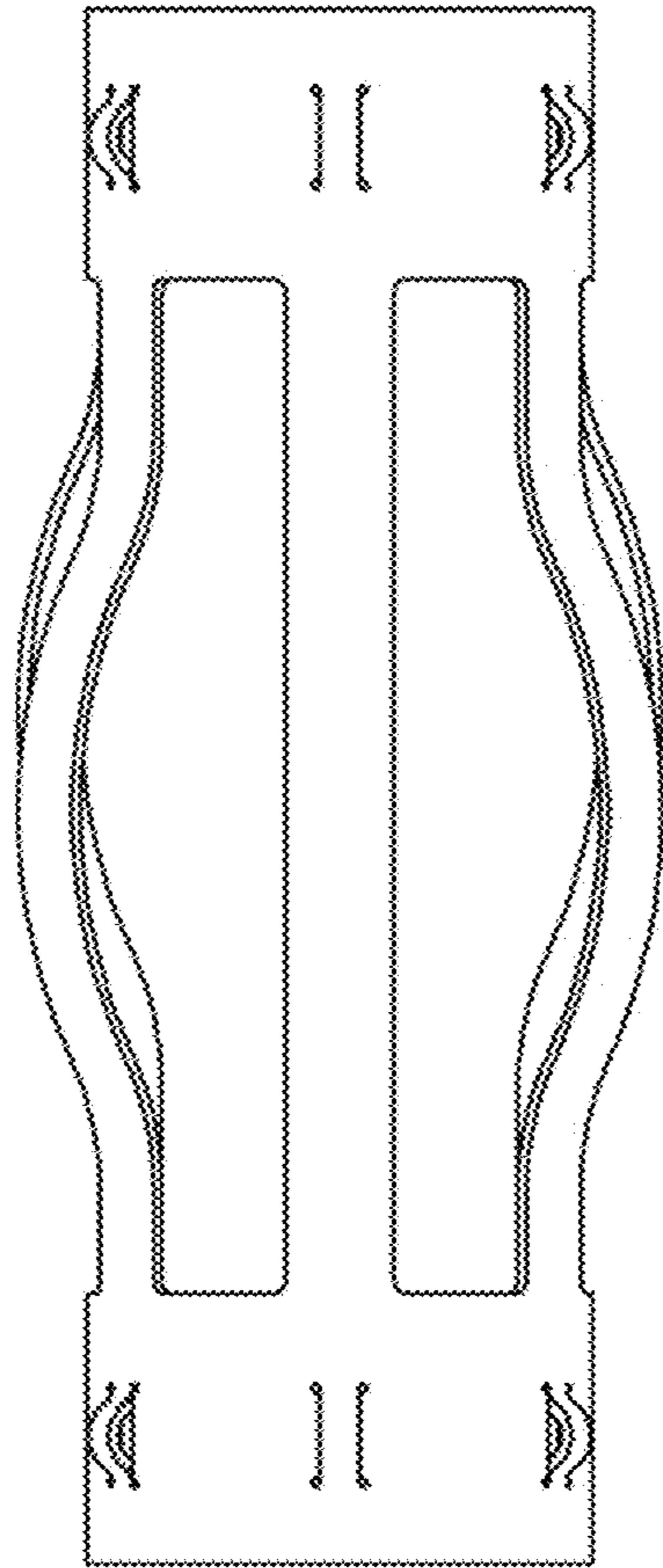


Figure 25

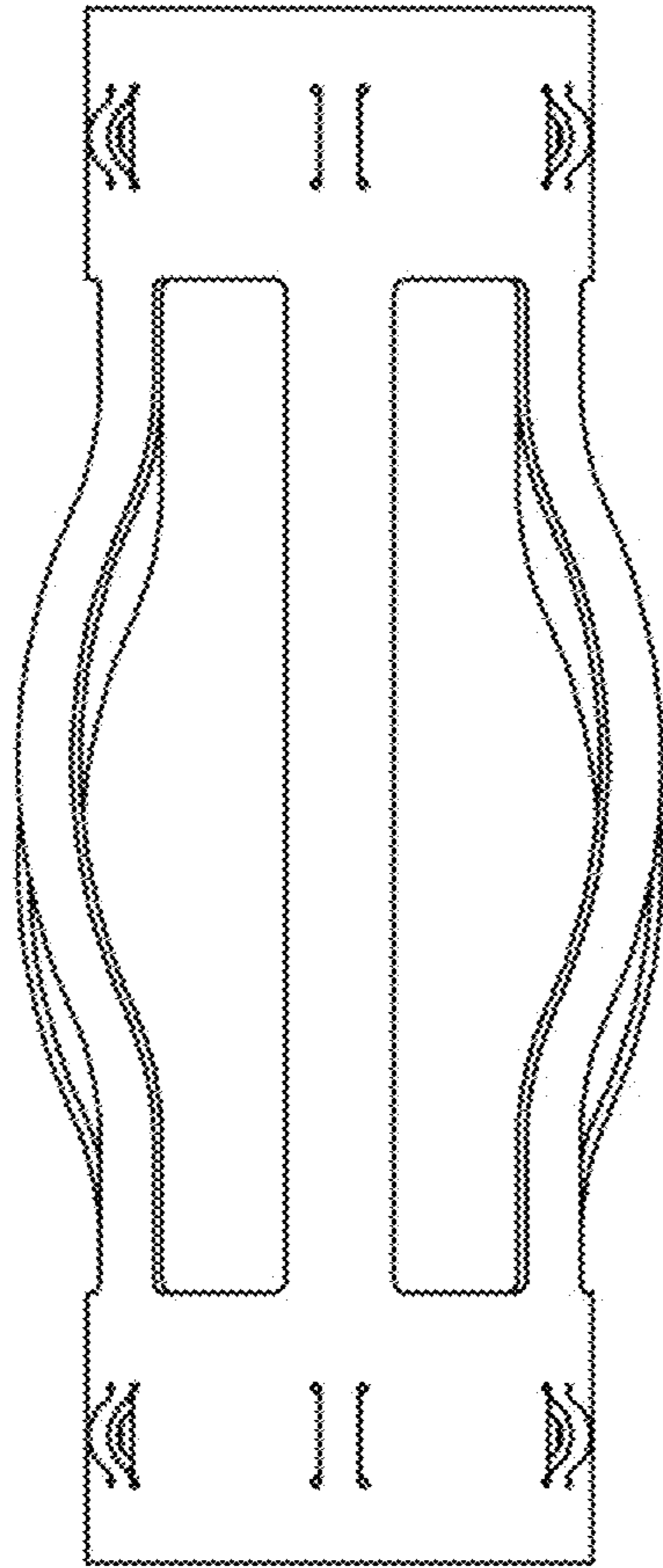


Figure 26



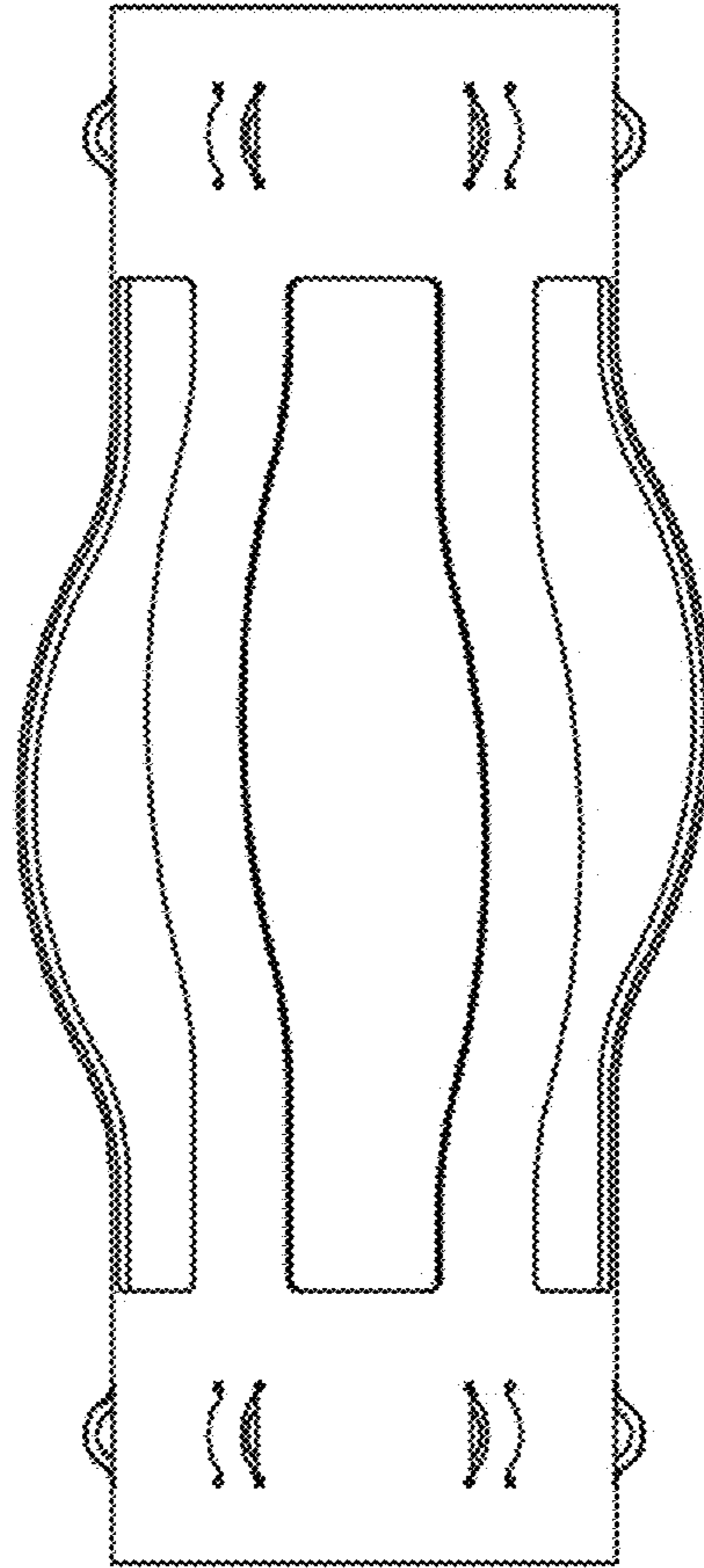


Figure 27

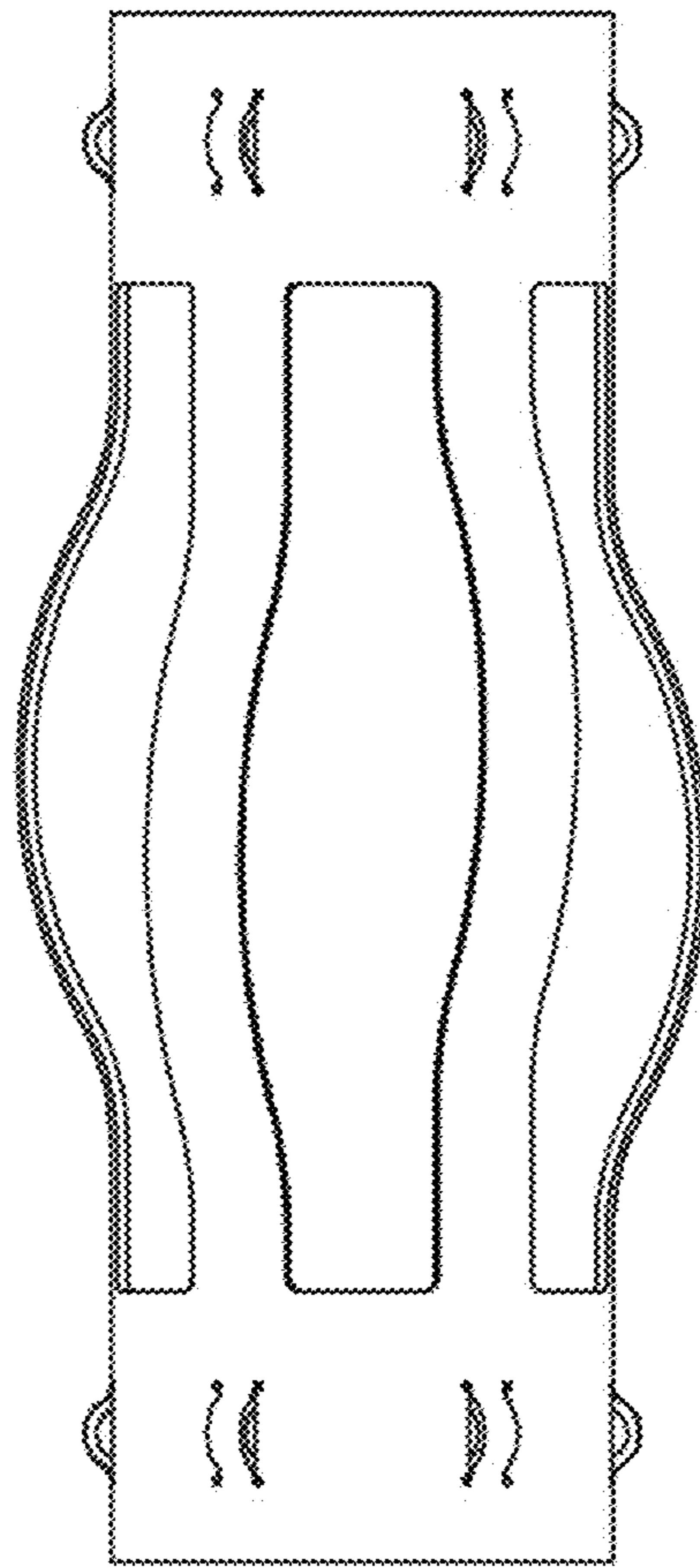


Figure 28

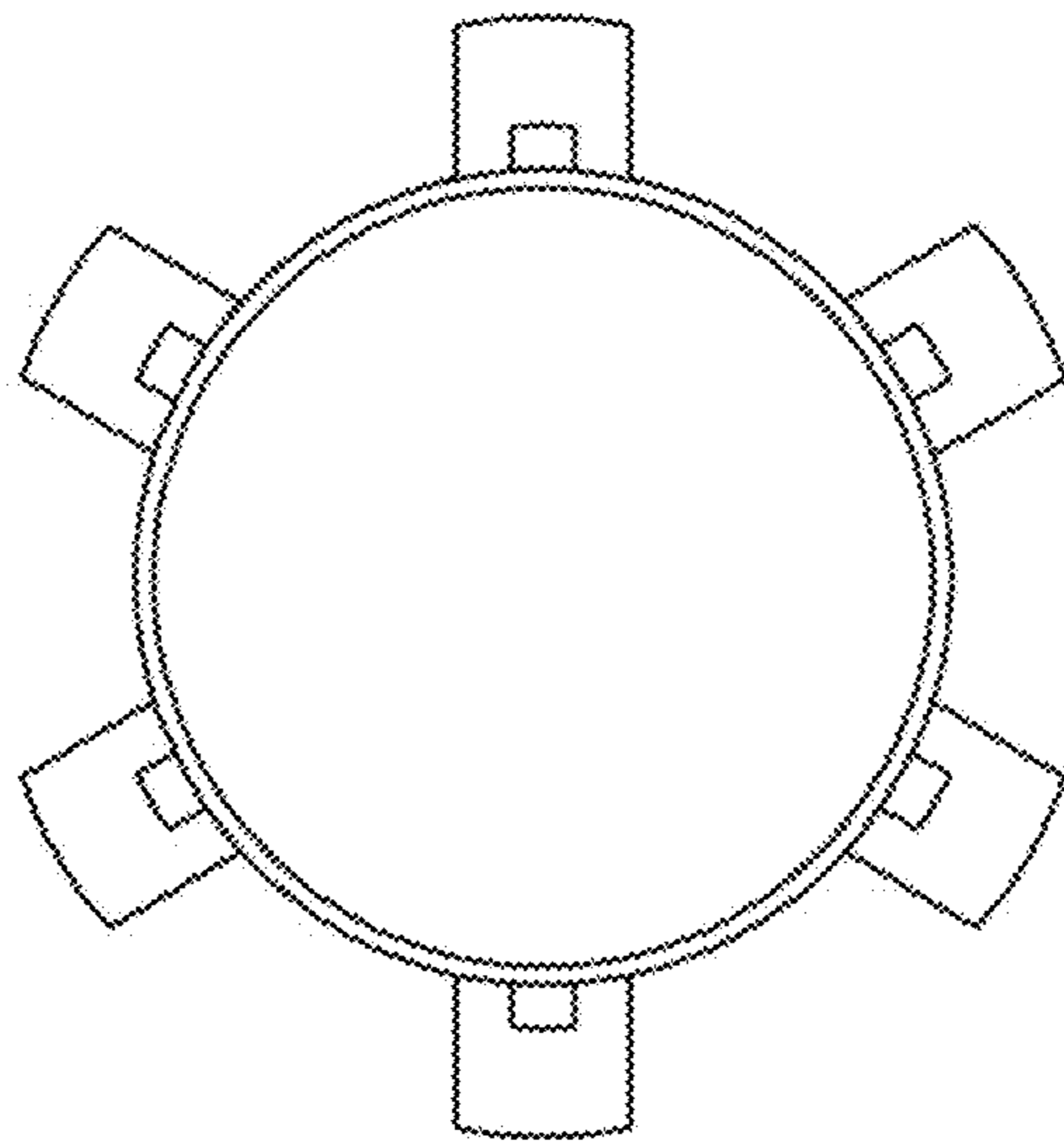


Figure 29

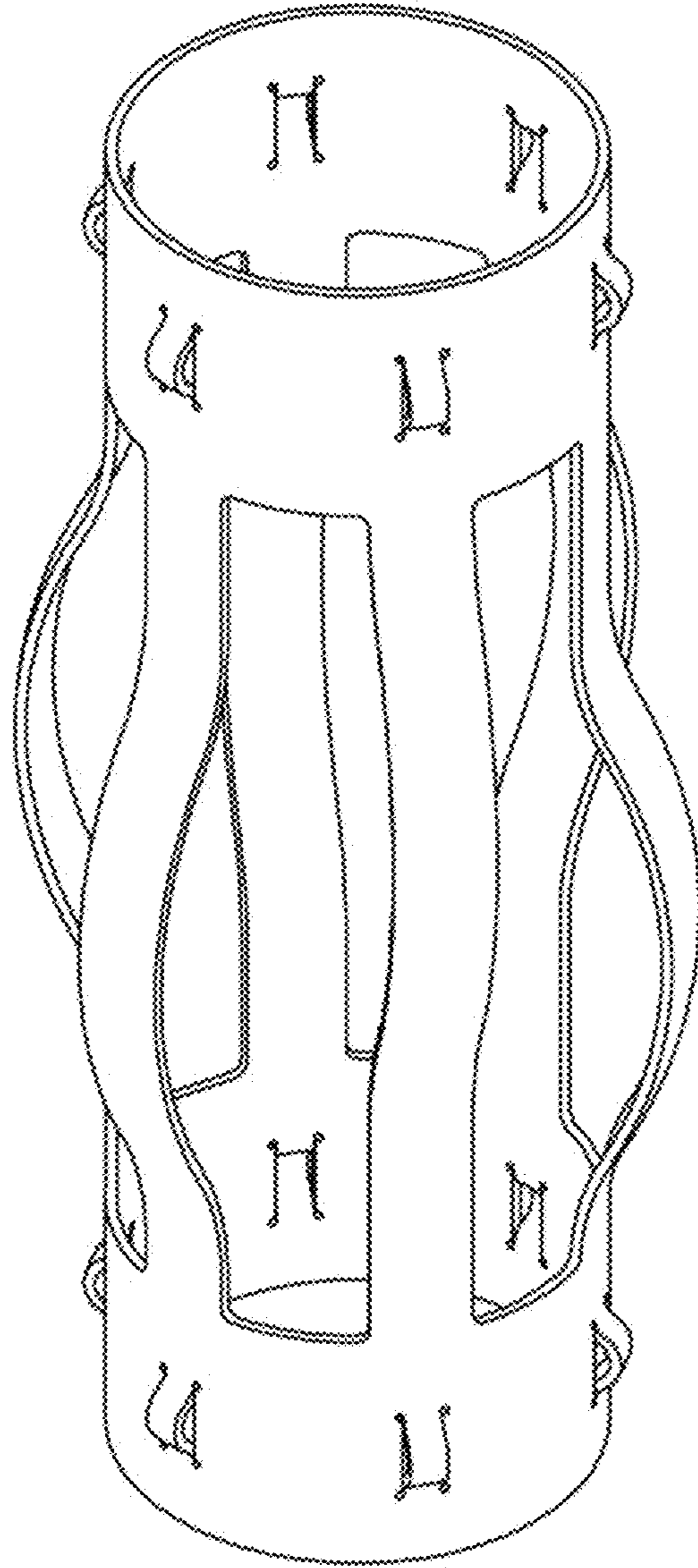


Figure 30

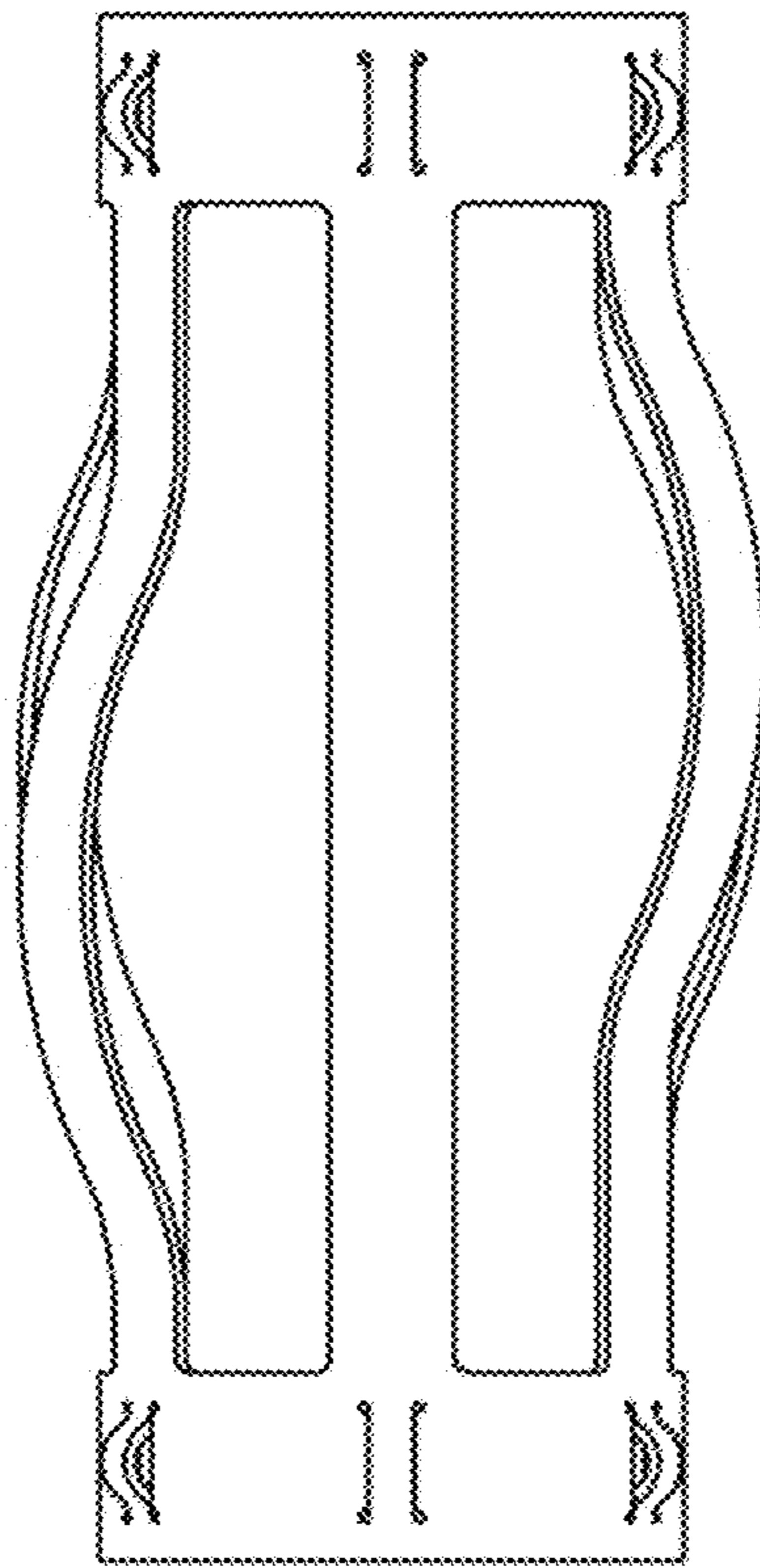


