



US00D738946S

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

(10) **Patent No.:** **US D738,946 S**

(45) **Date of Patent:** **\*\* \*Sep. 15, 2015**

(54) **NUCLEAR REACTOR BOILER DIVIDER  
PLATE SHIELD**

(71) Applicant: **American Ceramic Technology**, Poway,  
CA (US)

(72) Inventors: **Richard Culbertson**, Poway, CA (US);  
**Patrick Tony Pangacian**, San Diego,  
CA (US)

(73) Assignee: **American Ceramic Technology**, Poway,  
CA (US)

(\*) Notice: This patent is subject to a terminal dis-  
claimer.

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

(21) Appl. No.: **29/470,960**

(22) Filed: **Oct. 25, 2013**

**Related U.S. Application Data**

(63) Continuation-in-part of application No. 29/453,498,  
filed on Apr. 30, 2013, now Pat. No. Des. 732,589.

(51) **LOC (10) Cl.** ..... **15-99**

(52) **U.S. Cl.**  
USPC ..... **D15/199**; D15/138

(58) **Field of Classification Search**  
USPC ..... D8/354, 366, 380, 803; D15/138, 199  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,911,458	A *	11/1959	McKee	.....	174/395
2,951,108	A *	8/1960	Woods	.....	174/395
3,005,174	A *	10/1961	Pifer	.....	439/607.59
3,036,145	A *	5/1962	Murphy	.....	174/395
3,109,050	A *	10/1963	Lusic	.....	174/395
3,307,121	A *	2/1967	Loos	.....	334/6
4,127,776	A *	11/1978	Pickel	.....	378/156
4,913,876	A *	4/1990	Lettau et al.	.....	376/444
5,154,648	A *	10/1992	Buckshaw	.....	165/134.1
5,168,235	A *	12/1992	Bonner	.....	324/508

5,474,123	A *	12/1995	Buckshaw	.....	165/134.1
5,884,695	A *	3/1999	Brownlee	.....	165/134.1
6,939,434	B2 *	9/2005	Collins et al.	.....	156/345.35
D596,020	S *	7/2009	Lisowski	.....	D8/380
2003/0123600	A1 *	7/2003	Hesketh et al.	.....	376/435
2004/0076253	A1 *	4/2004	Soderlund et al.	.....	376/310
2005/0105677	A1 *	5/2005	Yoon et al.	.....	376/462
2006/0227923	A1 *	10/2006	Brashier et al.	.....	376/364
2008/0110602	A1 *	5/2008	Woodson	.....	165/134.1
2008/0152069	A1 *	6/2008	Aktas et al.	.....	376/362
2009/0060117	A1 *	3/2009	Yoon et al.	.....	376/439
2009/0252280	A1 *	10/2009	Lutz	.....	376/431
2010/0101511	A1 *	4/2010	Nordh	.....	122/512

\* cited by examiner

*Primary Examiner* — Patricia Palasik

(74) *Attorney, Agent, or Firm* — Mastermind IP Law P.C.;  
Diane L. Gardner

(57) **CLAIM**

The ornamental design for a nuclear reactor boiler divider  
plate shield, substantially as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of a nuclear reactor boiler  
divider plate shield showing the new design;  
FIG. 2 is a rear perspective view thereof;  
FIG. 3 is a front view thereof;  
FIG. 4 is a rear view thereof;  
FIG. 5 is a top view thereof;  
FIG. 6 is a bottom view thereof;  
FIG. 7 is a side view thereof;  
FIG. 8 is a side view thereof;  
FIG. 9 is a front perspective view of a nuclear reactor boiler  
divider plate shield showing another embodiment of the new  
design;  
FIG. 10 is a rear perspective view thereof;  
FIG. 11 is a front view thereof;  
FIG. 12 is a rear view thereof;  
FIG. 13 is a top view thereof;  
FIG. 14 is a bottom view thereof;  
FIG. 15 is a side view thereof;  
FIG. 16 is a side view thereof;

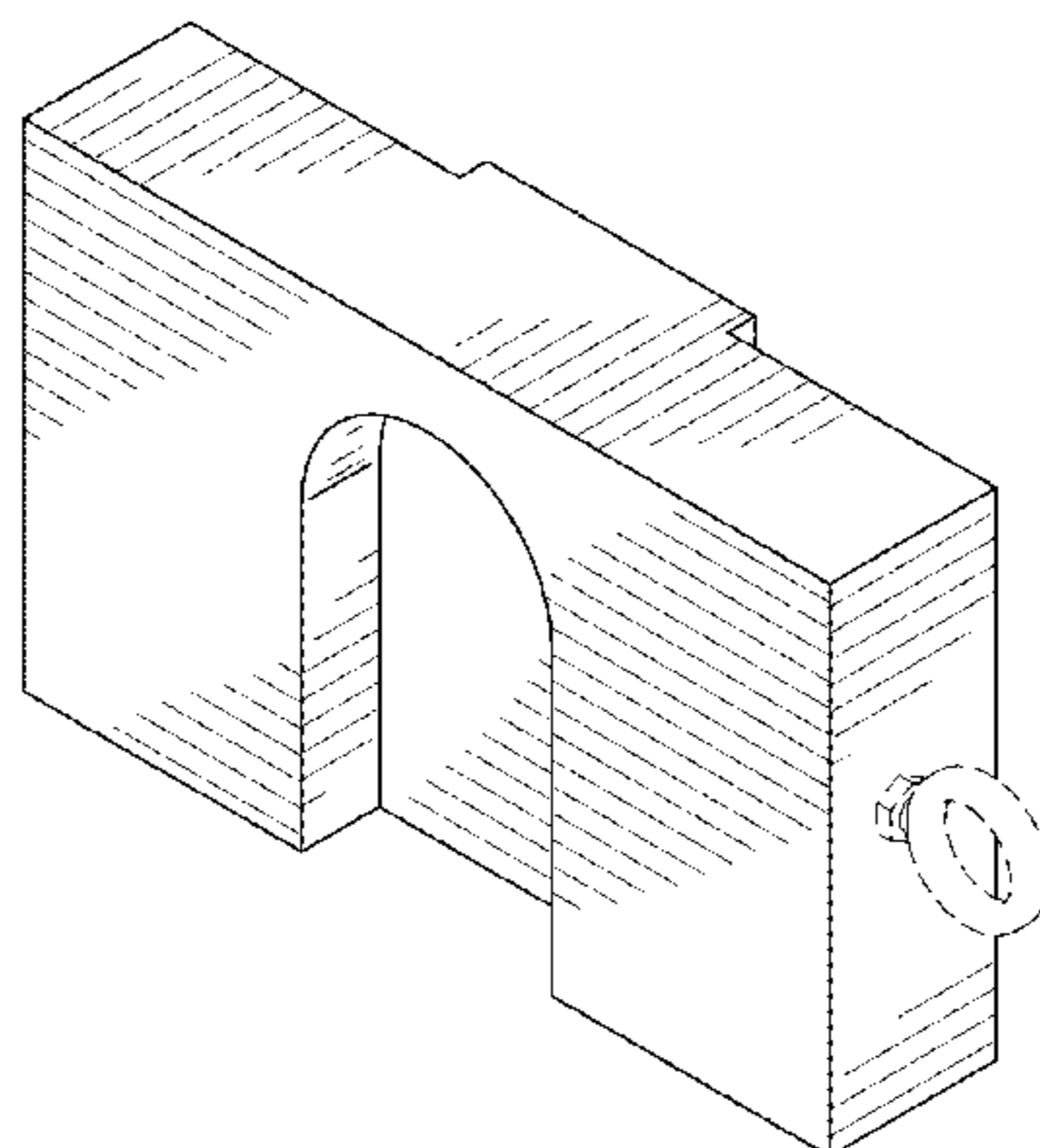


FIG. 17 is a front perspective view of a nuclear reactor boiler divider plate shield showing another embodiment of the new design;

FIG. 18 is a rear perspective view thereof;

FIG. 19 is a front view thereof;

FIG. 20 is a rear view thereof;

FIG. 21 is a top view thereof;

FIG. 22 is a bottom view thereof;

FIG. 23 is a side view thereof;

FIG. 24 is a side view thereof;

FIG. 25 is a front perspective view of a nuclear reactor boiler divider plate shield showing another embodiment of the new design;

FIG. 26 is a rear perspective view thereof;

FIG. 27 is a front view thereof;

FIG. 28 is a rear view thereof;

FIG. 29 is a top view thereof;

FIG. 30 is a bottom view thereof;

FIG. 31 is a side view thereof;

FIG. 32 is a side view thereof;

FIG. 33 is a front perspective view of a nuclear reactor boiler divider plate shield showing another embodiment of the new design;

FIG. 34 is a rear perspective view thereof;

FIG. 35 is a front view thereof;

FIG. 36 is a rear view thereof;

FIG. 37 is a top view thereof;

FIG. 38 is a bottom view thereof;

FIG. 39 is a side view thereof;

FIG. 40 is a side view thereof;

FIG. 41 is a front perspective view of a nuclear reactor boiler divider plate shield showing another embodiment of the new design;

FIG. 42 is a rear perspective view thereof;

FIG. 43 is a front view thereof;

FIG. 44 is a rear view thereof;

FIG. 45 is a top view thereof;

FIG. 46 is a bottom view thereof;

FIG. 47 is a side view thereof;

FIG. 48 is a side view thereof;

FIG. 49 is a front perspective view of a nuclear reactor boiler divider plate shield showing another embodiment of the new design;

FIG. 50 is a rear perspective view thereof;

FIG. 51 is a front view thereof;

FIG. 52 is a rear view thereof;

FIG. 53 is a top view thereof;

FIG. 54 is a bottom view thereof;

FIG. 55 is a side view thereof;

FIG. 56 is a side view thereof;

FIG. 57 is a front perspective view of a nuclear reactor boiler divider plate shield showing another embodiment of the new design;

FIG. 58 is a rear perspective view thereof;

FIG. 59 is a front view thereof;

FIG. 60 is a rear view thereof;

FIG. 61 is a top view thereof;

FIG. 62 is a bottom view thereof;

FIG. 63 is a side view thereof;

FIG. 64 is a side view thereof;

FIG. 65 is a front perspective view of a nuclear reactor boiler divider plate shield showing another embodiment of the new design;

FIG. 66 is a rear perspective view thereof;

FIG. 67 is a front view thereof;

FIG. 68 is a rear view thereof;

FIG. 69 is a top view thereof;

FIG. 70 is a bottom view thereof;

FIG. 71 is a side view thereof; and,

FIG. 72 is a side view thereof.

The claimed design can be used, for example, as radiation shielding.

