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

(10) **Patent No.:** **US D668,131 S**  
(45) **Date of Patent:** **\*\* Oct. 2, 2012**

(54) **WINDING CORE**

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

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(51) **LOC (9) Cl.** ..... **08-05**

(52) **U.S. Cl.** ..... **D8/356**

(58) **Field of Classification Search** ..... 248/68.1,  
248/49, 51, 56, 60, 176.1, 304, 305, 339,  
248/217.2; D8/356, 354, 349, 360, 355,  
D8/361, 362, 366, 367, 380, 373, 377, 395;  
D13/155; D6/512; D14/432, 217, 299; 411/431,  
411/372.5; D18/34.9, 56; 24/698; 294/16;  
138/106

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

429,041 A \* 5/1890 Lynch ..... 138/106  
2,831,948 A \* 4/1958 Fraser ..... 200/295  
3,358,256 A \* 12/1967 Naito et al. .... 336/83  
3,540,669 A 11/1970 Schmidt et al.  
3,579,859 A \* 5/1971 Malenge ..... 434/96  
4,185,125 A \* 1/1980 Sakakibara et al. .... 426/439  
4,576,364 A \* 3/1986 O'Fearna ..... 256/24  
5,070,597 A \* 12/1991 Holt et al. .... 29/887  
5,943,836 A \* 8/1999 Kassardjian ..... 52/301  
6,189,575 B1 \* 2/2001 Ions et al. .... 138/106  
6,204,584 B1 \* 3/2001 Muszynski ..... 310/156.08  
6,226,865 B1 \* 5/2001 Tanikawa et al. .... 29/872  
D513,471 S \* 1/2006 Sato et al. .... D8/382

D534,416 S \* 1/2007 Kelleghan ..... D8/356  
D549,753 S \* 8/2007 Kanemitsu ..... D15/148  
7,364,111 B2 \* 4/2008 Schleucher ..... 242/580  
2005/0076602 A1 \* 4/2005 Routhier ..... 52/698

**FOREIGN PATENT DOCUMENTS**

JP 47-2810 B 1/1972  
JP 1-162467 U 11/1989  
JP 2004-106225 A 4/2004  
JP 2005-298094 A 10/2005

\* cited by examiner

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(74) *Attorney, Agent, or Firm* — Dennis R. Haszko

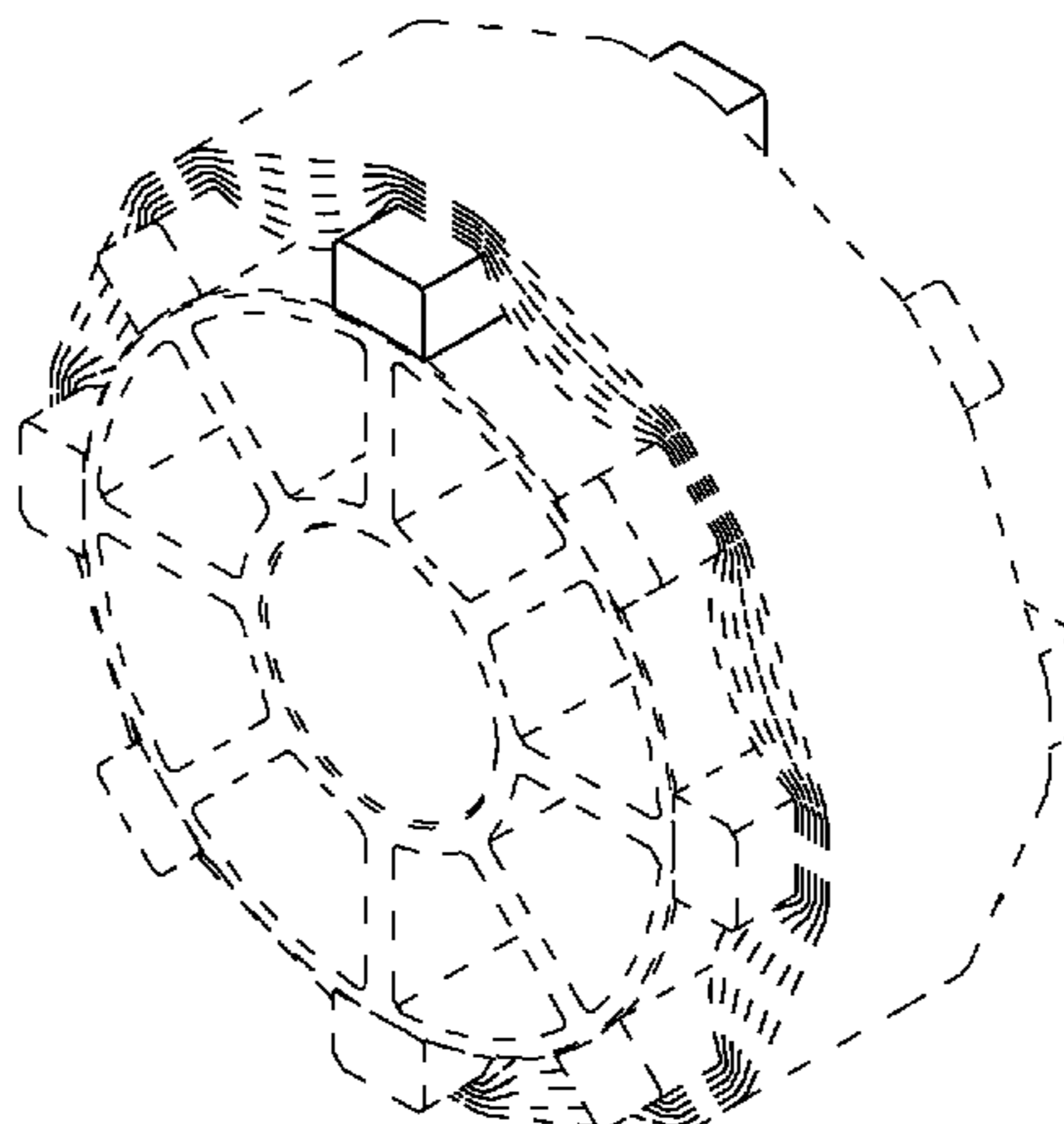
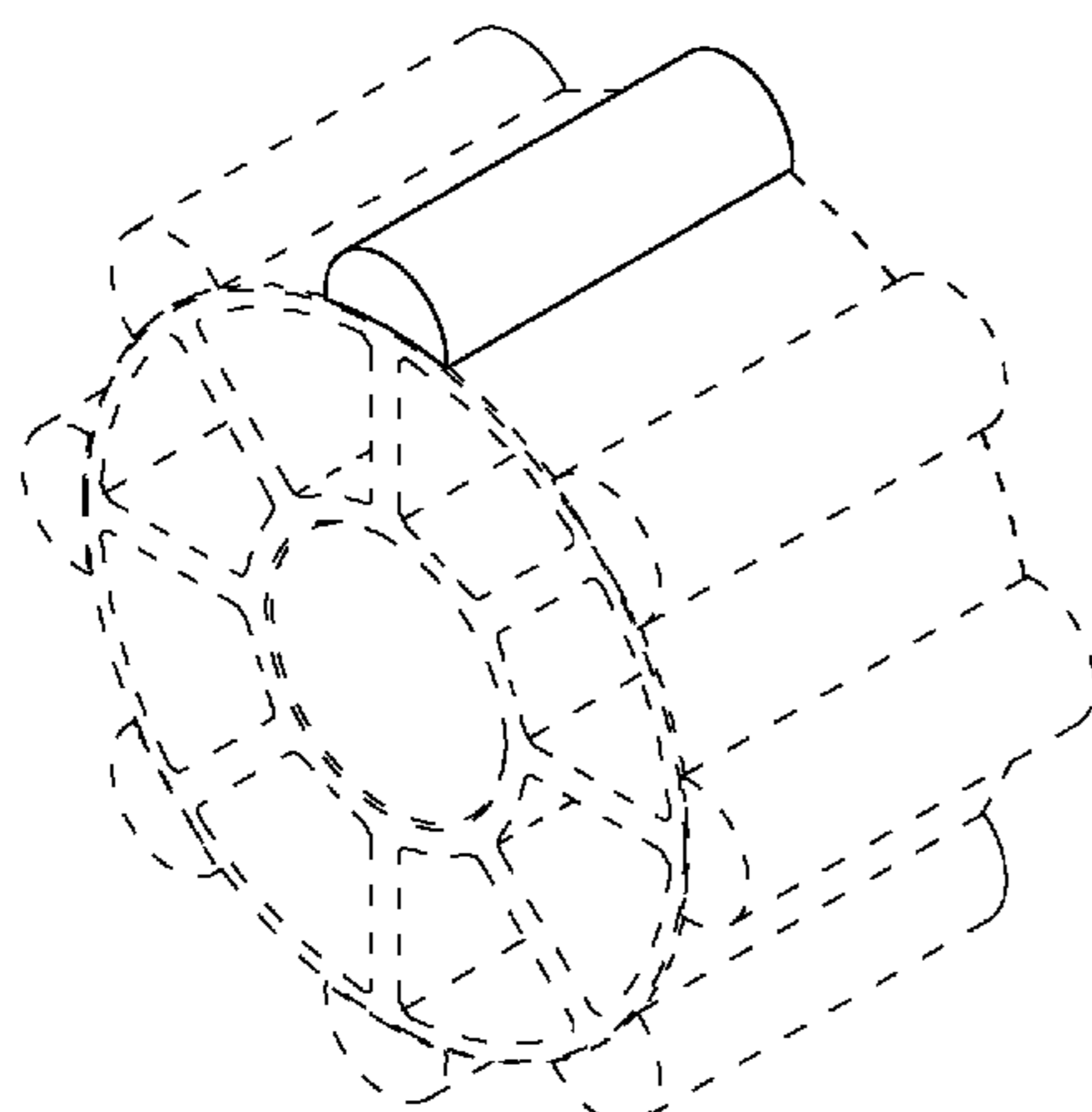
(57) **CLAIM**

The ornamental design for a winding core, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a first embodiment of the winding core;  
FIG. 2 is a front view thereof;  
FIG. 3 is a plan view thereof;  
FIG. 4 is a bottom view thereof;  
FIG. 5 is a right side view thereof;  
FIG. 6 is a sectional view thereof taken at 6-6 of FIG. 3;  
FIG. 7 is a reference view thereof showing the actual use;  
FIG. 8 is a perspective view of a second embodiment of the winding core;  
FIG. 9 is a front view thereof;  
FIG. 10 is a plan view thereof;  
FIG. 11 is a bottom view thereof;  
FIG. 12 is a right side view thereof;  
FIG. 13 is a sectional view thereof taken at 13-13 of FIG. 10;  
FIG. 14 is a reference view thereof showing the actual use;  
FIG. 15 is a perspective view of a third embodiment of the winding core;  
FIG. 16 is a front view thereof;  
FIG. 17 is a plan view thereof;  
FIG. 18 is a bottom view thereof;  
FIG. 19 is a right side view thereof;  
FIG. 20 is a sectional view thereof taken at 20-20 of FIG. 17;  
and,  
FIG. 21 is a reference view thereof showing the actual use.  
The portions shown in broken lines do not form part of the claimed design.