Figure 31

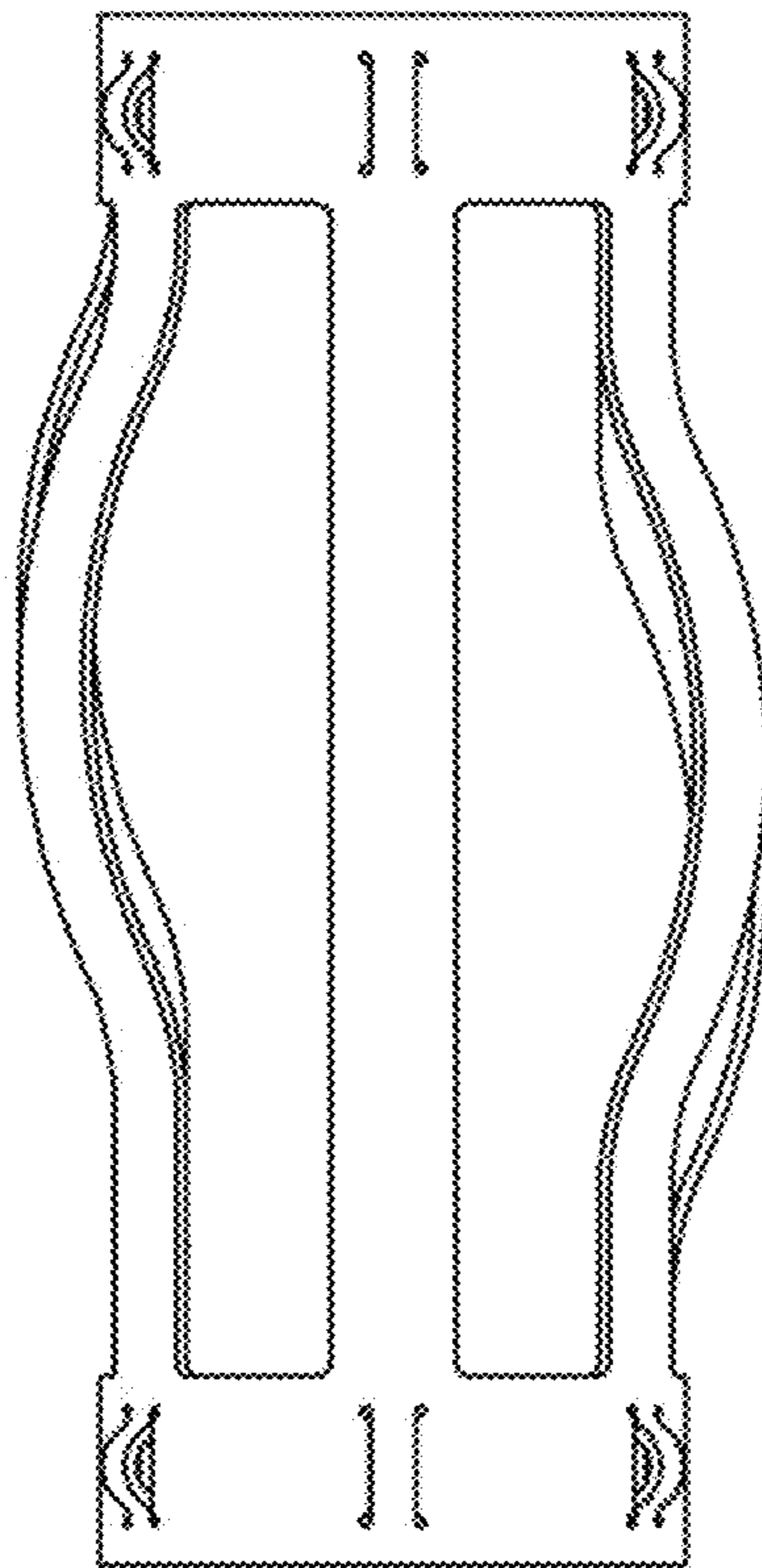


Figure 32



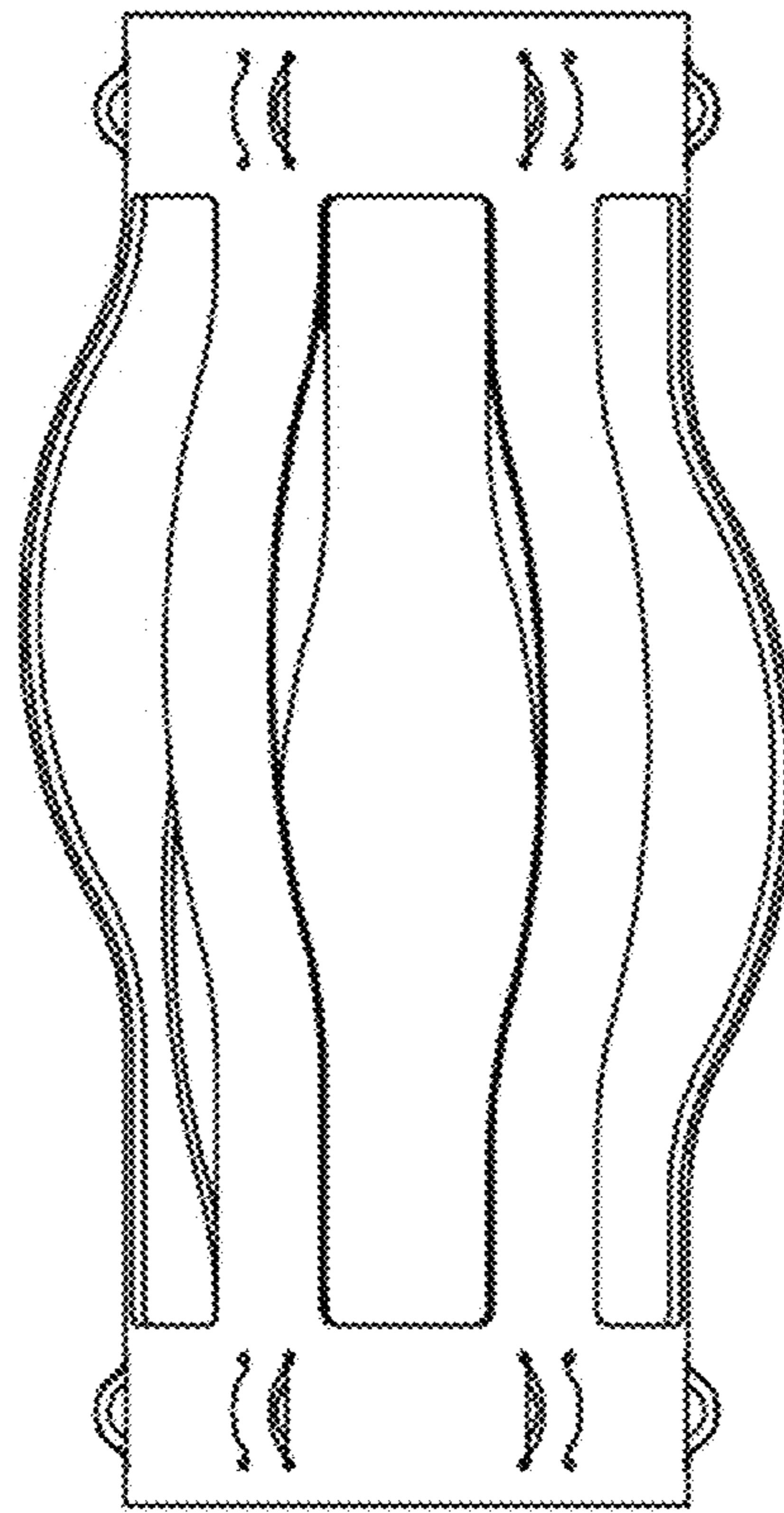


Figure 33

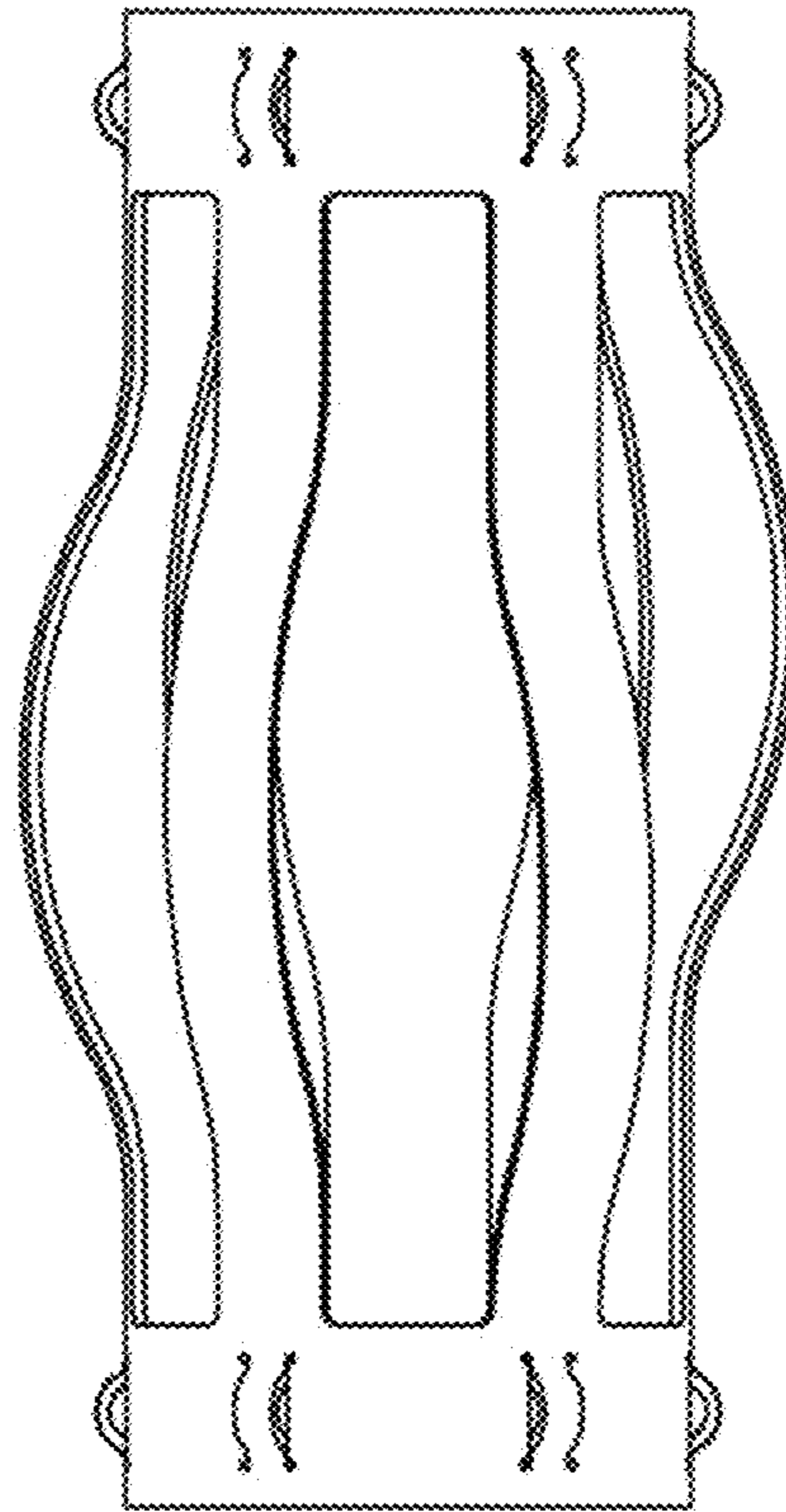


Figure 34

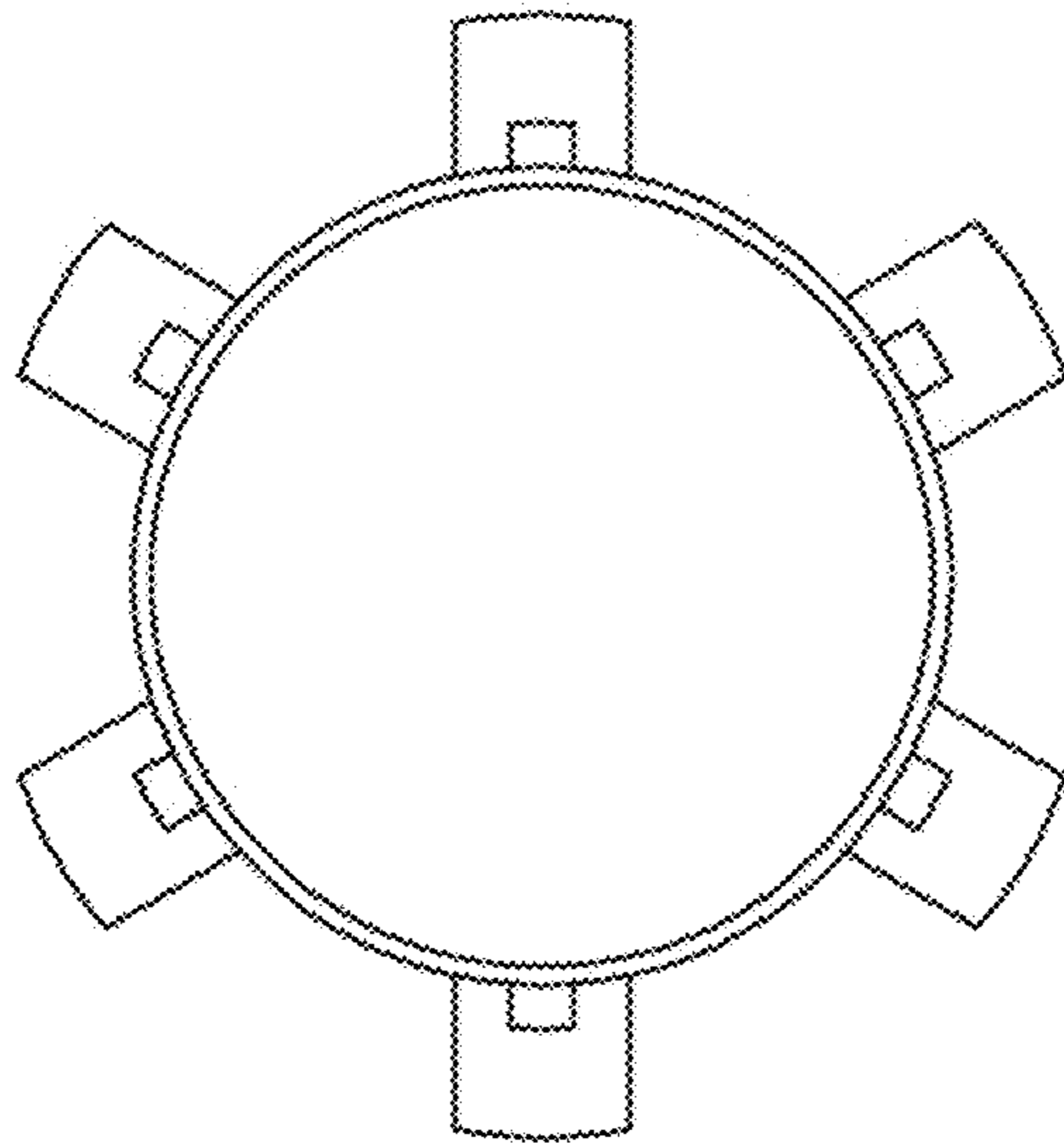


Figure 35

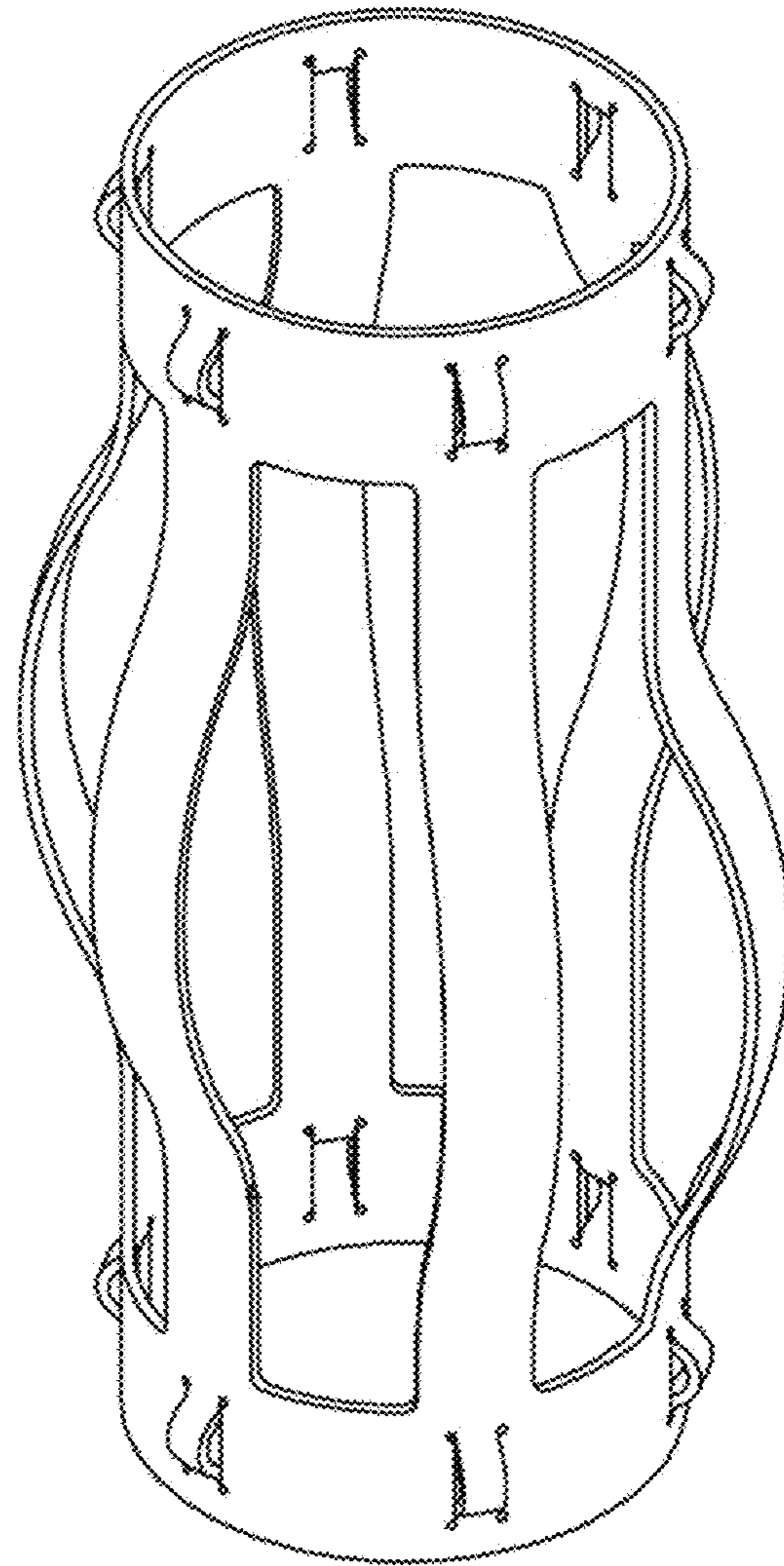


Figure 36

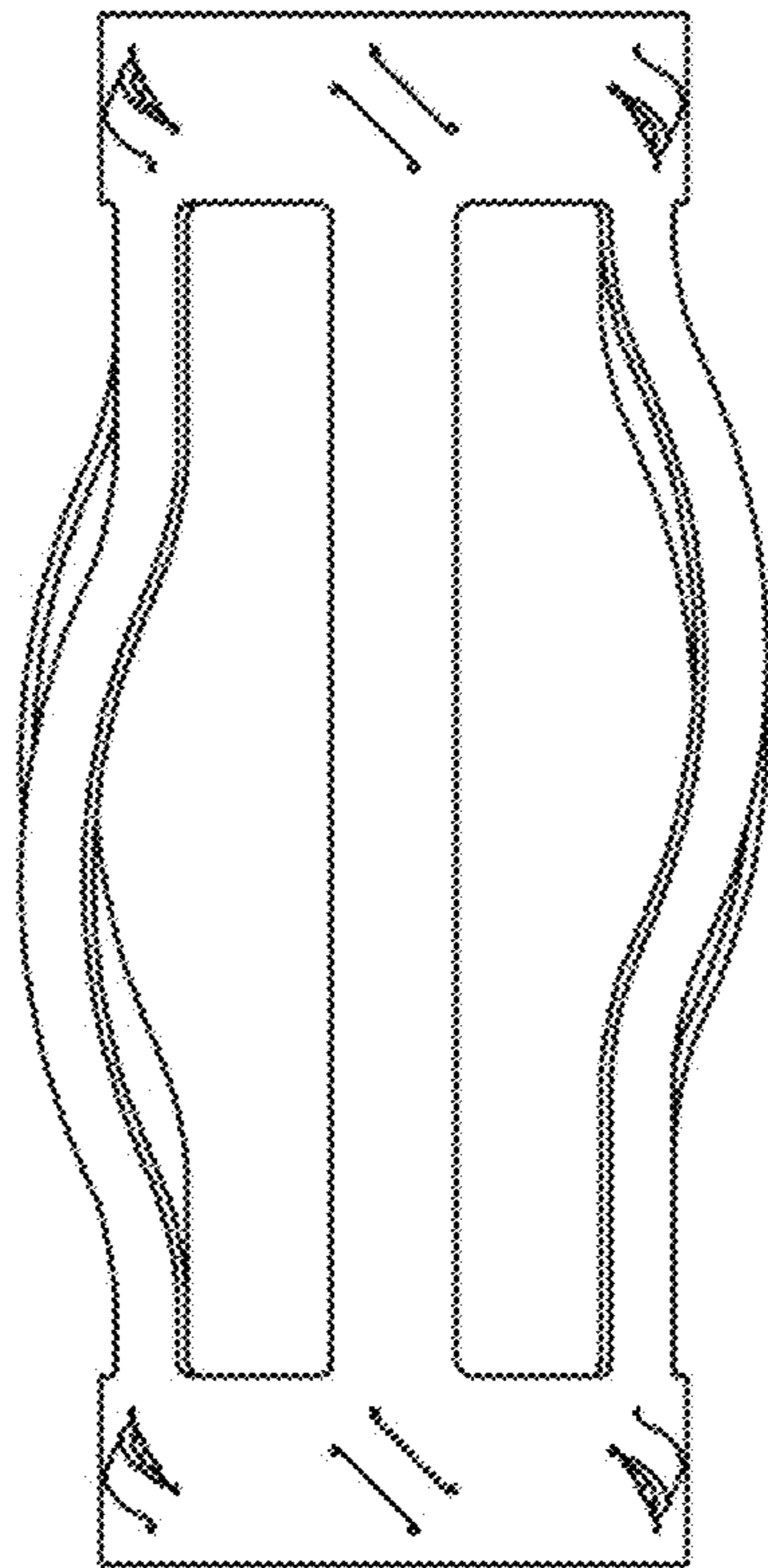


Figure 37

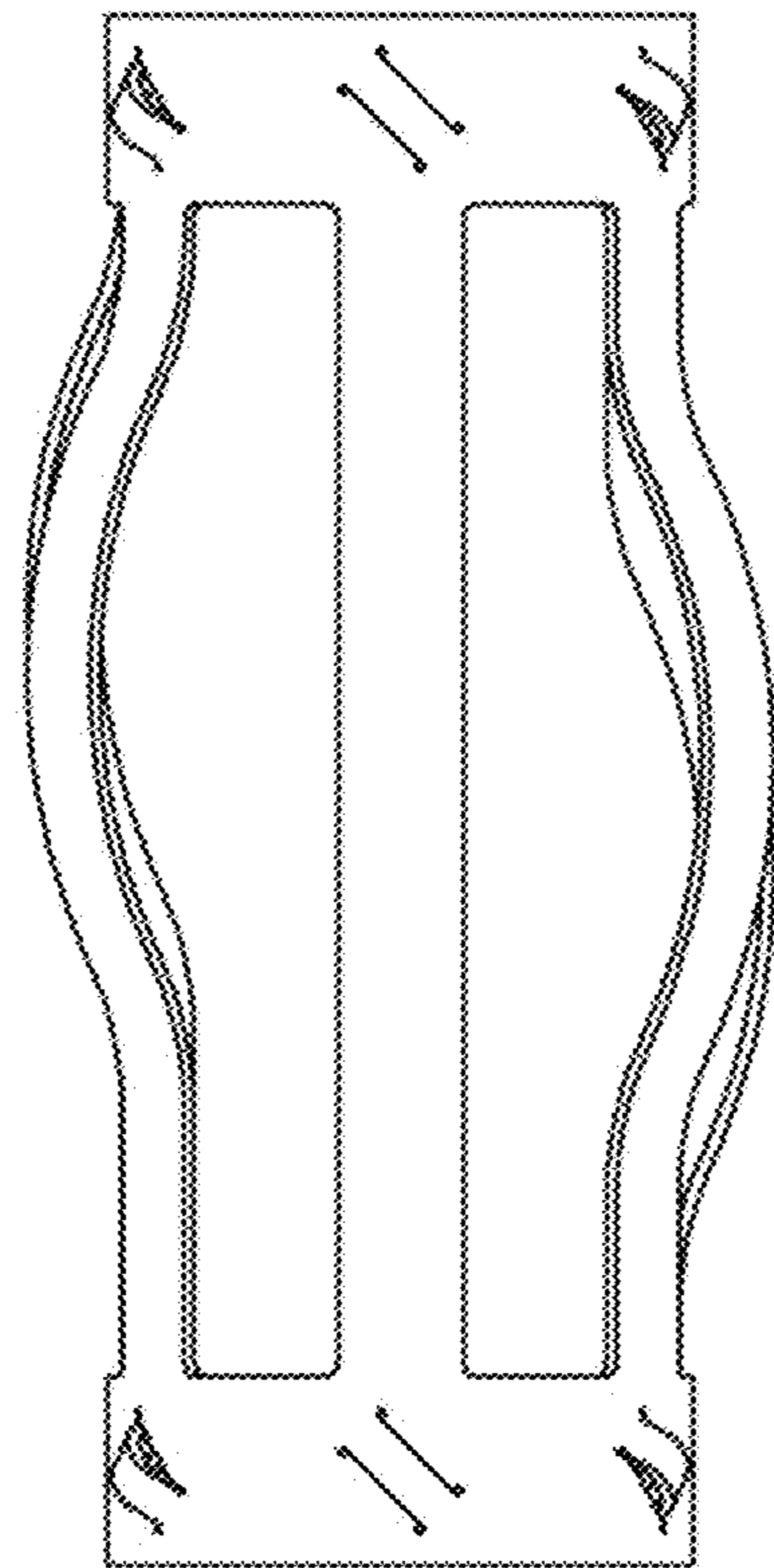