**1 Claim, 27 Drawing Sheets**

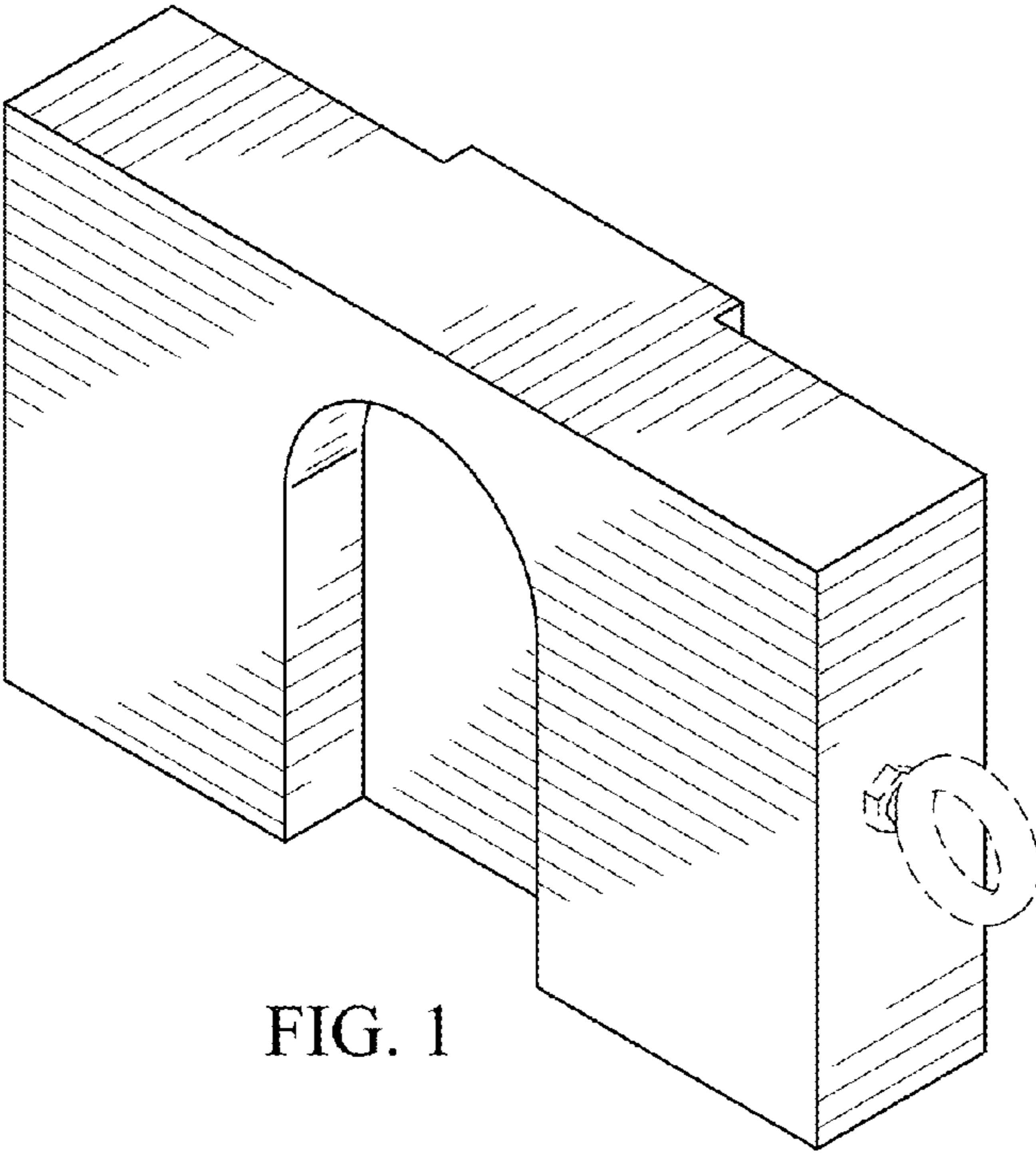


FIG. 1

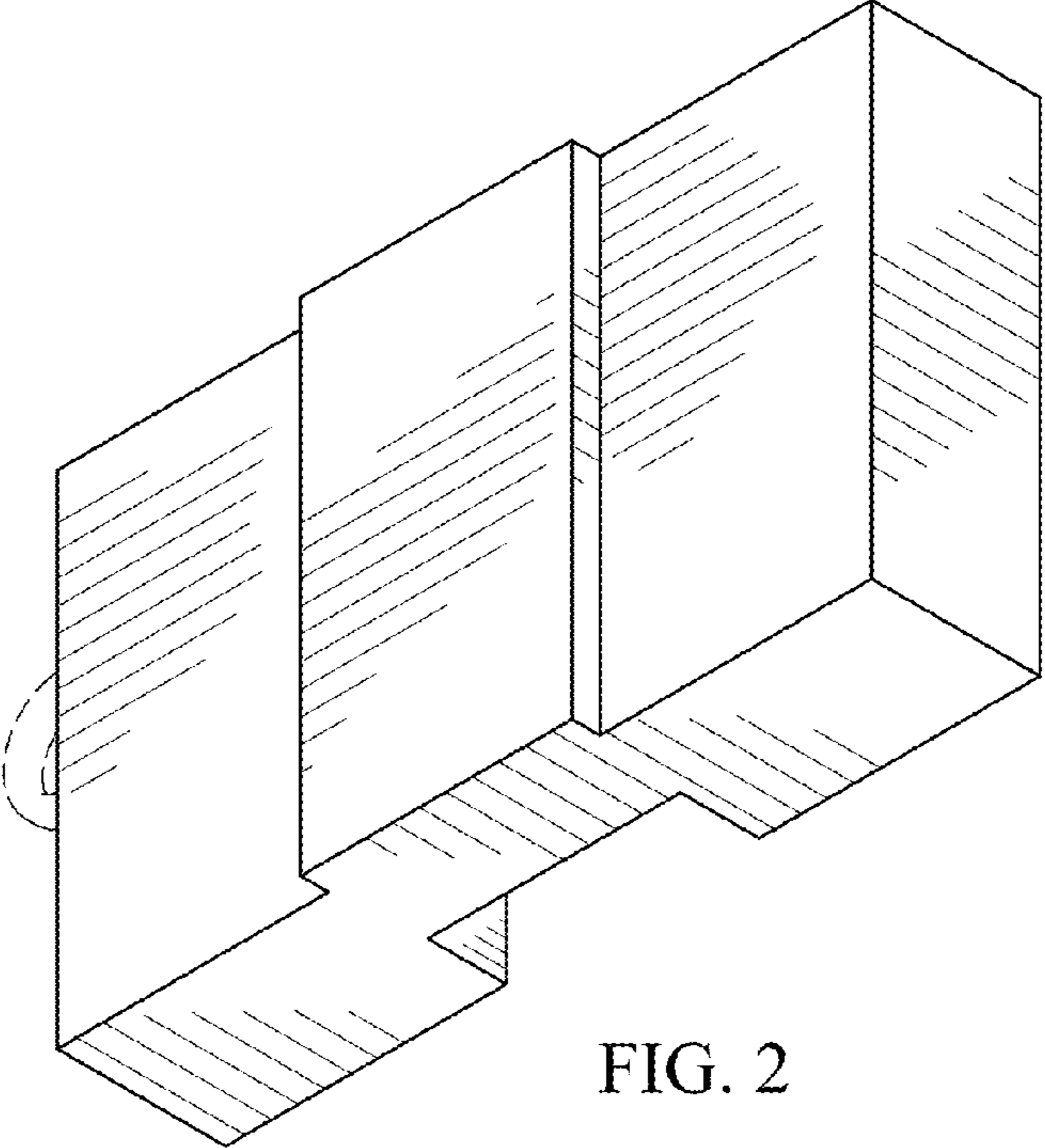


FIG. 2

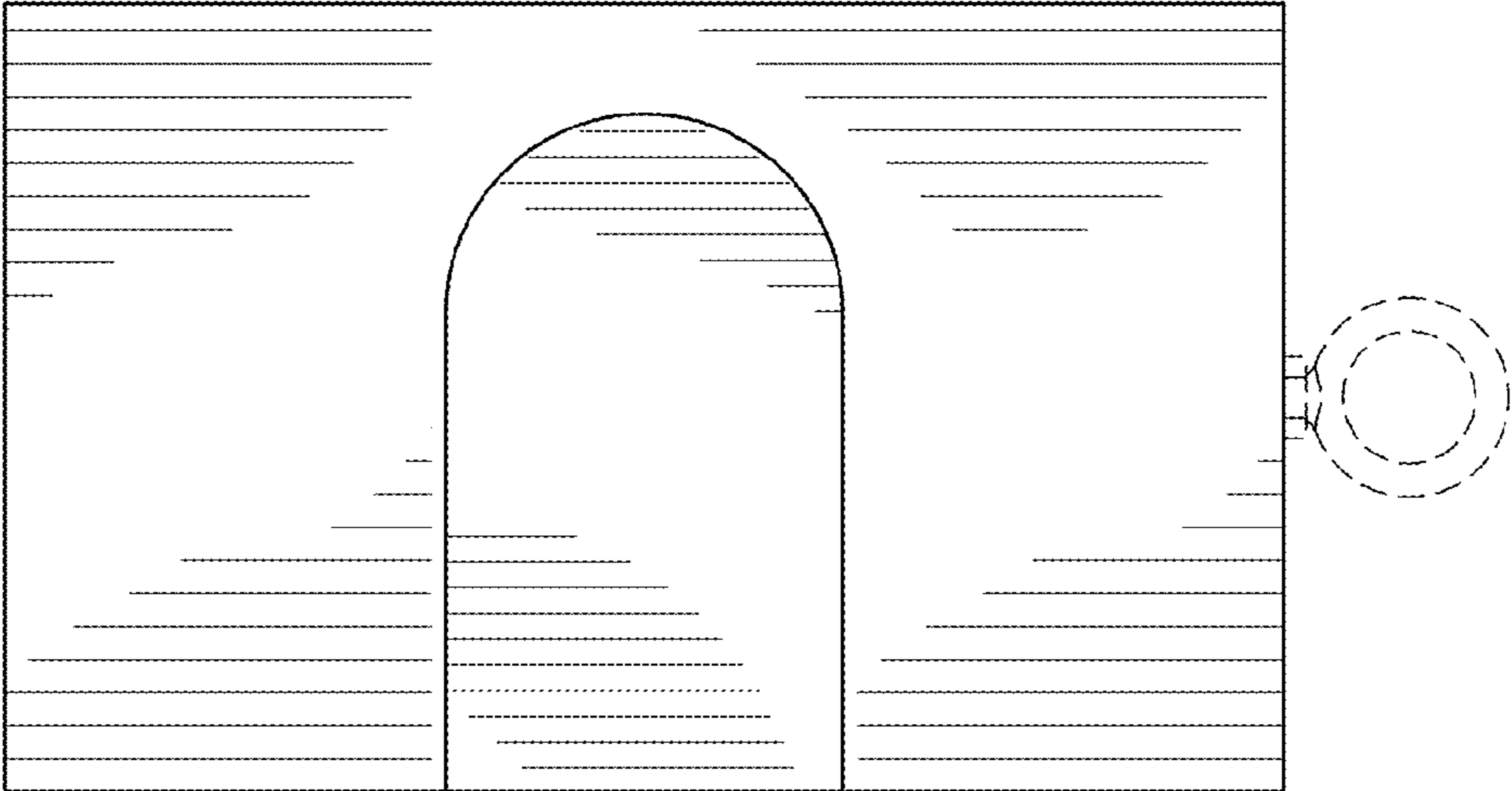


FIG. 3

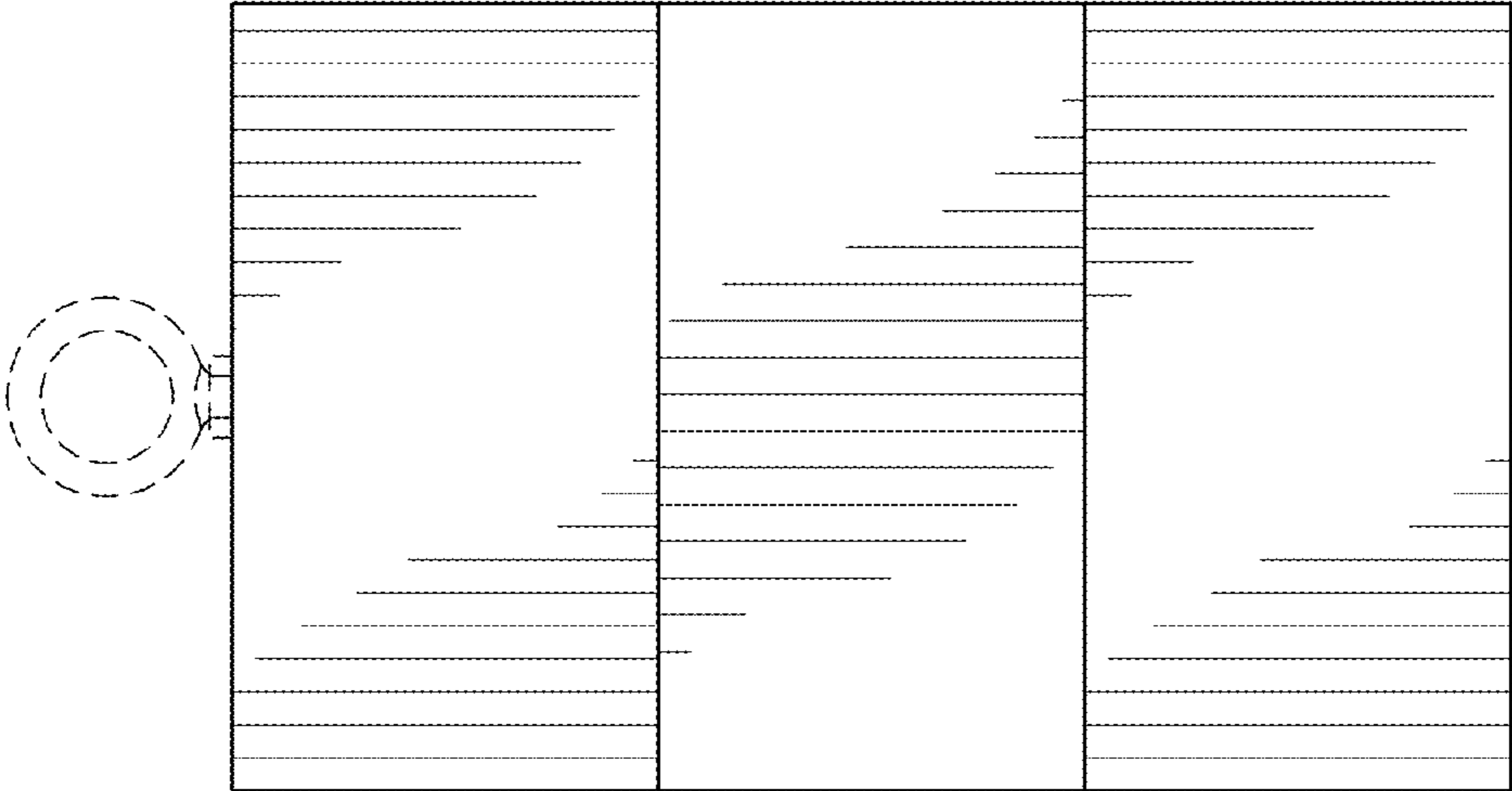


FIG. 4

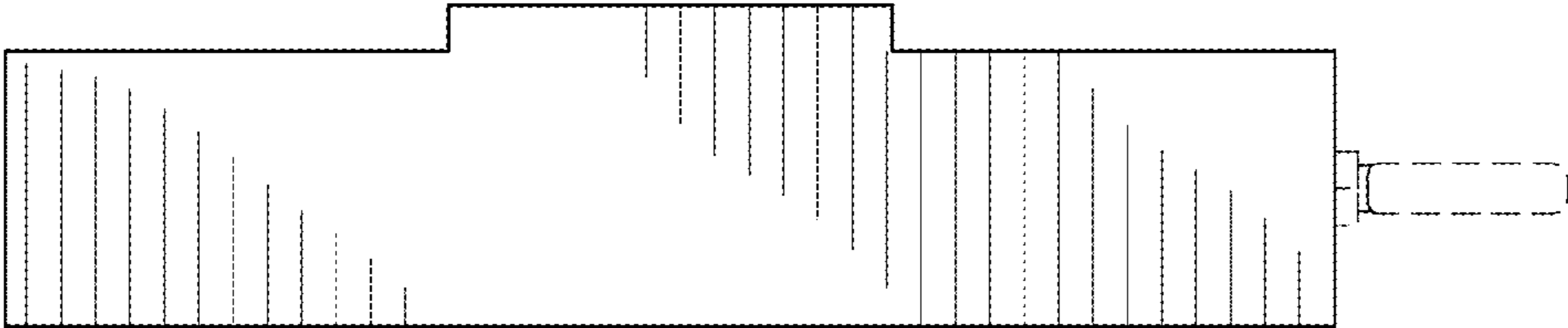


FIG. 5

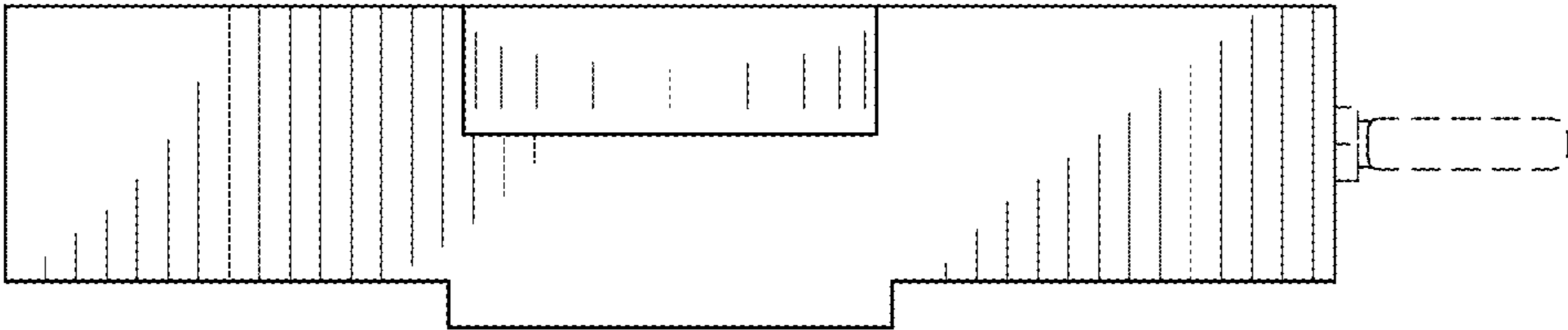


FIG. 6

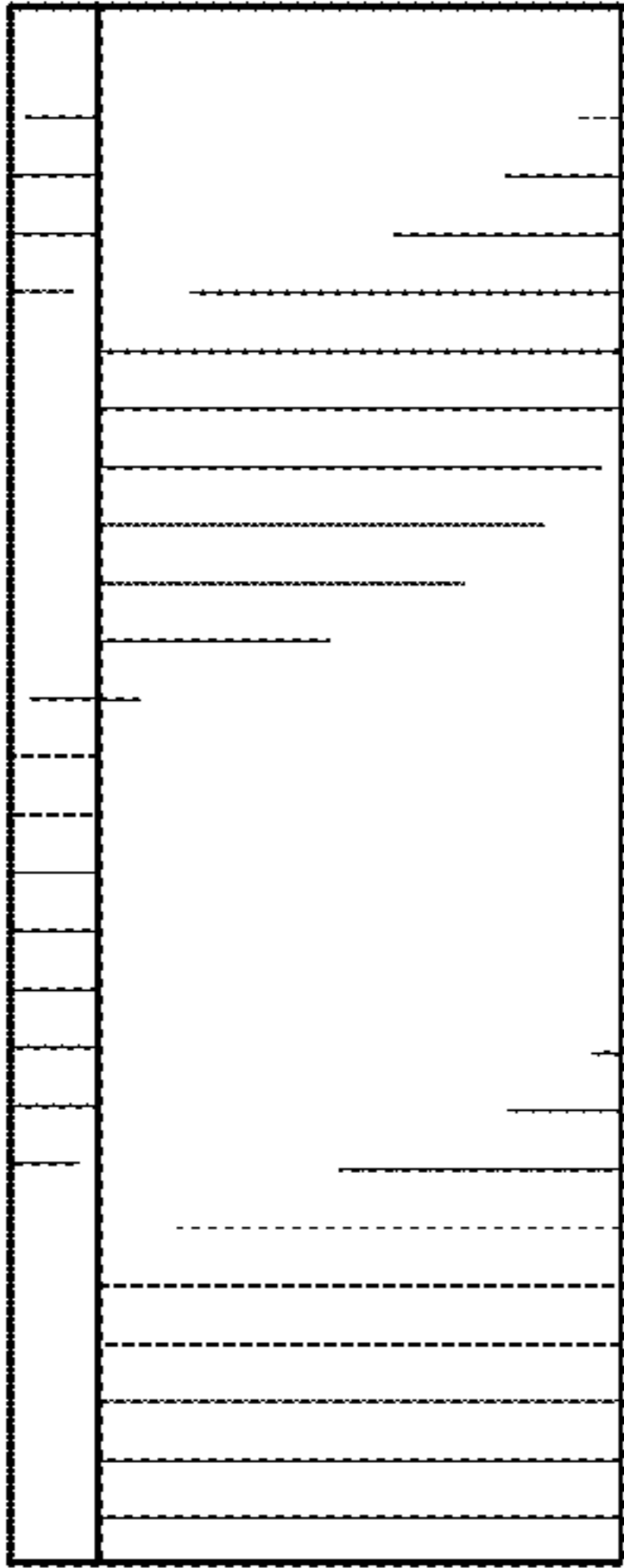


FIG. 7

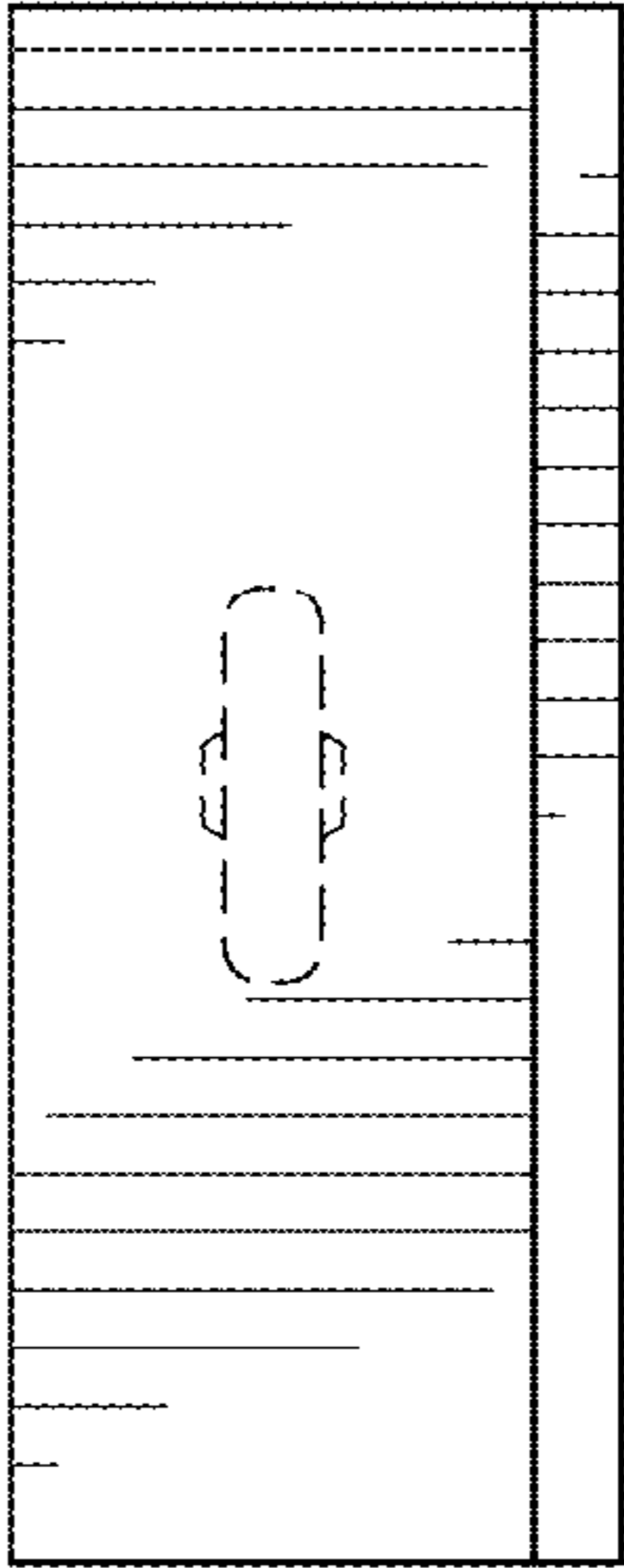