**1 Claim, 12 Drawing Sheets**



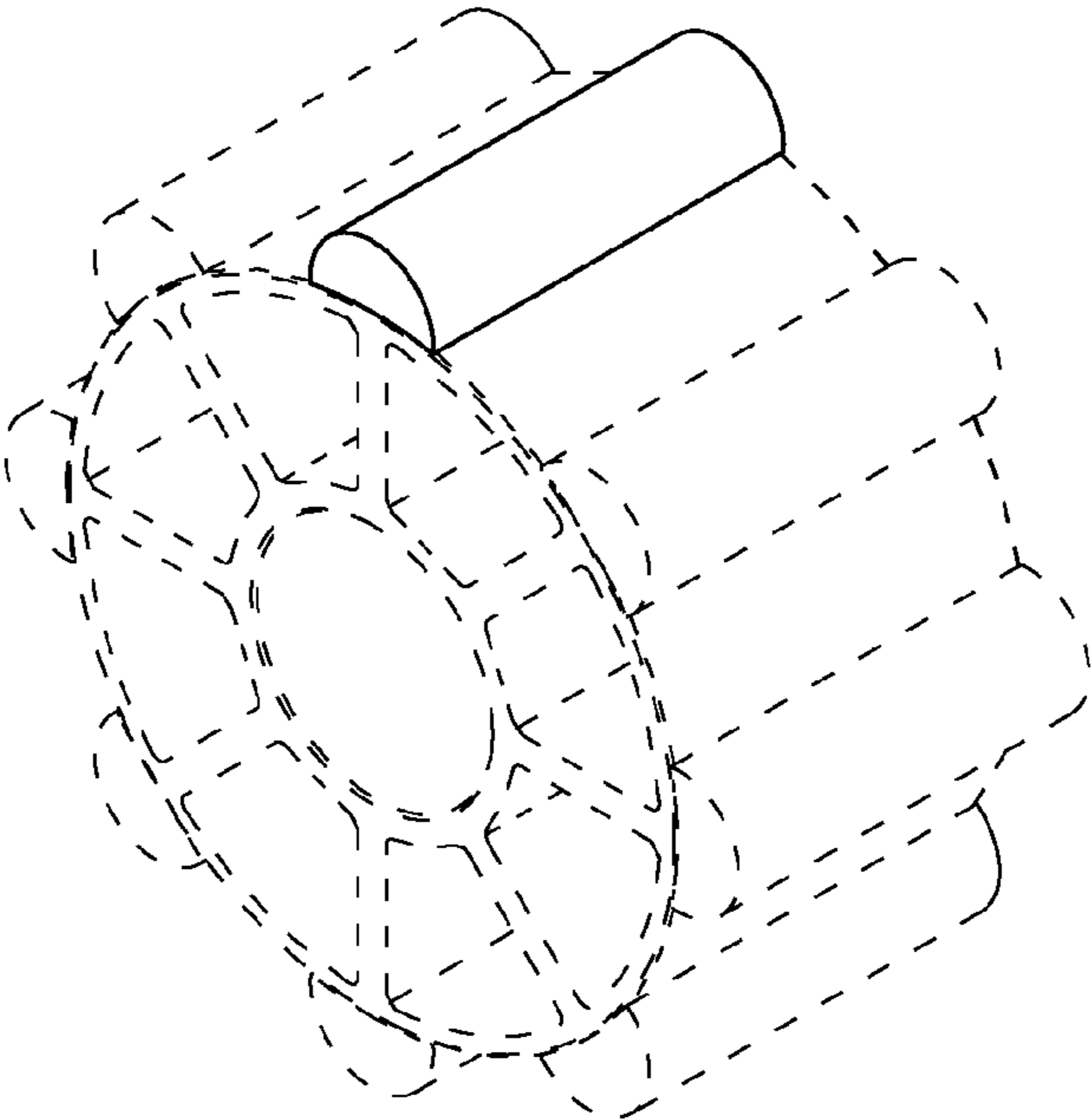


FIG. 1

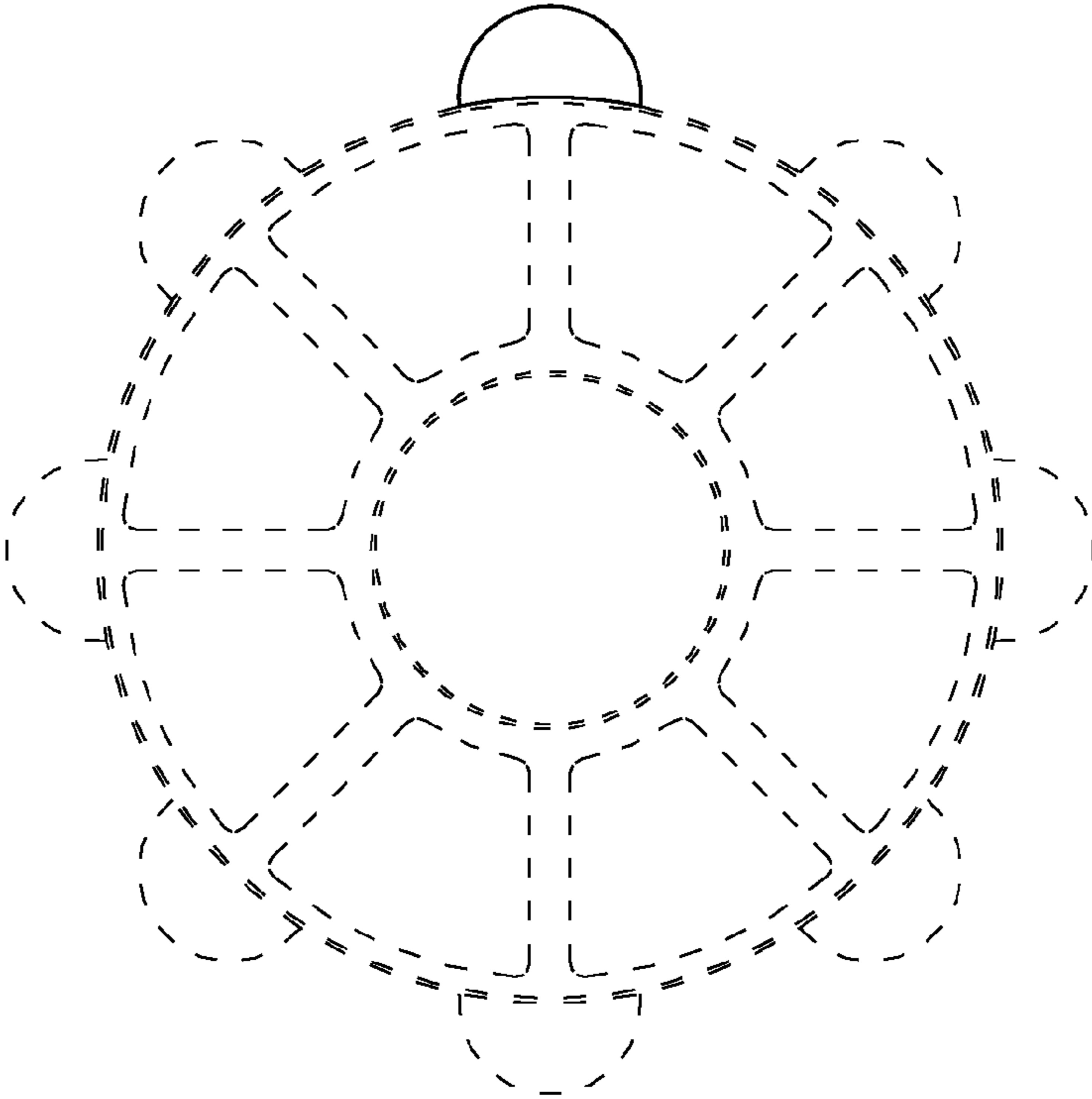


FIG. 2

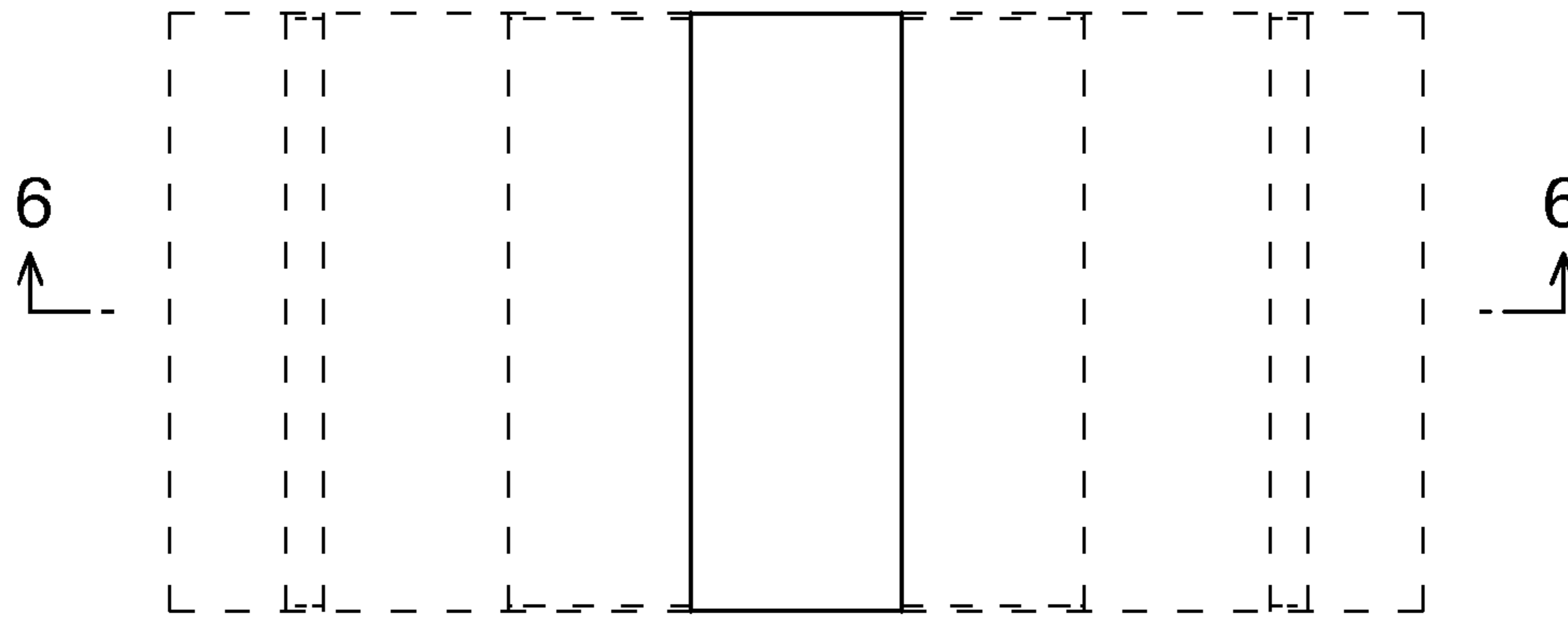