Figure 38



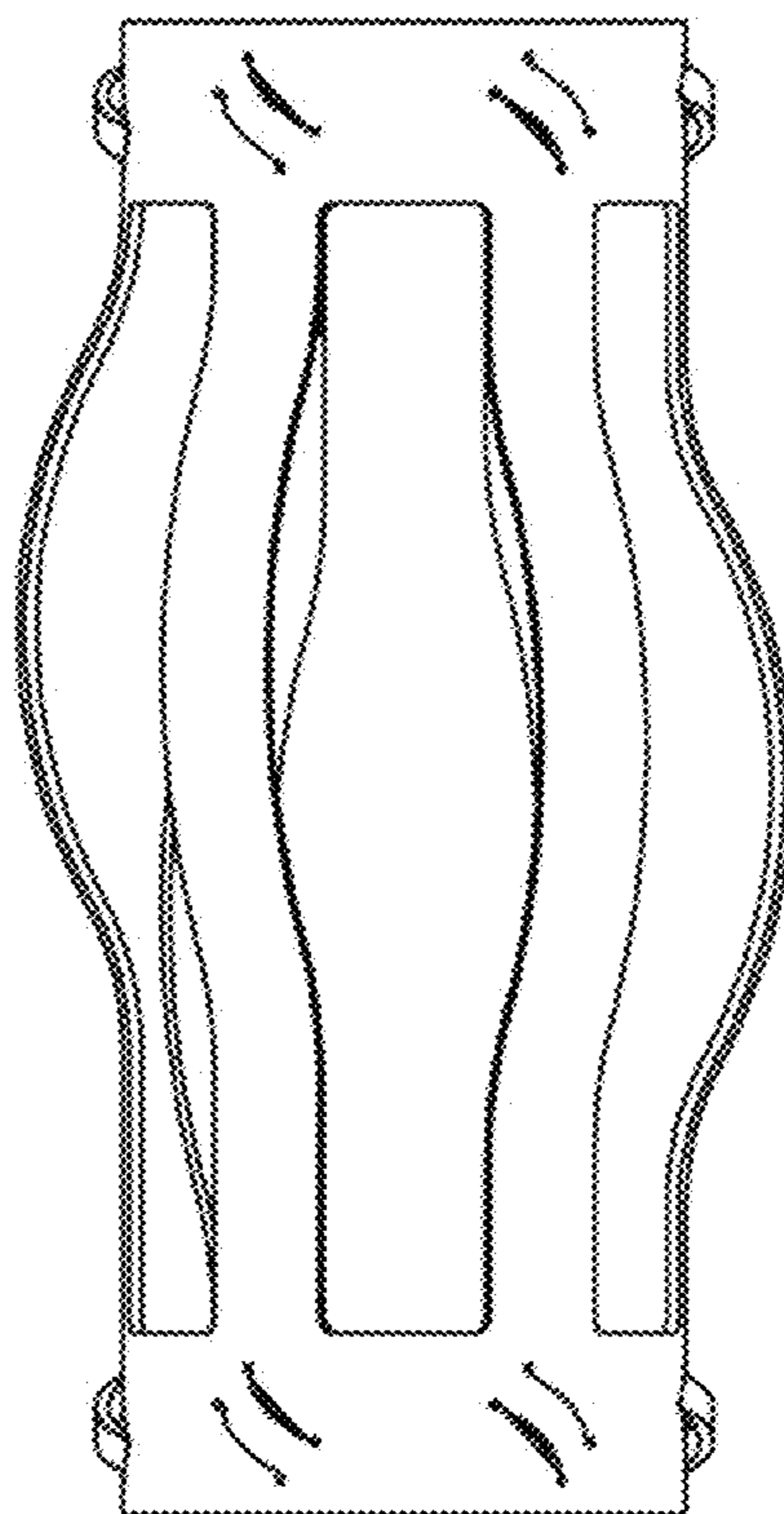


Figure 39

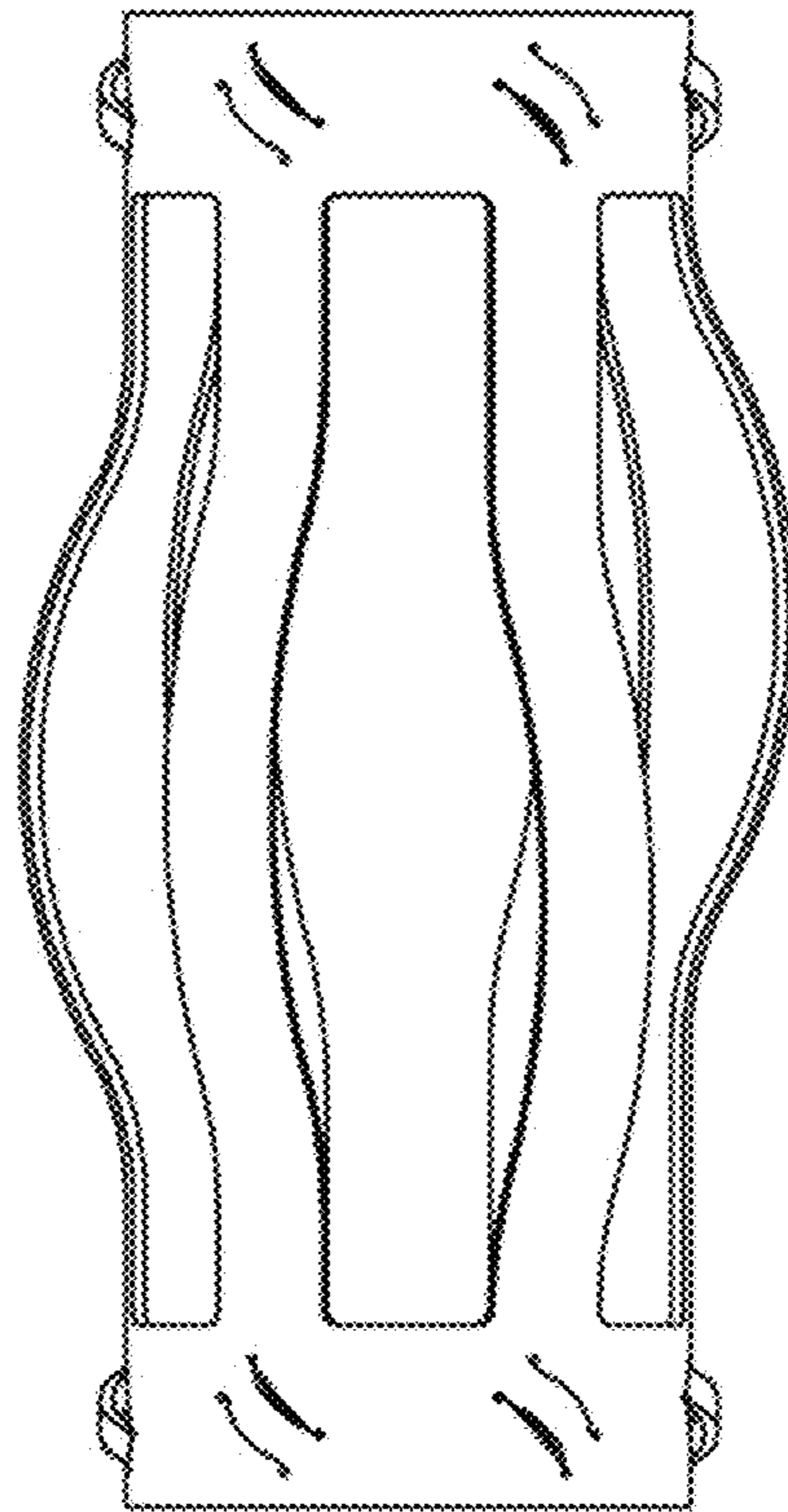


Figure 40

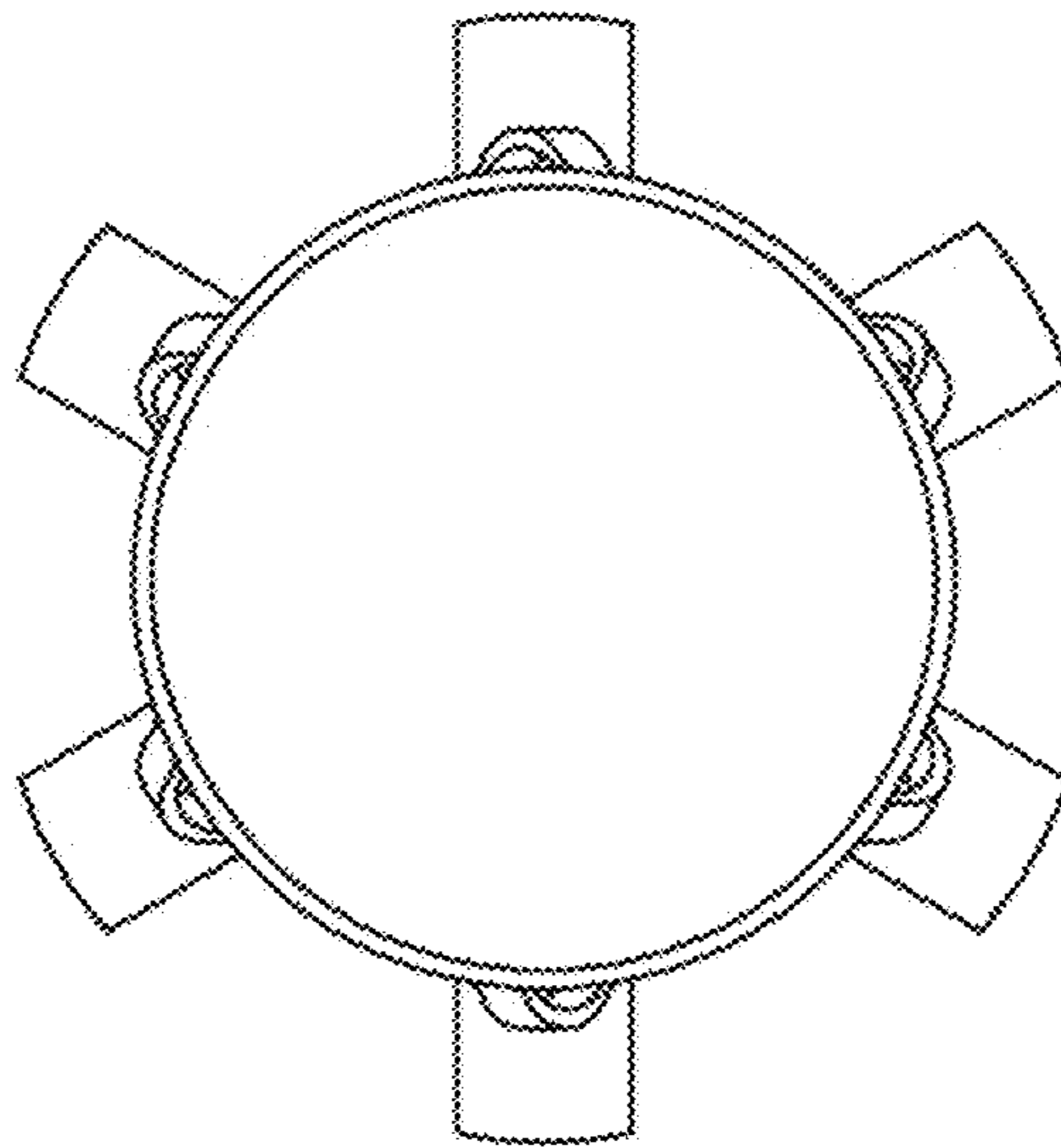


Figure 41

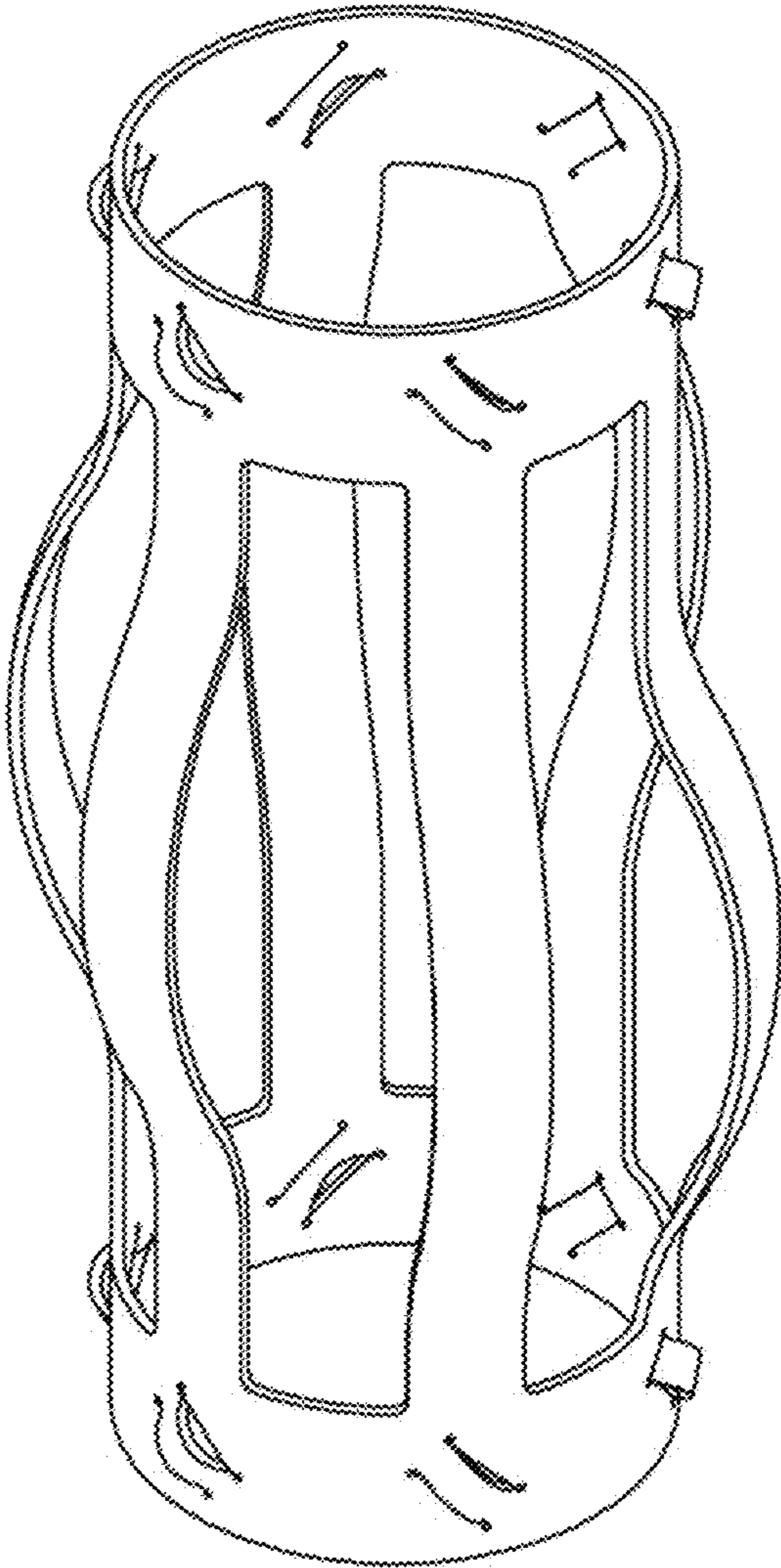


Figure 42

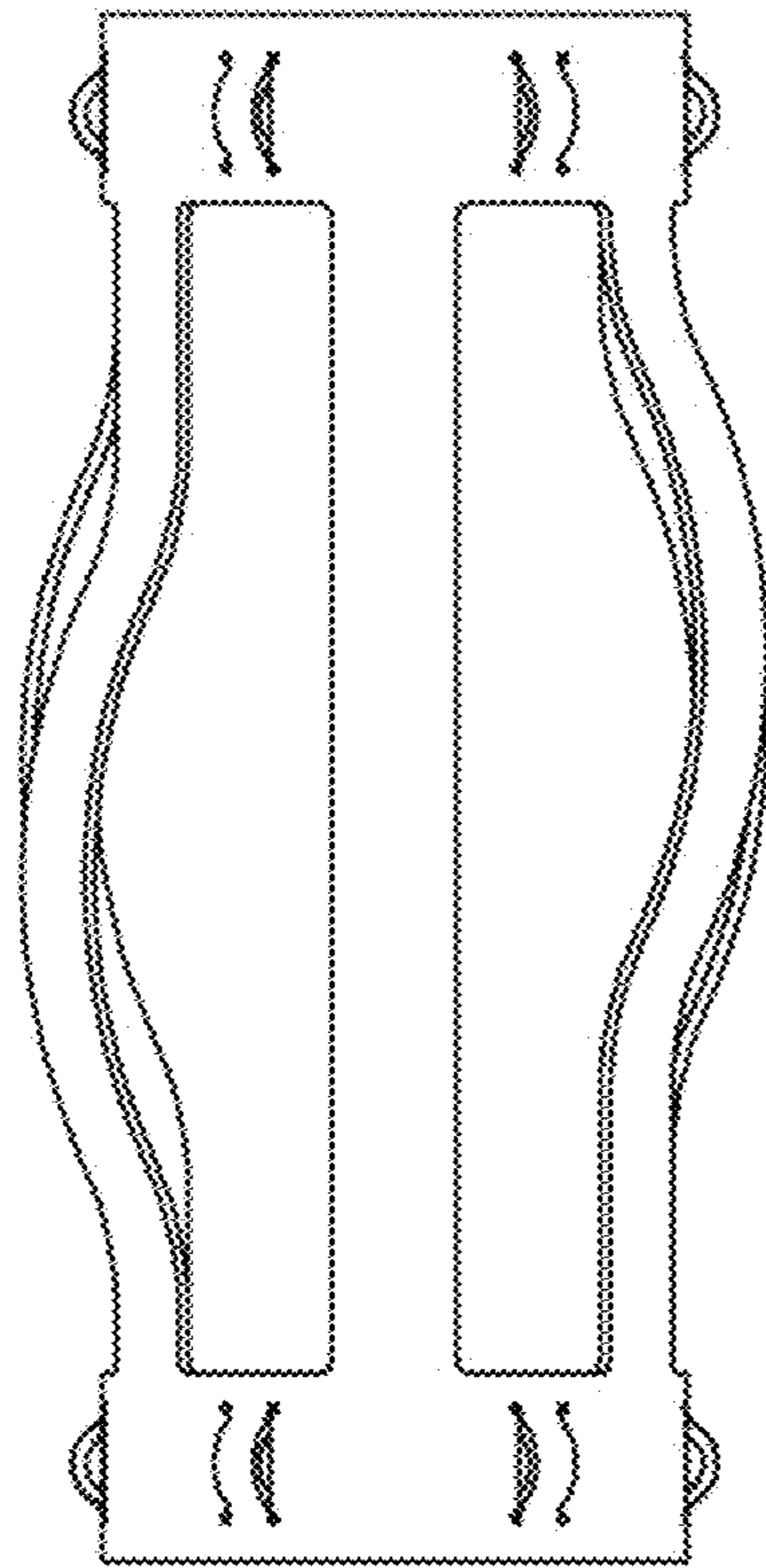


Figure 43

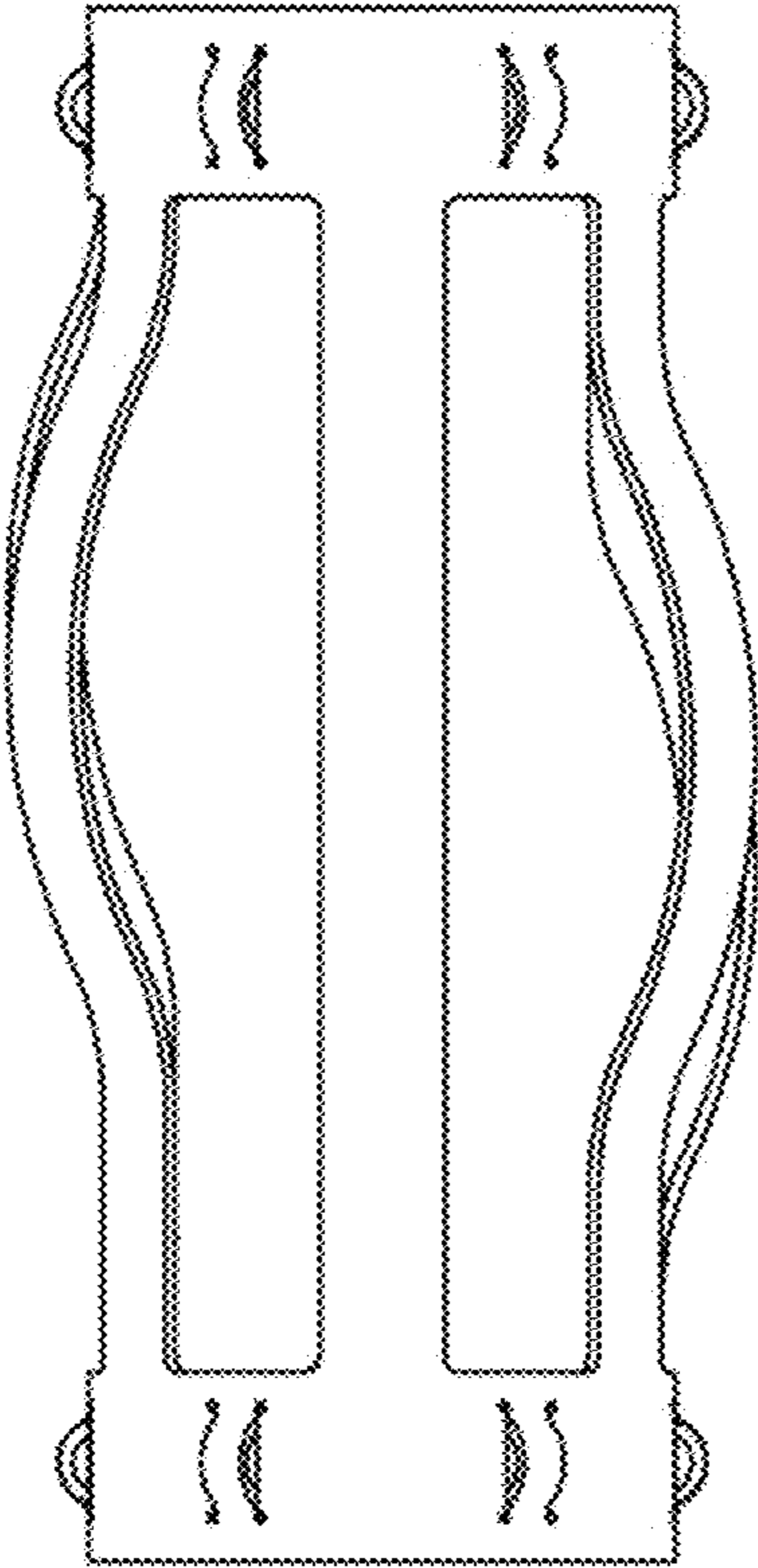


Figure 44