FIG. 8

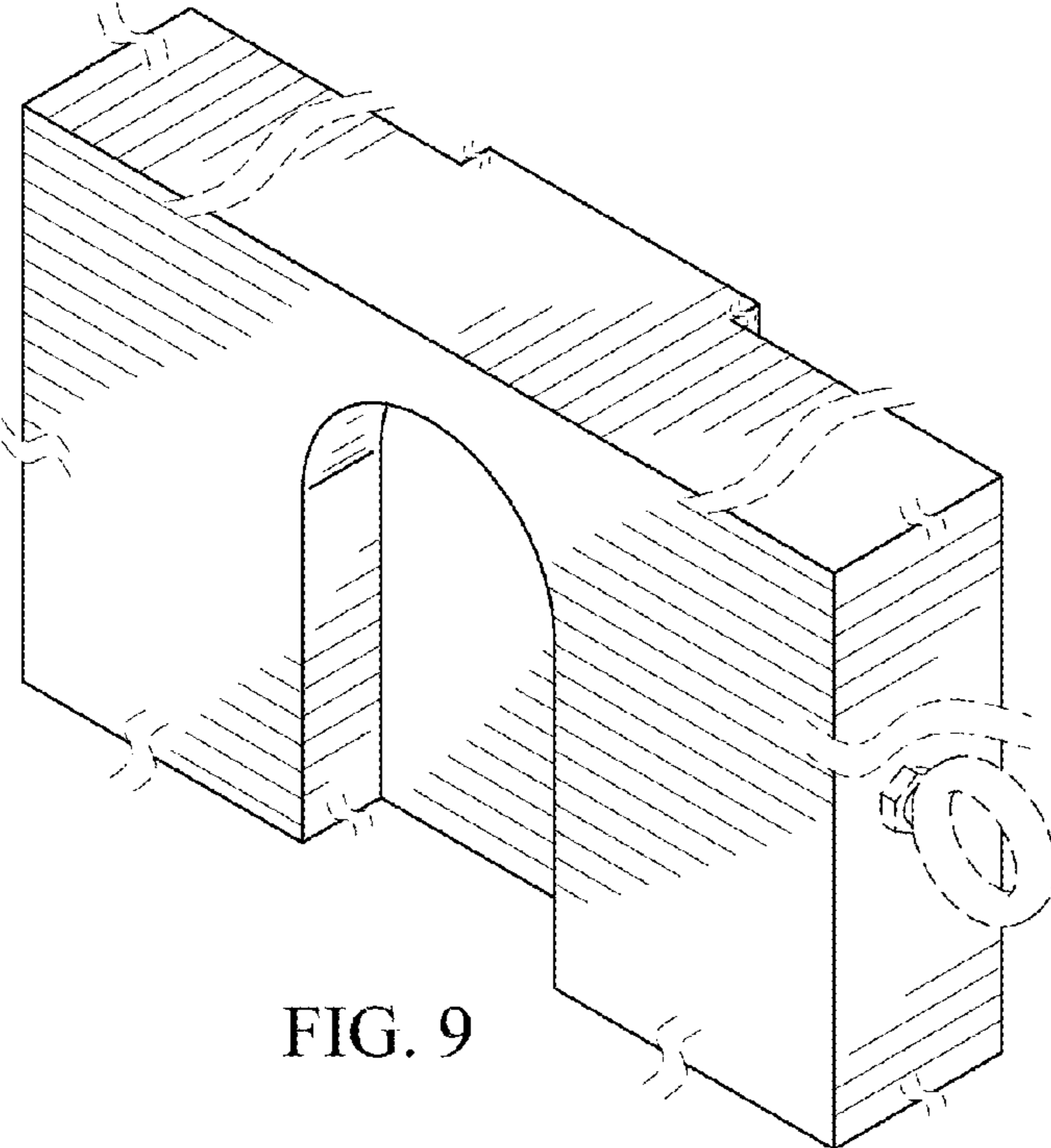


FIG. 9

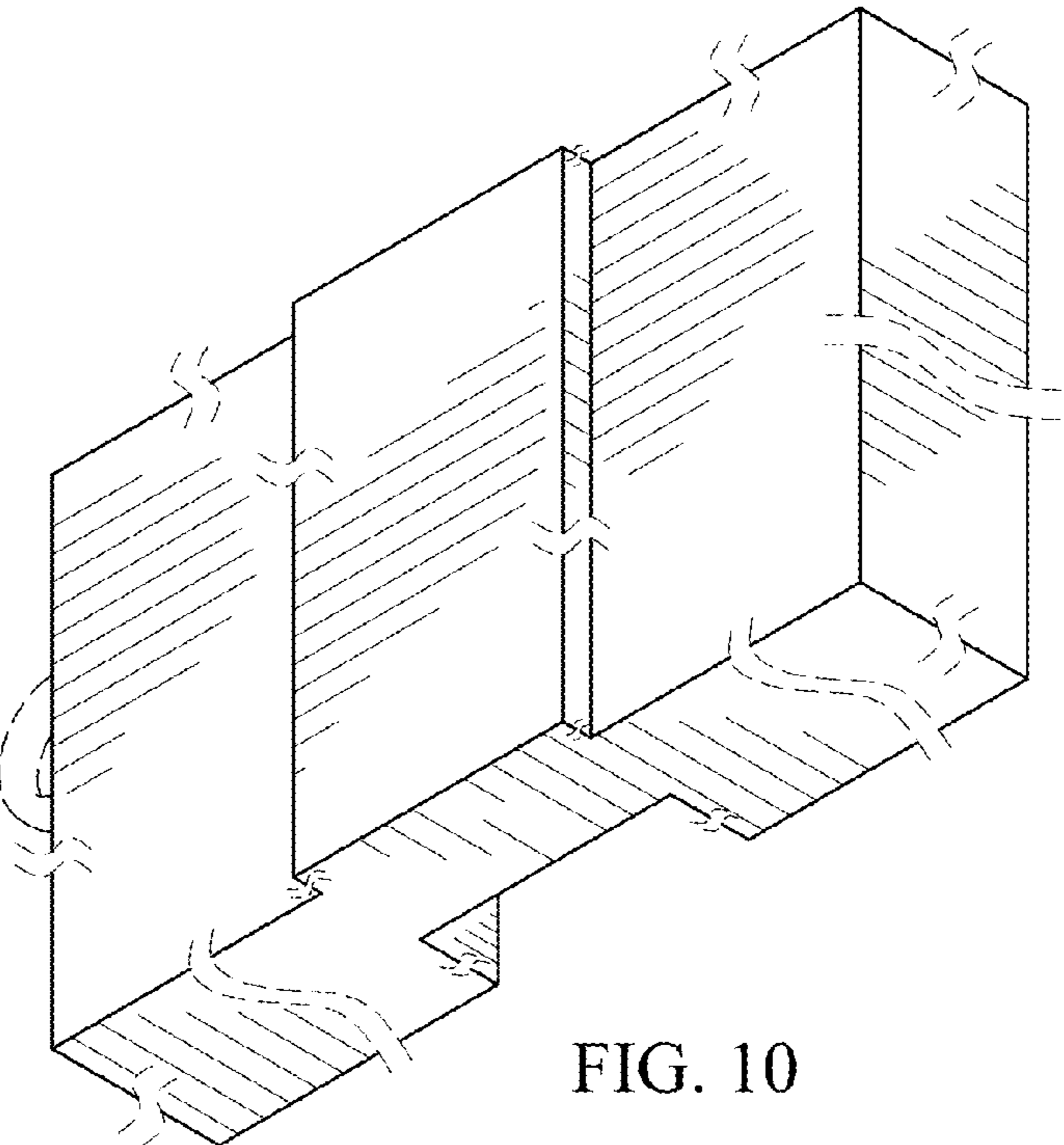


FIG. 10

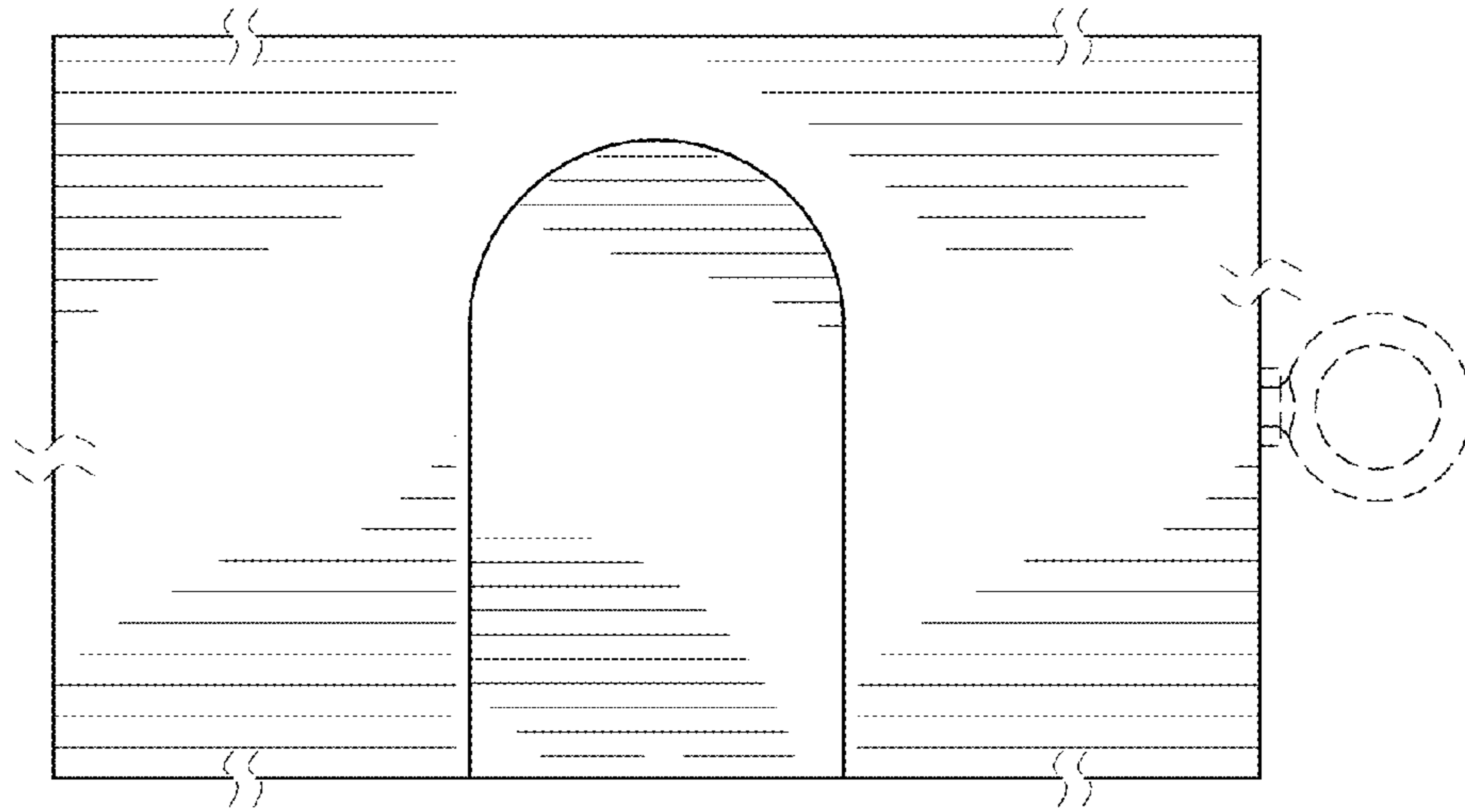


FIG. 11

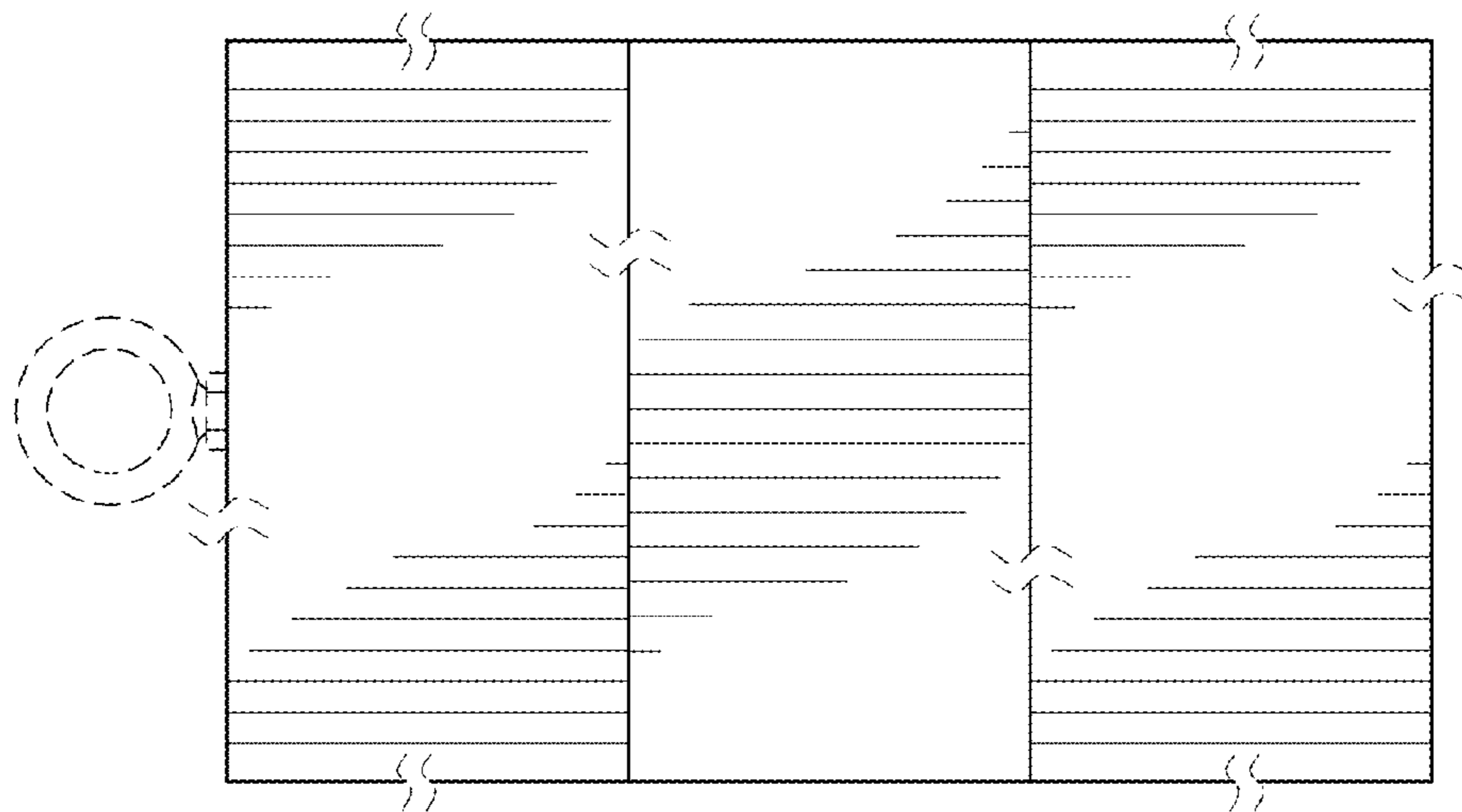


FIG. 12

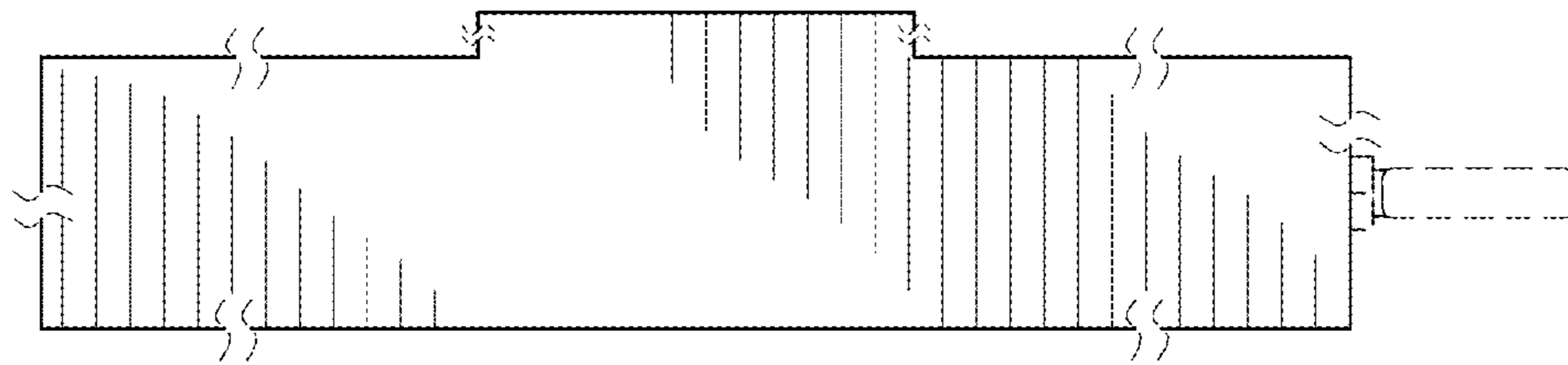


FIG. 13

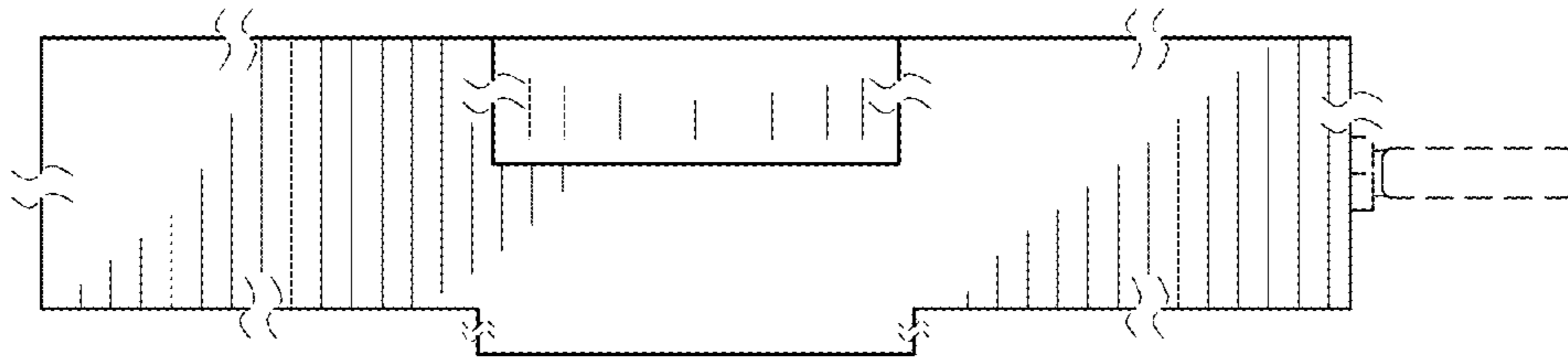


FIG. 14

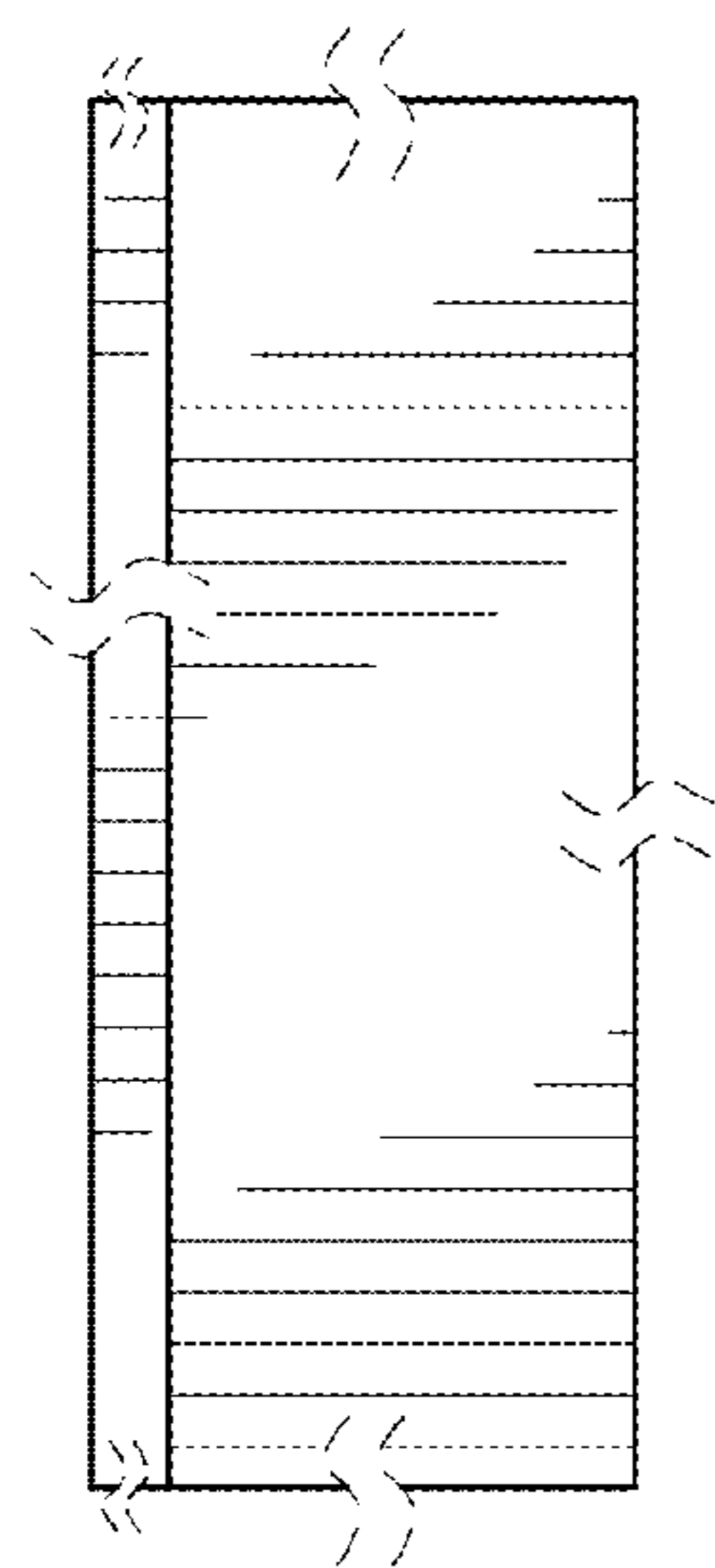


FIG. 15

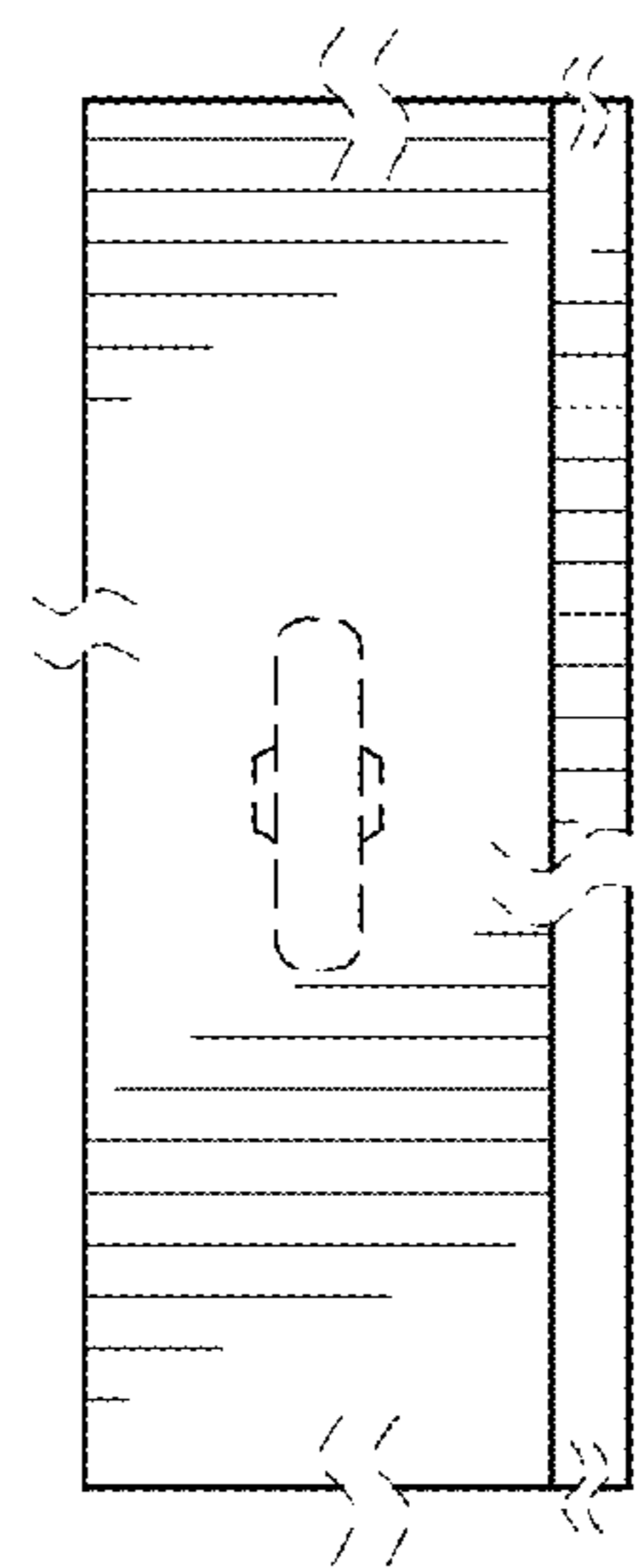


FIG. 16