FIG.3

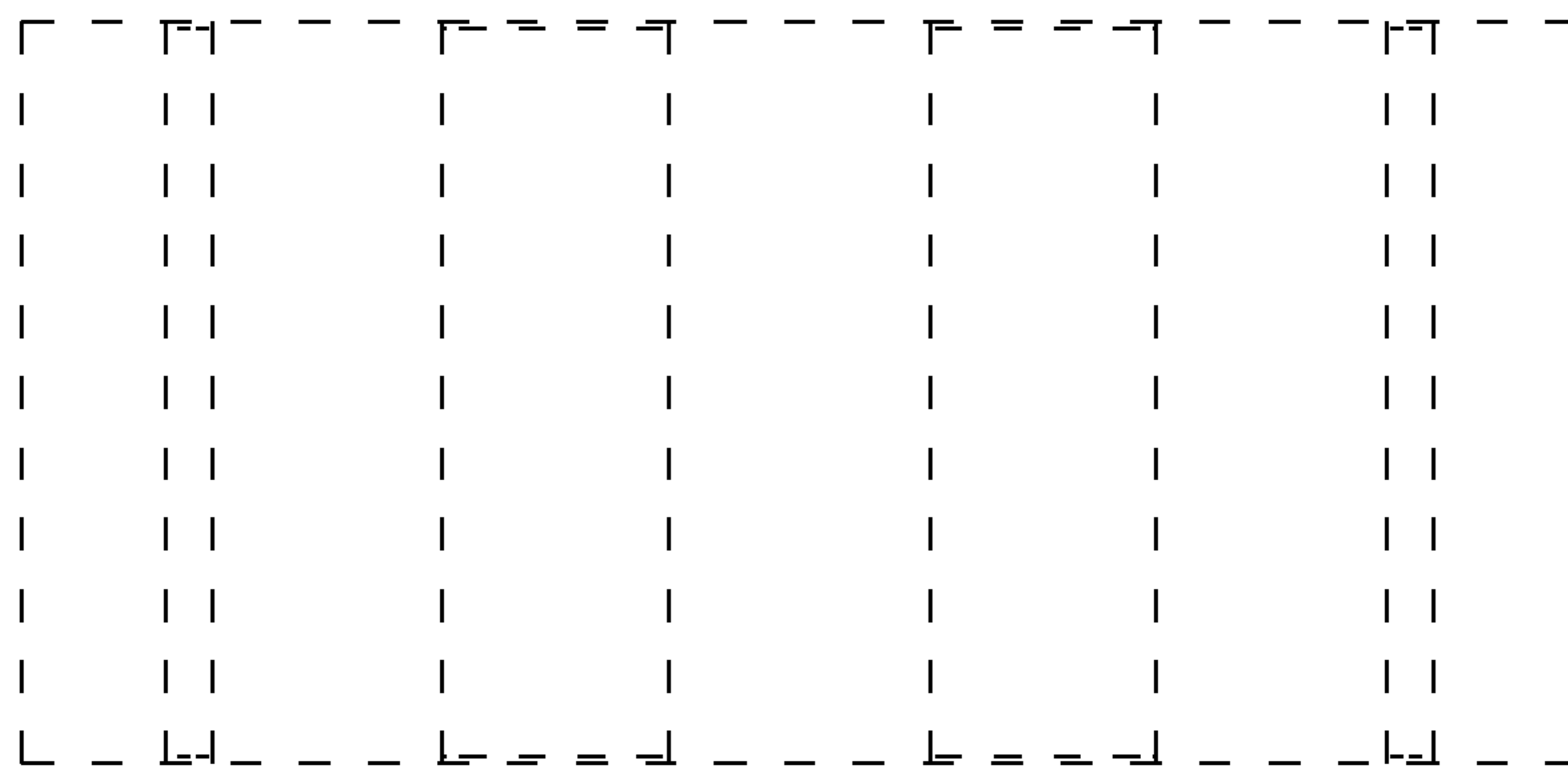


FIG.4

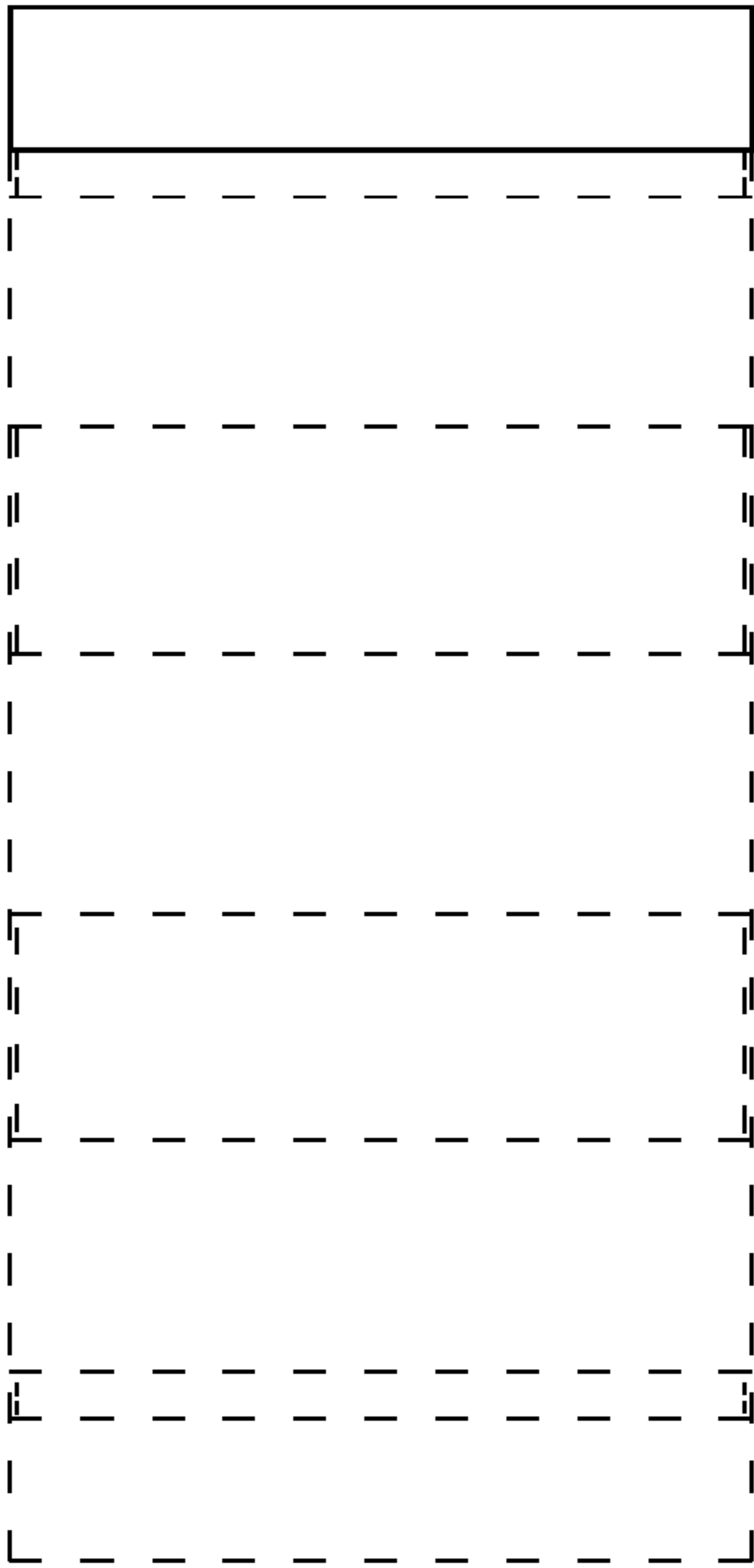


FIG. 5

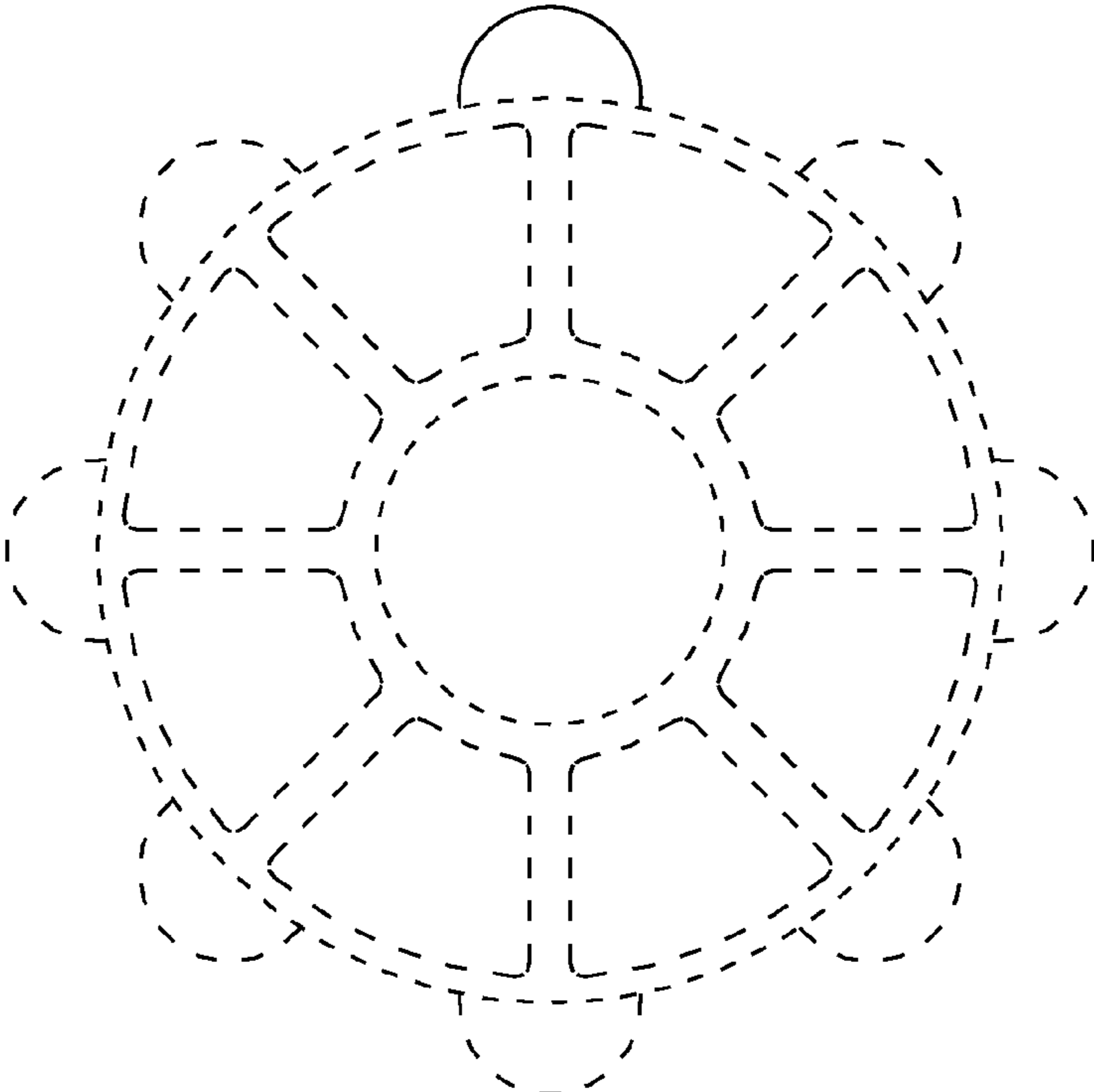