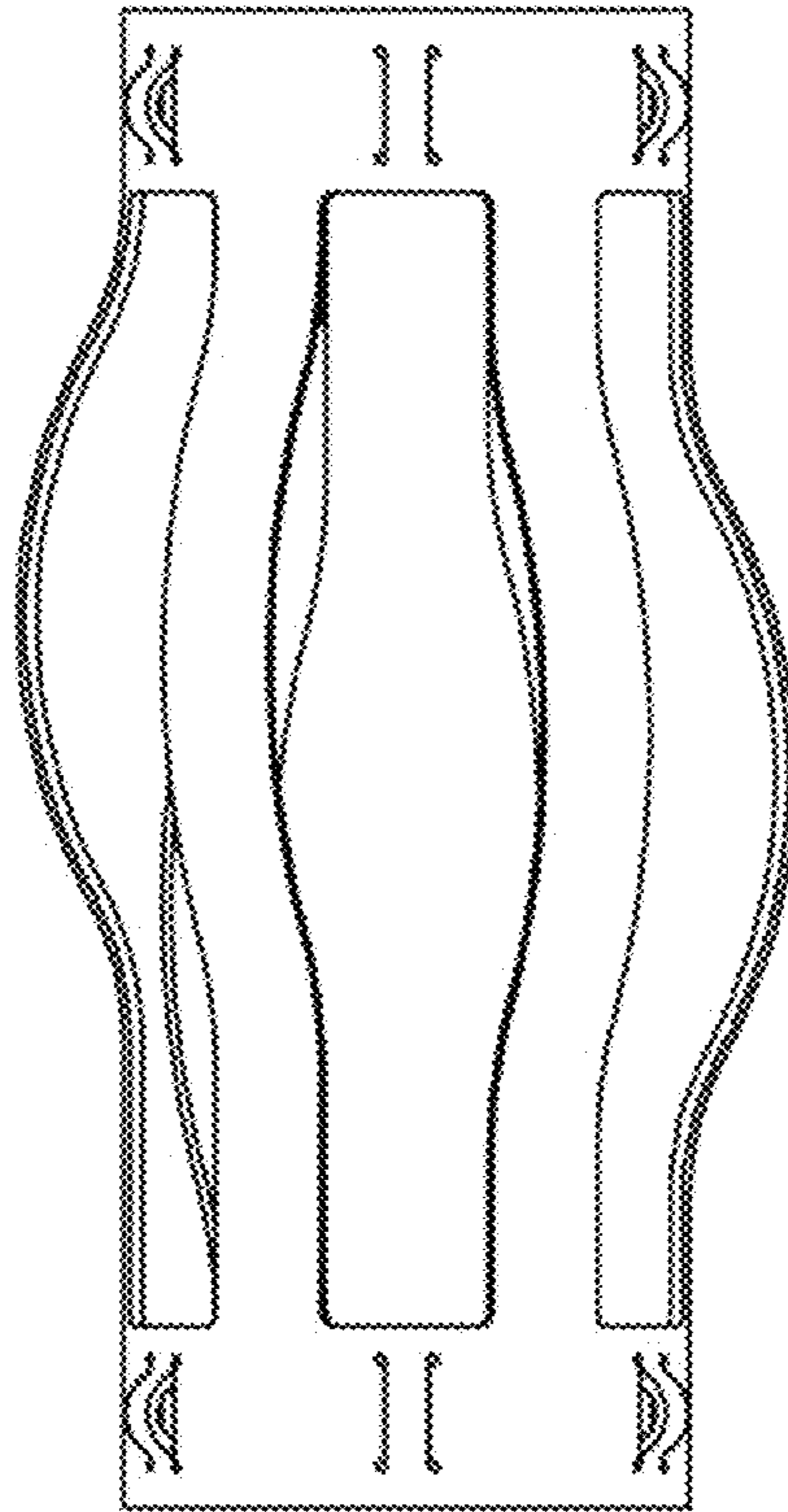


Figure 45

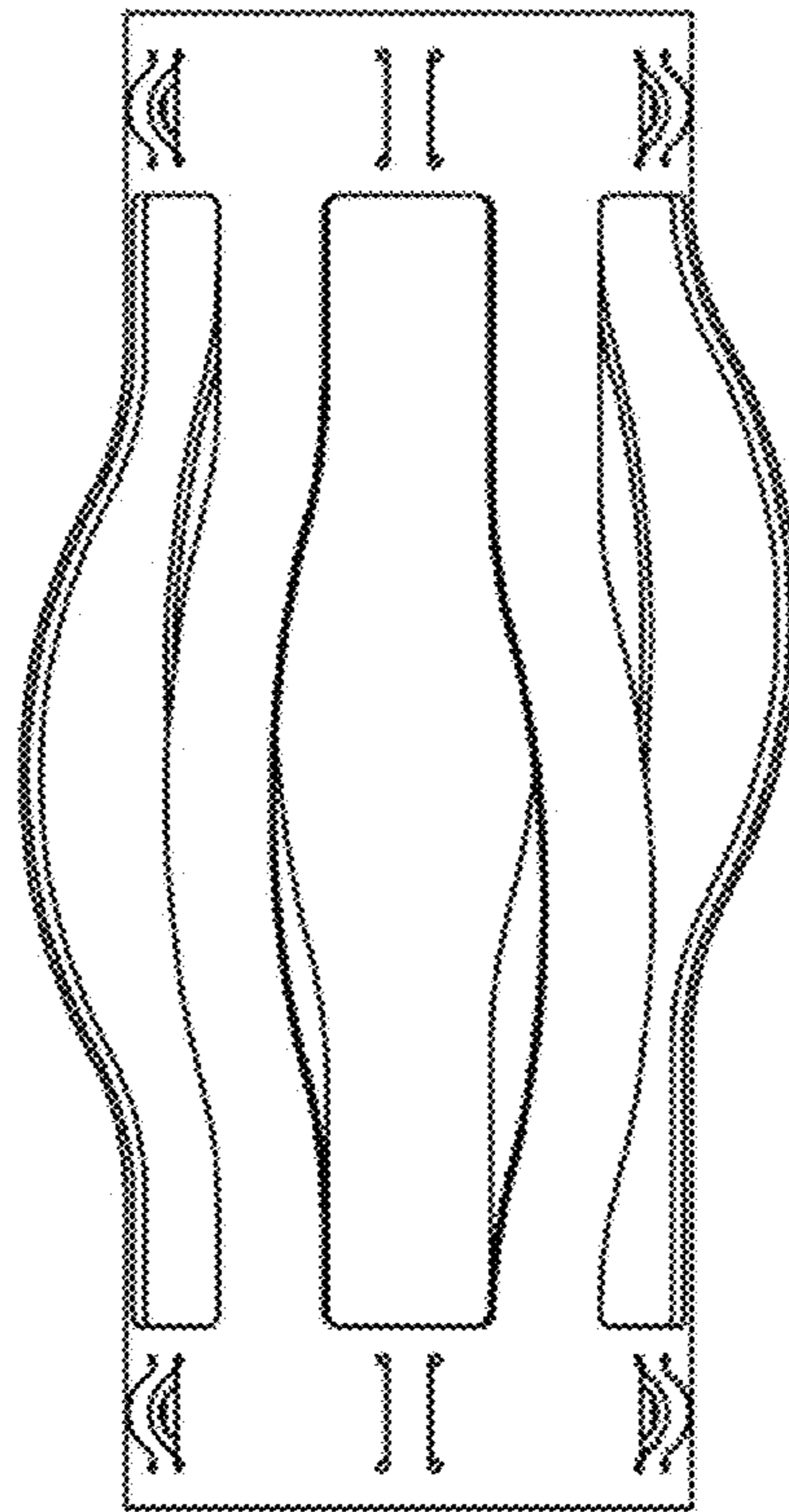


Figure 46

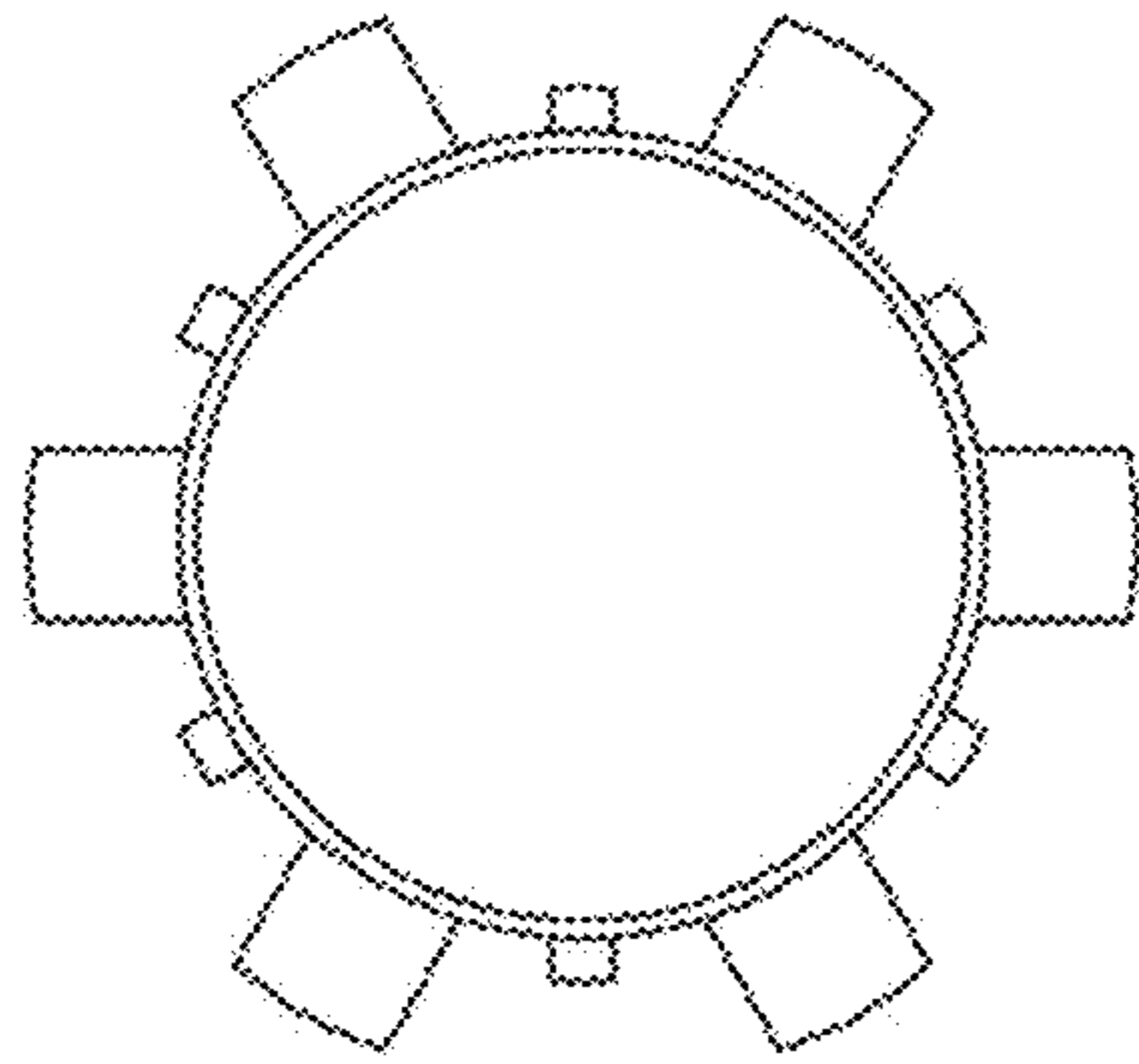


Figure 47

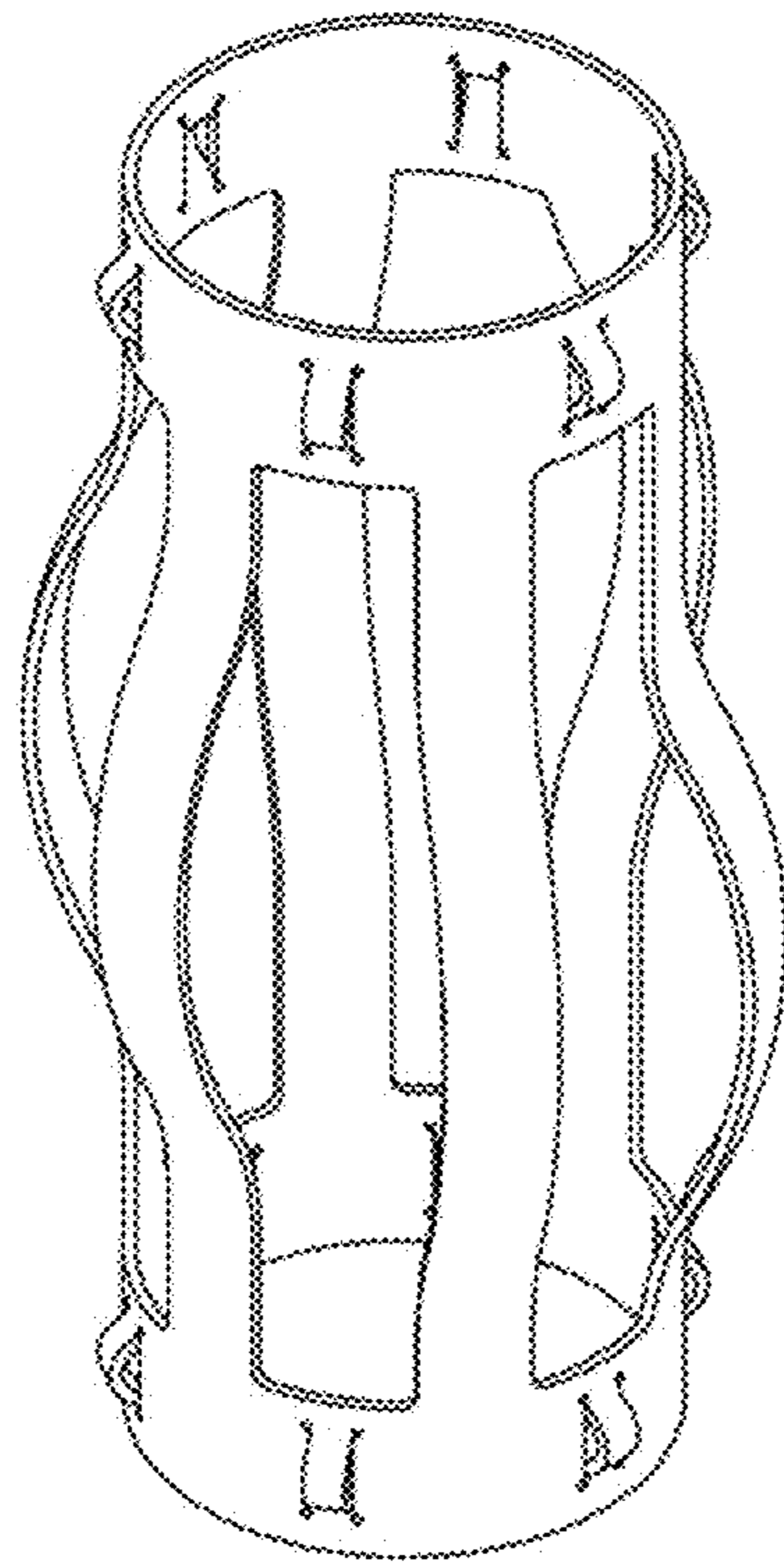


Figure 48

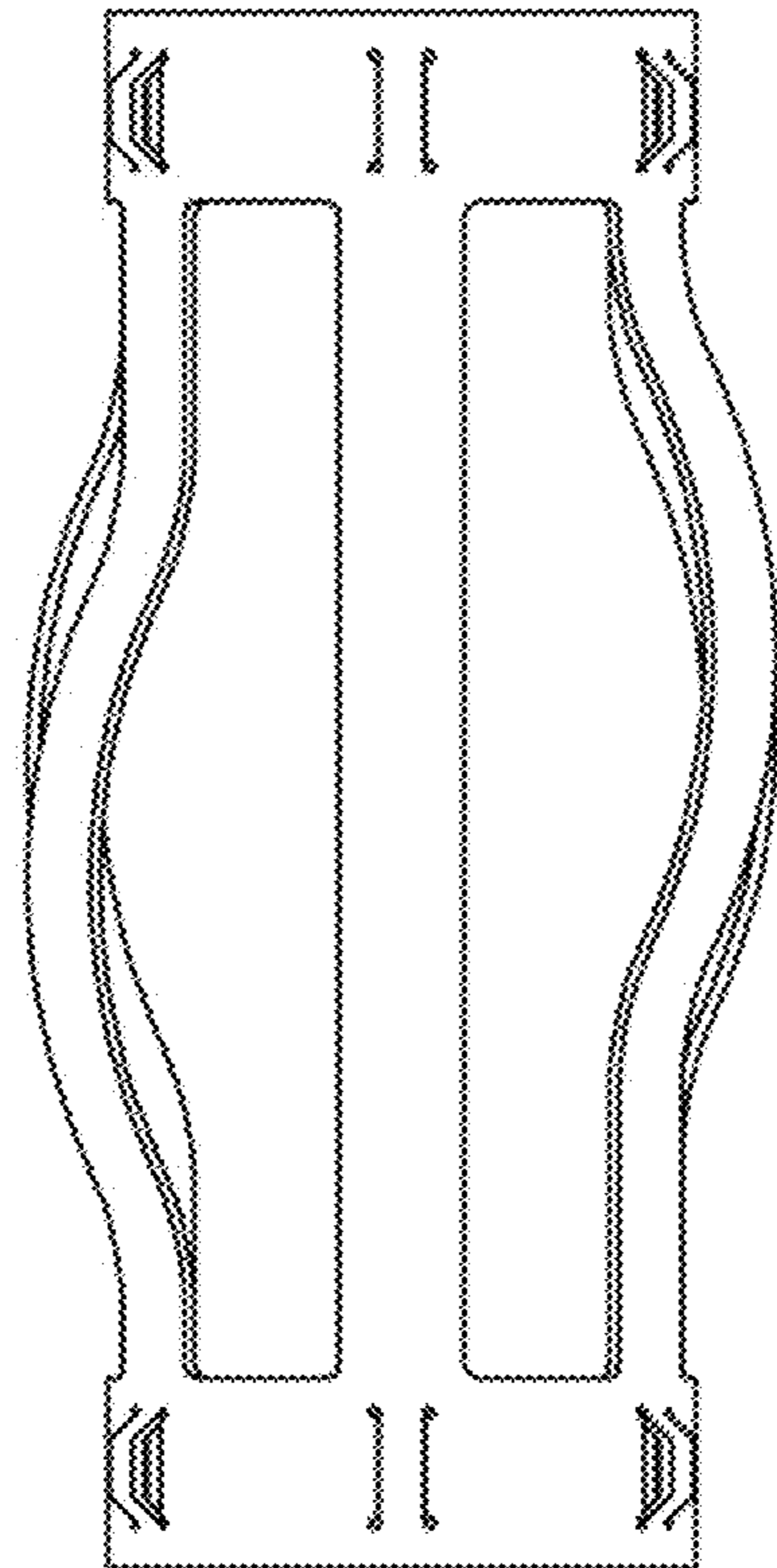


Figure 49

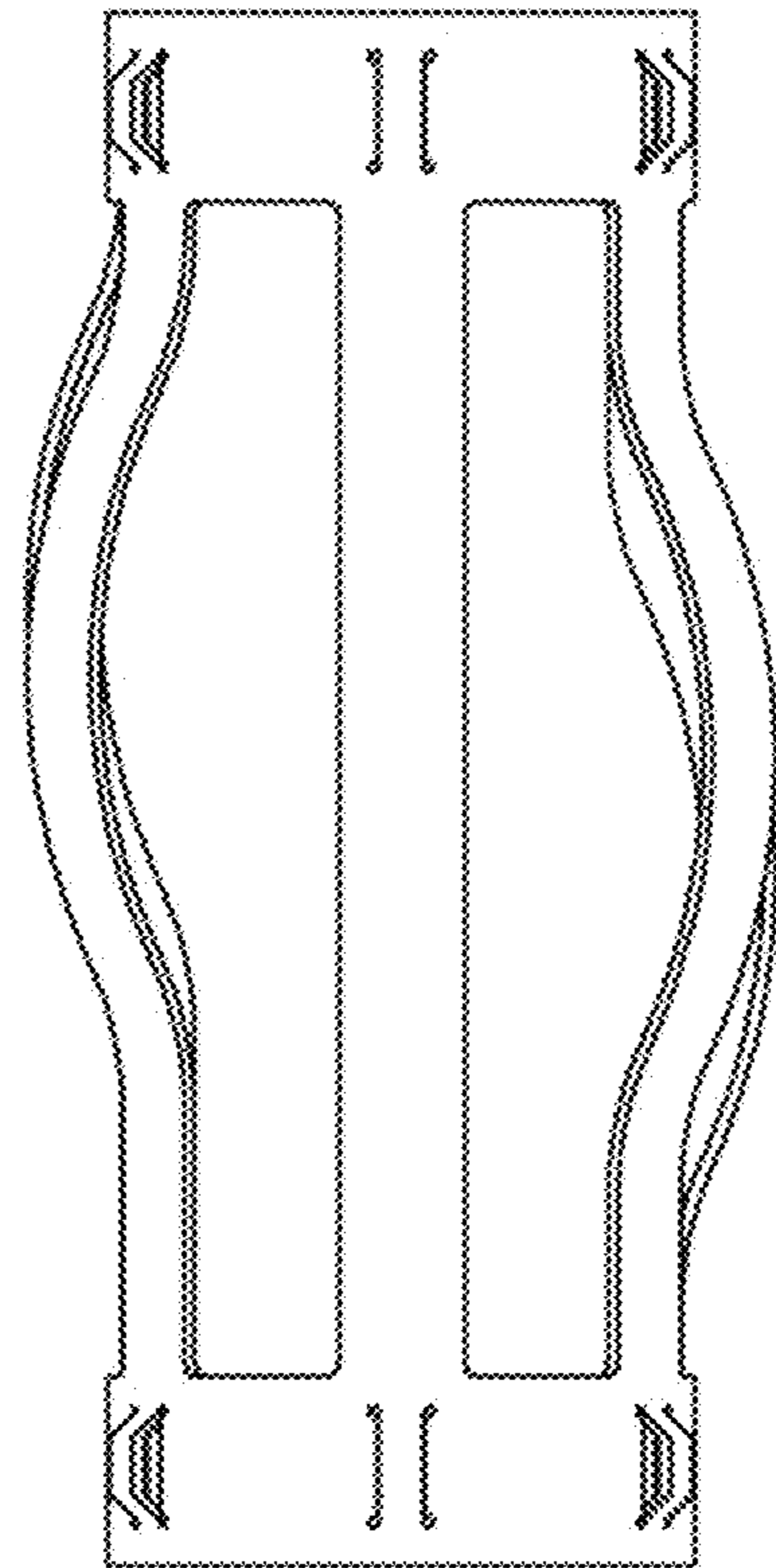


Figure 50



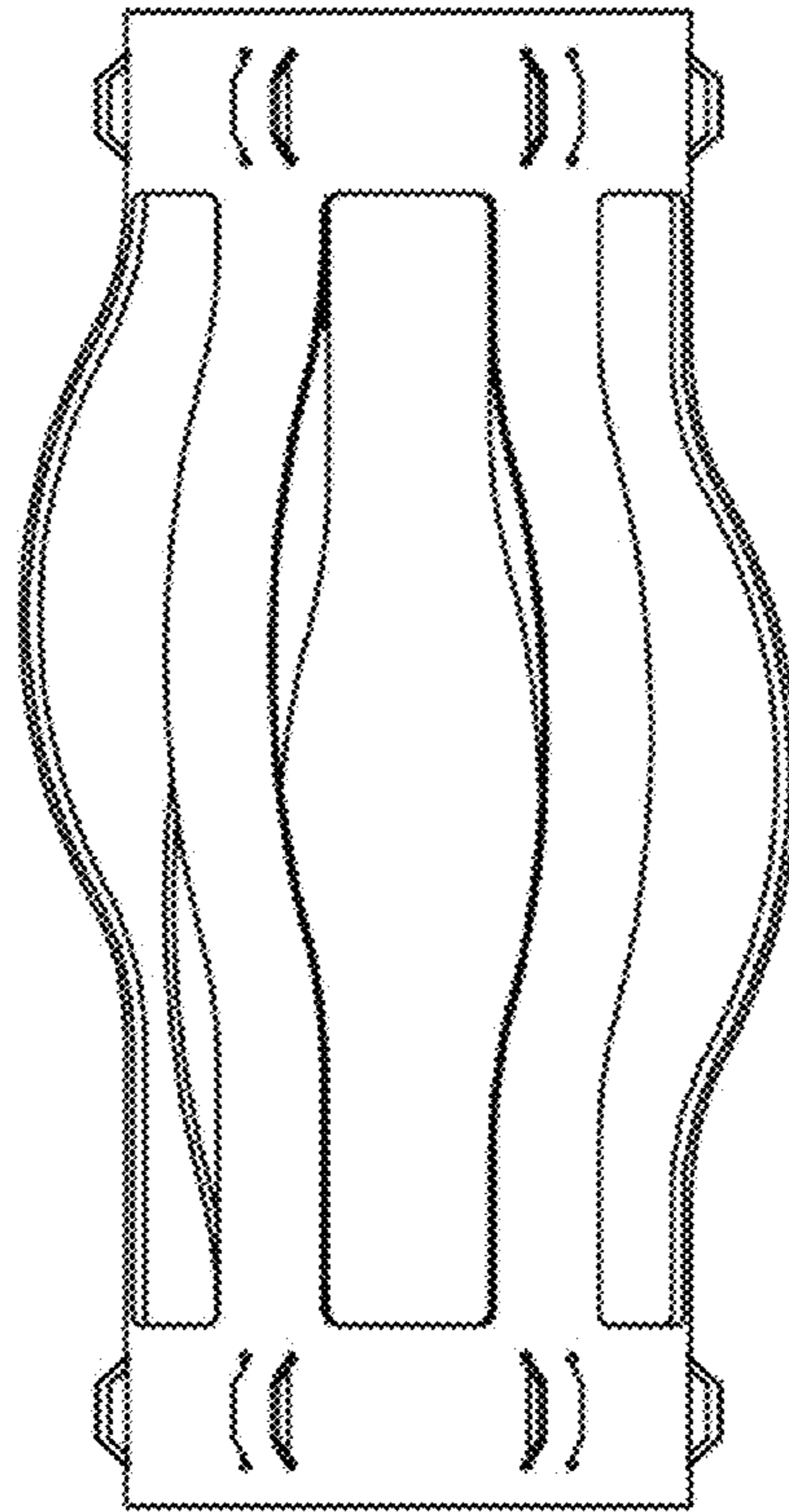


Figure 51