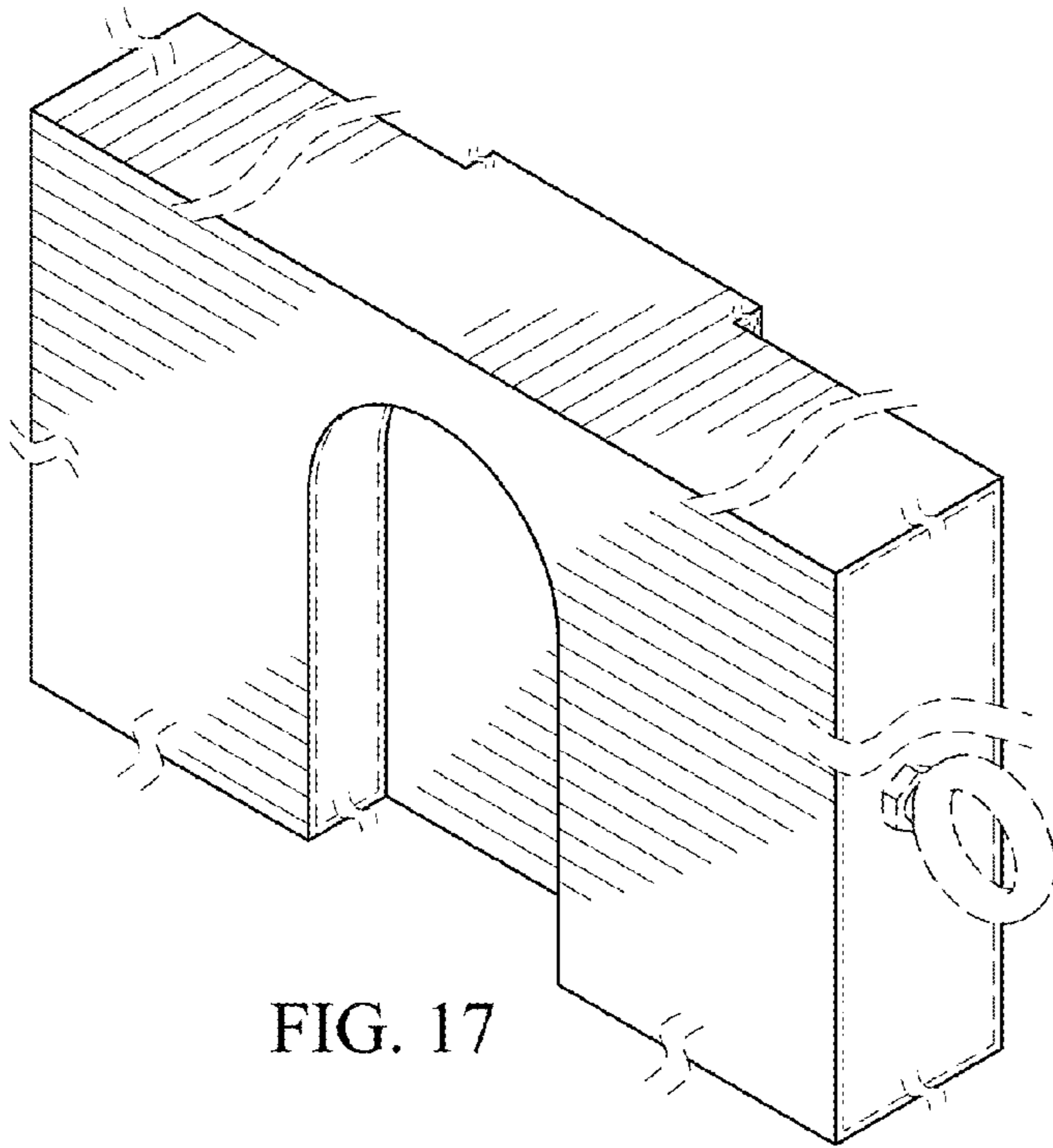


FIG. 17

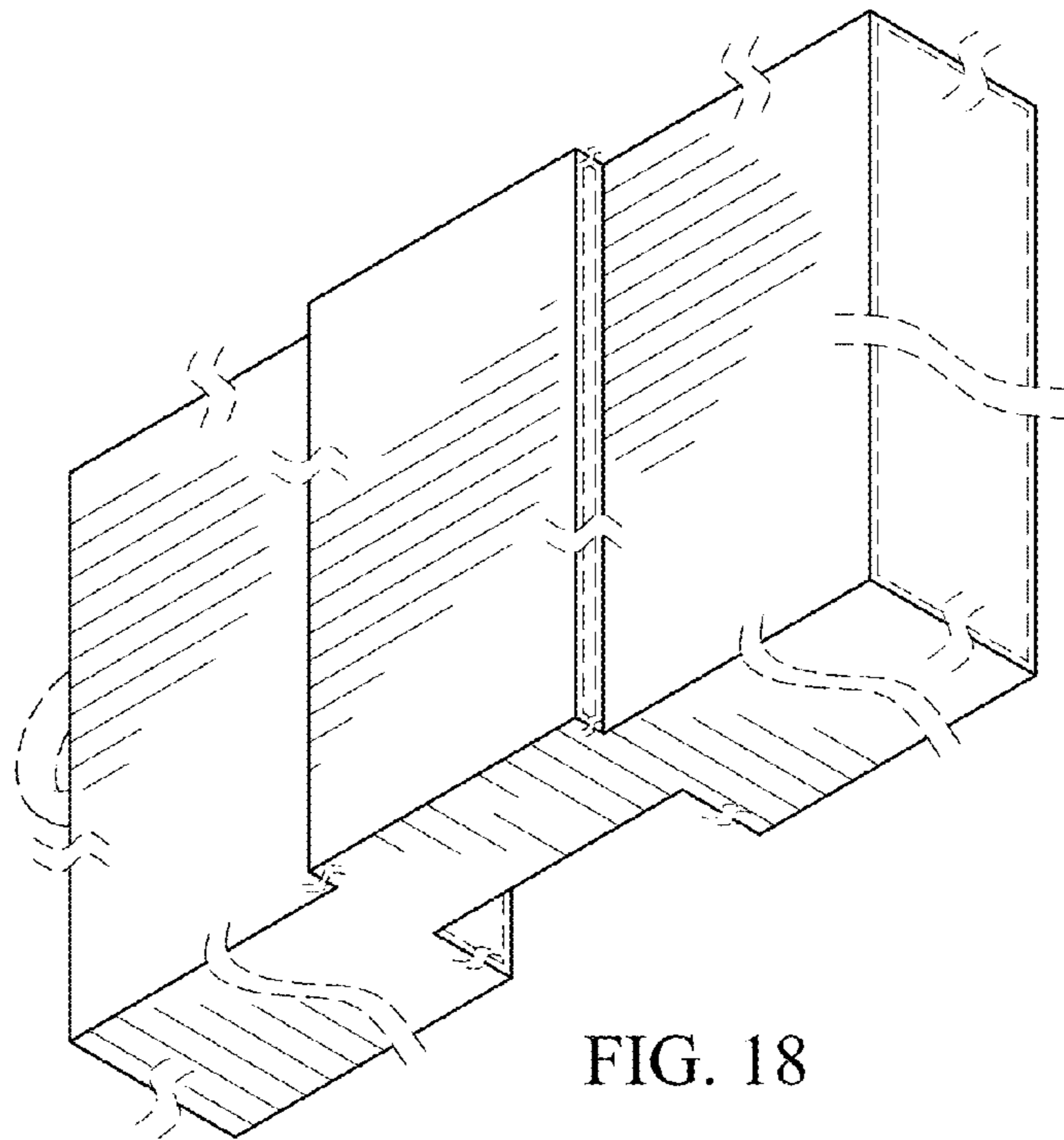


FIG. 18

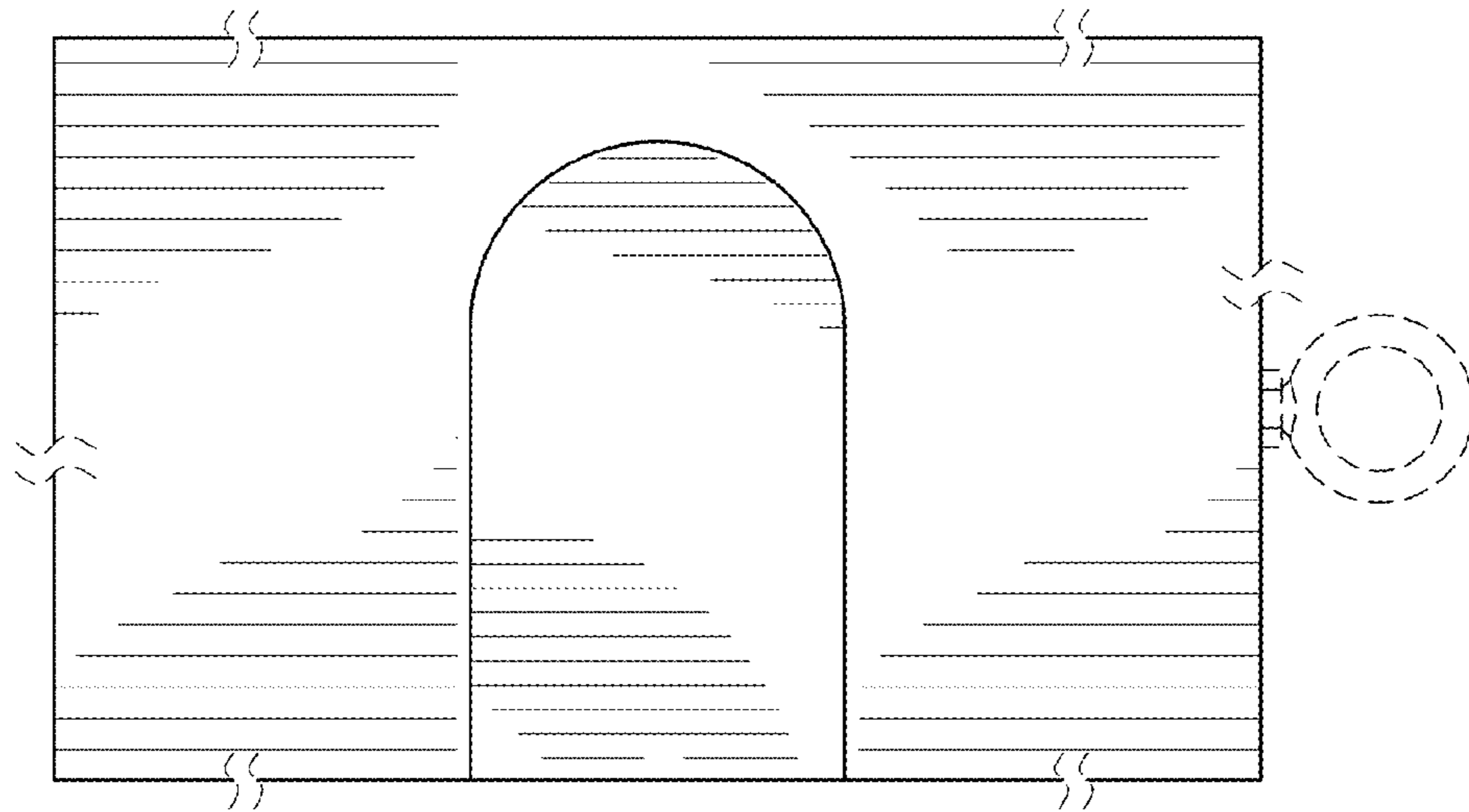


FIG. 19

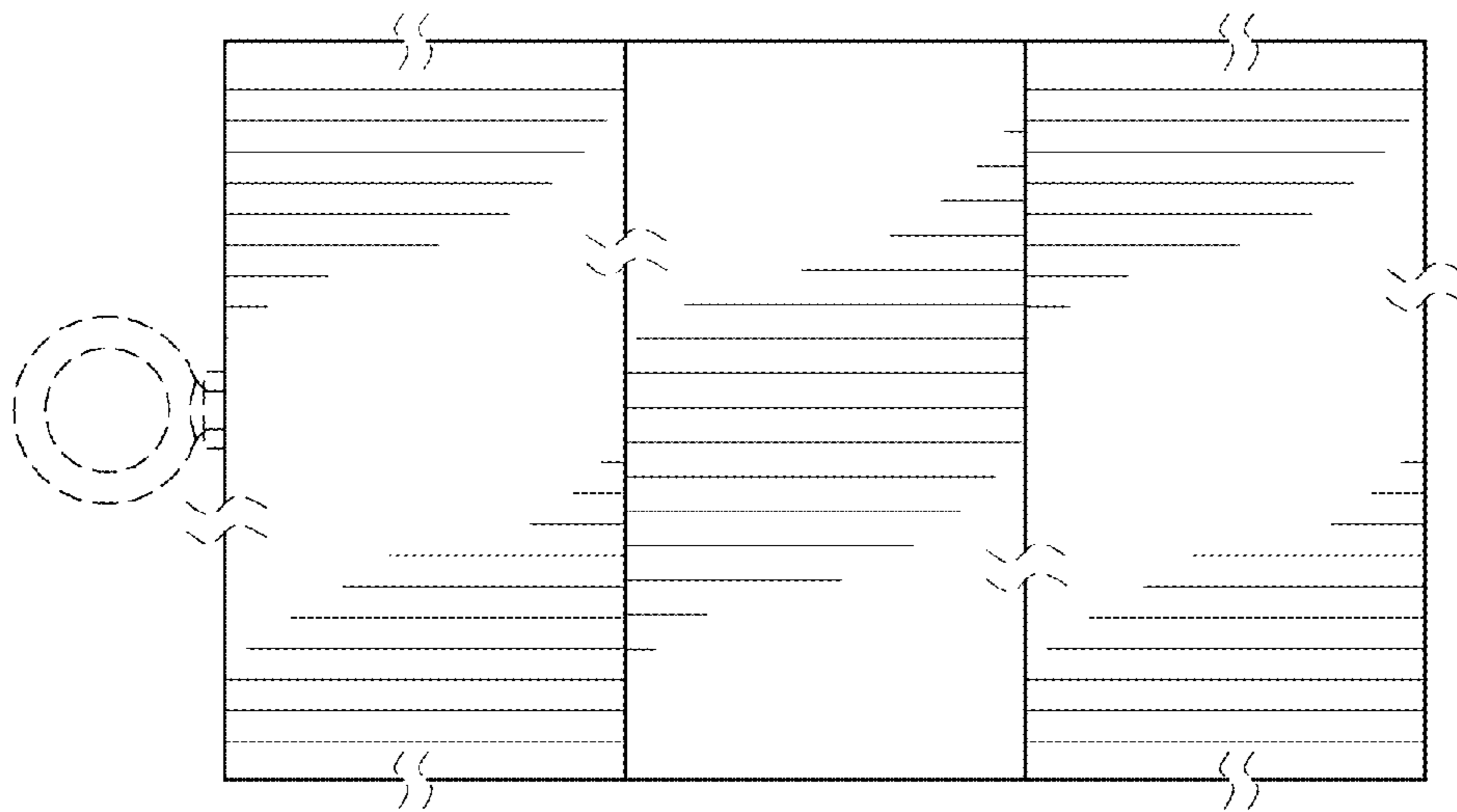


FIG. 20

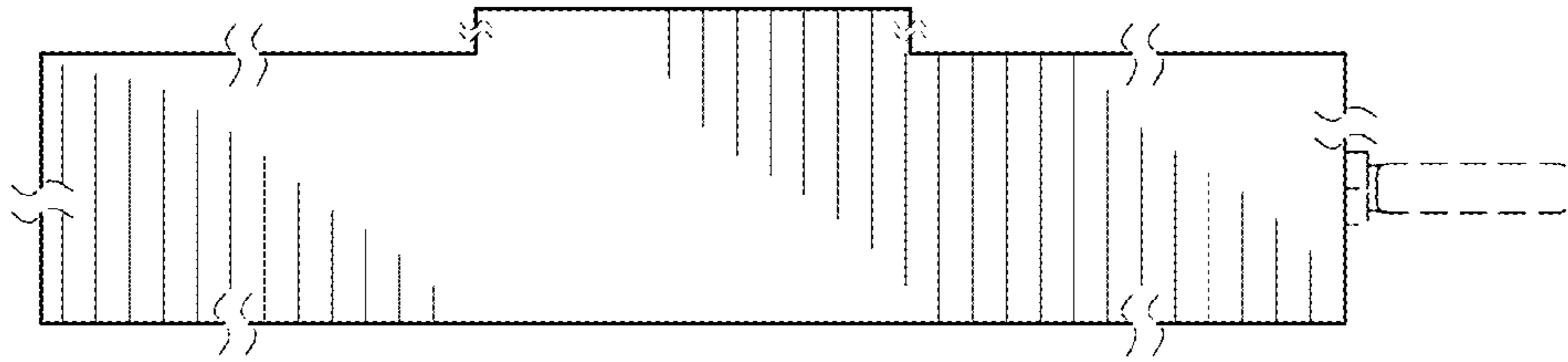


FIG. 21

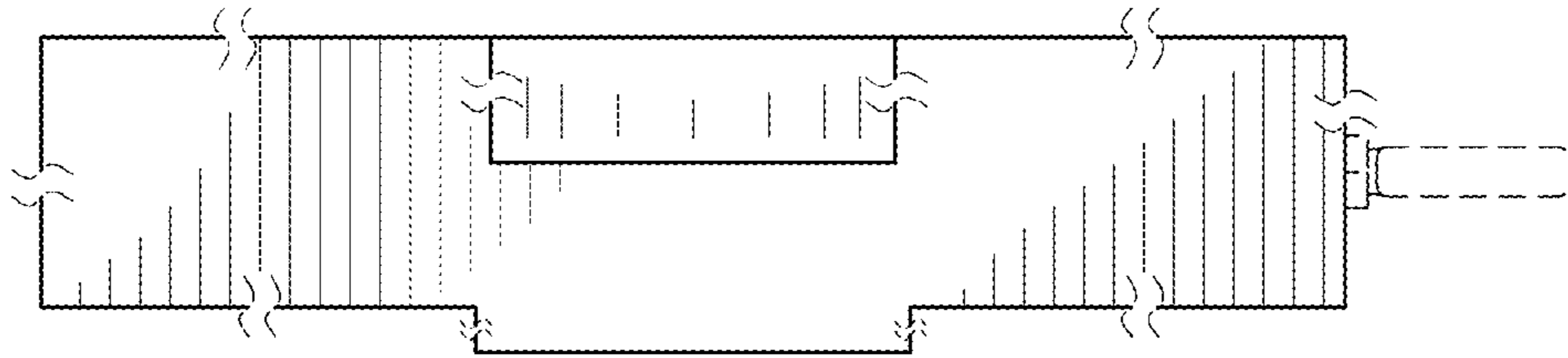


FIG. 22

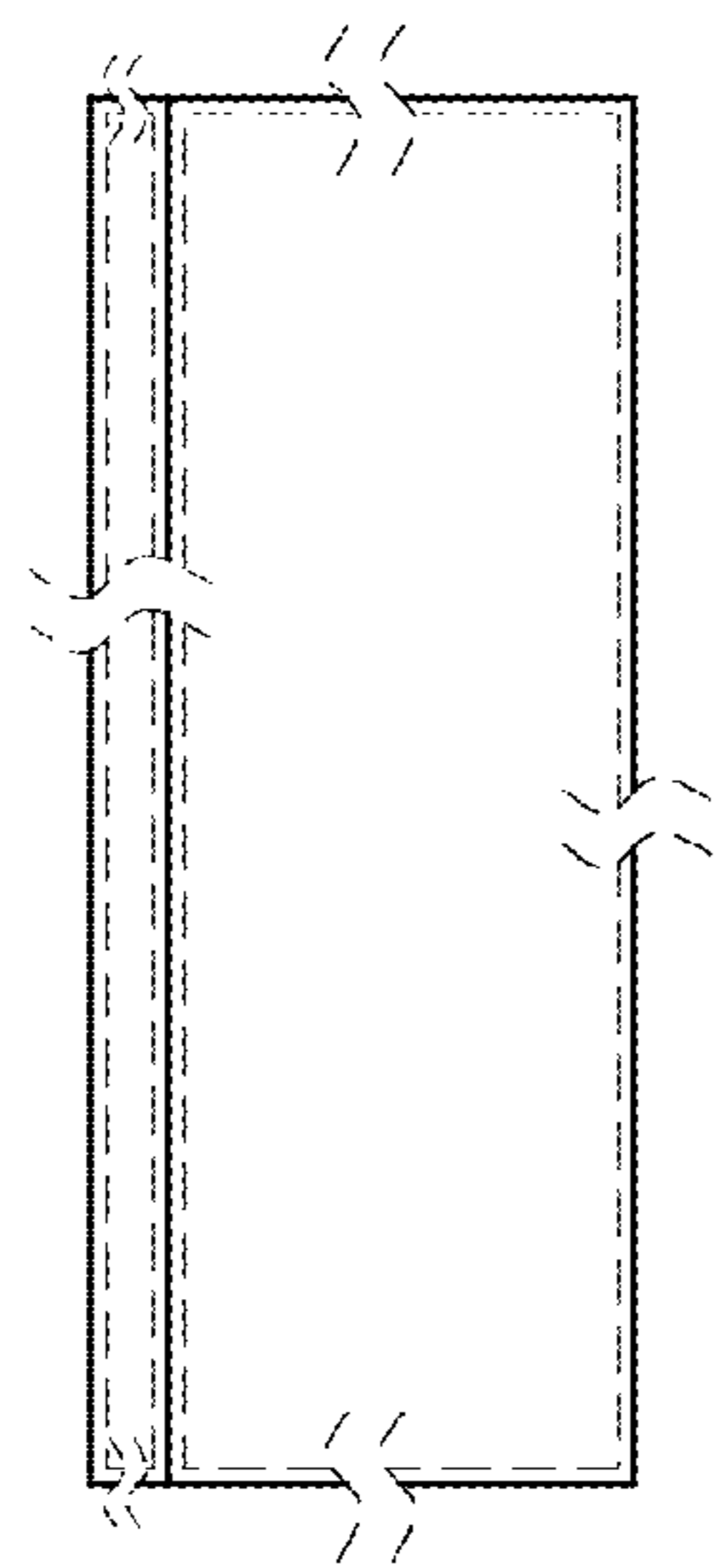


FIG. 23

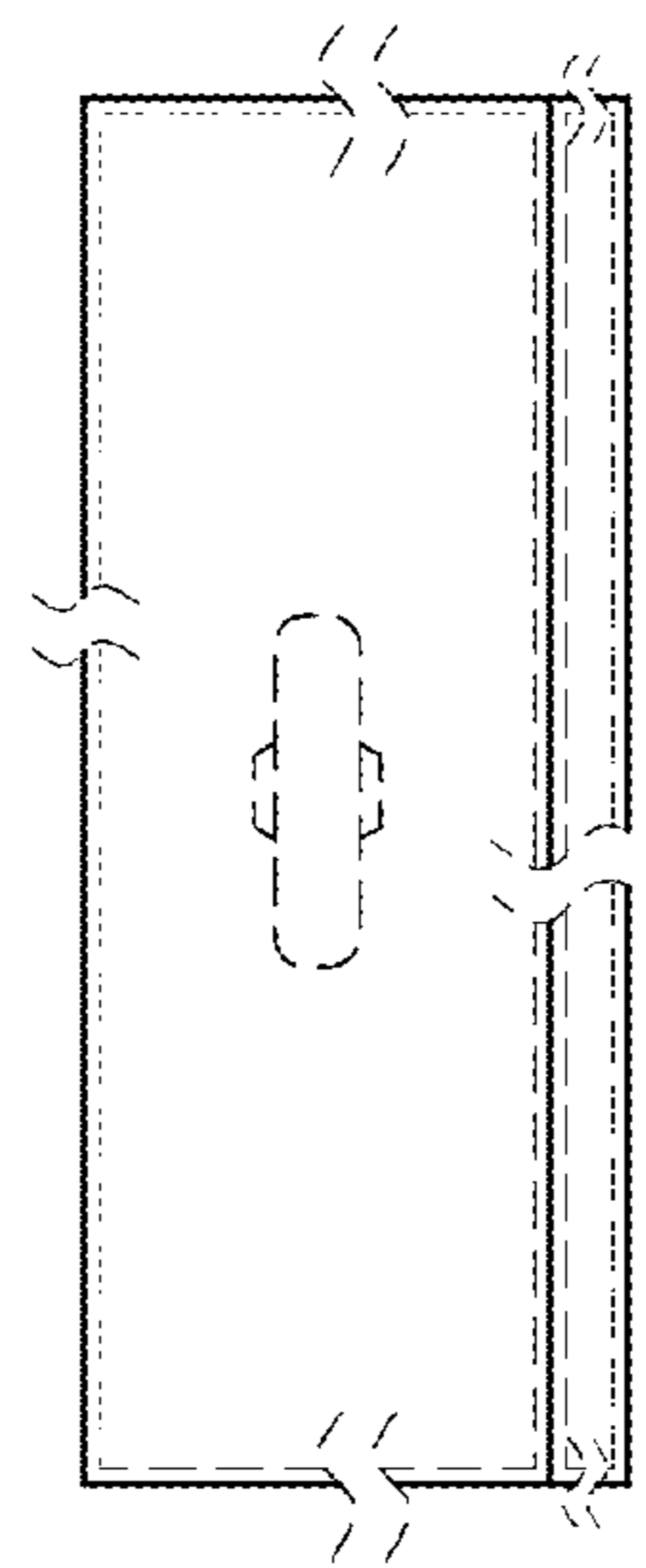


FIG. 24

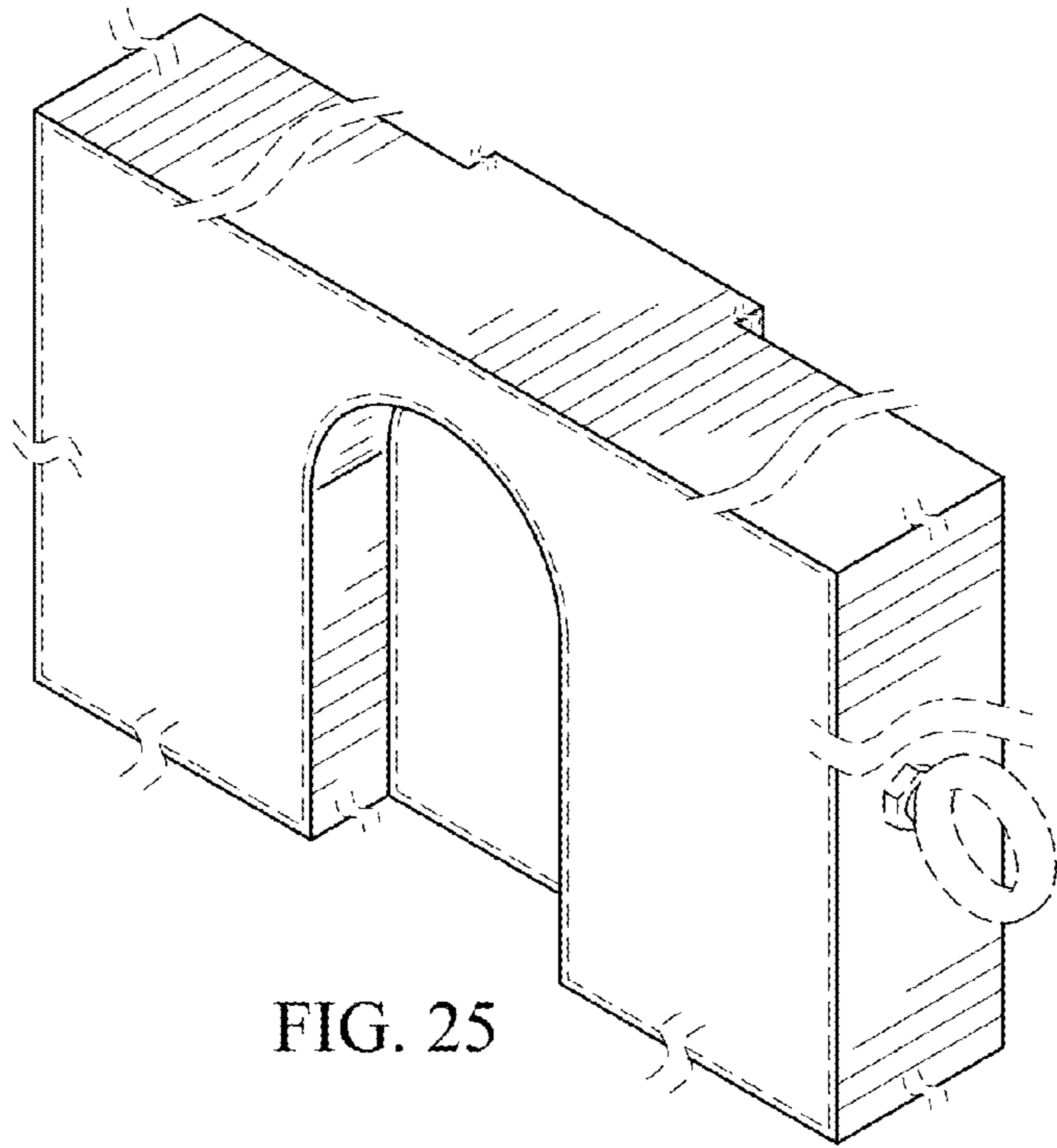