FIG. 6

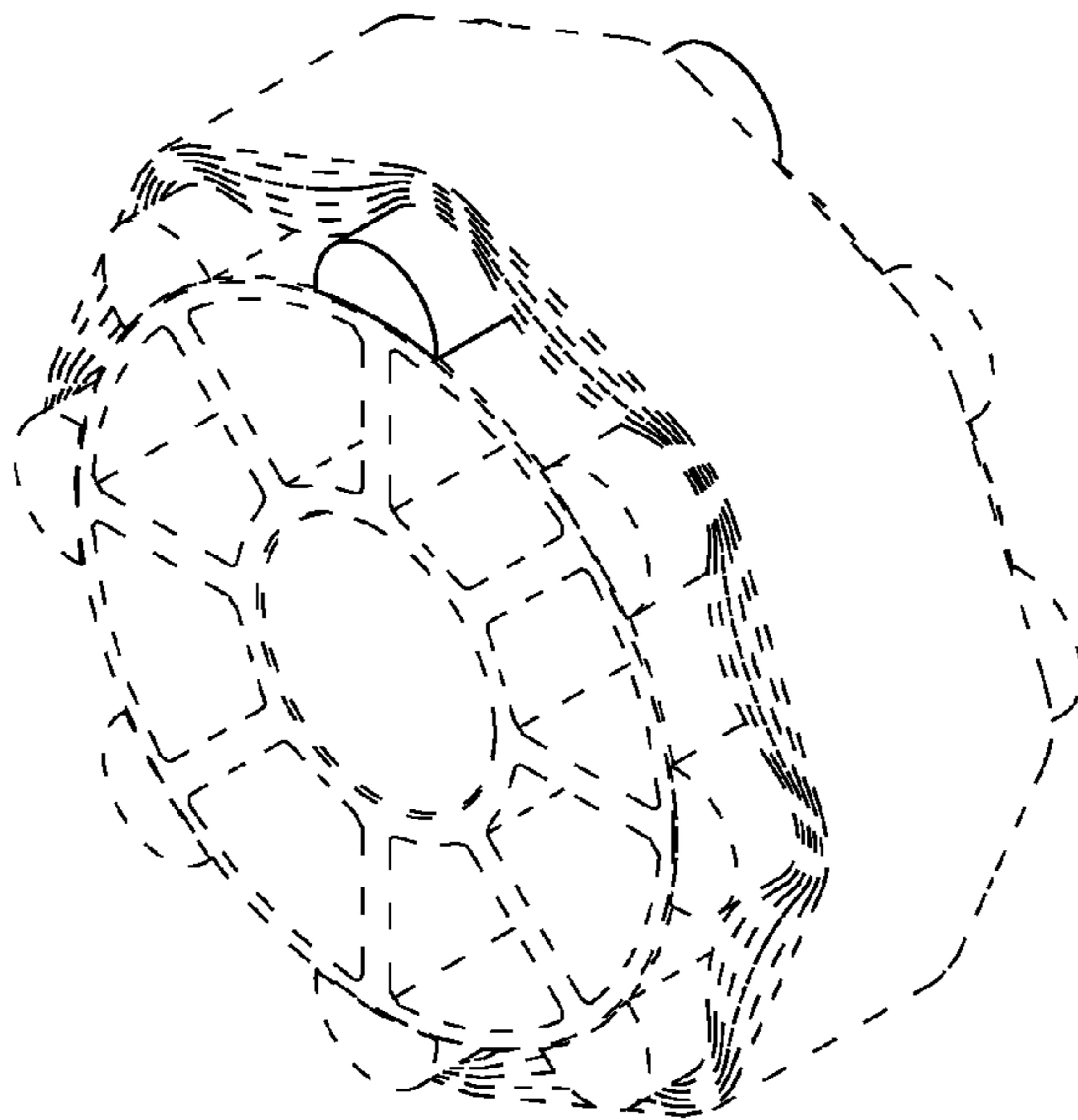


FIG.7

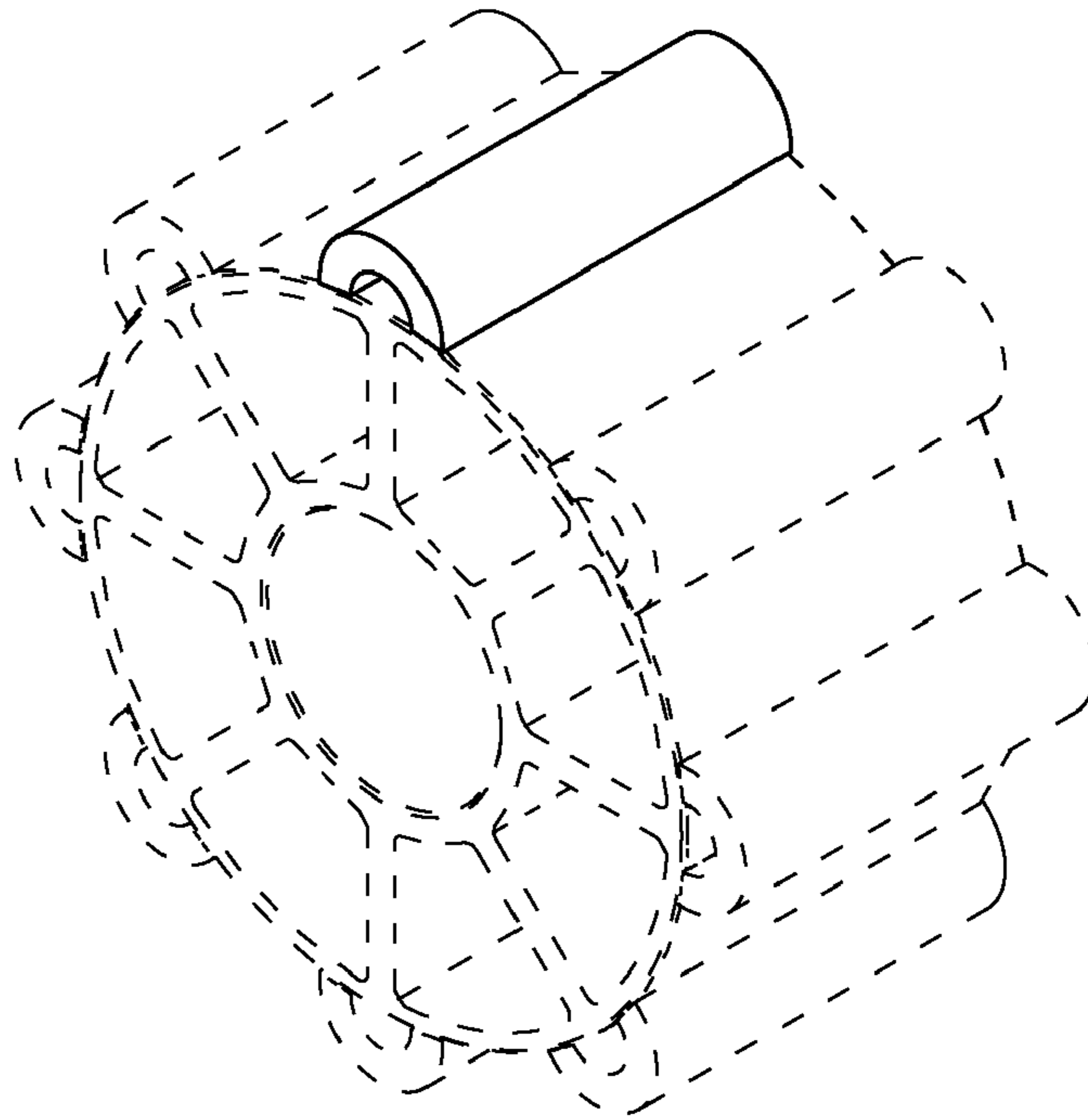


FIG. 8

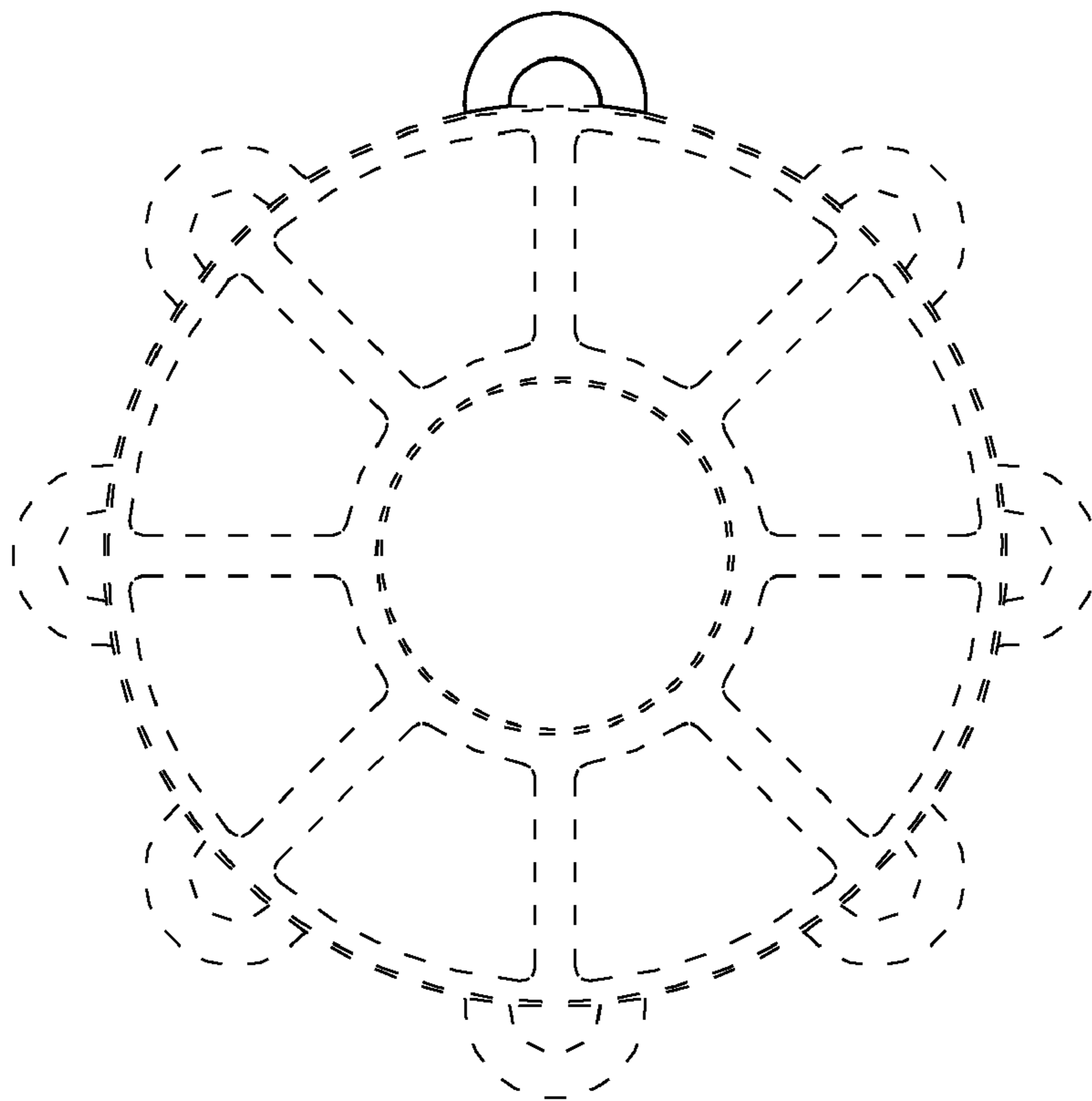