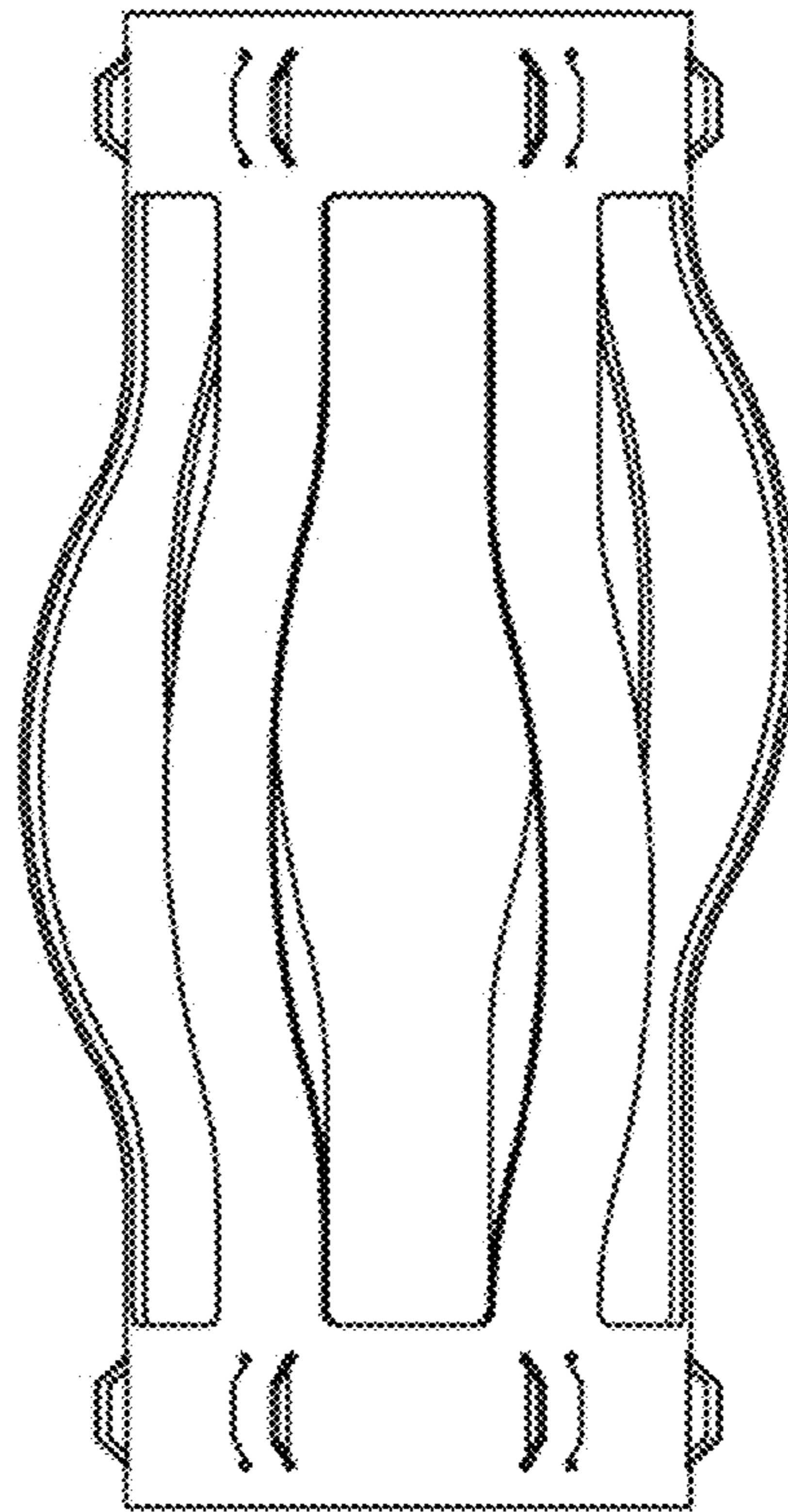


Figure 52

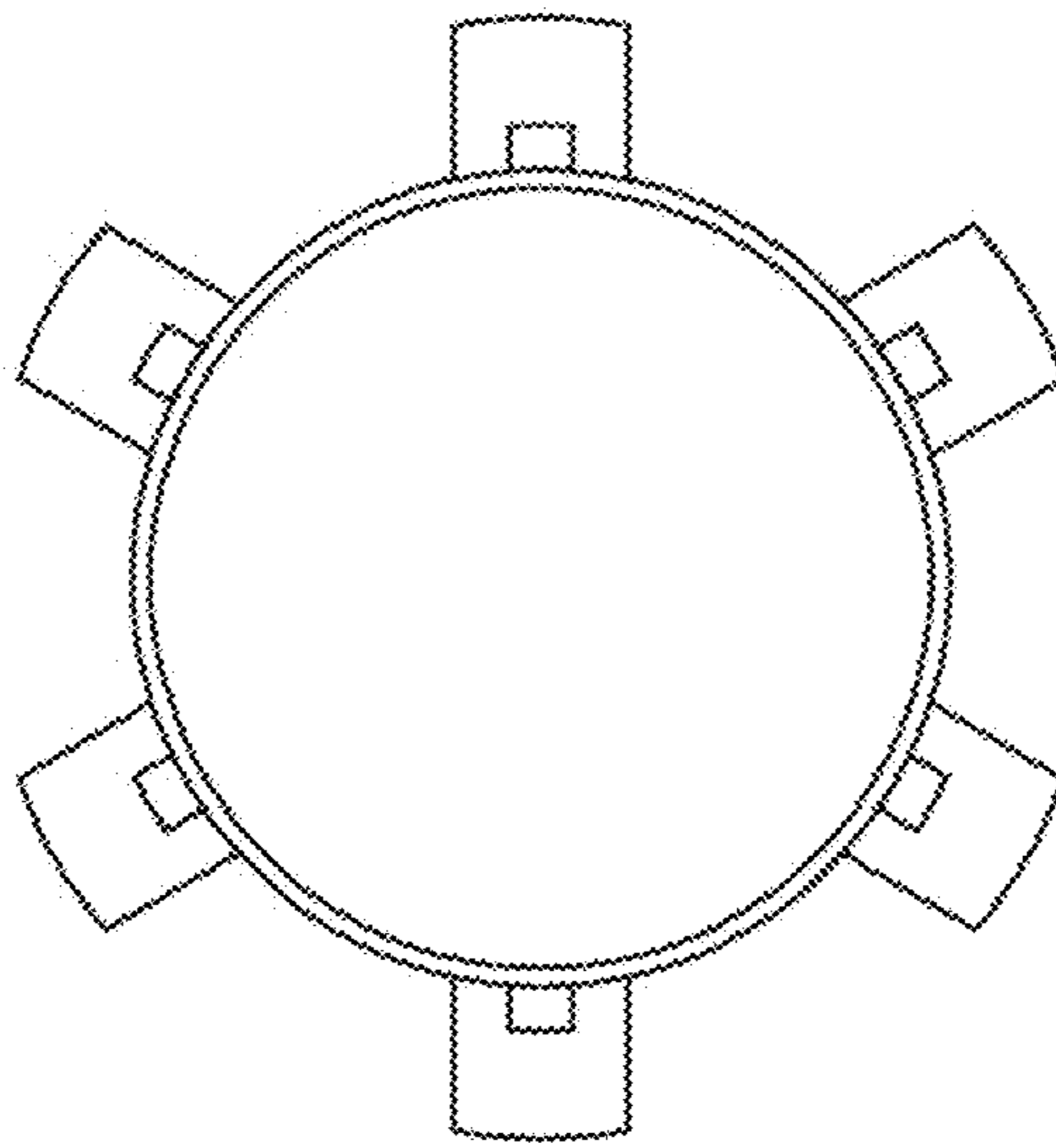


Figure 53

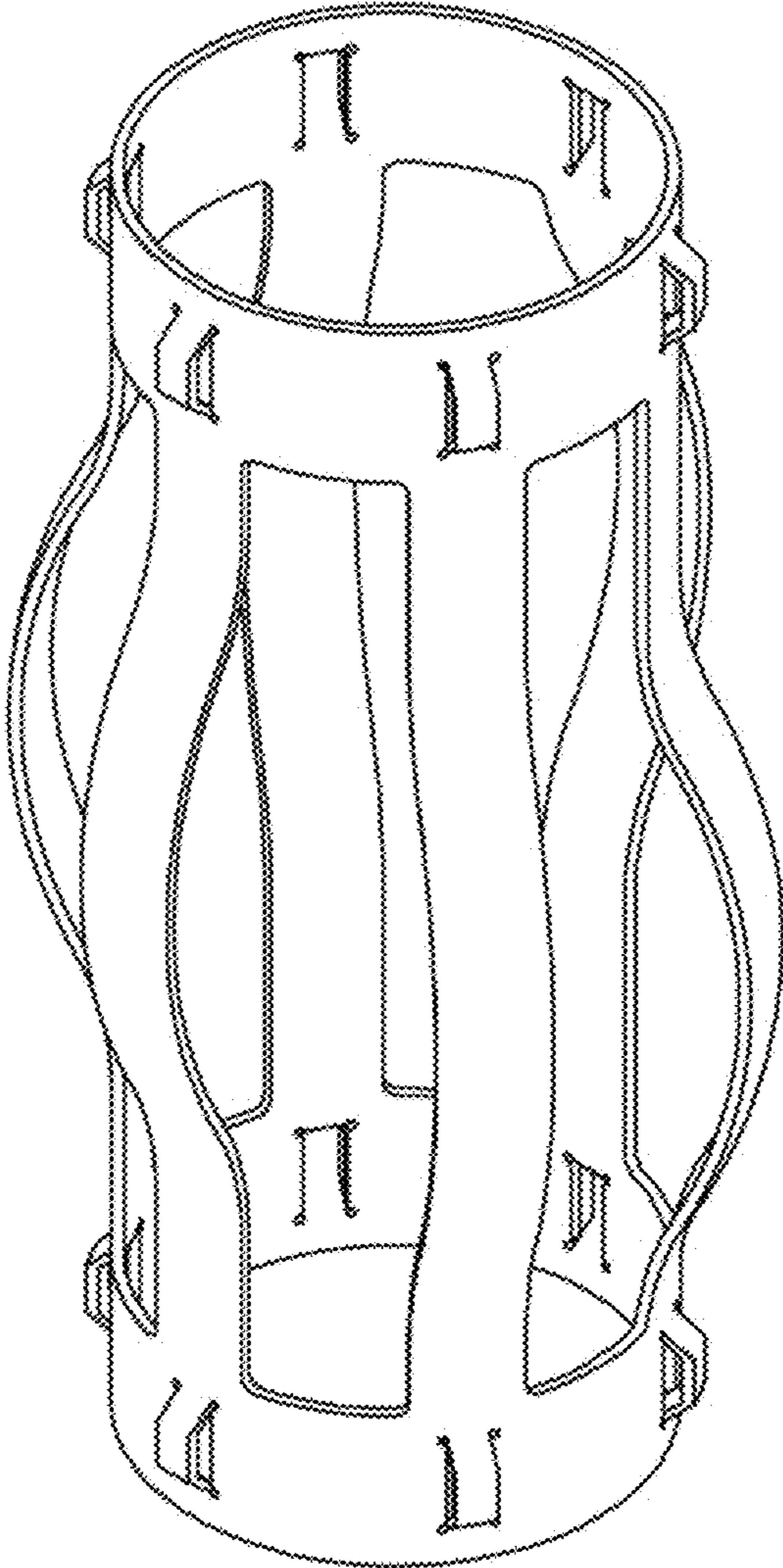


Figure 54

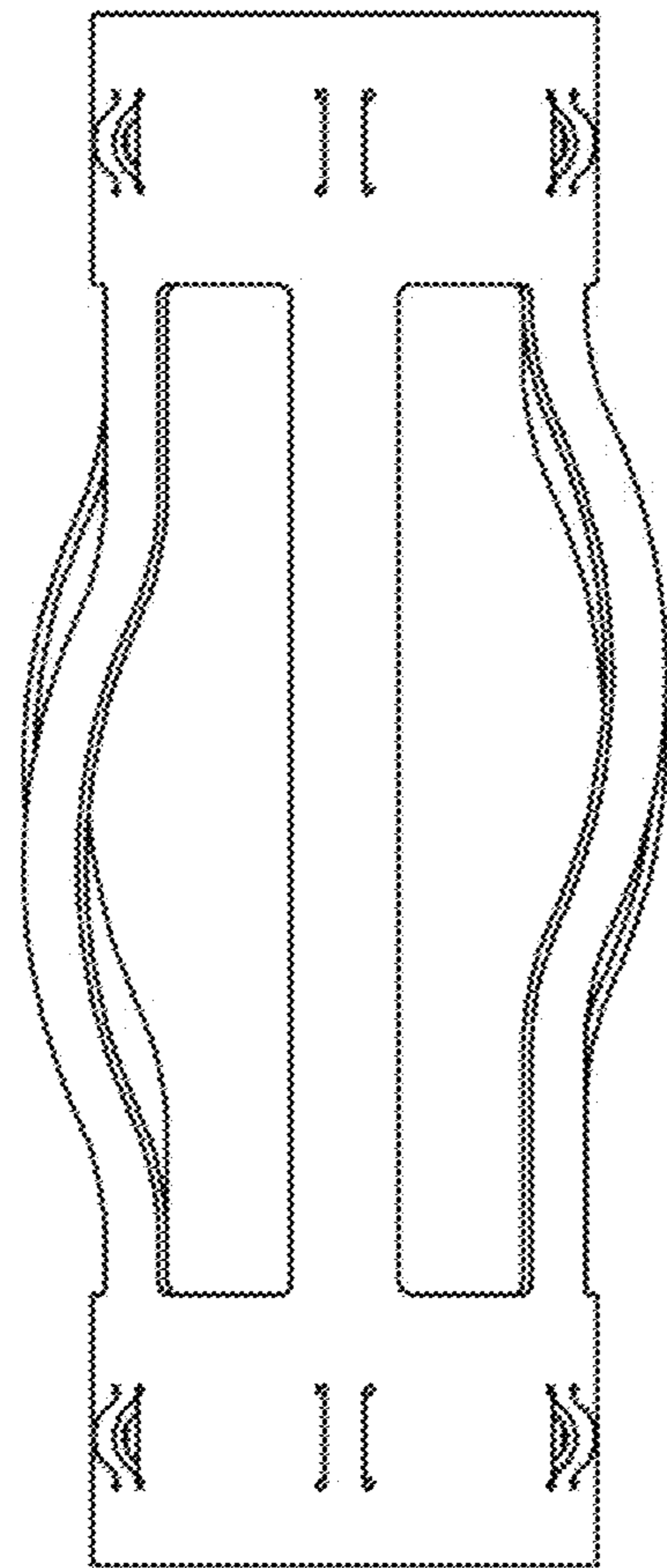


Figure 55

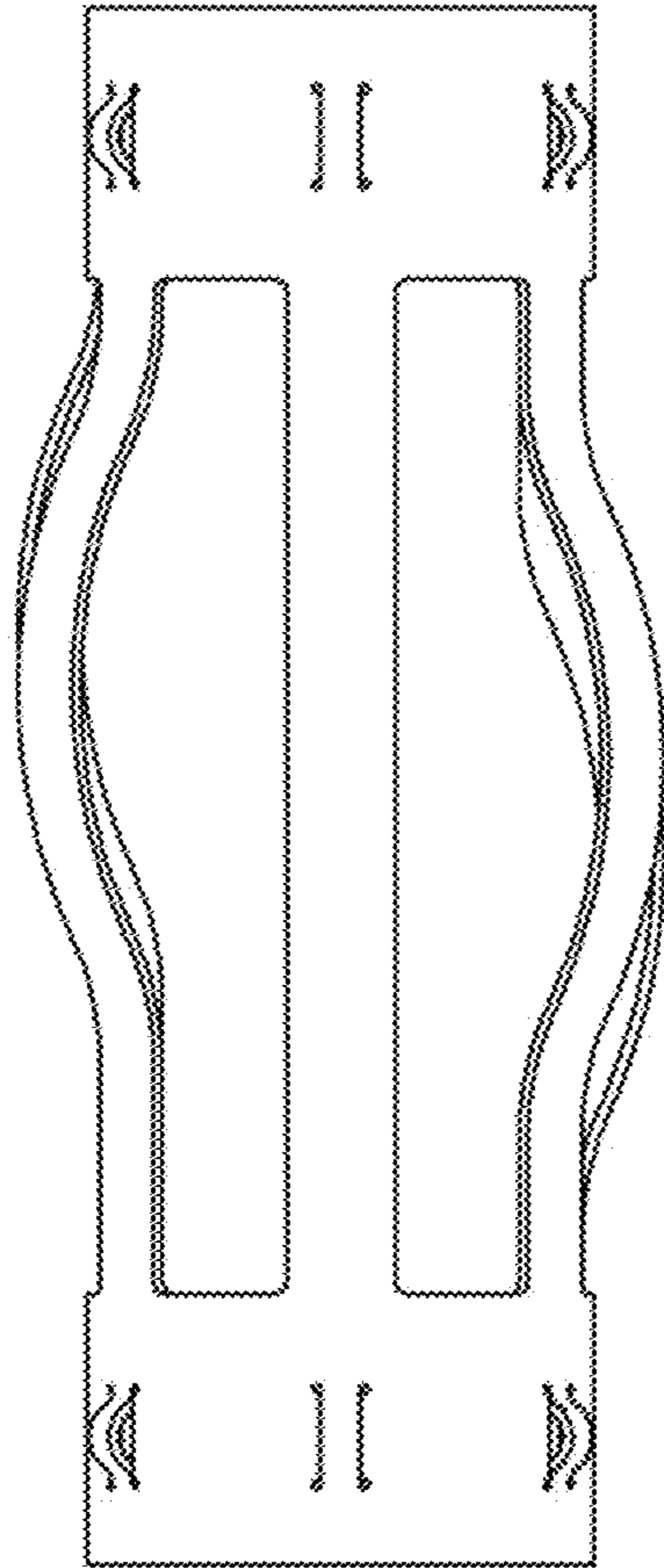


Figure 56

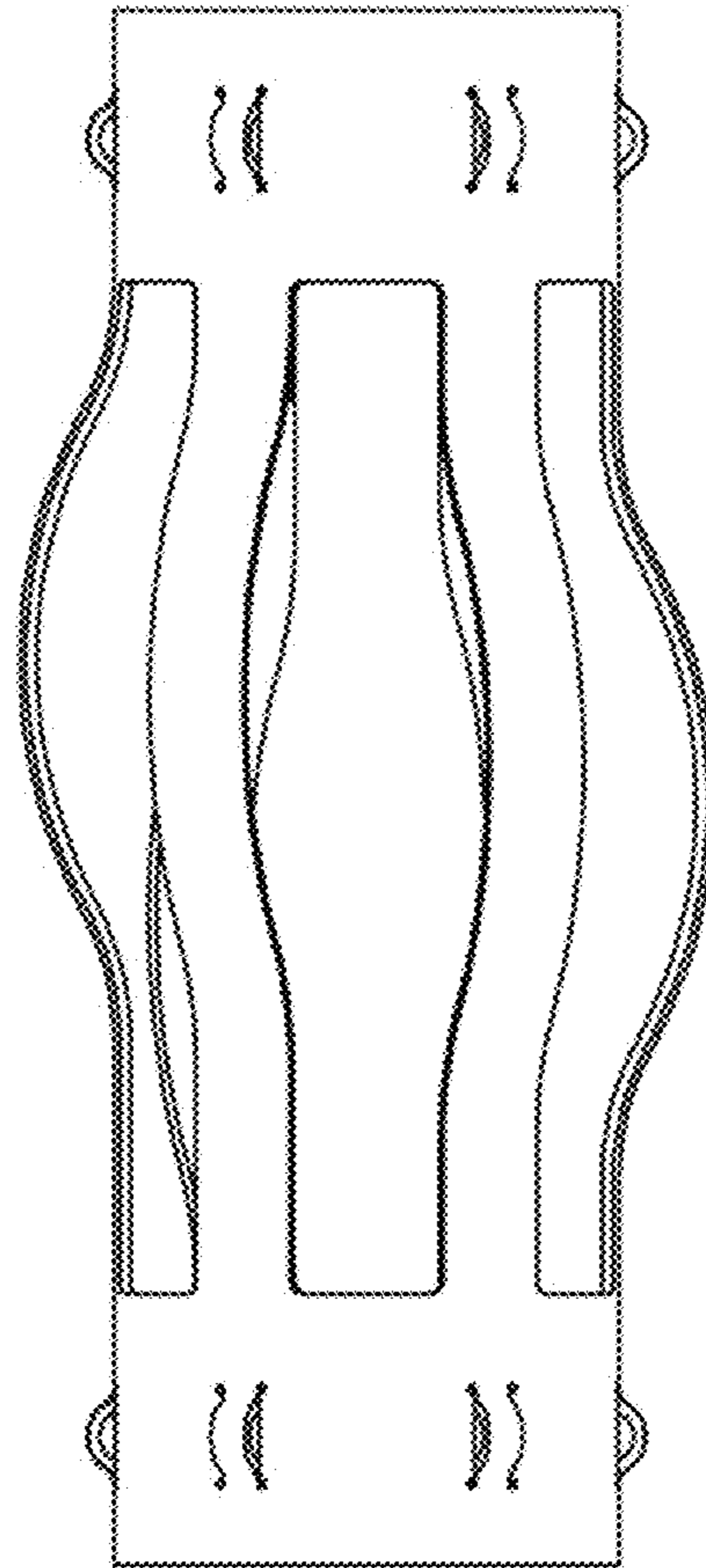


Figure 57



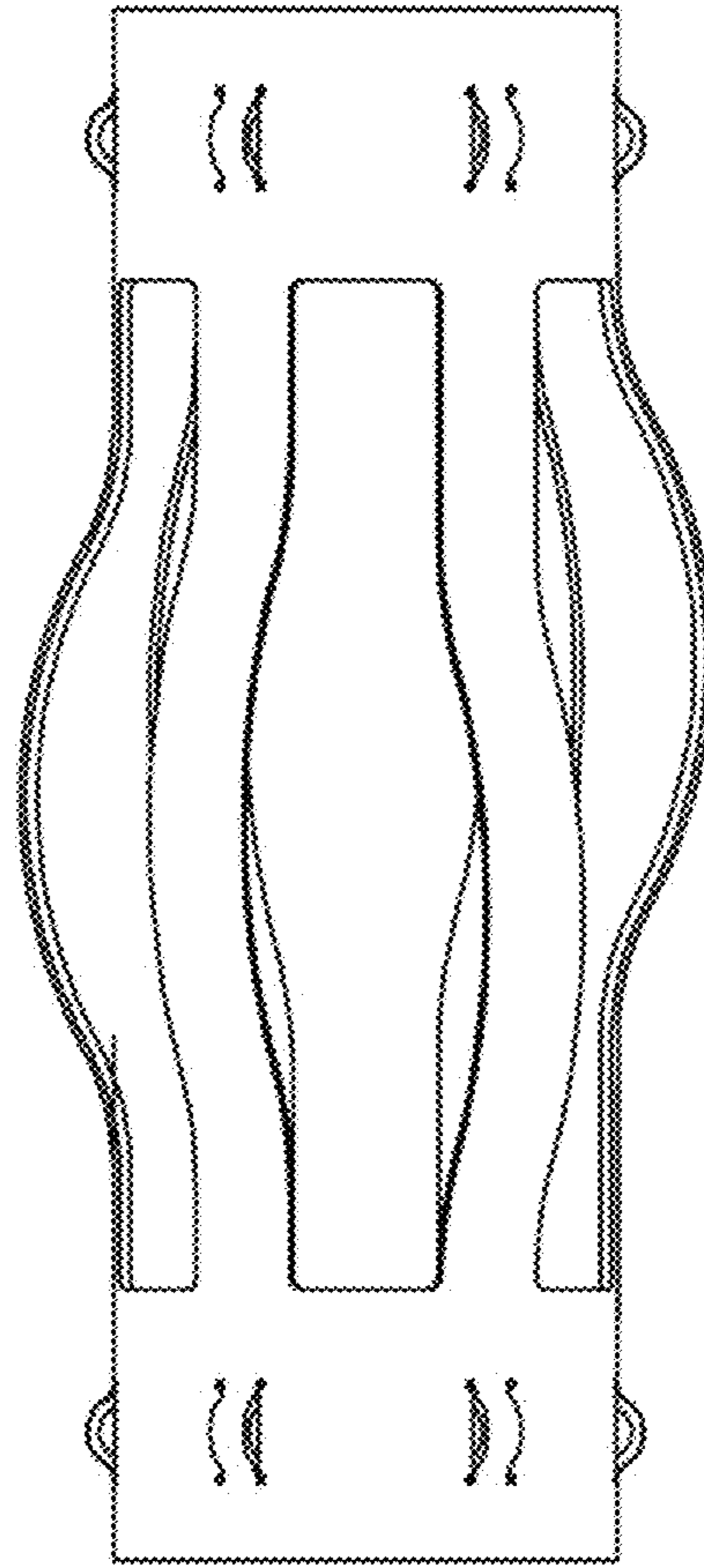