FIG. 25

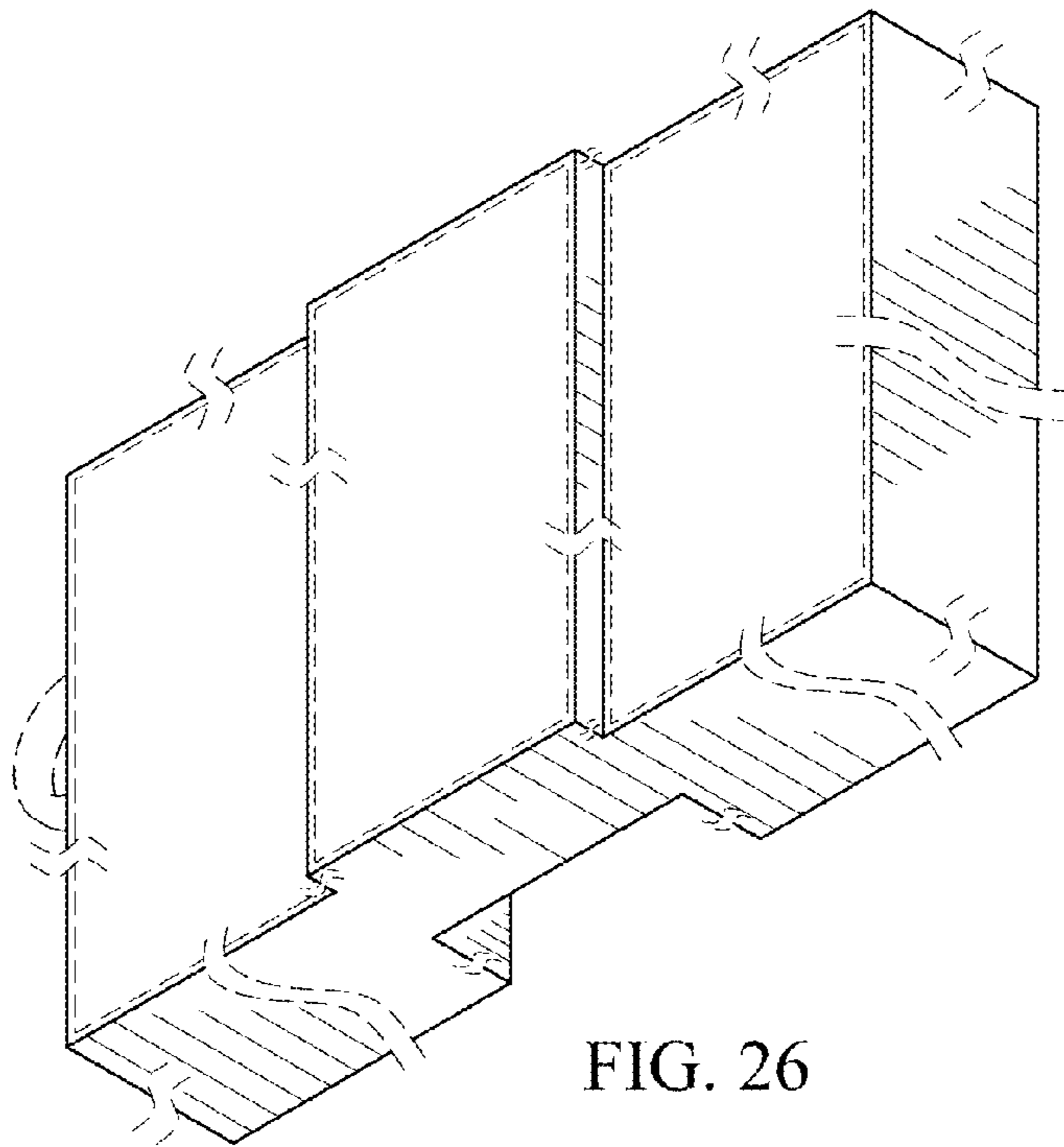


FIG. 26

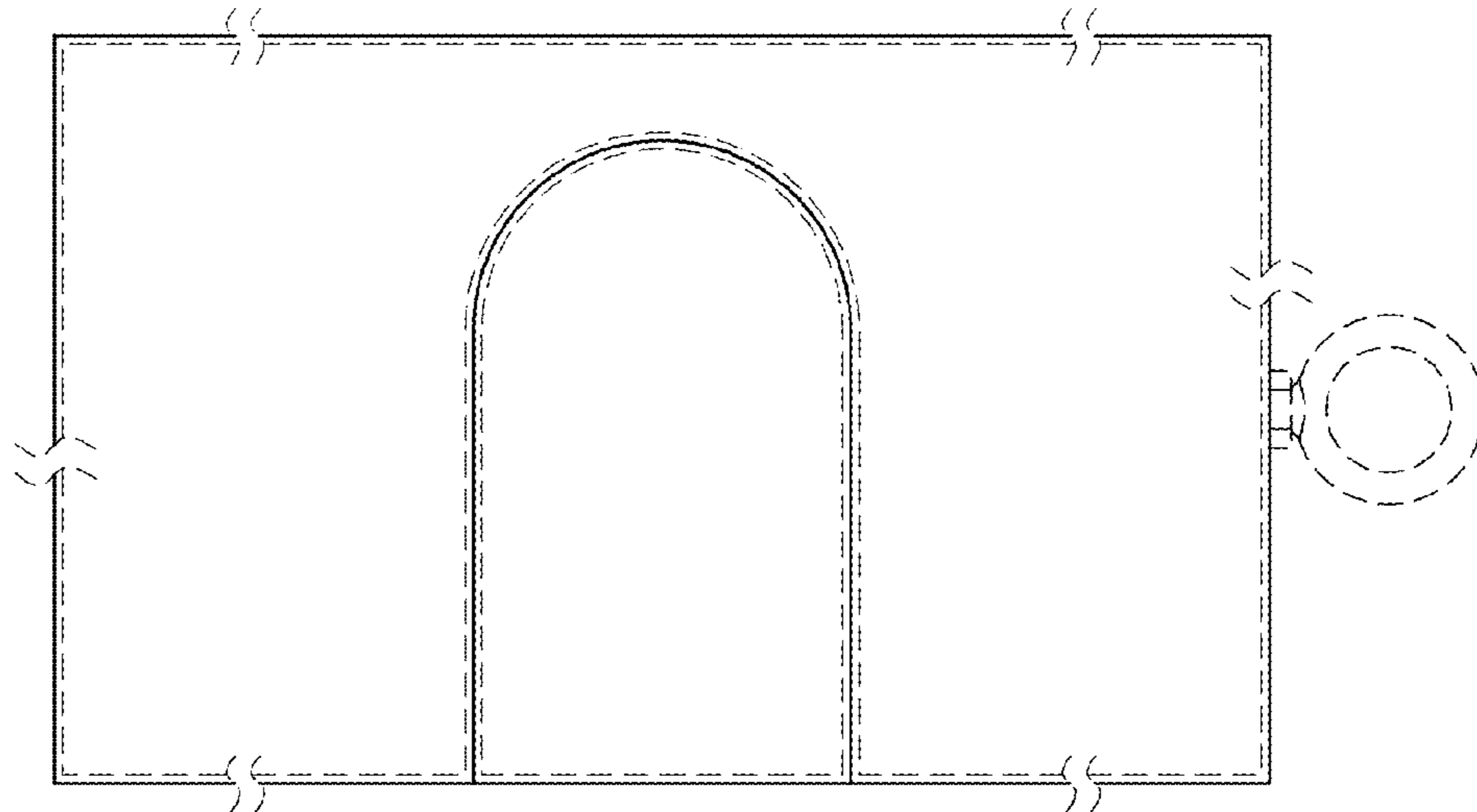


FIG. 27

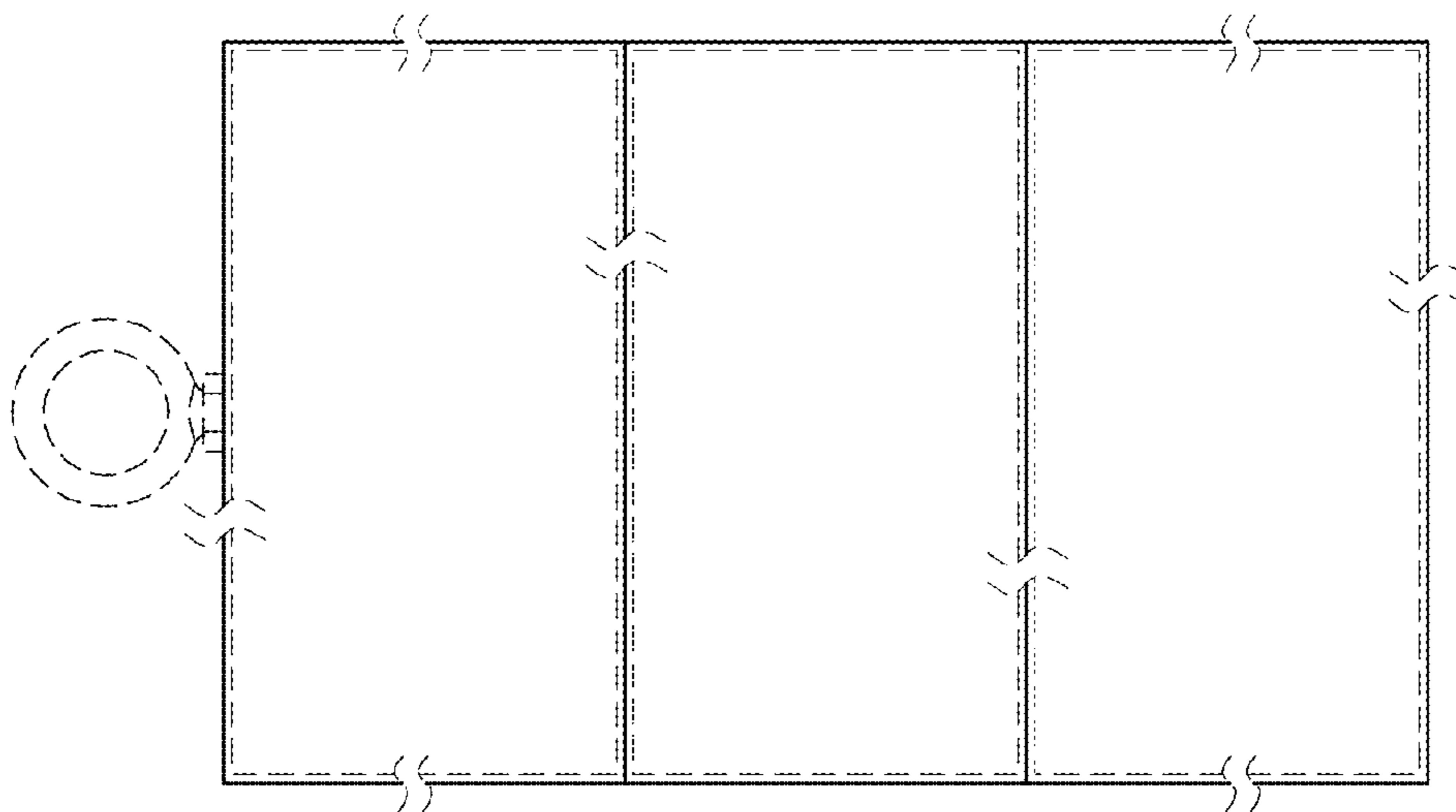


FIG. 28

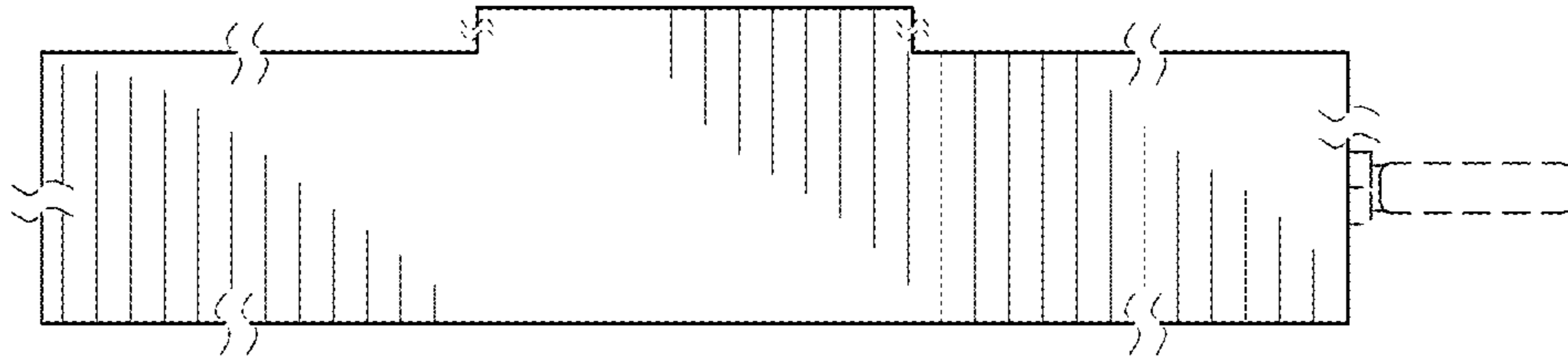


FIG. 29

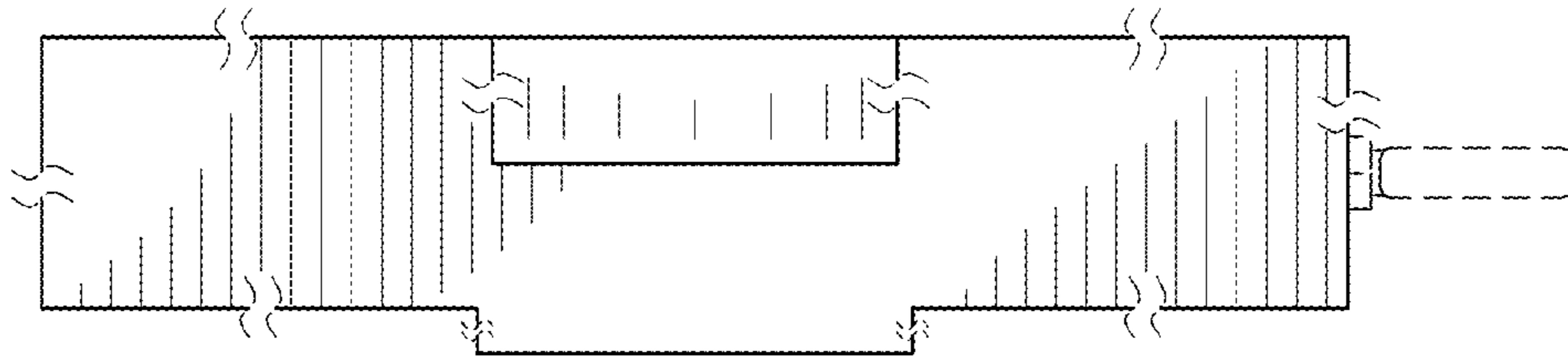


FIG. 30

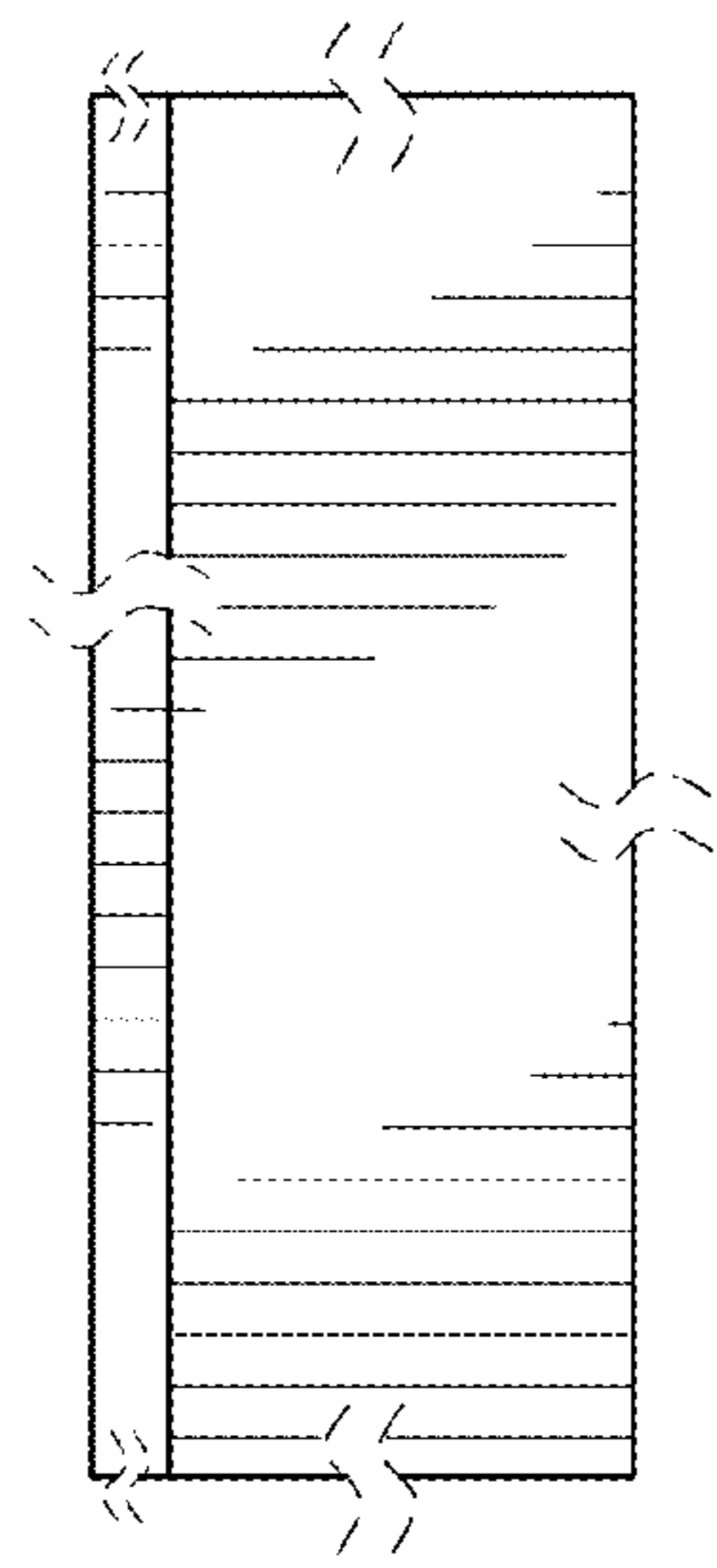


FIG. 31

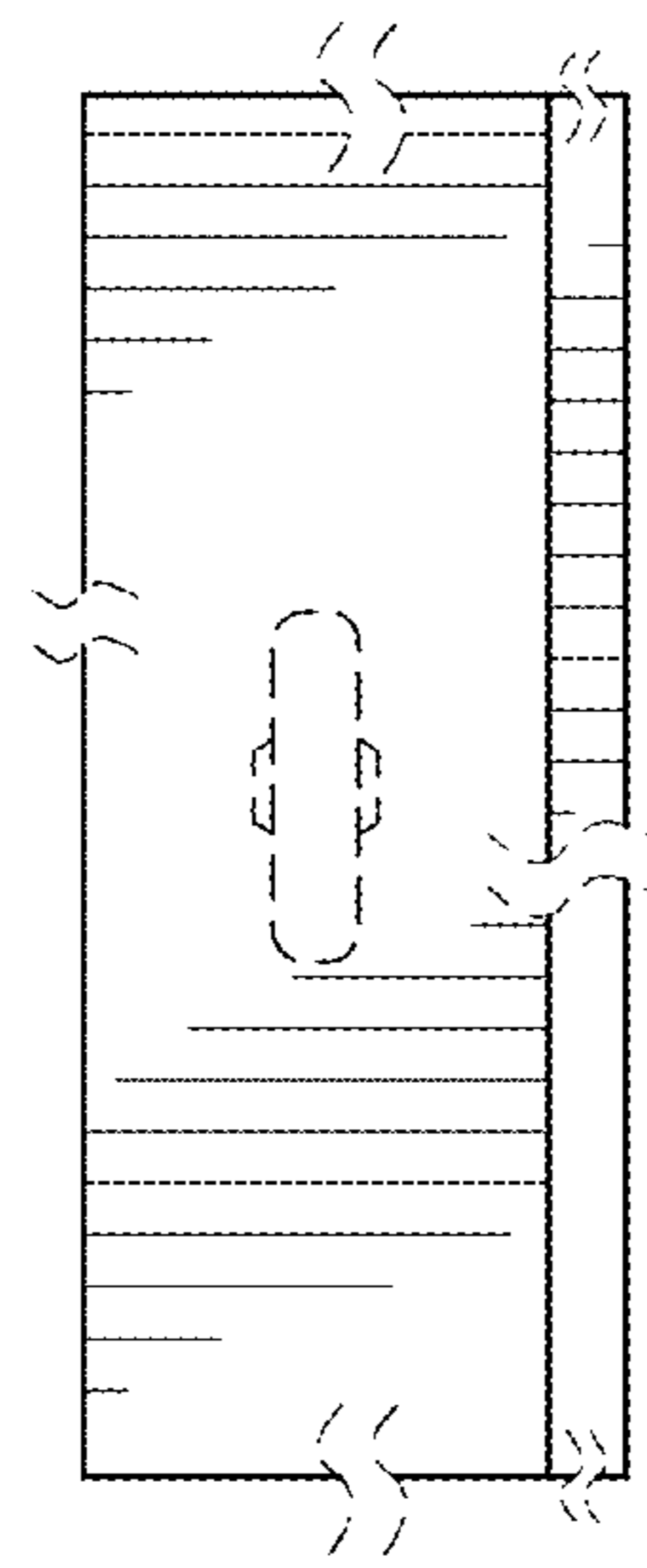


FIG. 32

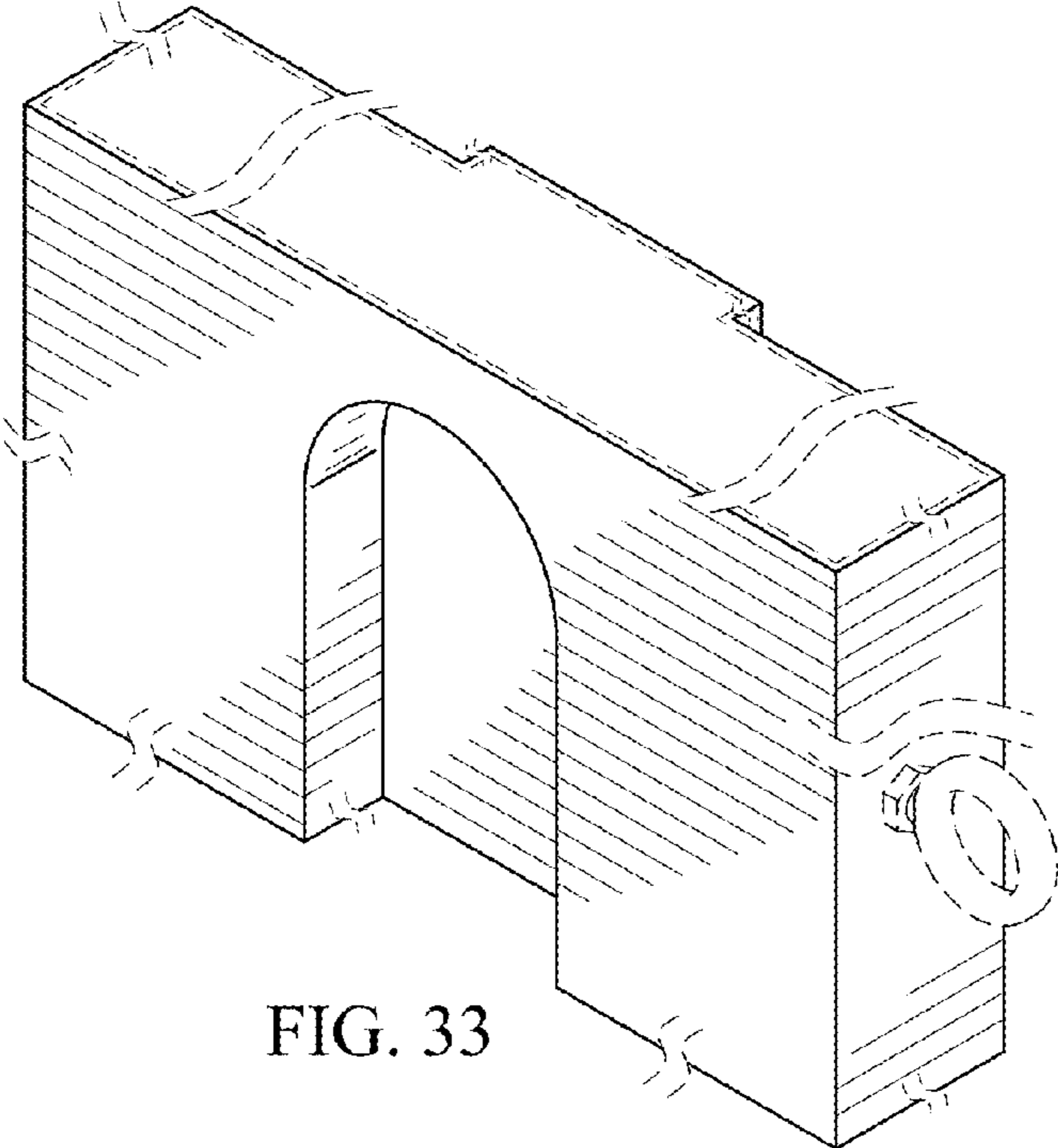


FIG. 33