FIG. 9

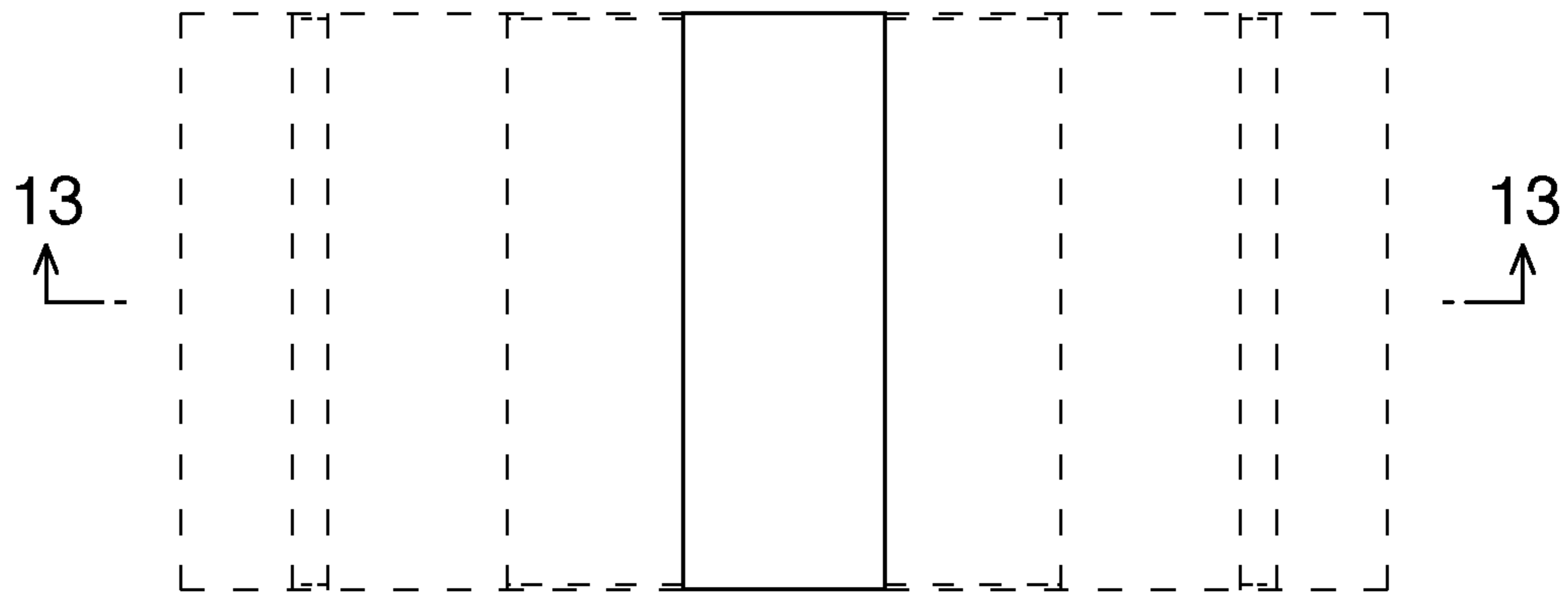


FIG.10

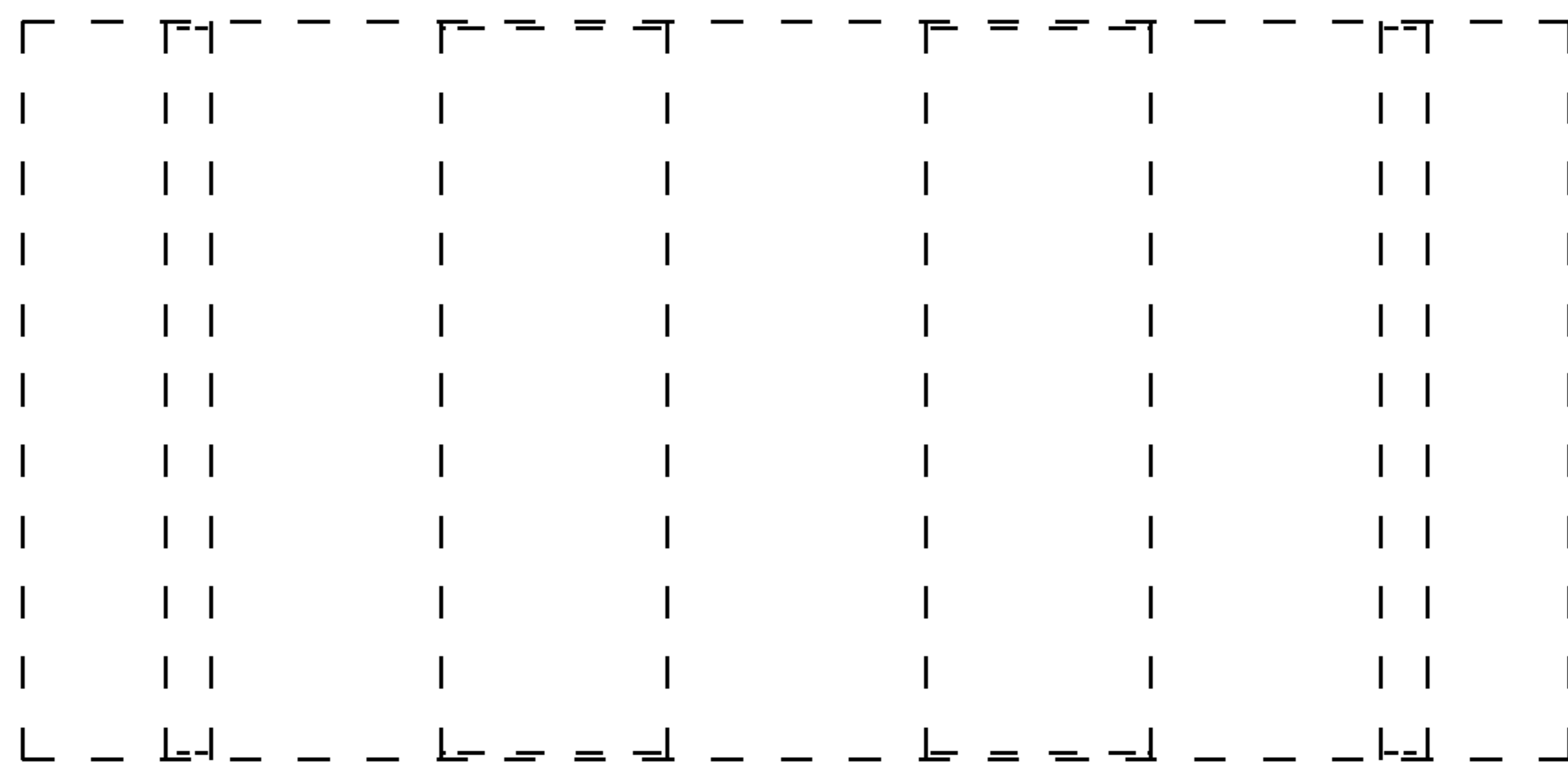


FIG.11

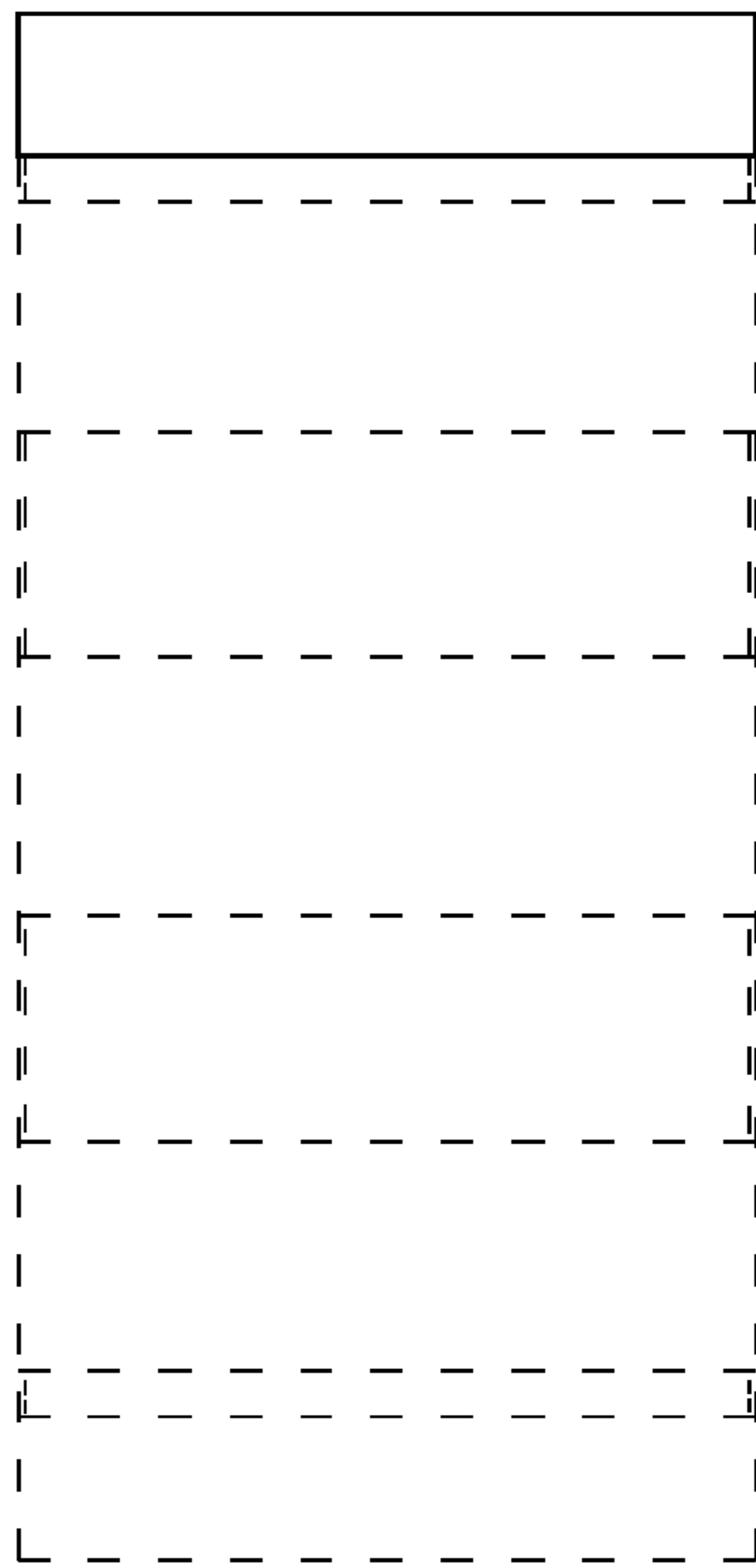