Figure 58

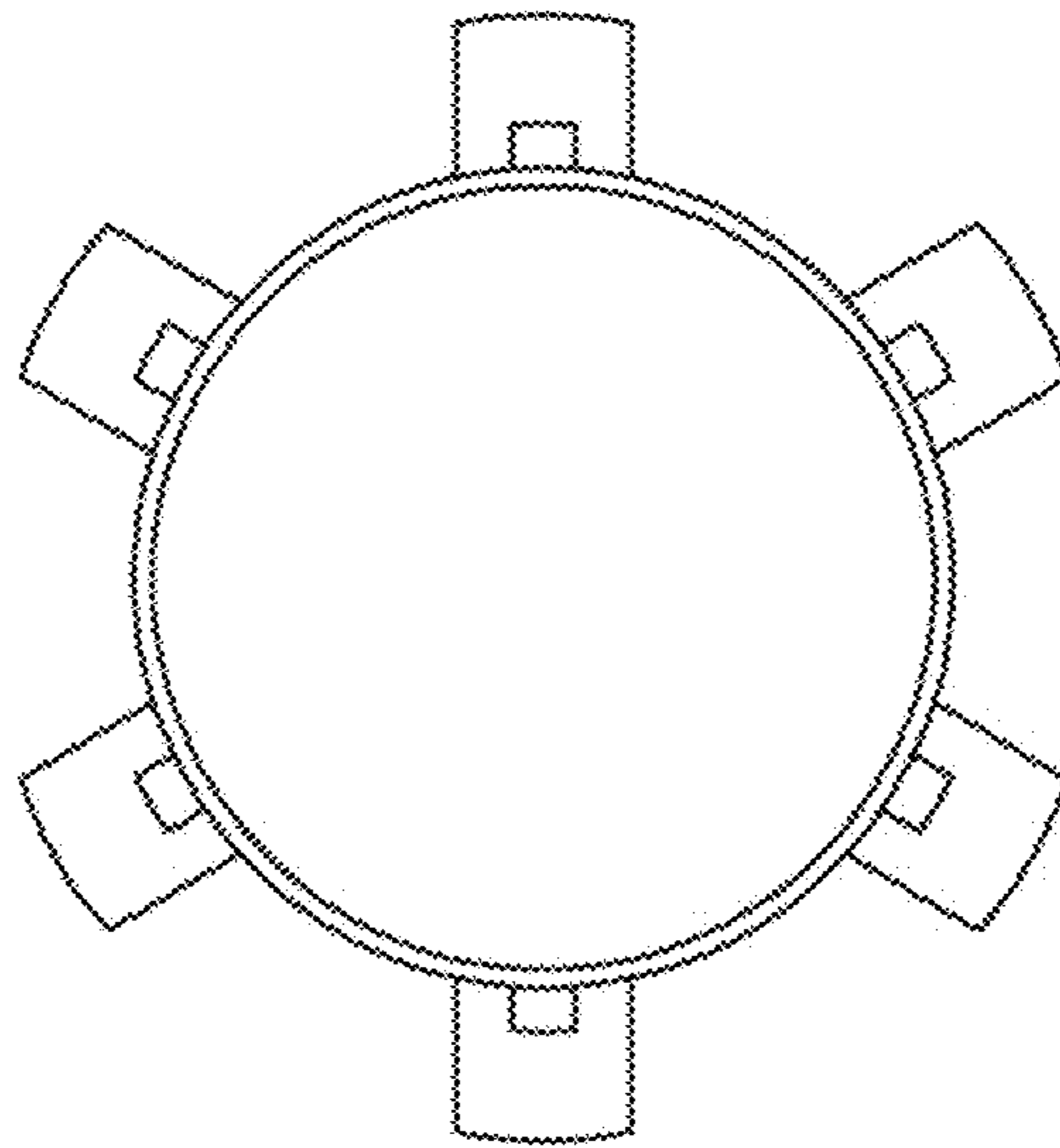


Figure 59

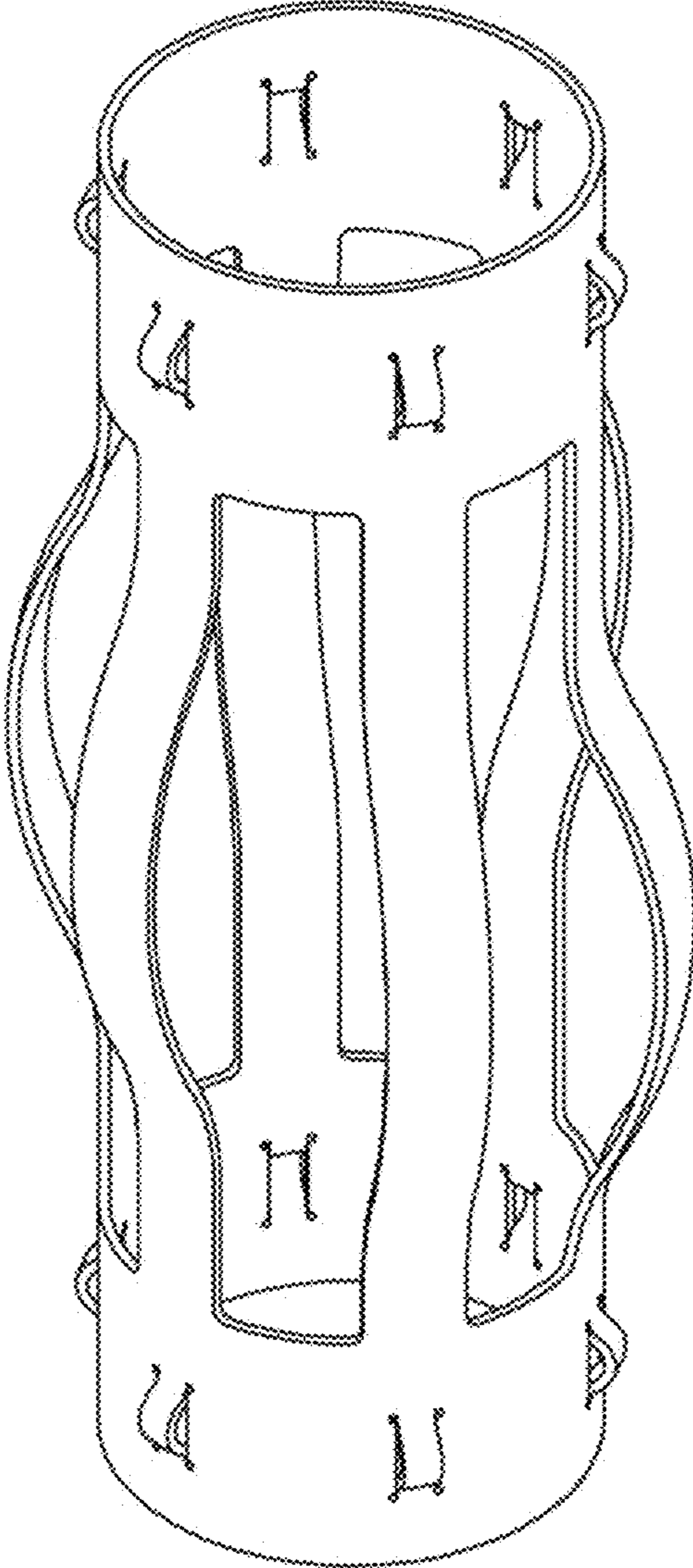


Figure 60

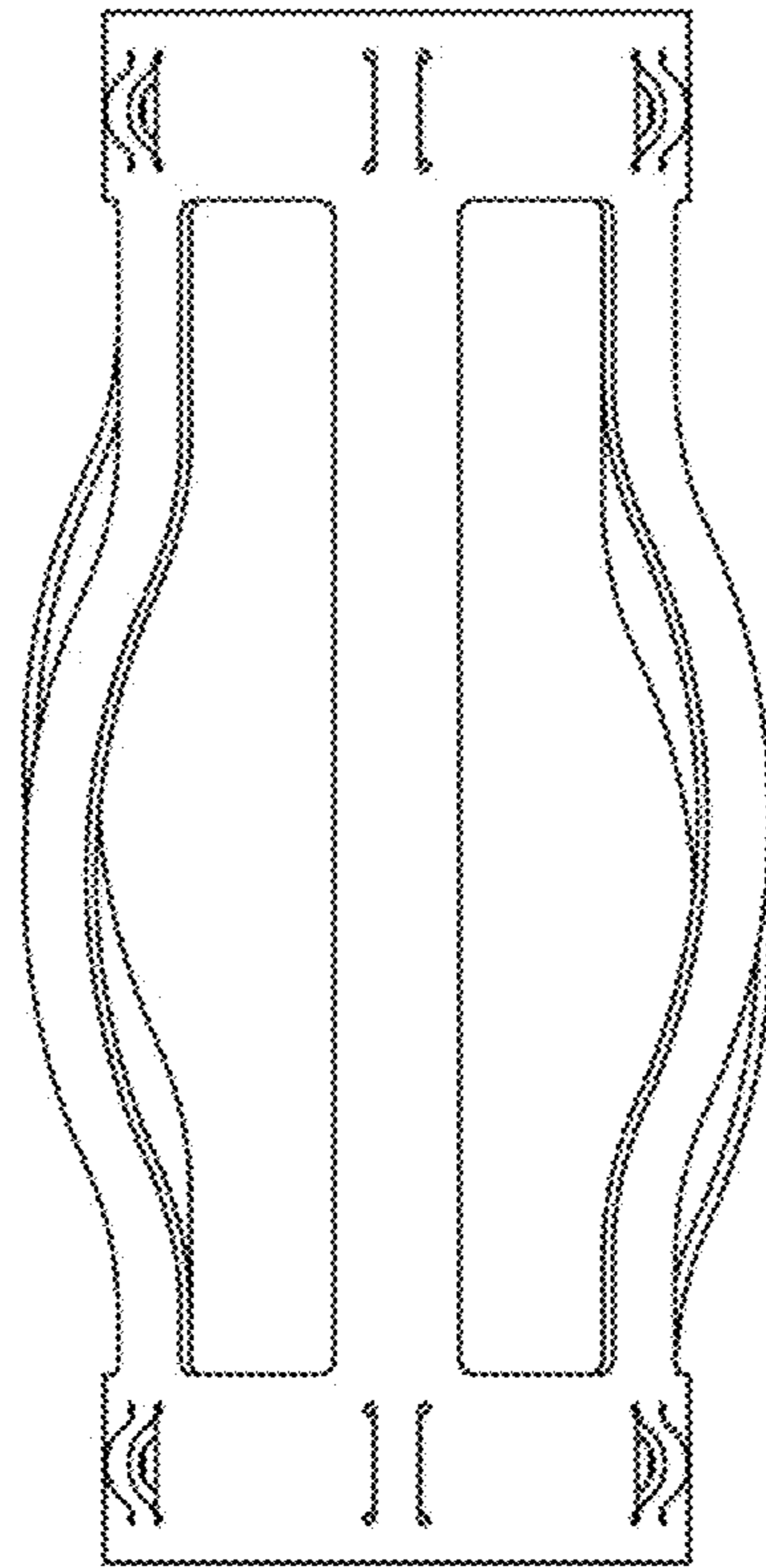


Figure 61

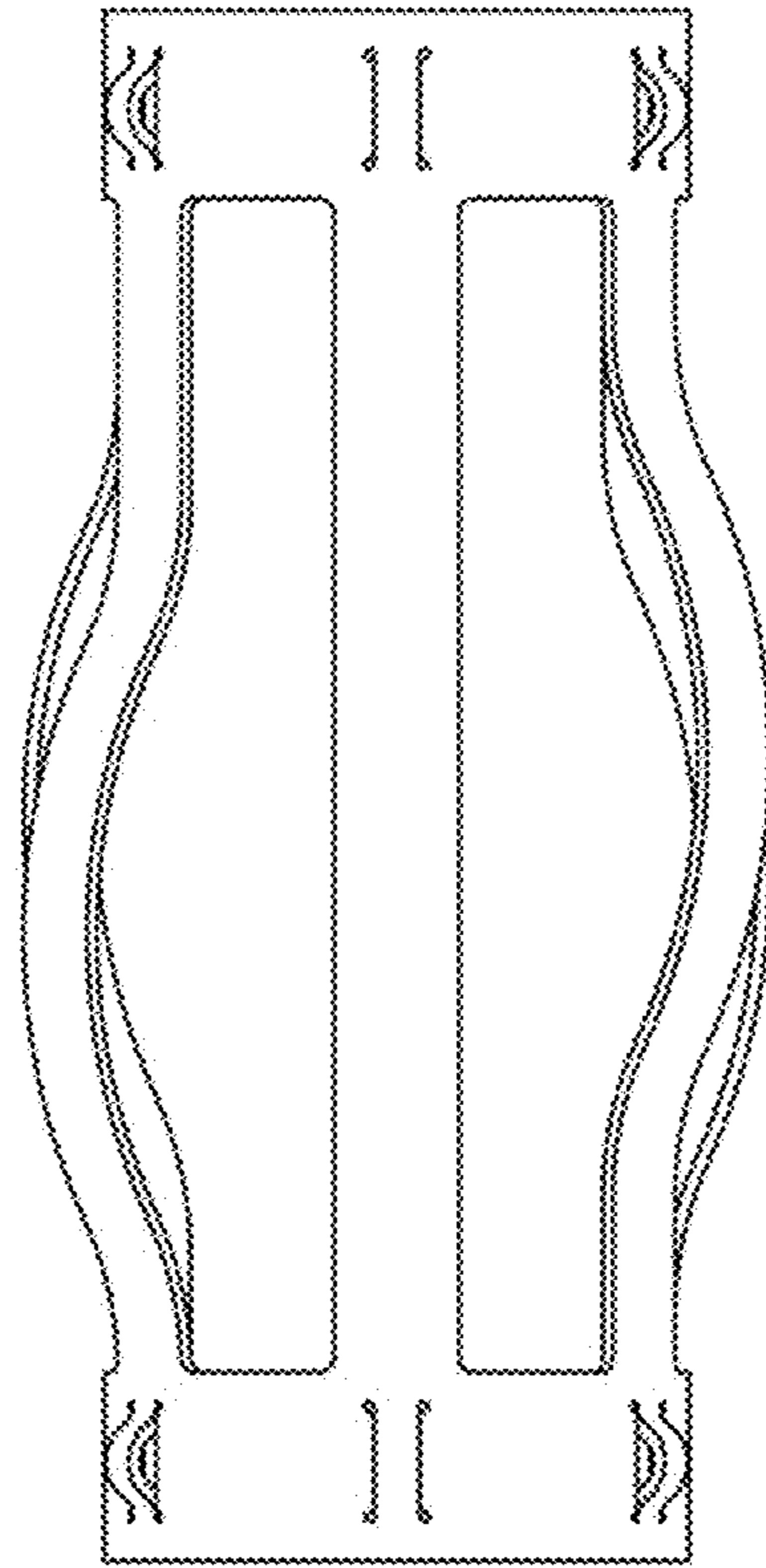


Figure 62

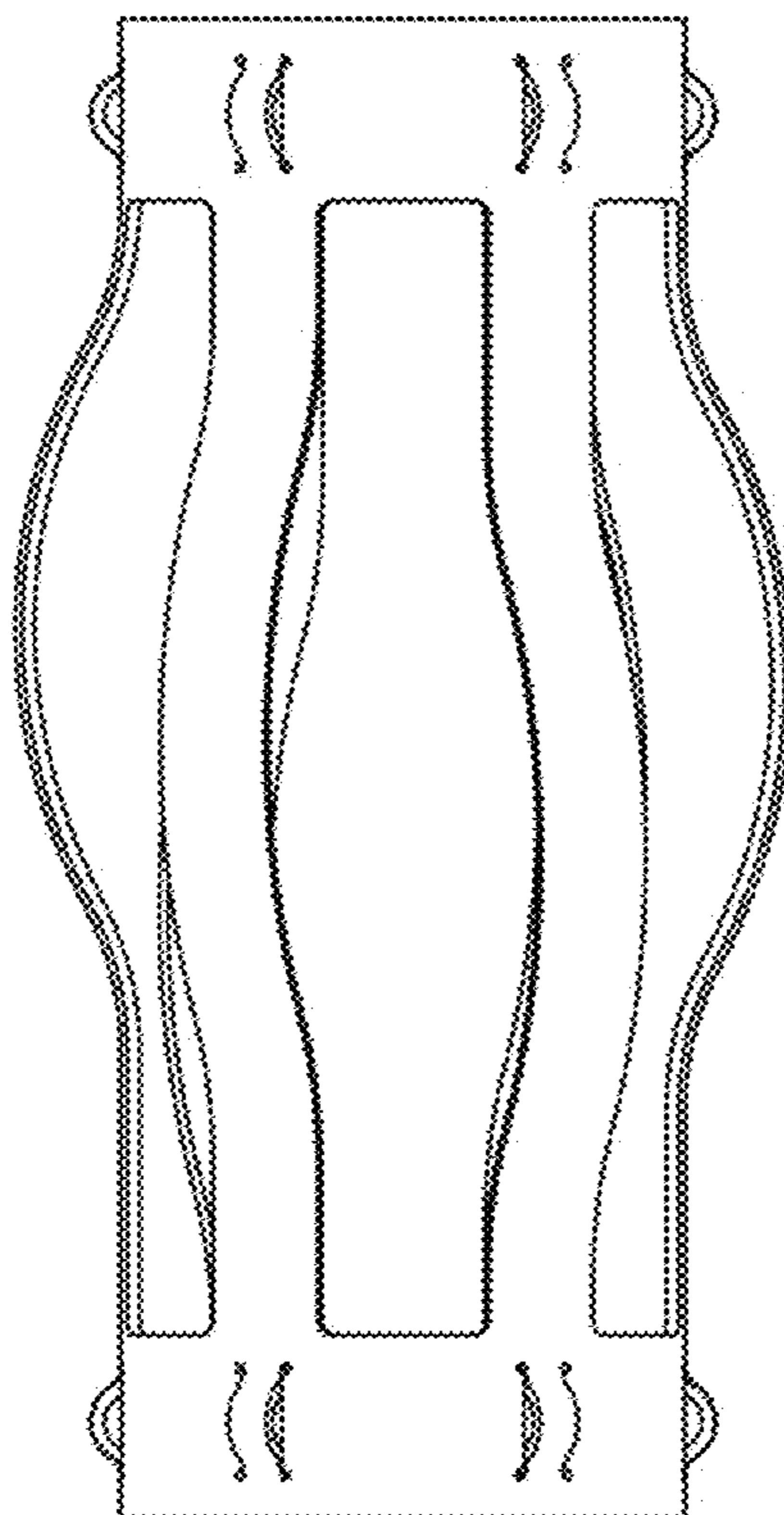


Figure 63

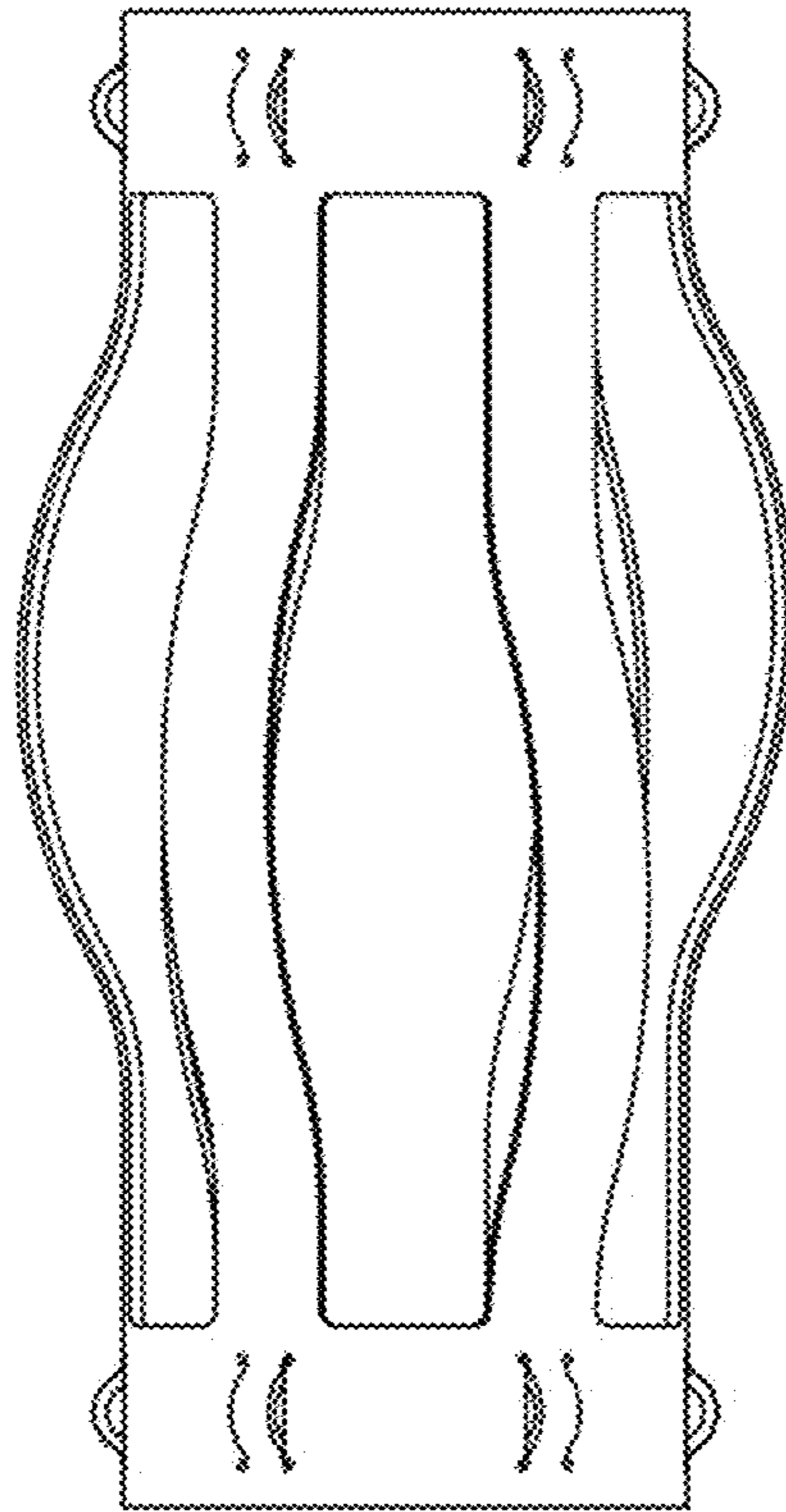


Figure 64



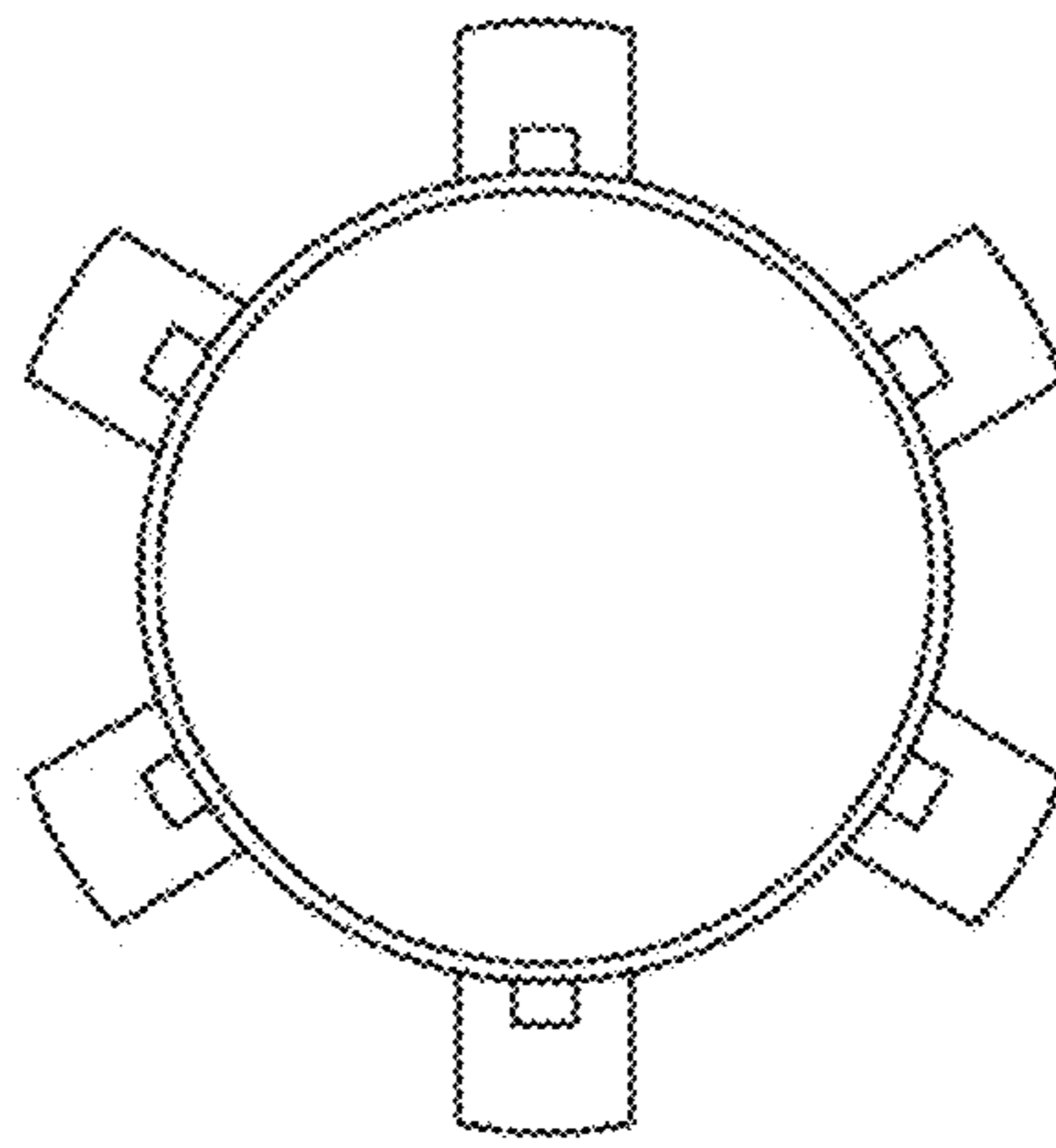