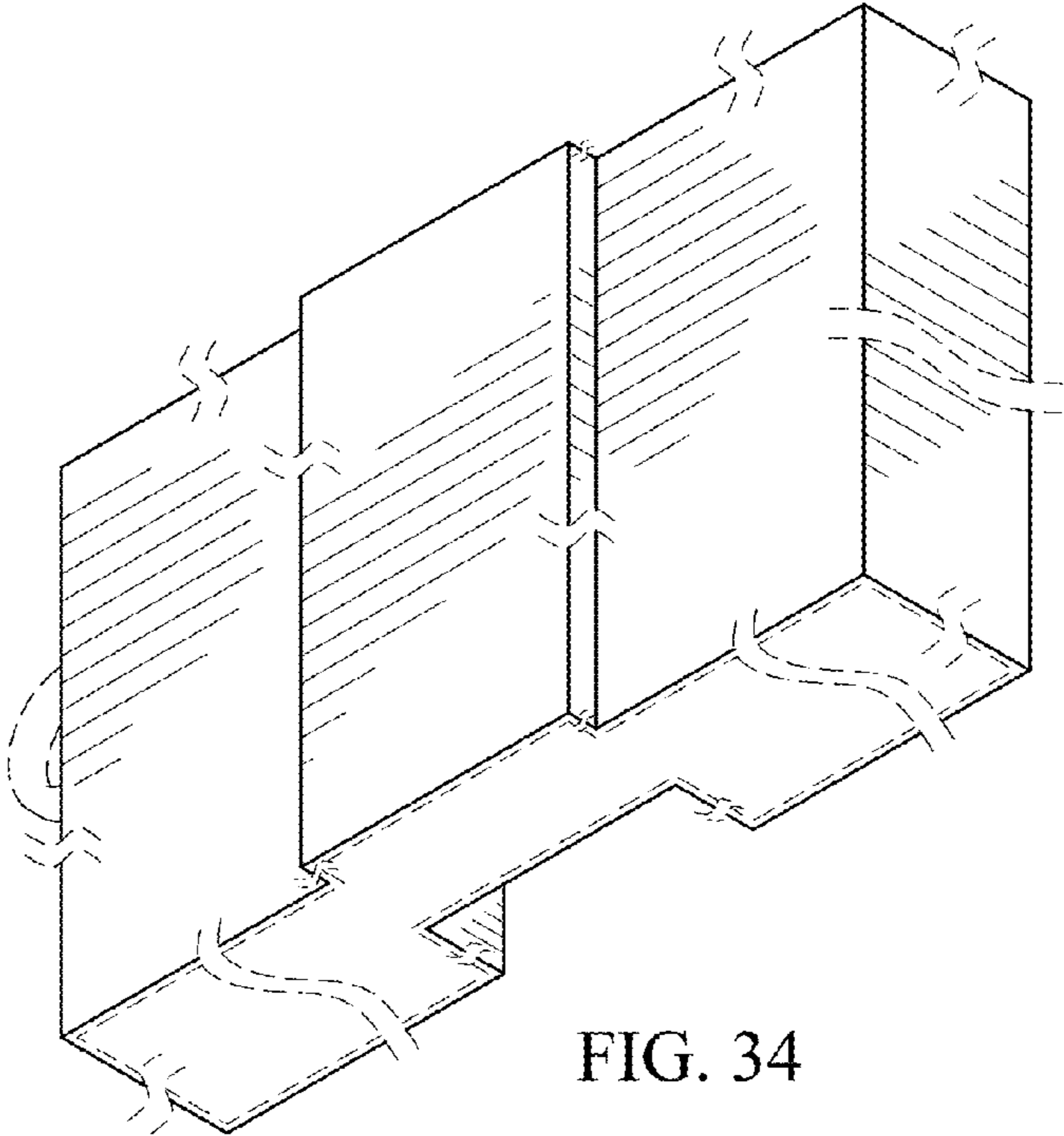


FIG. 34

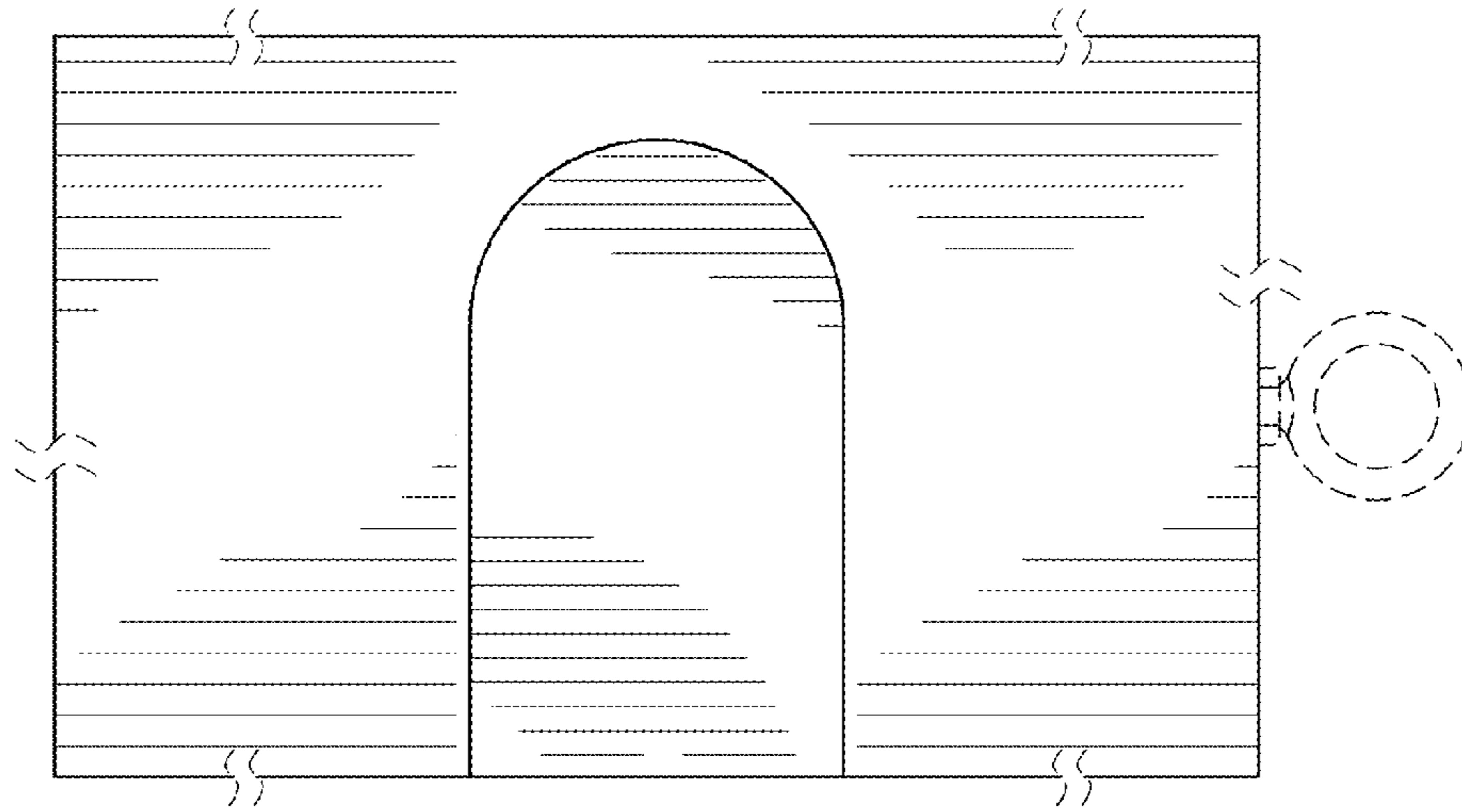


FIG. 35

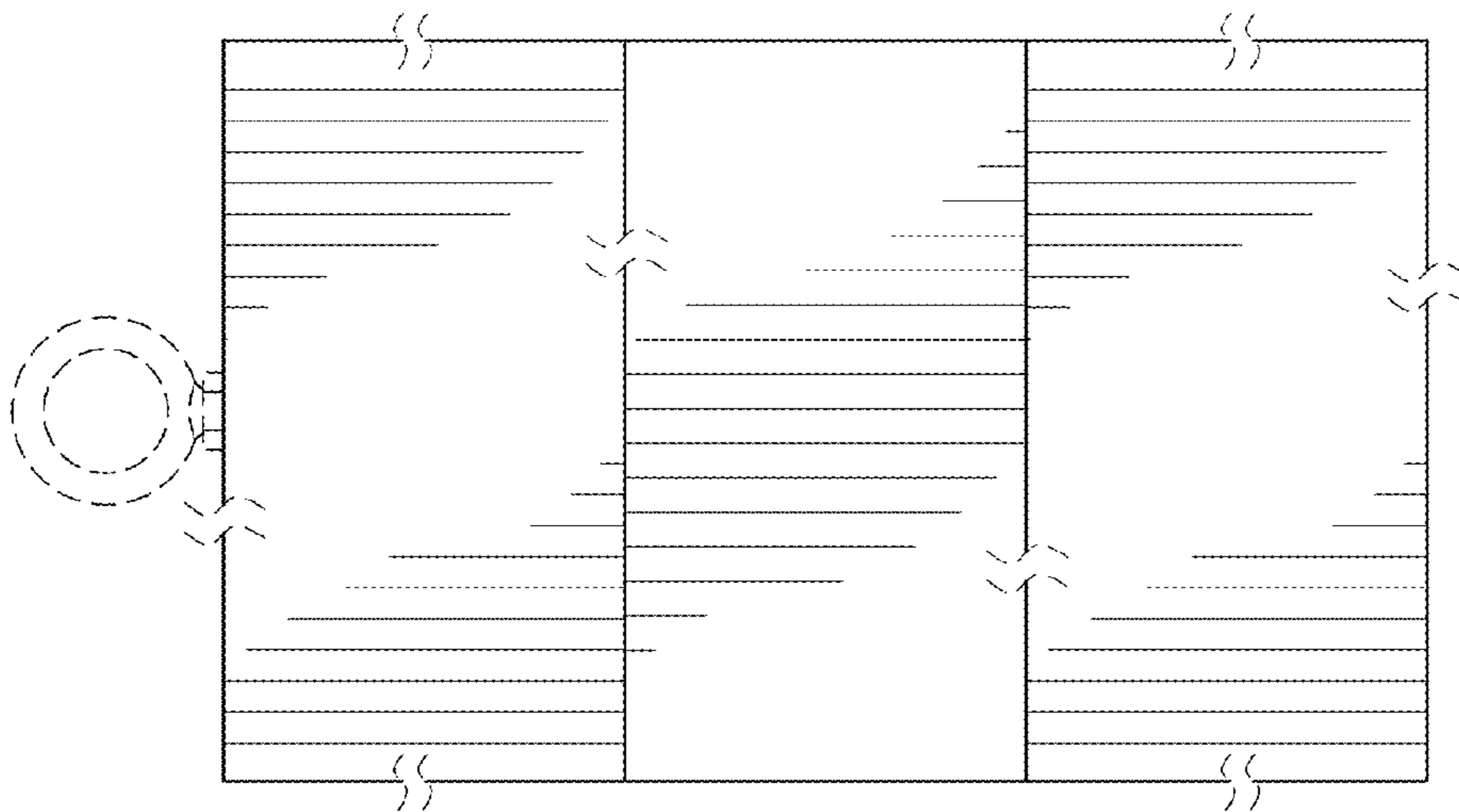


FIG. 36



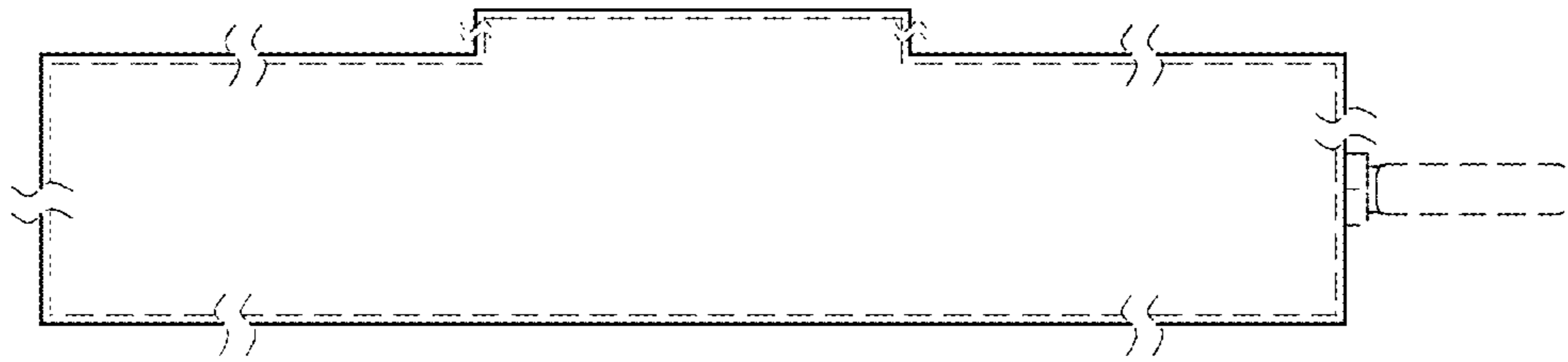


FIG. 37

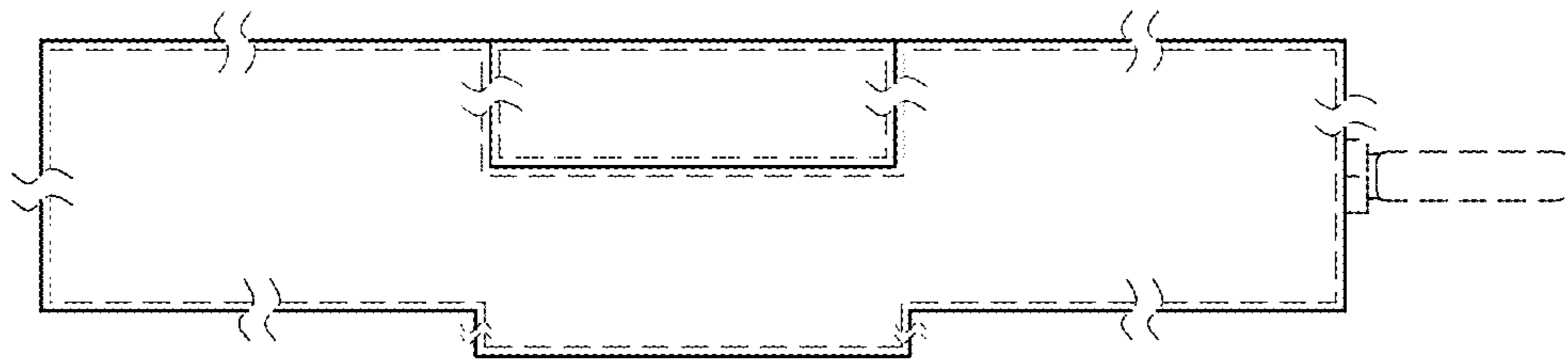


FIG. 38

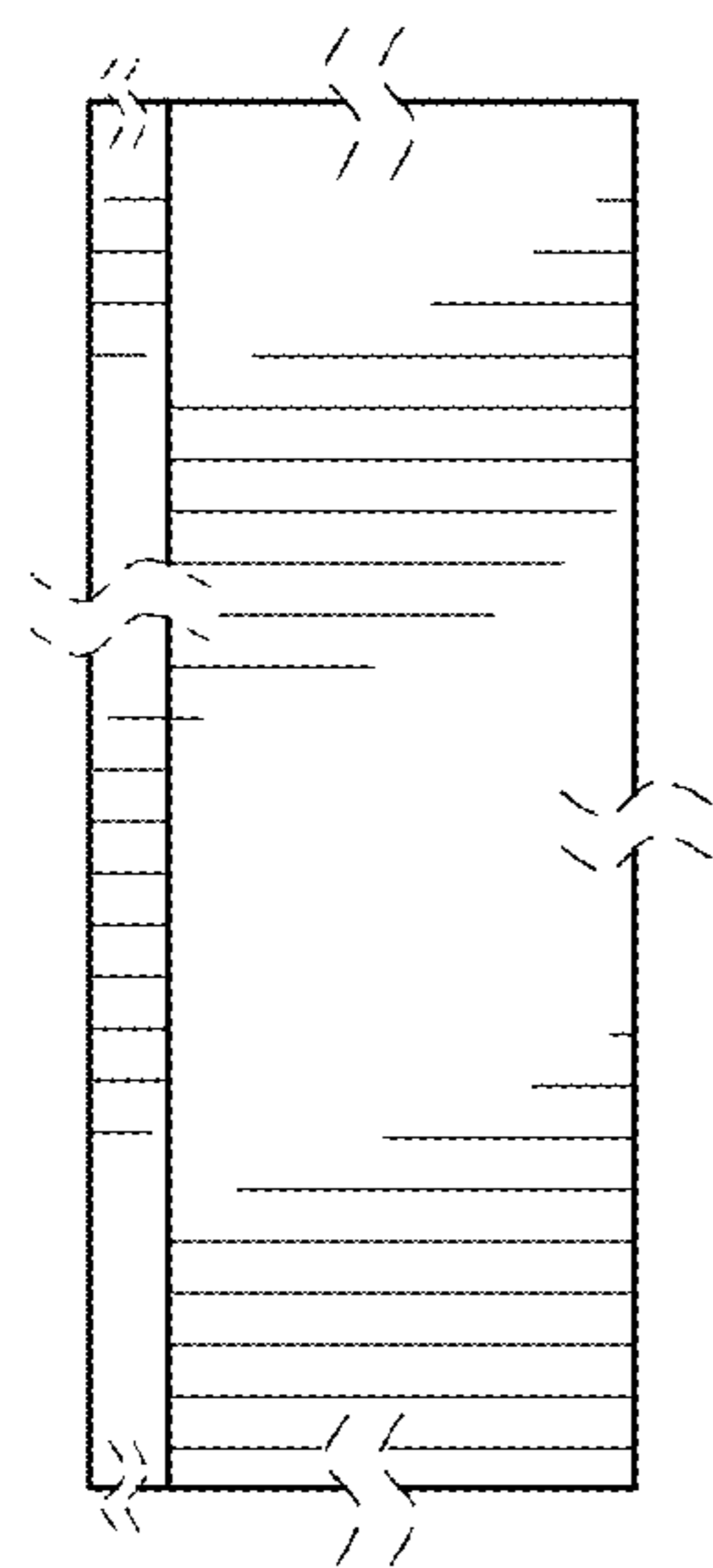


FIG. 39

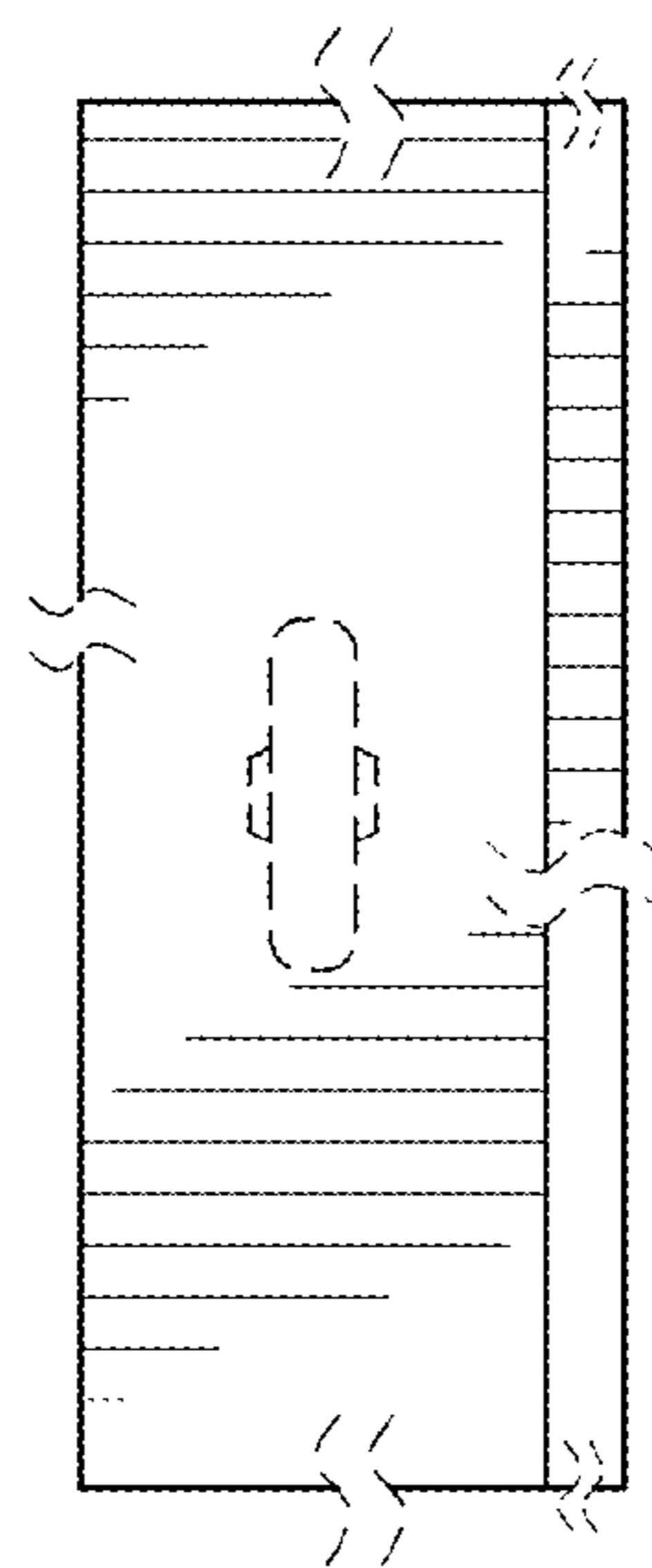


FIG. 40

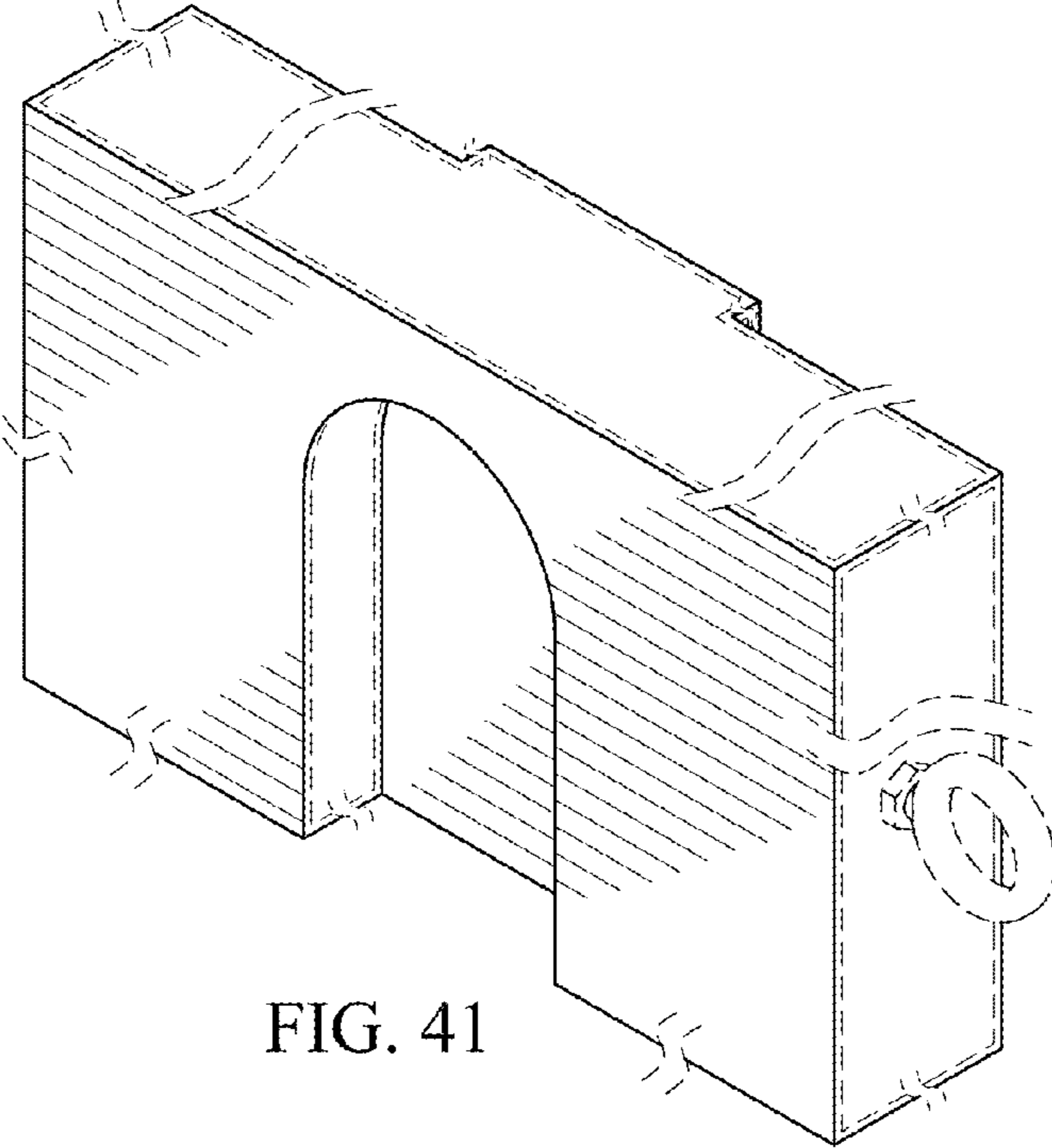


FIG. 41