FIG. 12

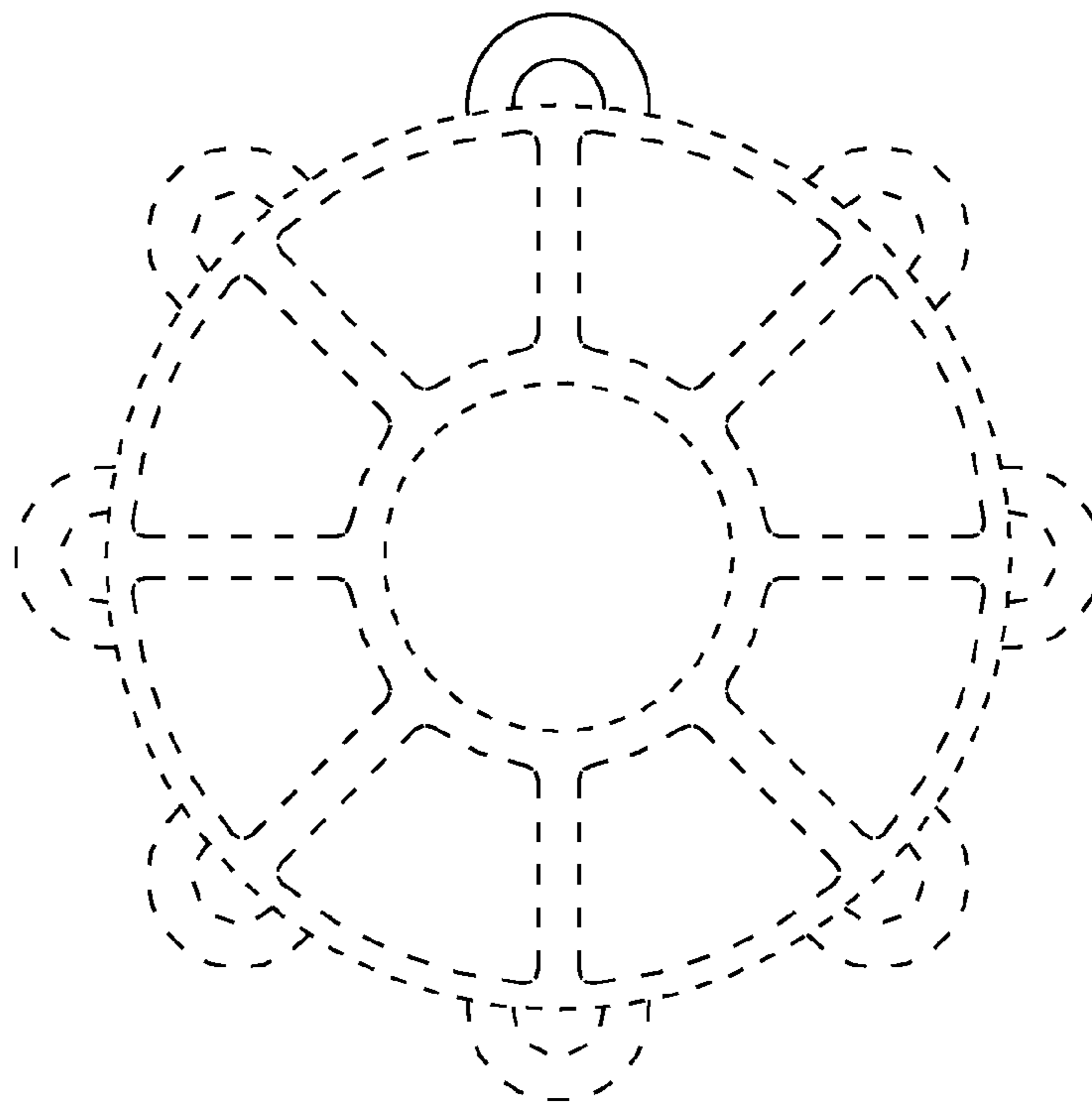


FIG. 13



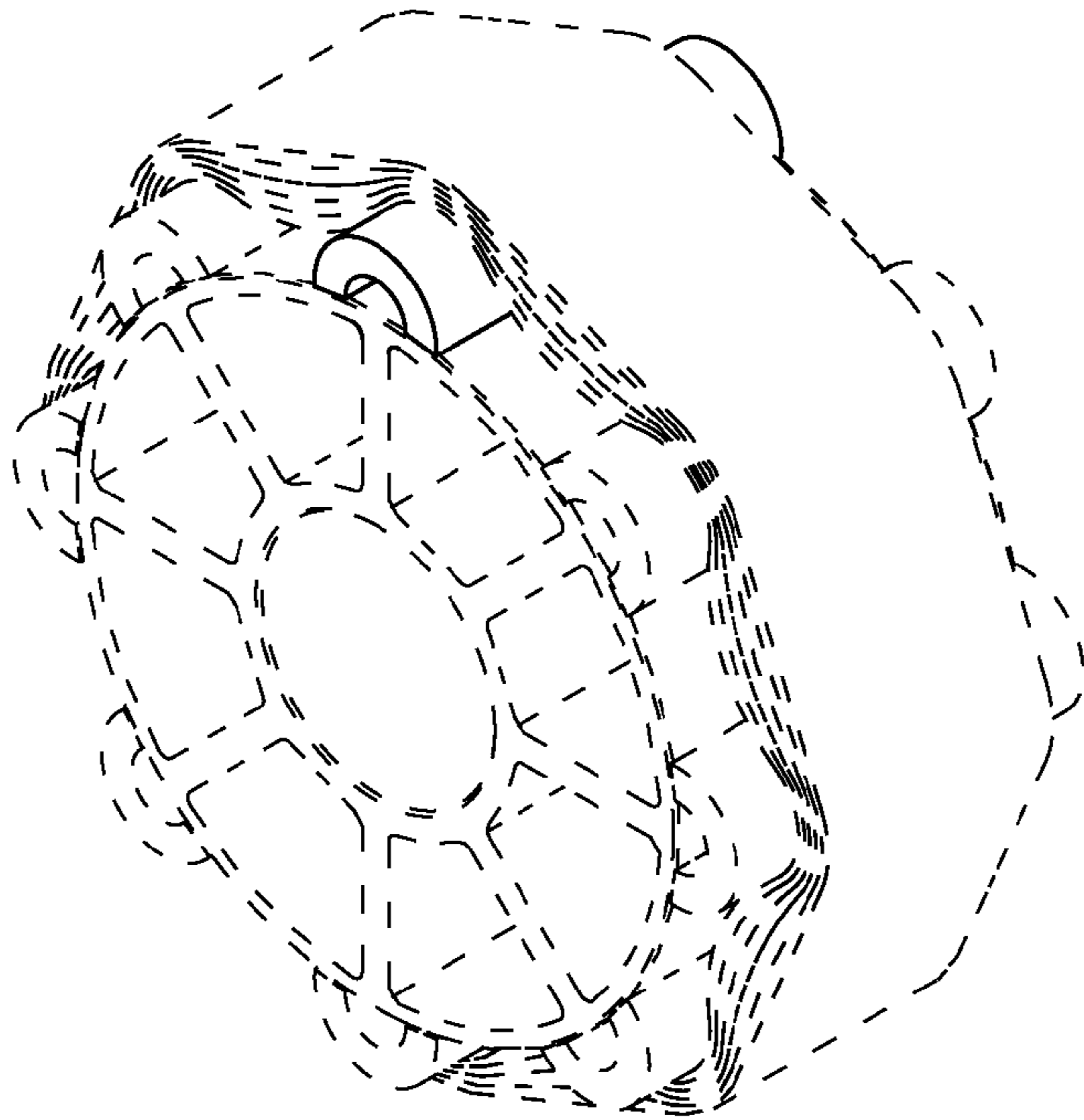


FIG.14

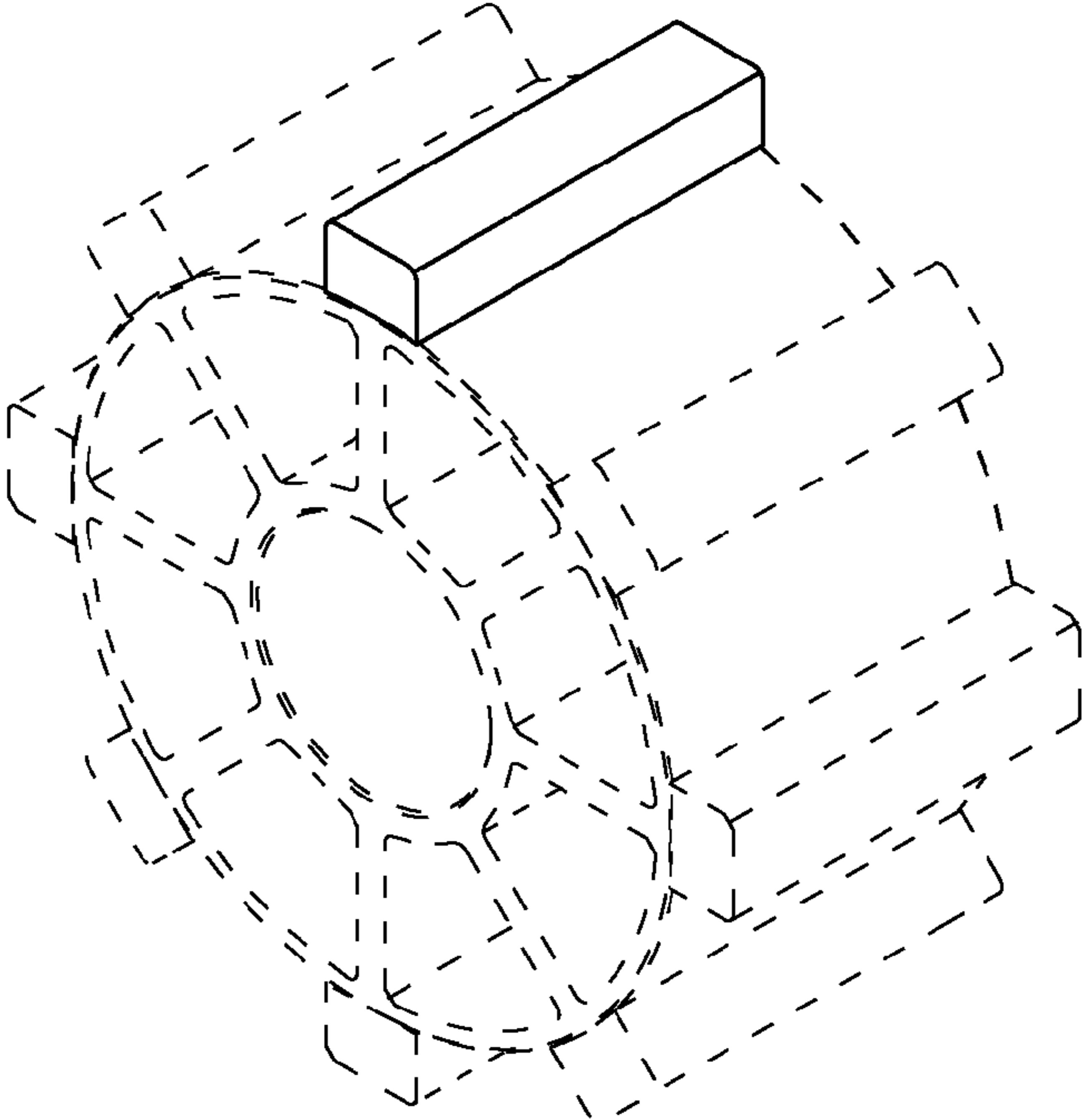