Figure 65

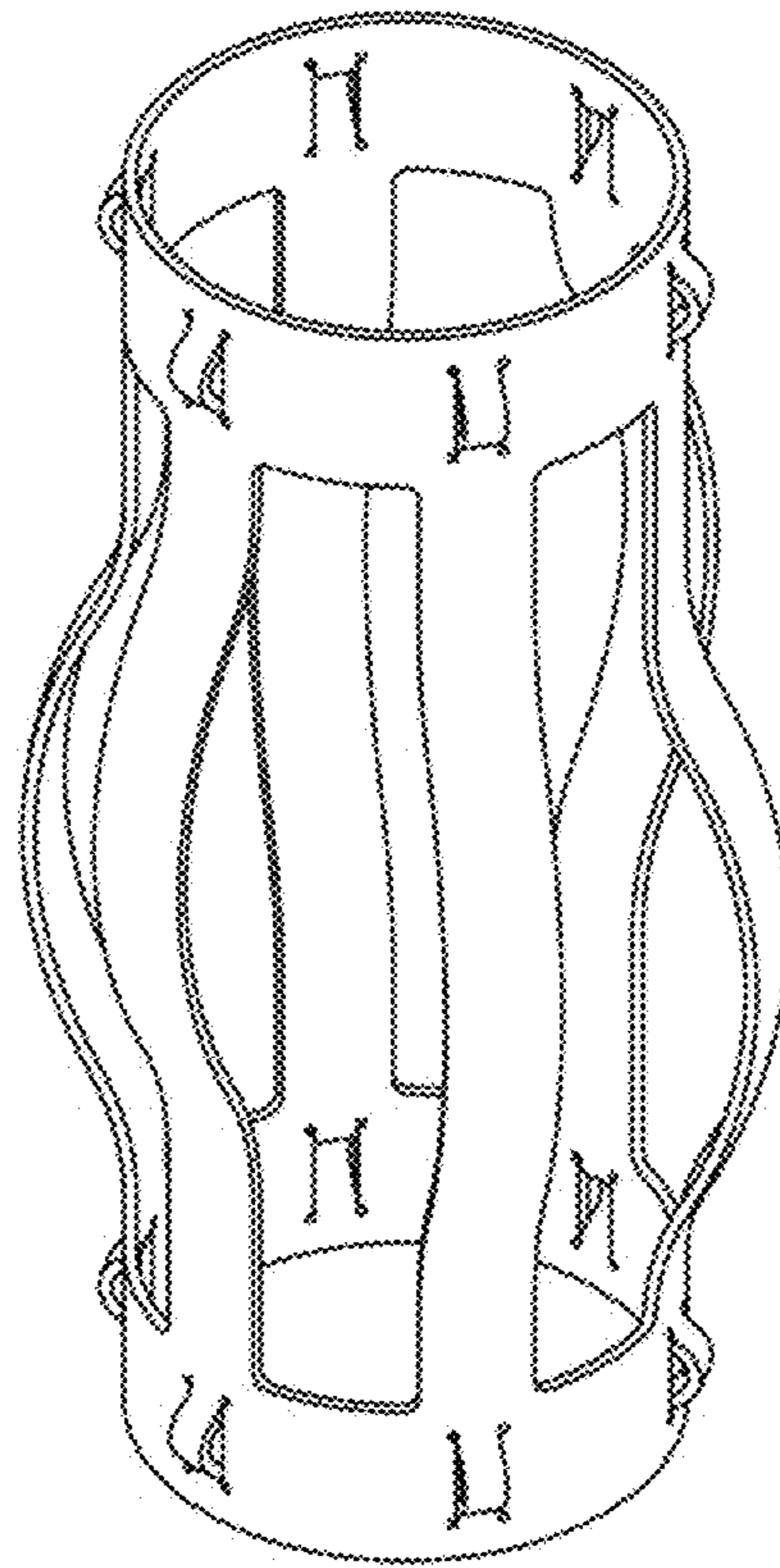


Figure 66

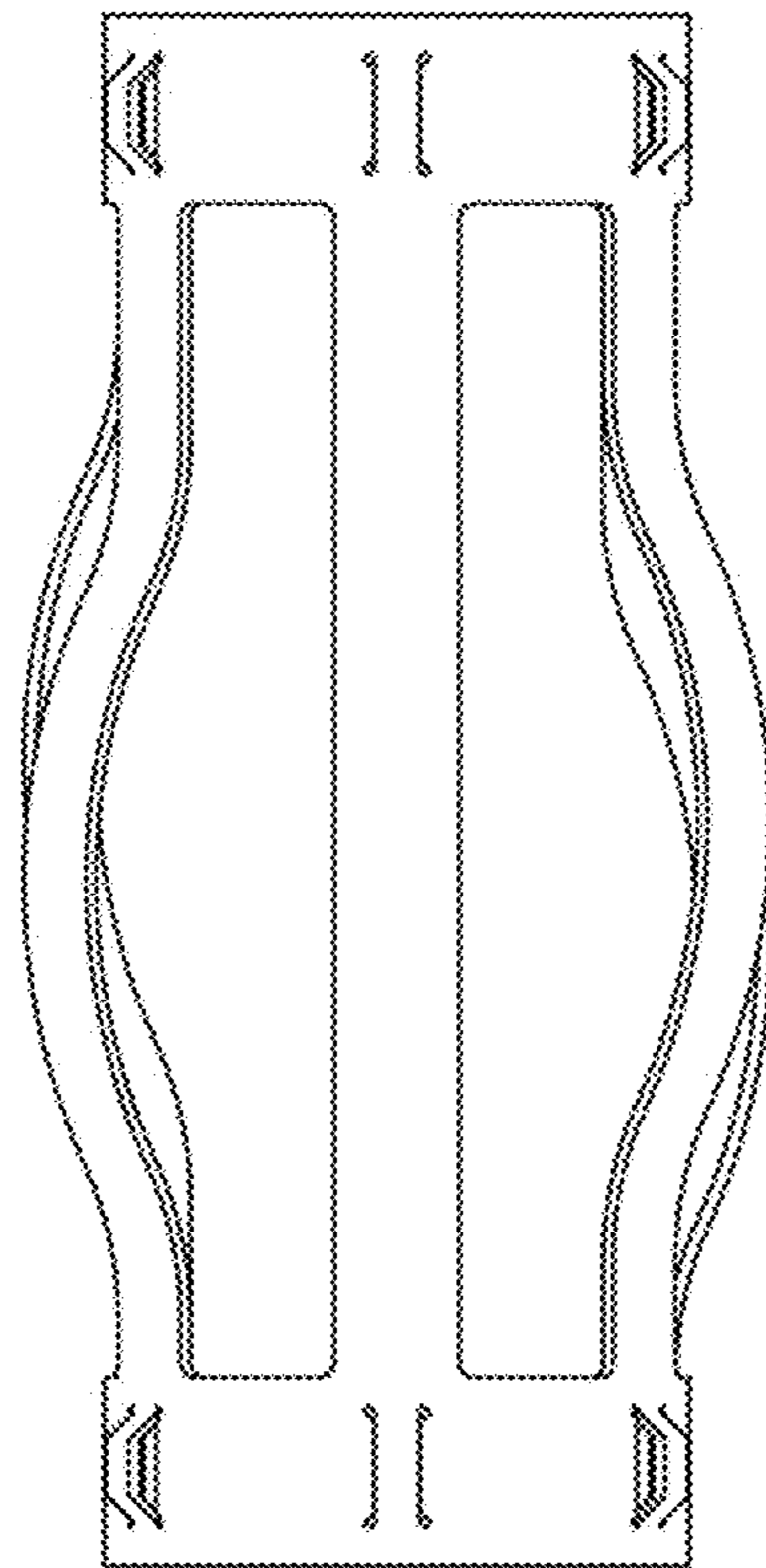


Figure 67

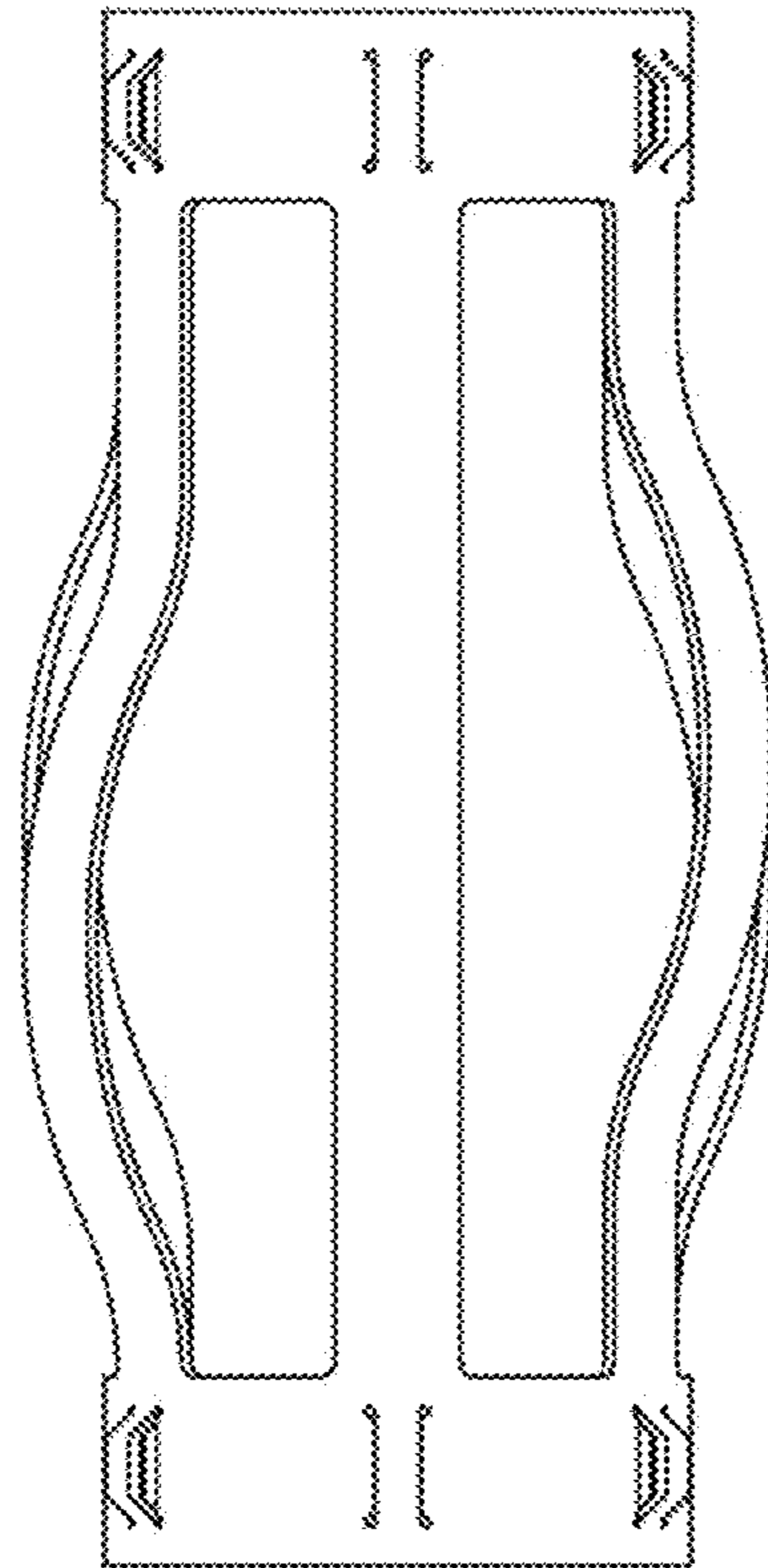


Figure 68

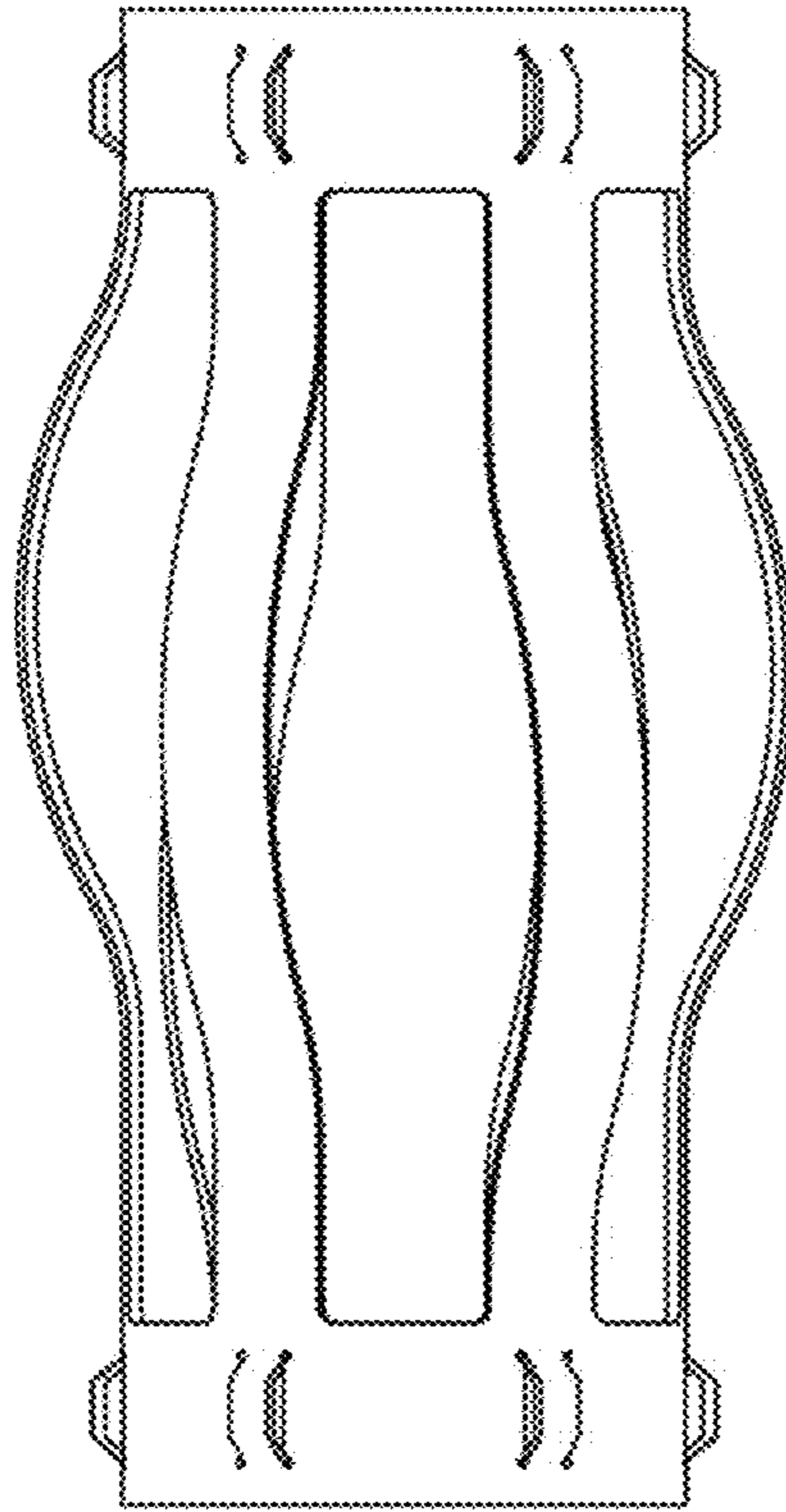


Figure 69

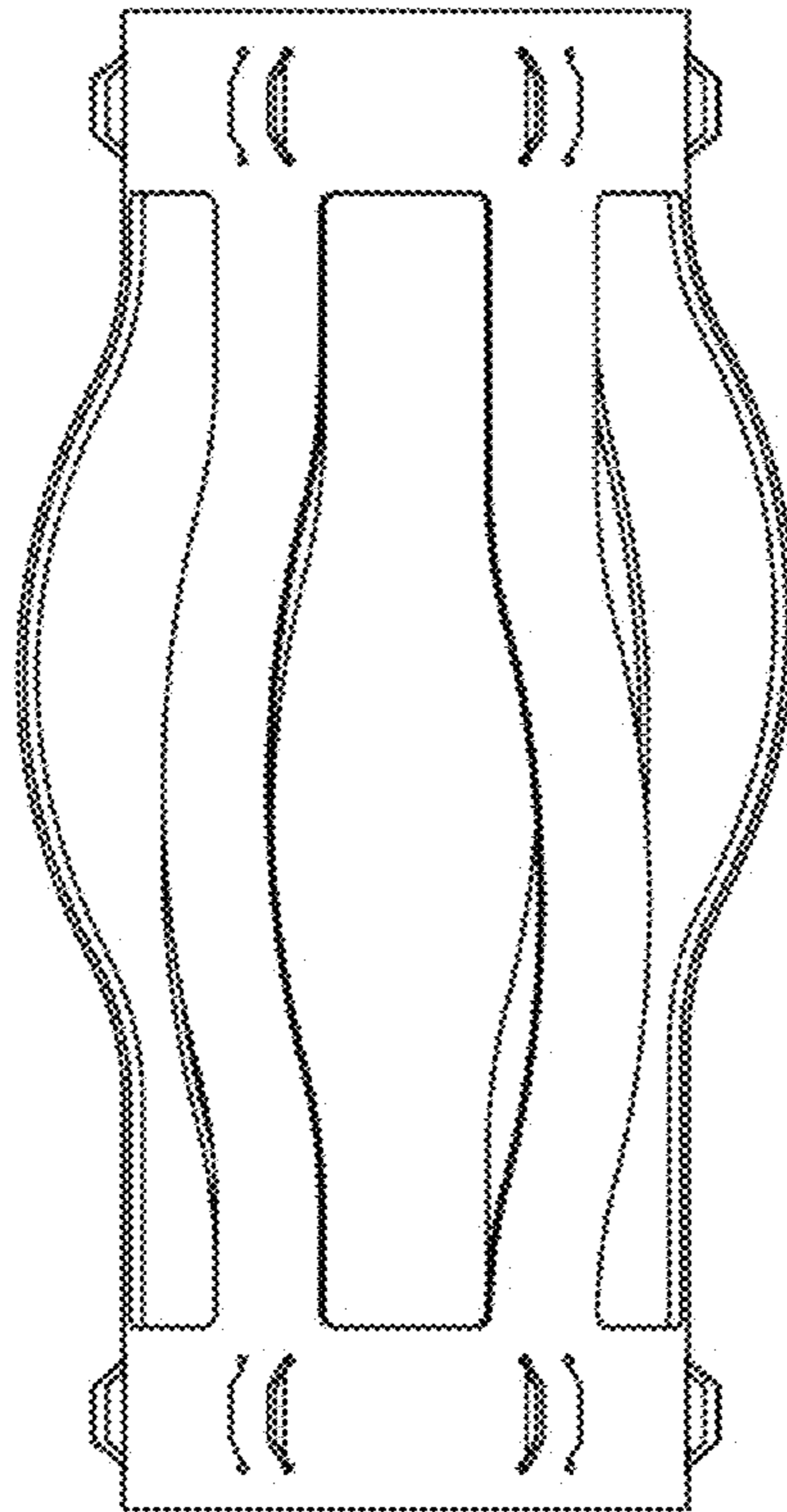


Figure 70

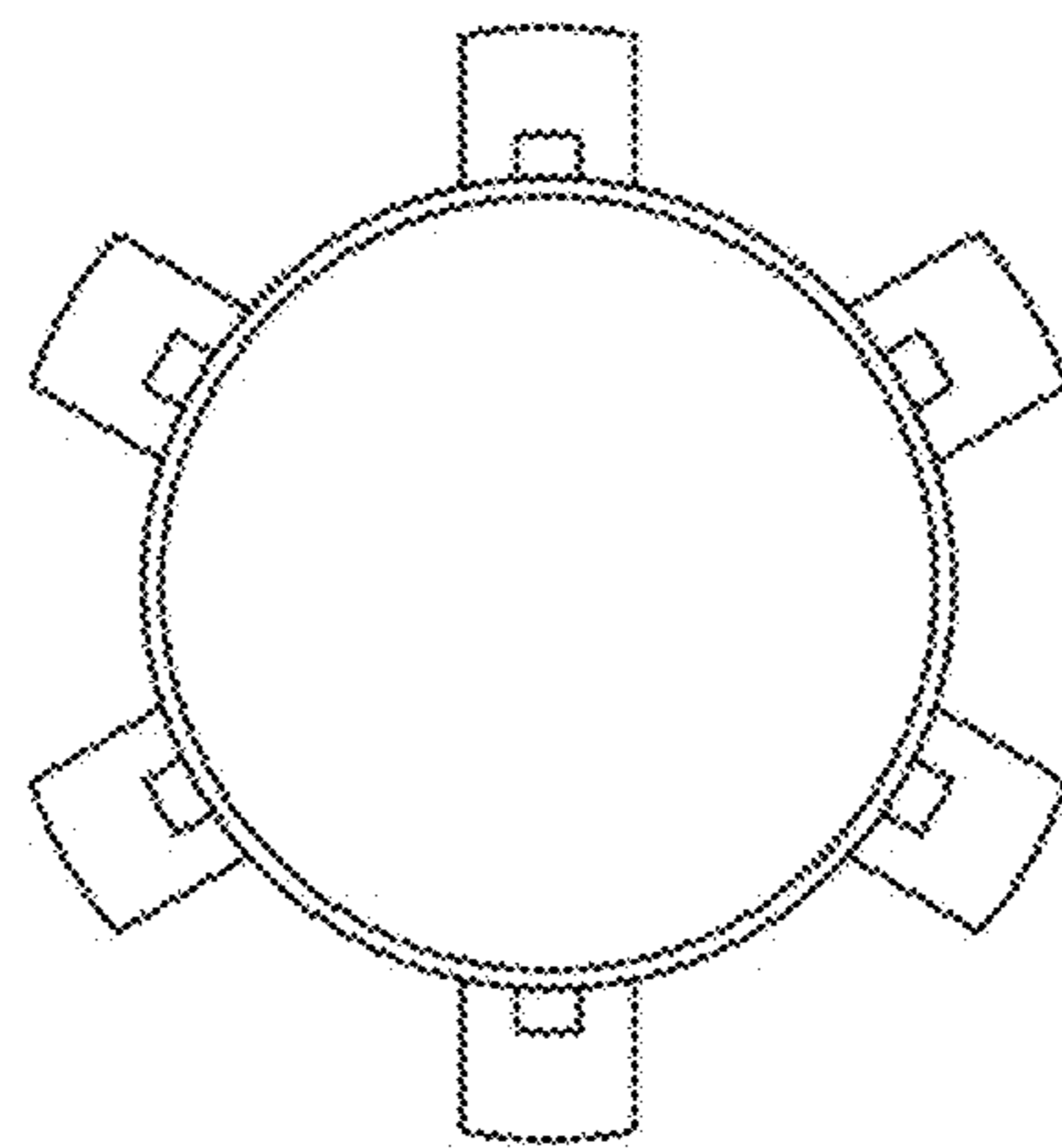


Figure 71