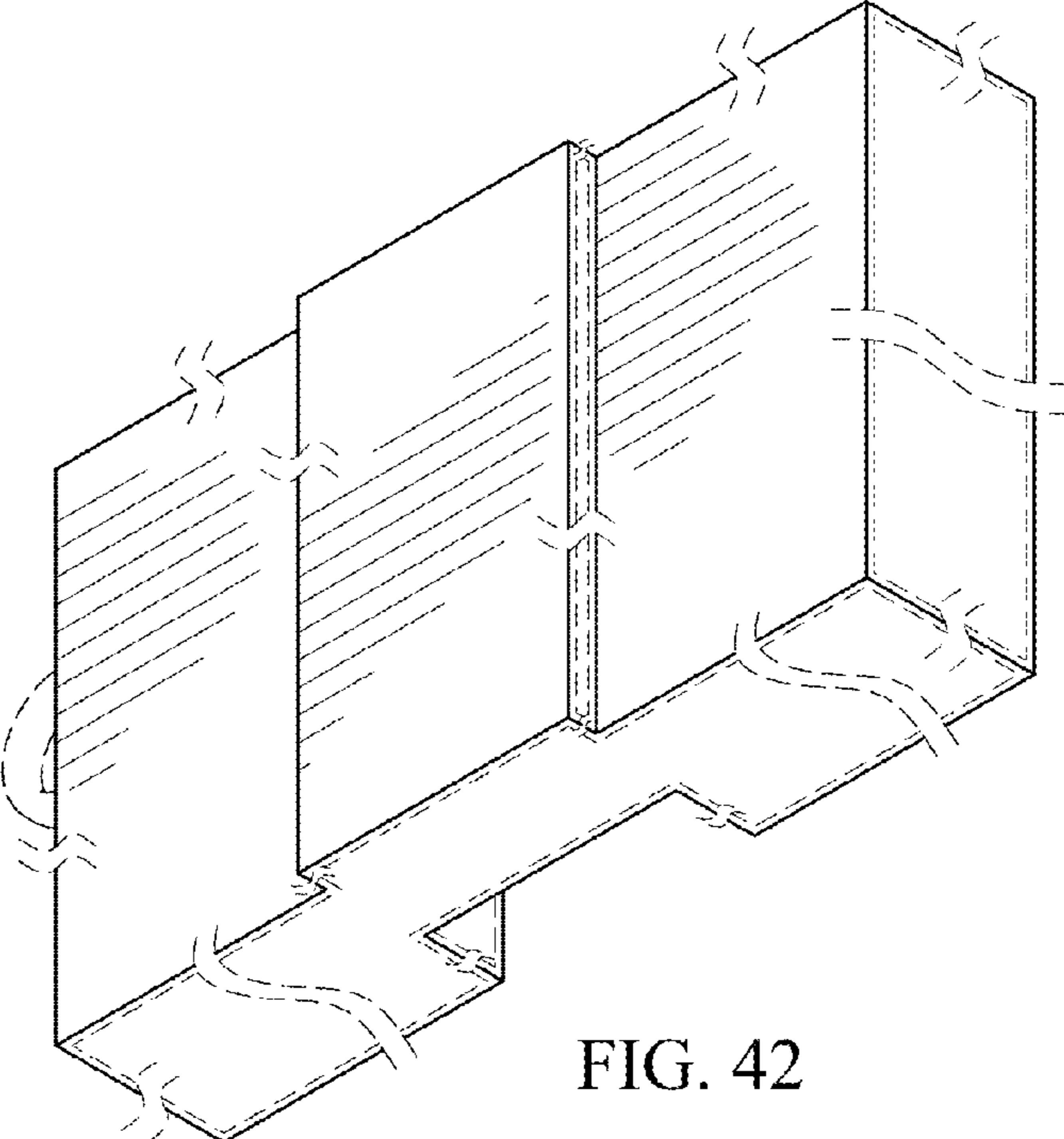


FIG. 42

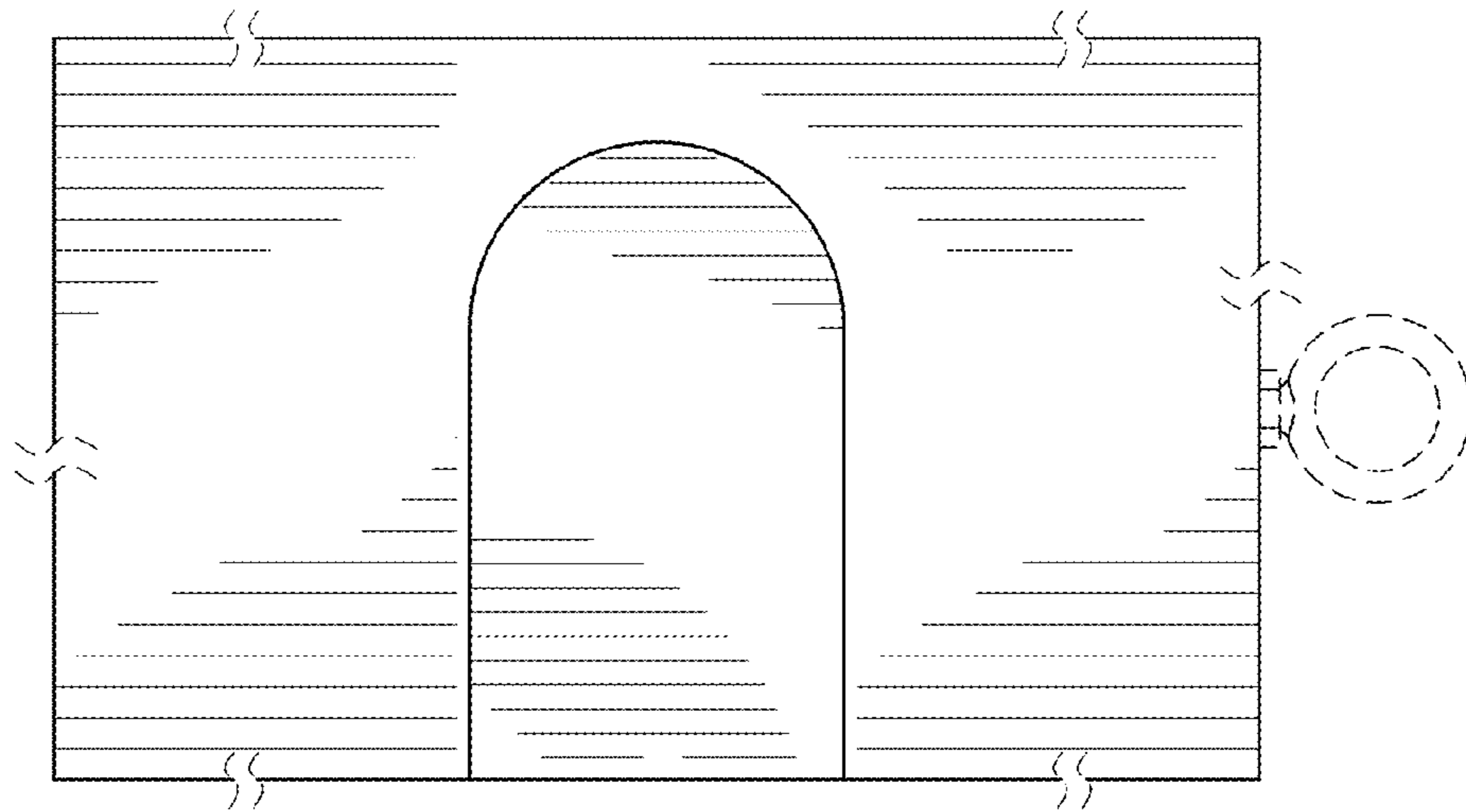


FIG. 43

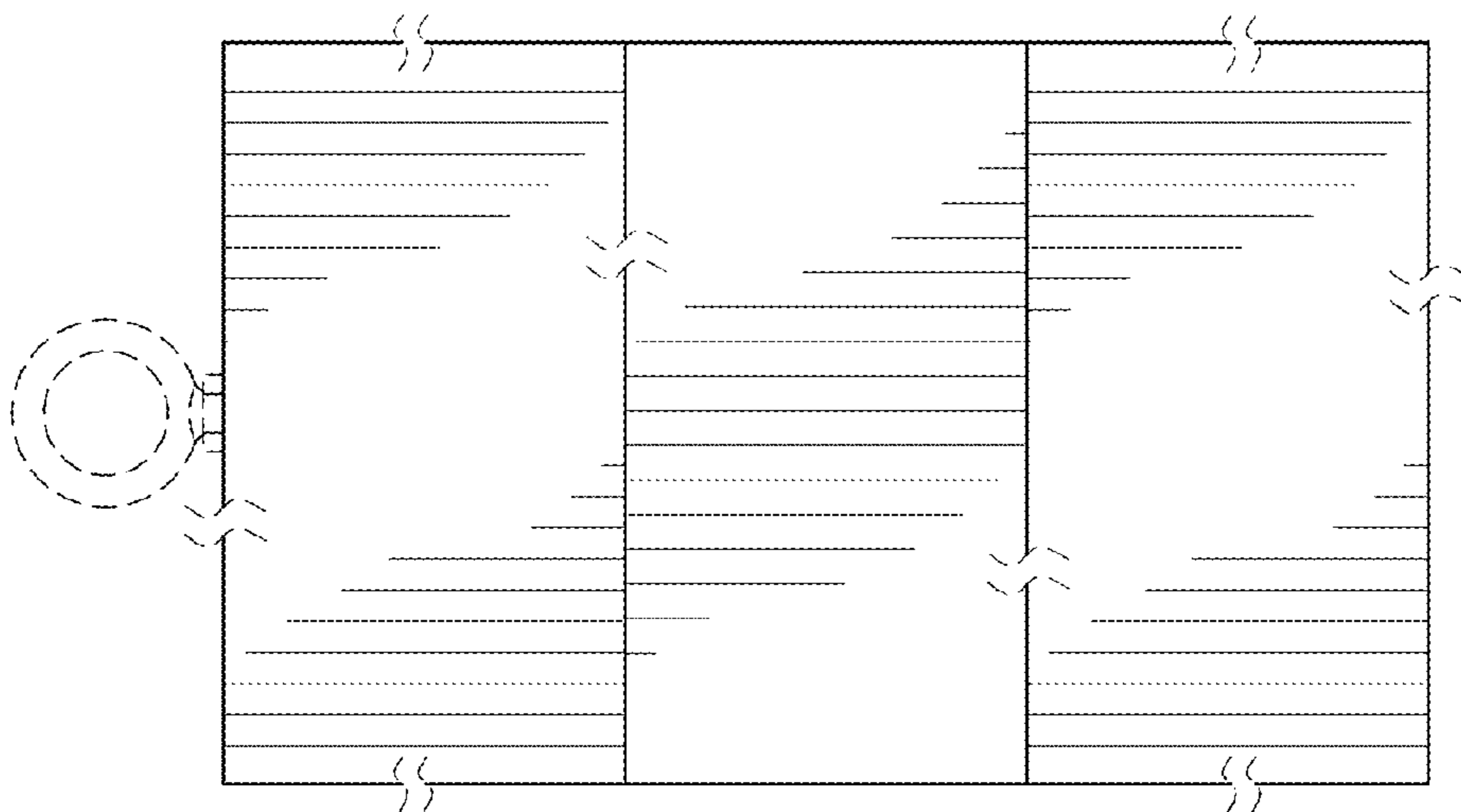


FIG. 44

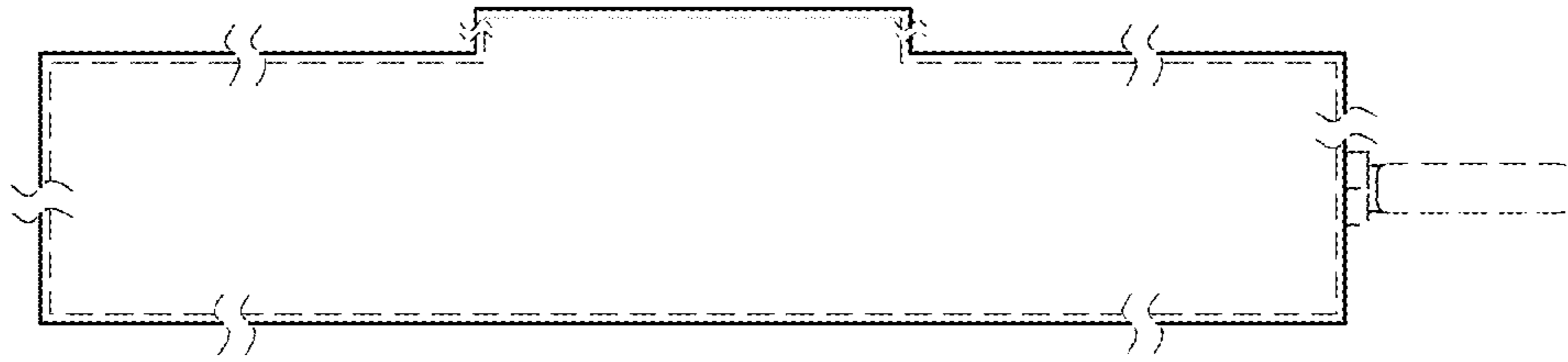


FIG. 45

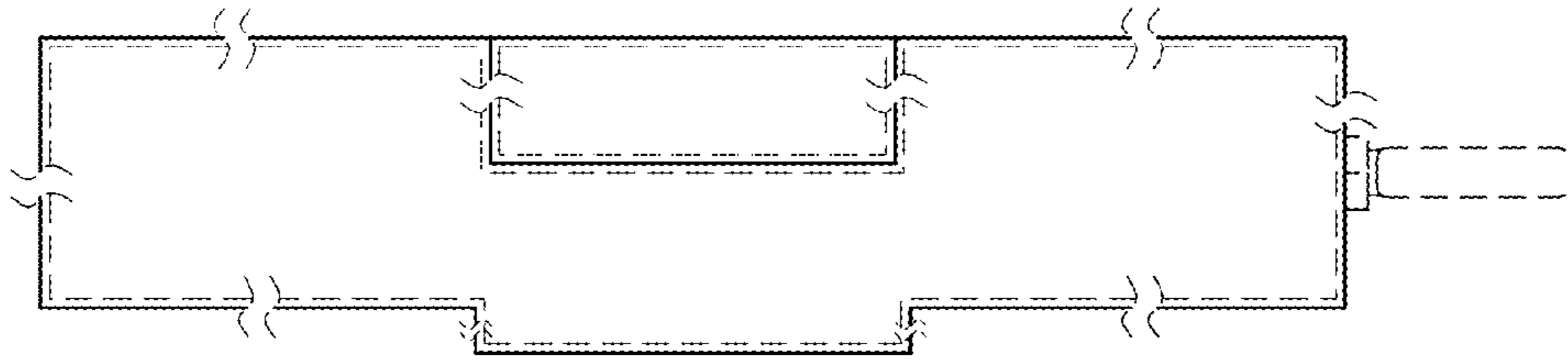


FIG. 46

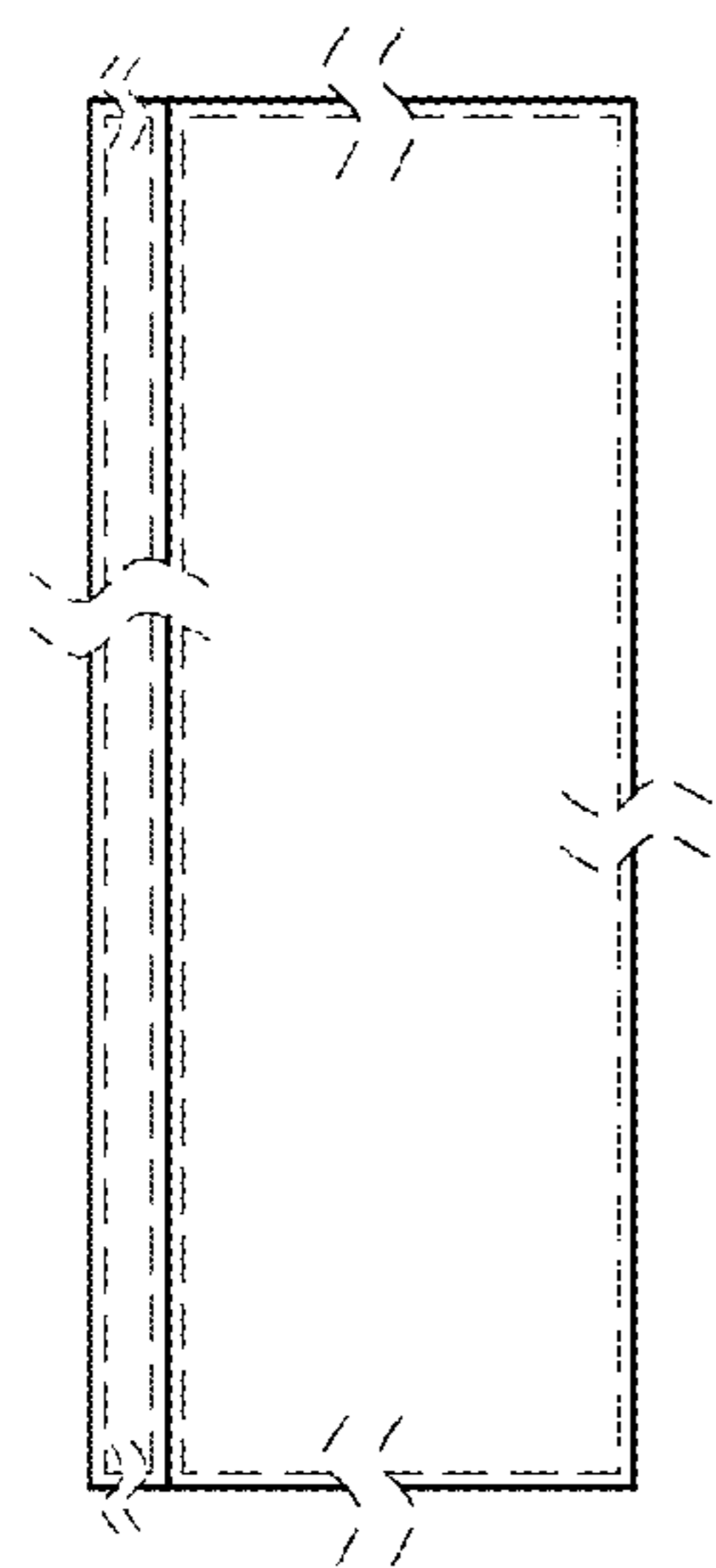


FIG. 47

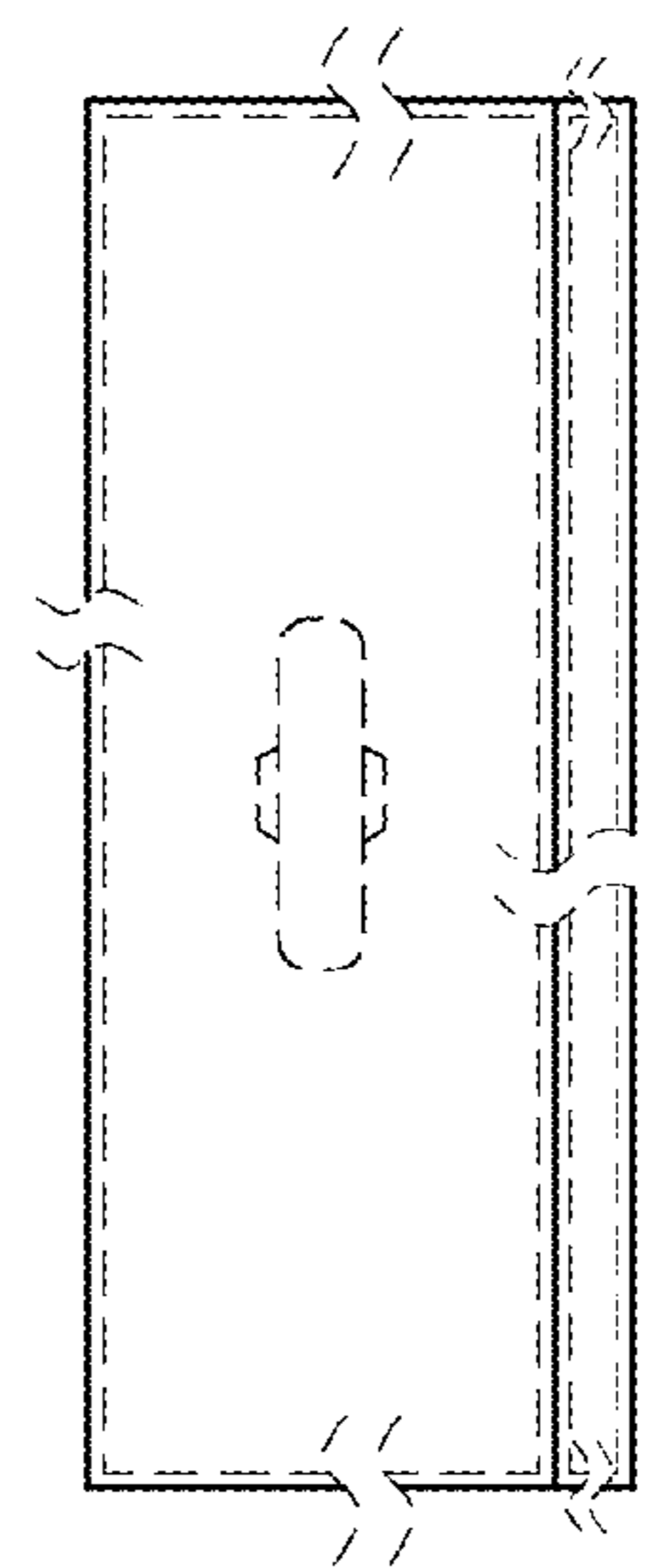


FIG. 48

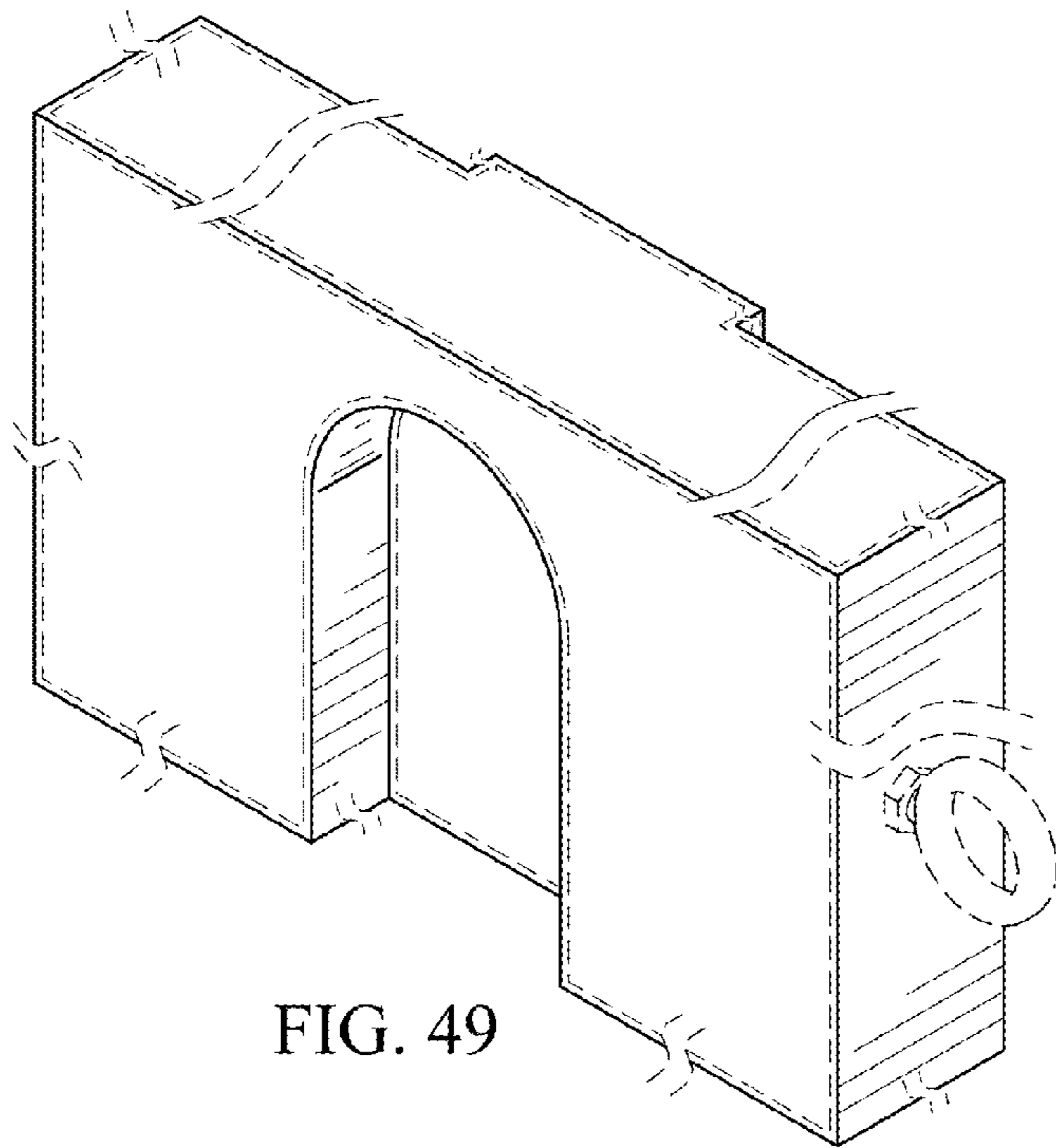


FIG. 49

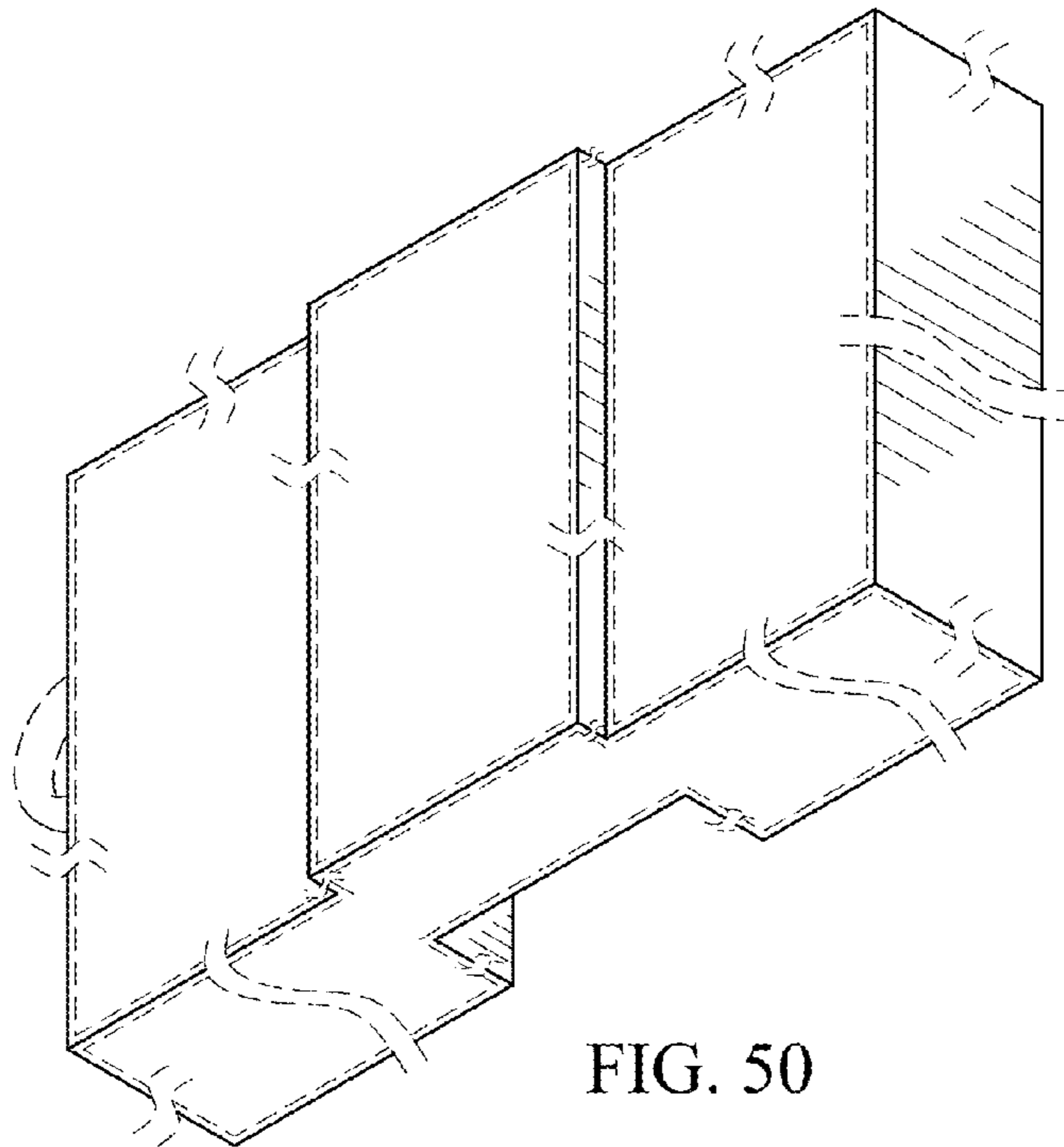