FIG. 15

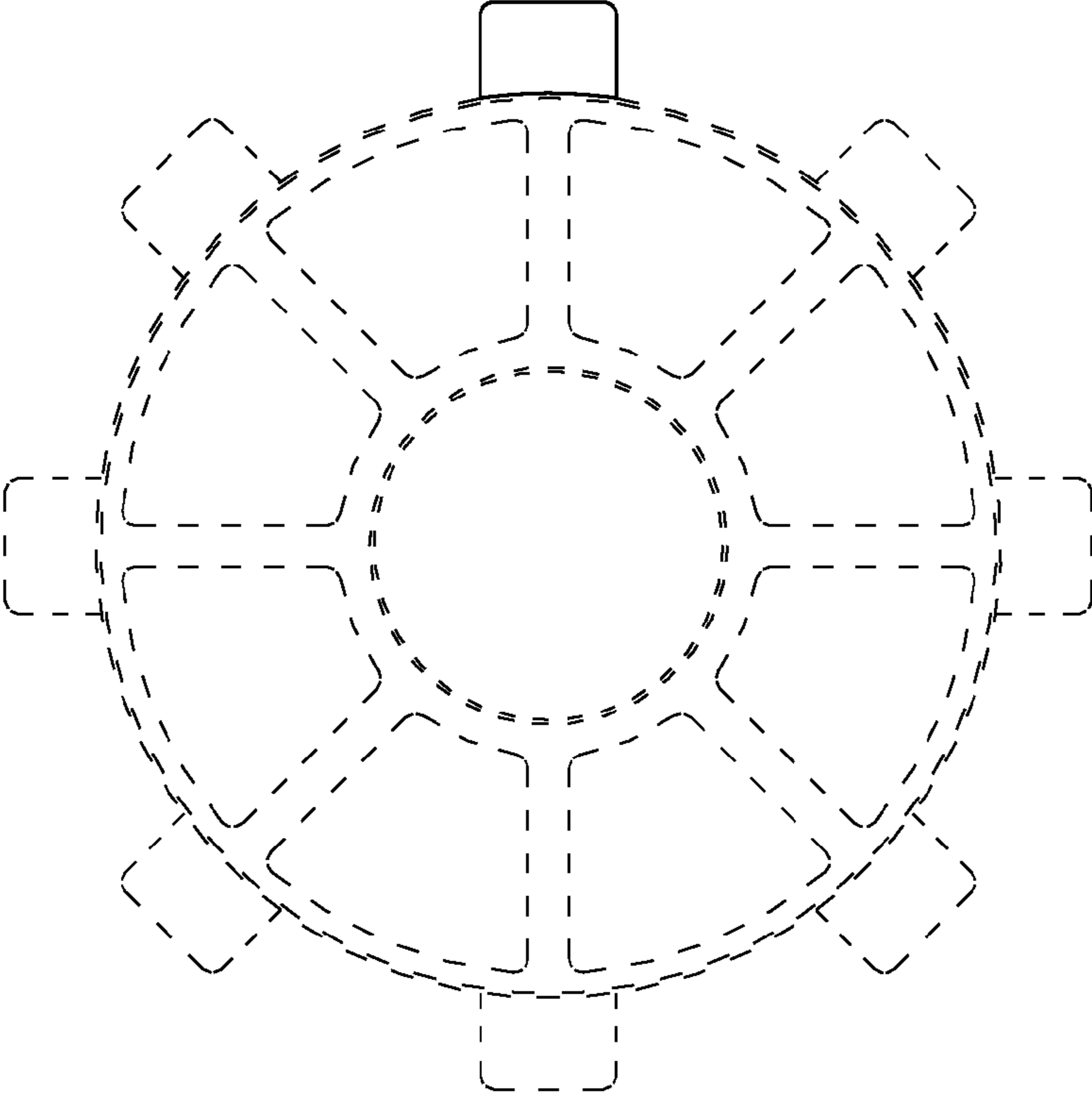


FIG. 16

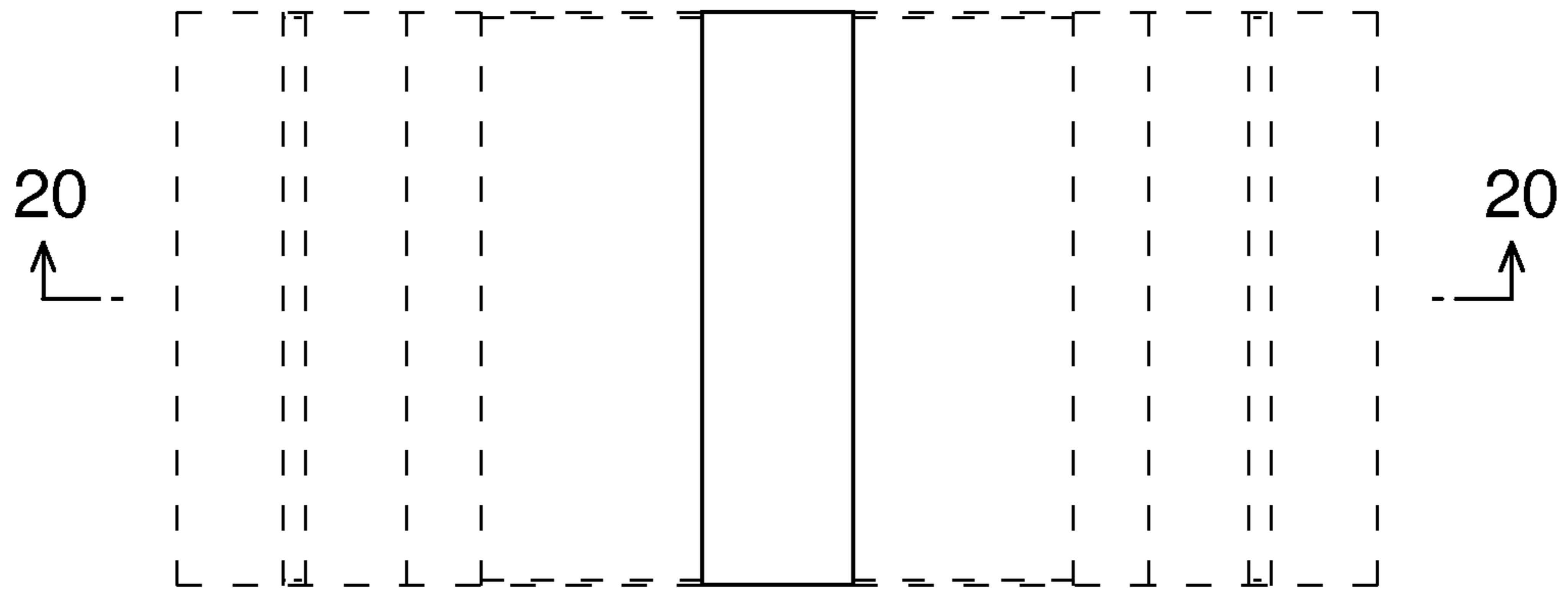


FIG.17

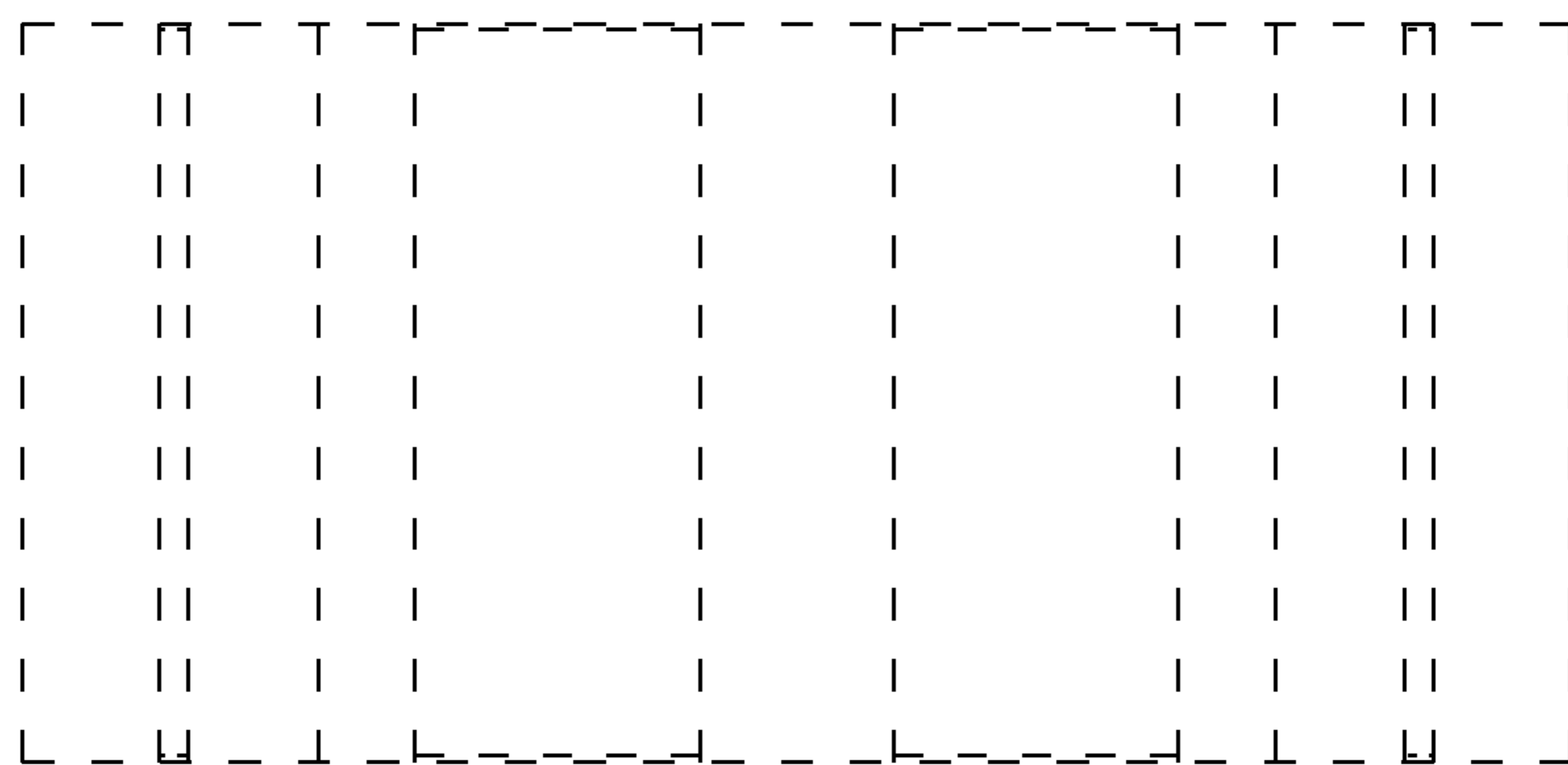