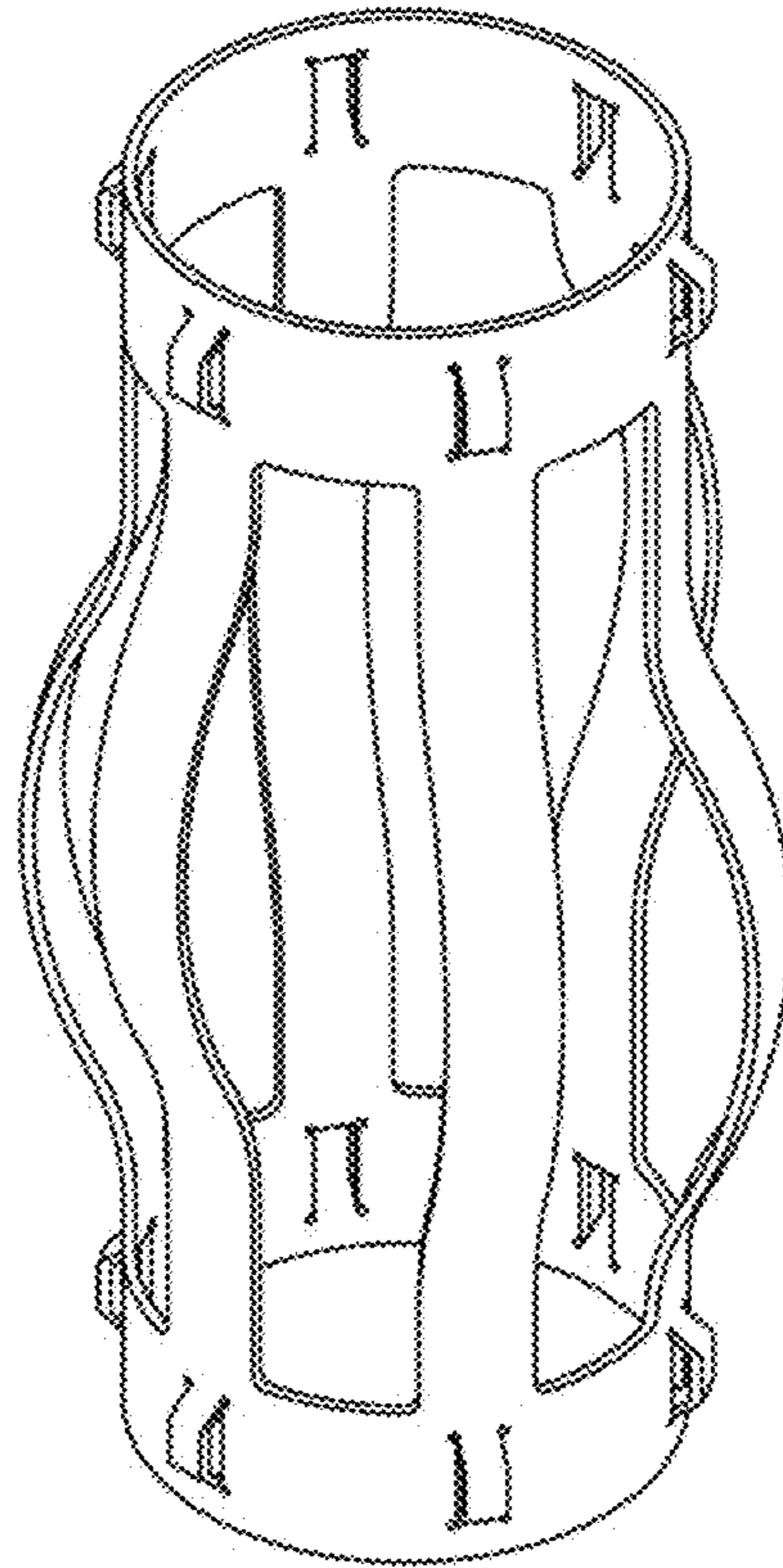


Figure 72

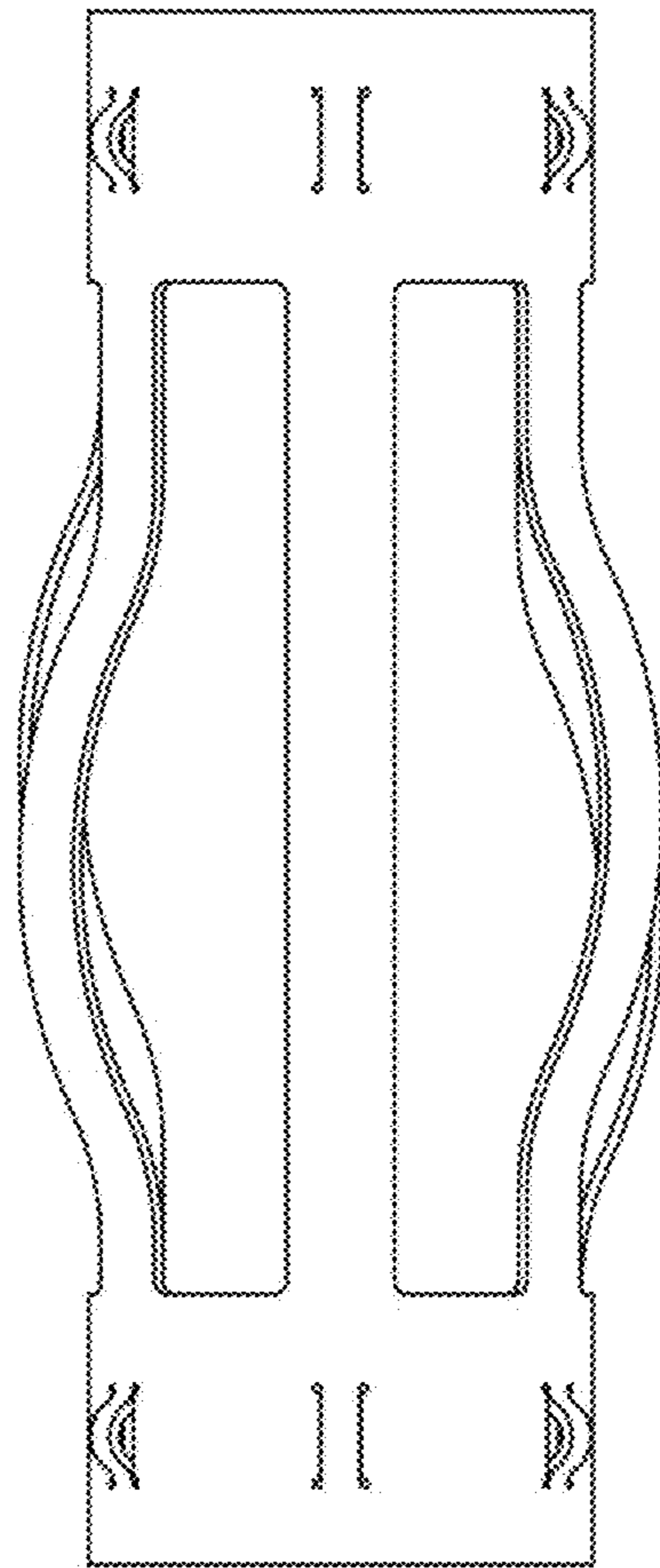


Figure 73

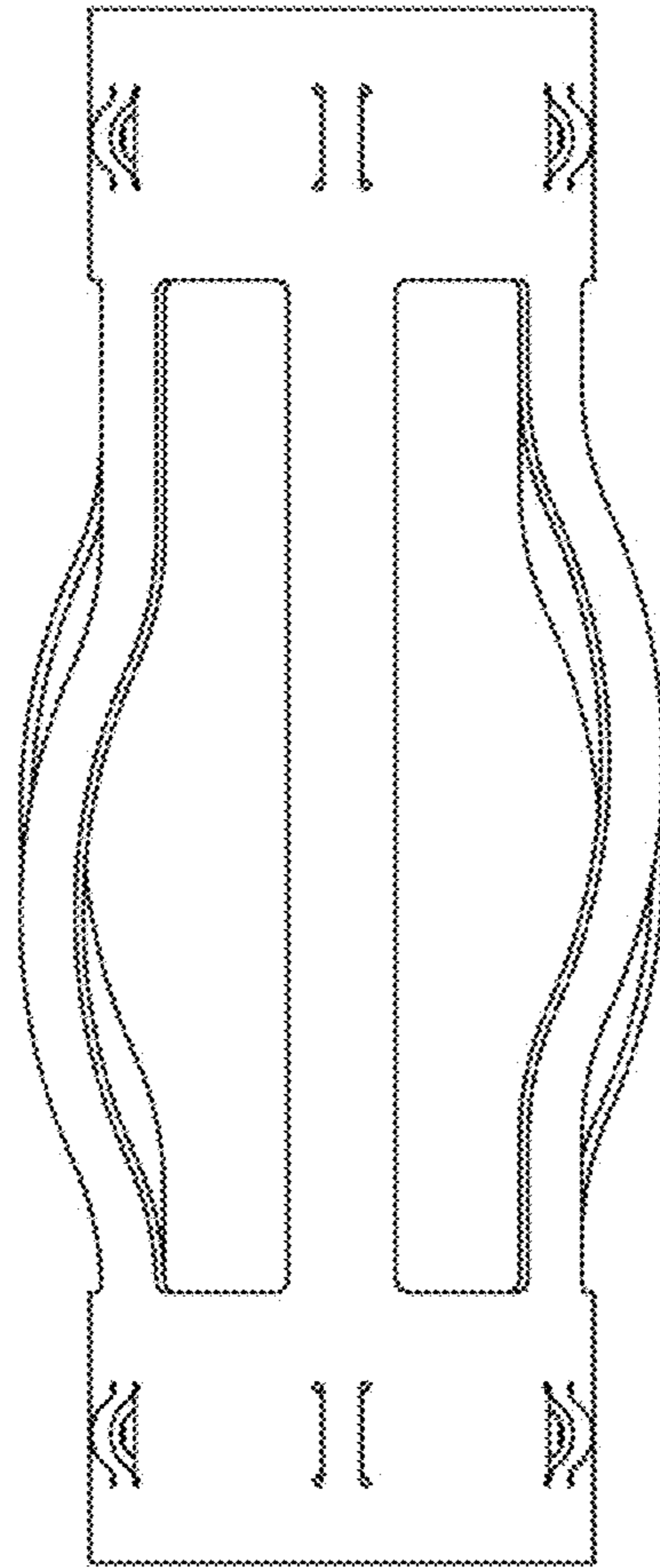


Figure 74

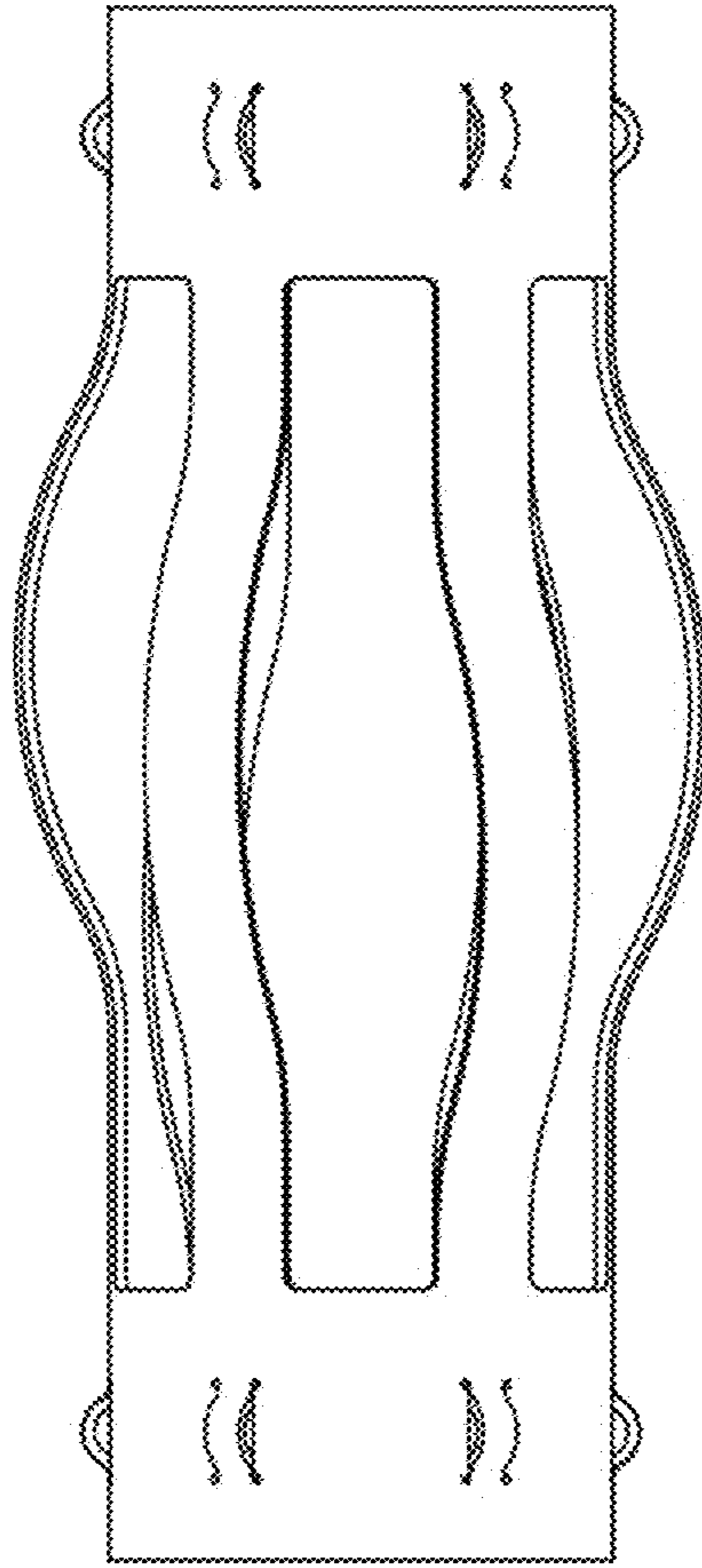


Figure 75

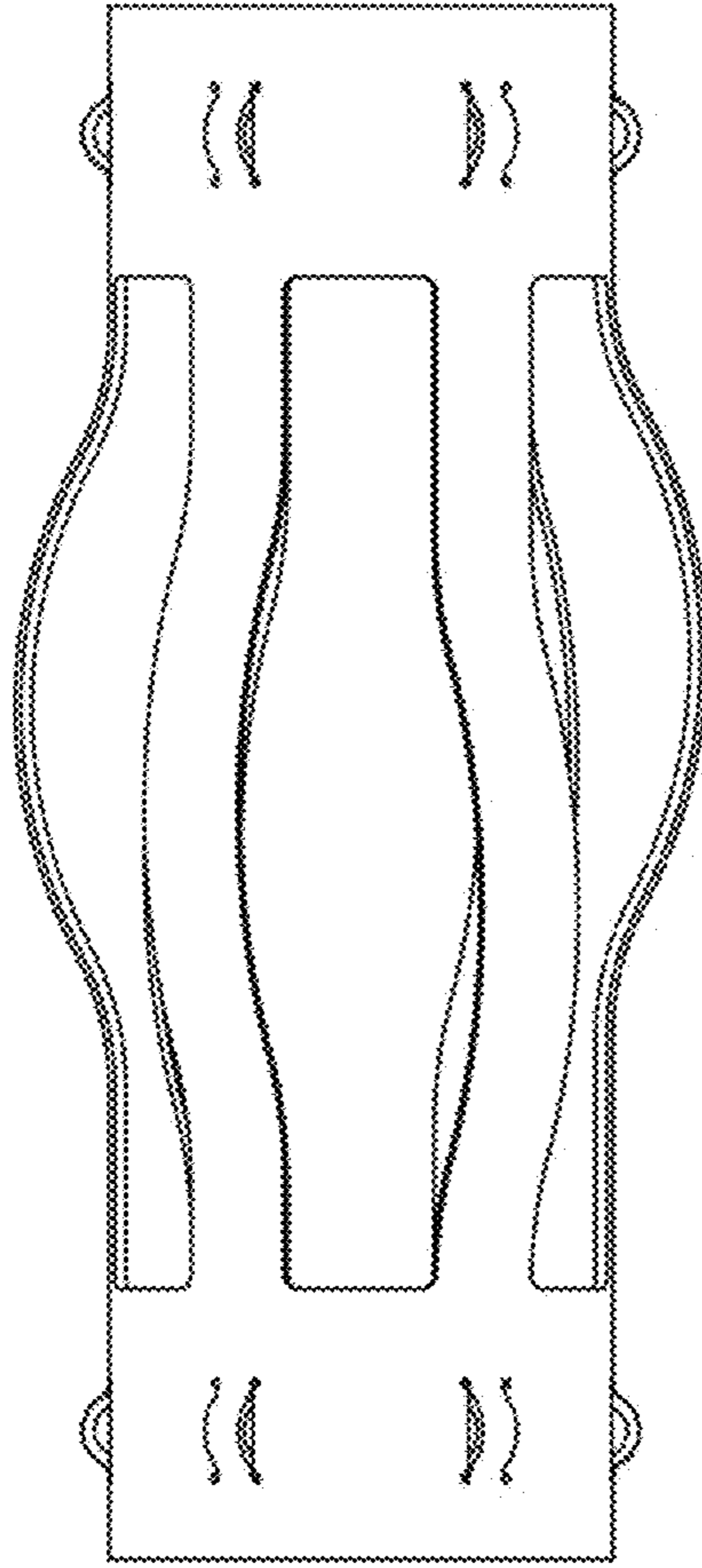


Figure 76

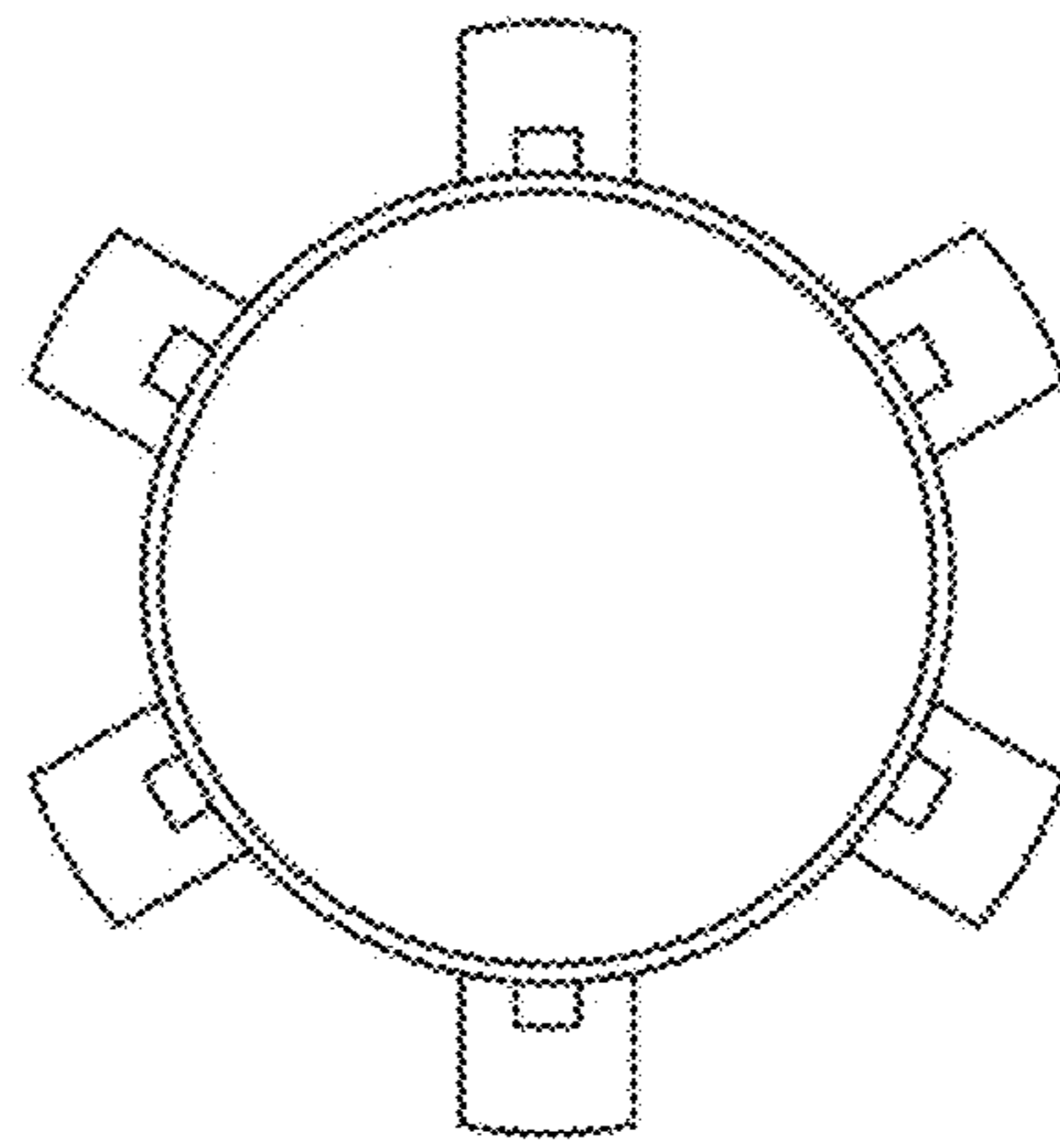


Figure 77

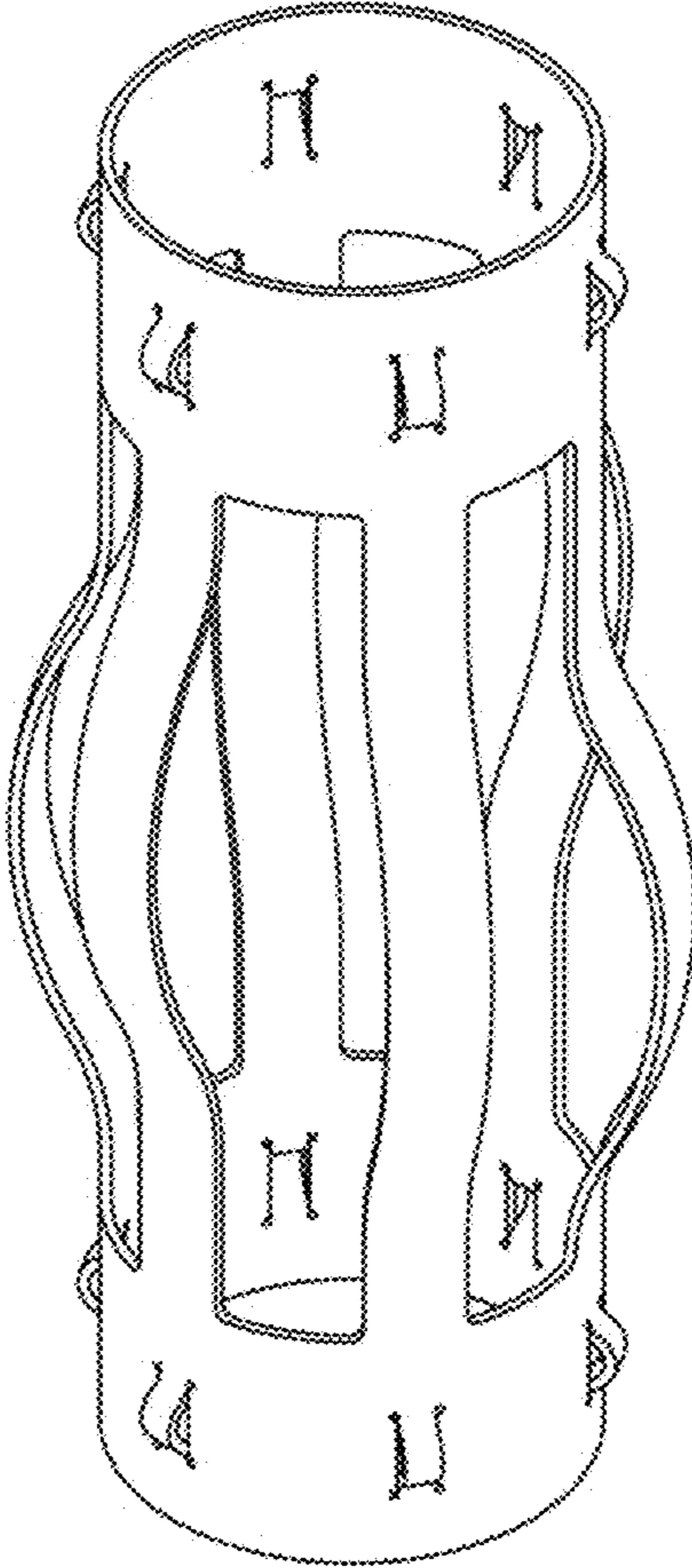


Figure 78