FIG.18

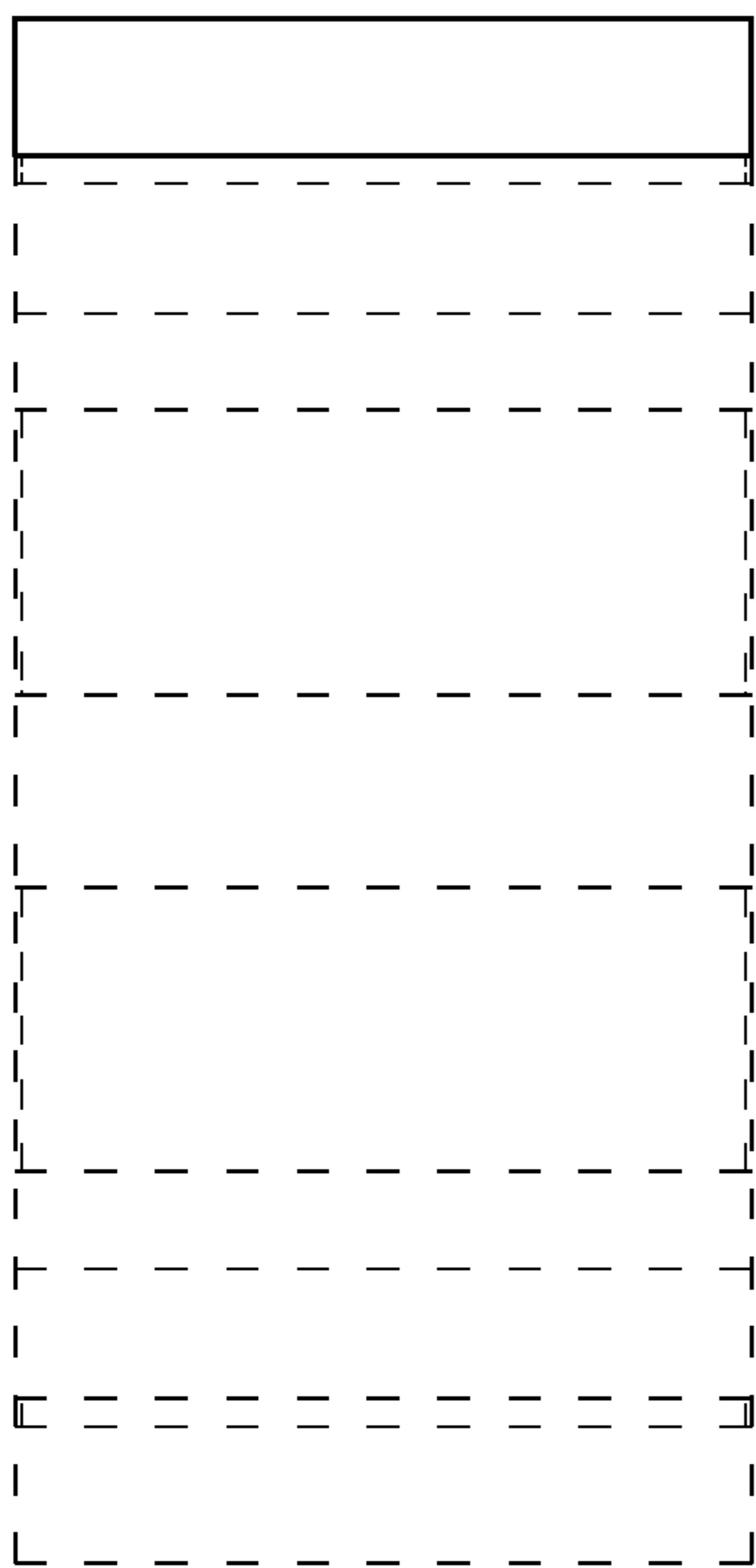


FIG.19

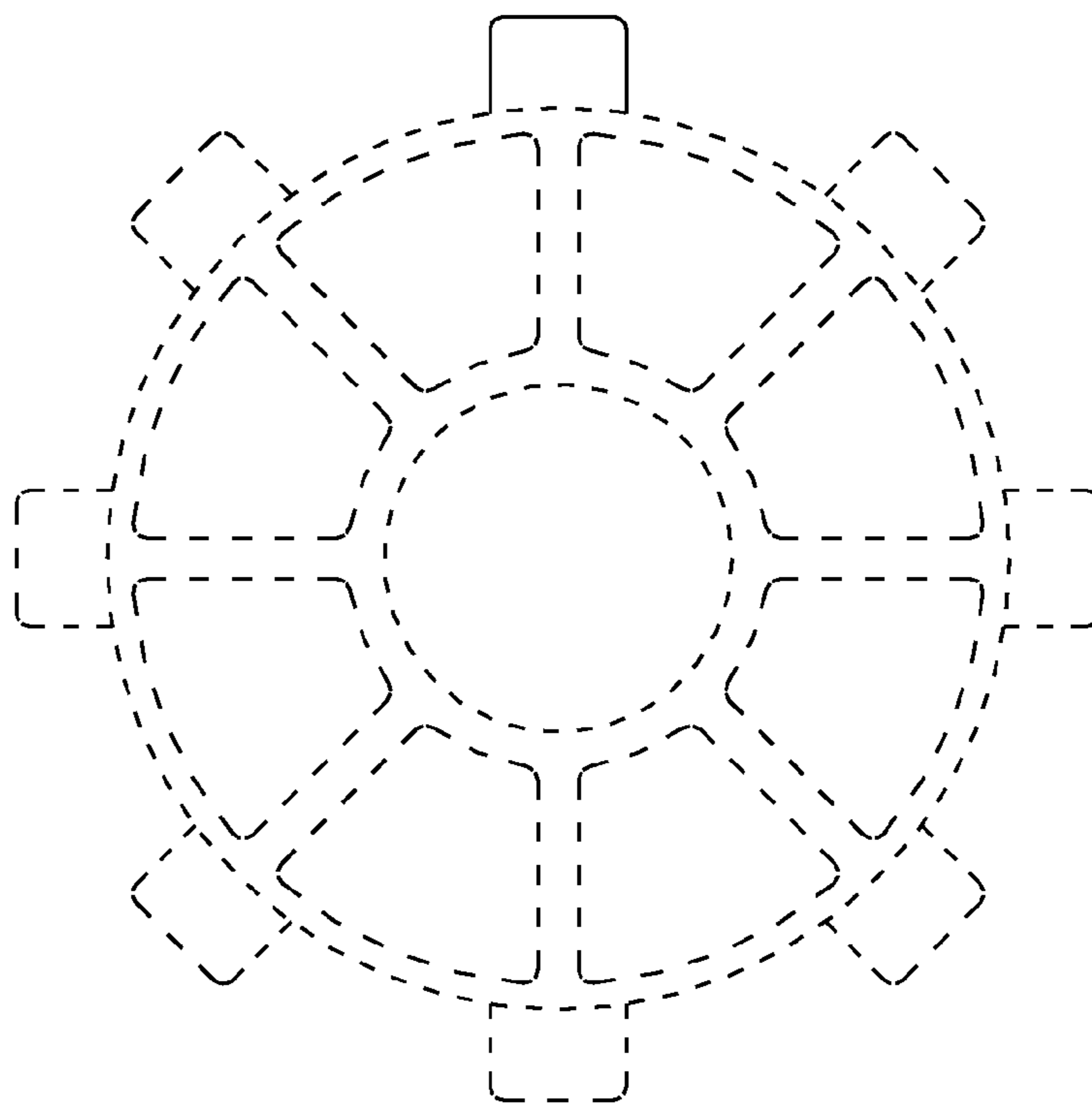


FIG.20

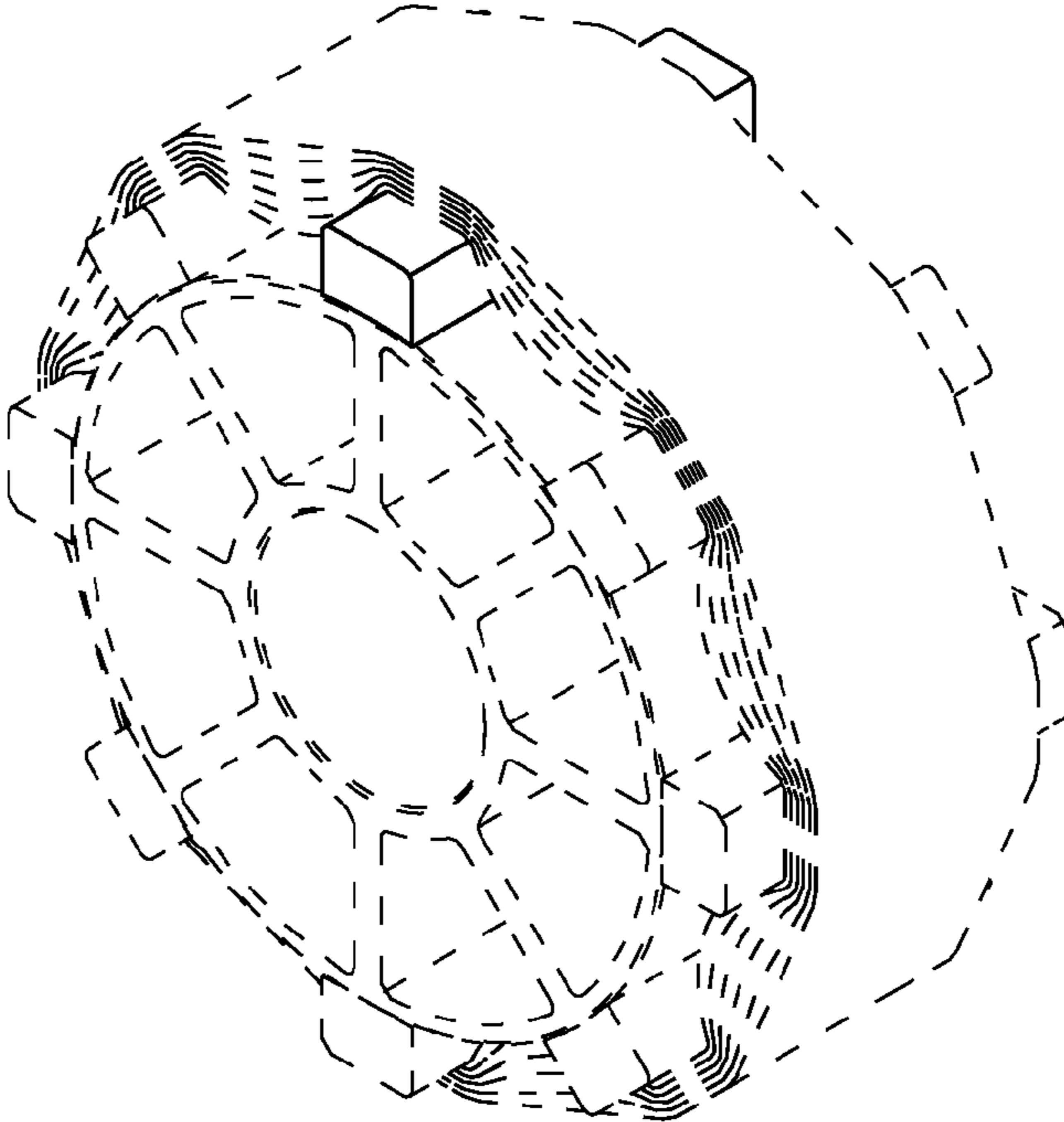


FIG.21