FIG. 50

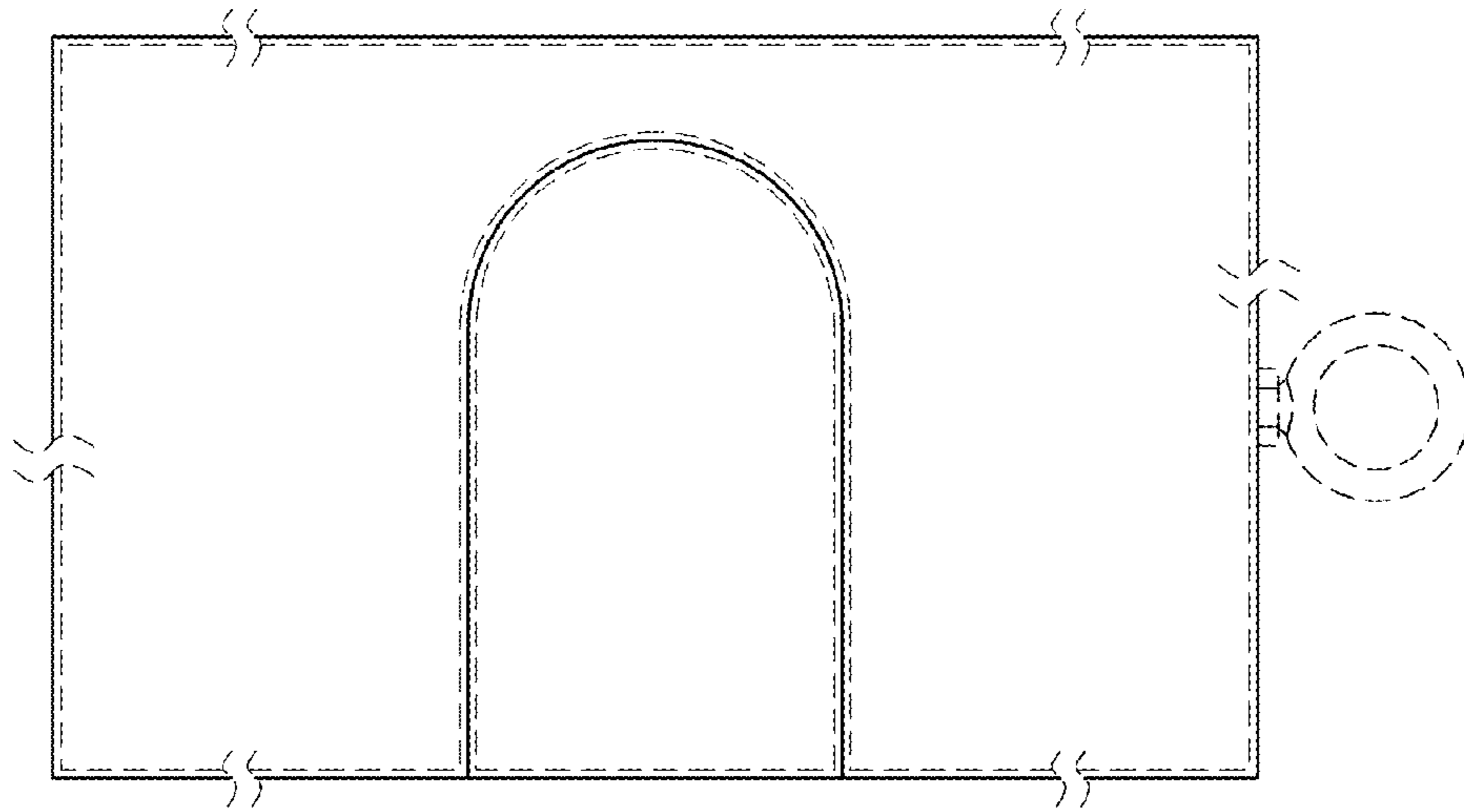


FIG. 51

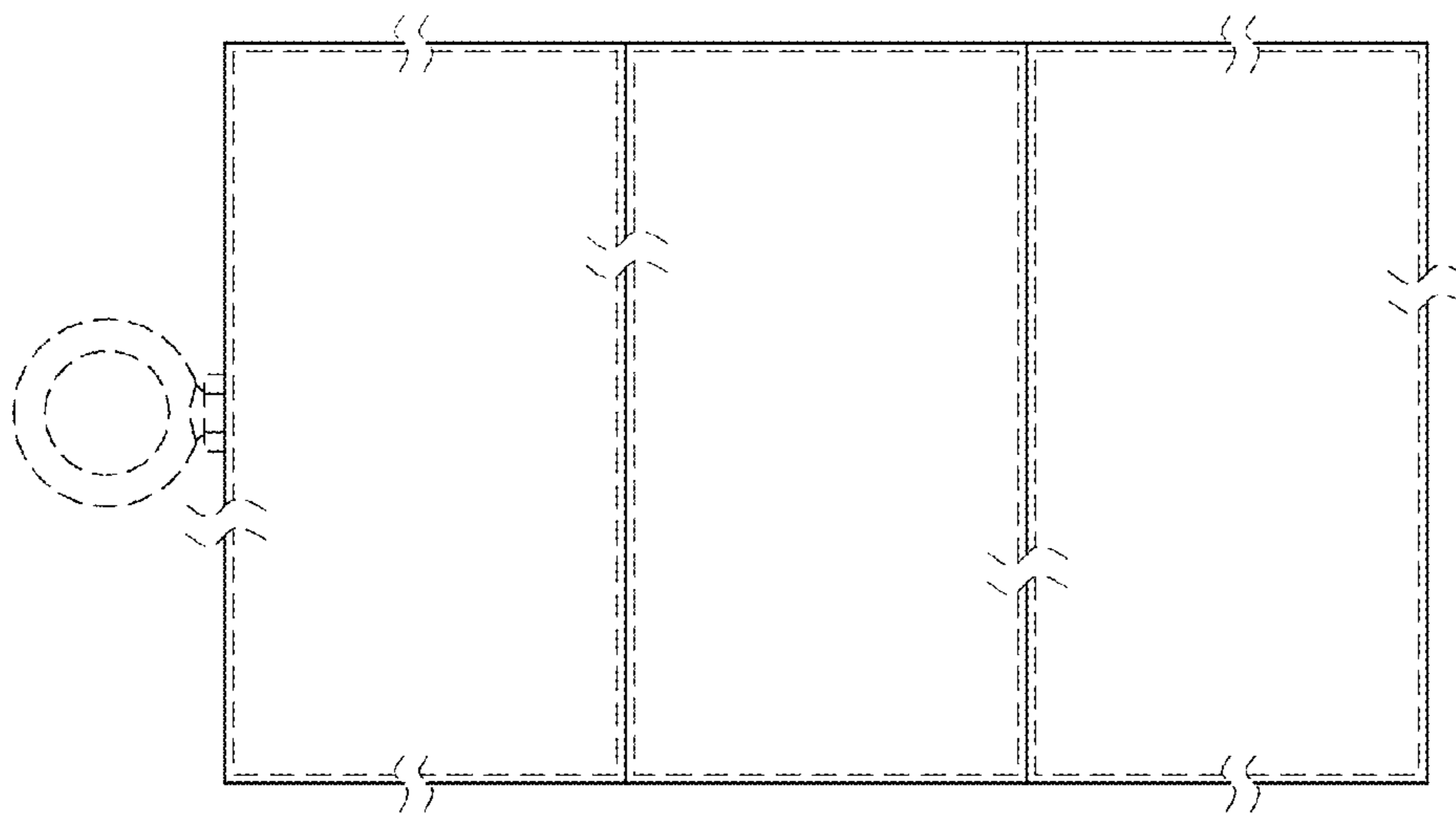


FIG. 52

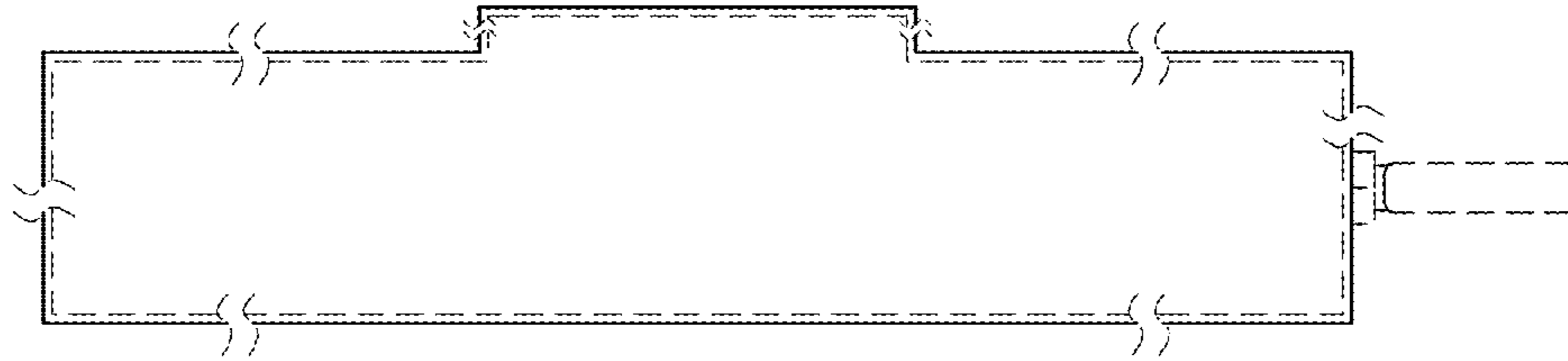


FIG. 53

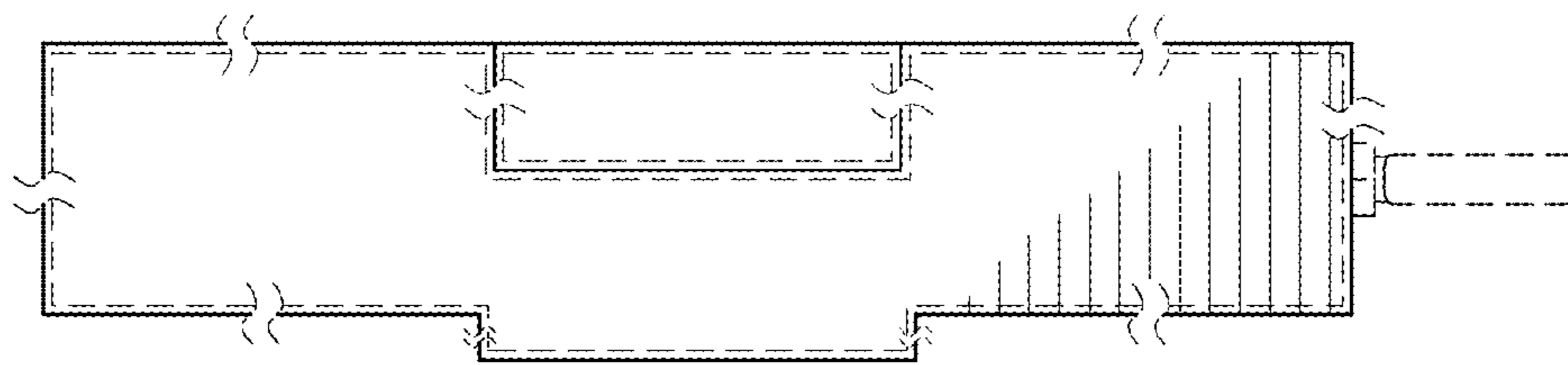


FIG. 54

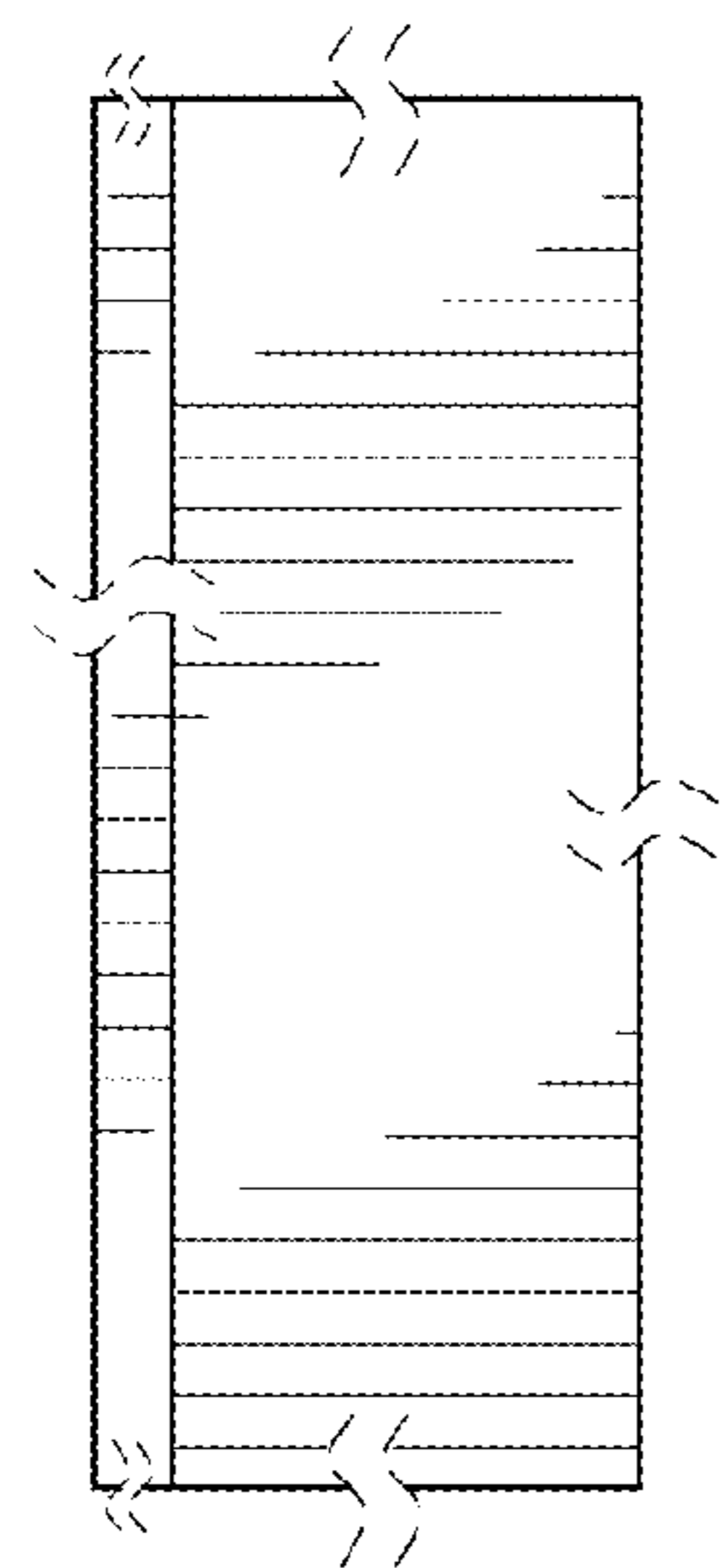


FIG. 55

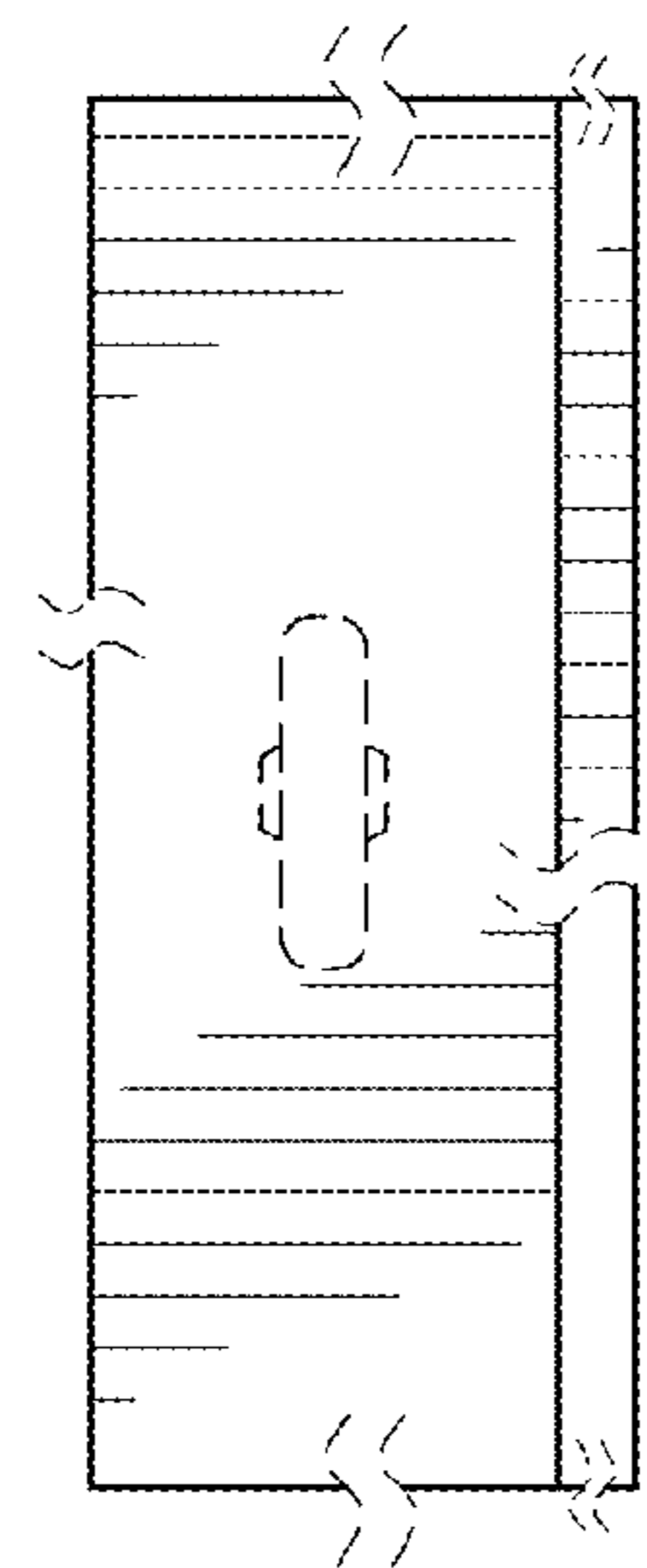


FIG. 56

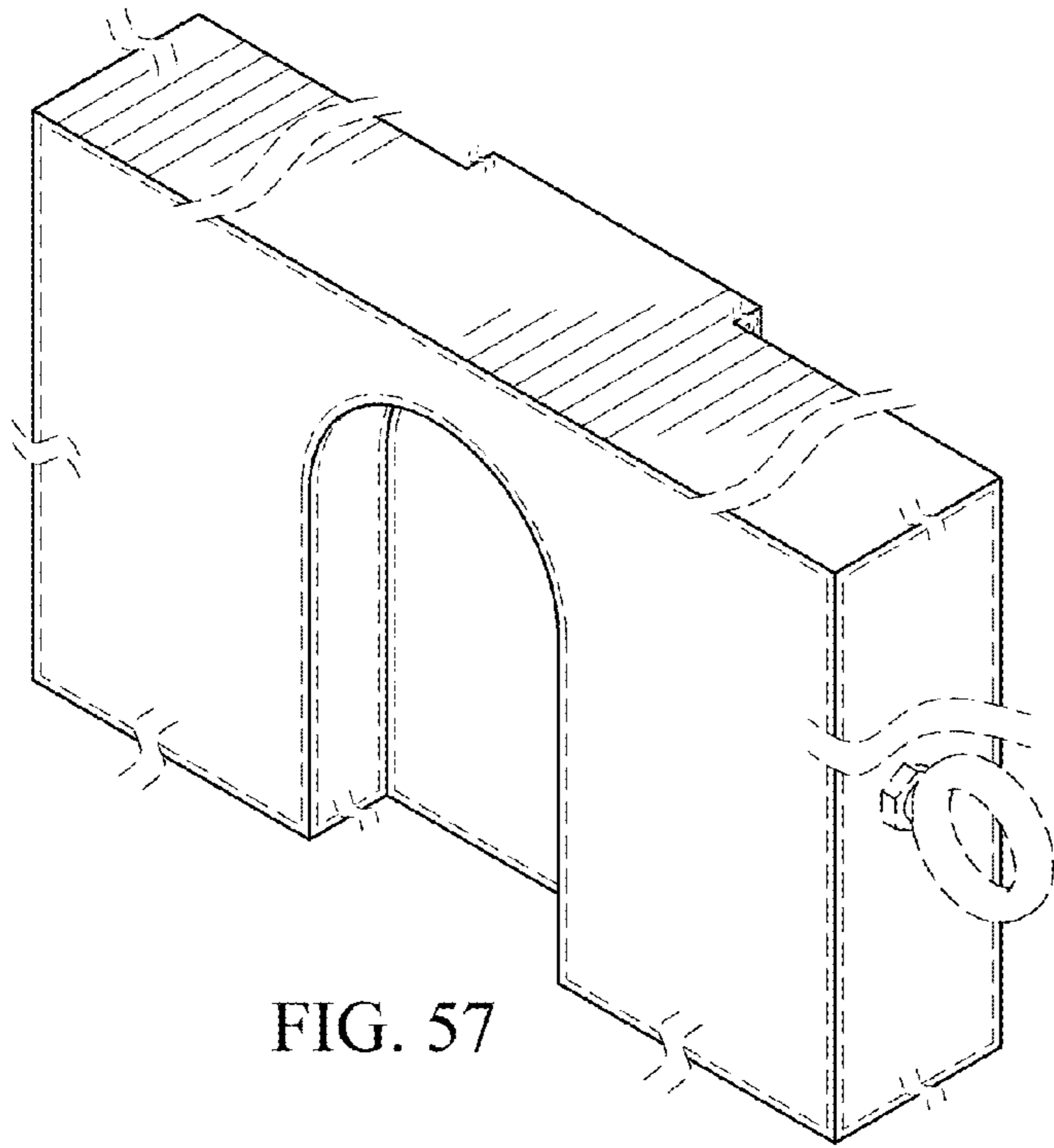


FIG. 57

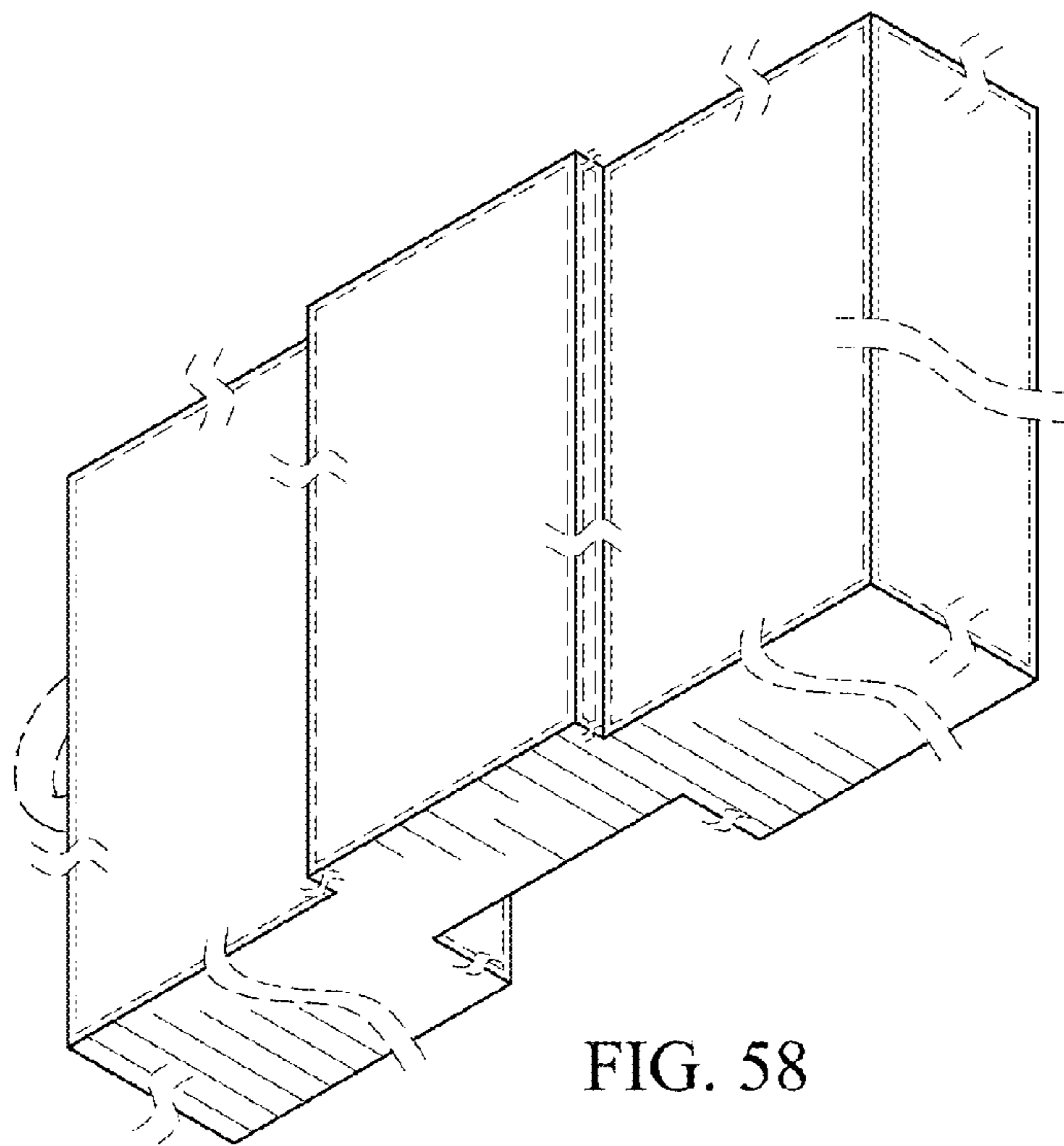


FIG. 58



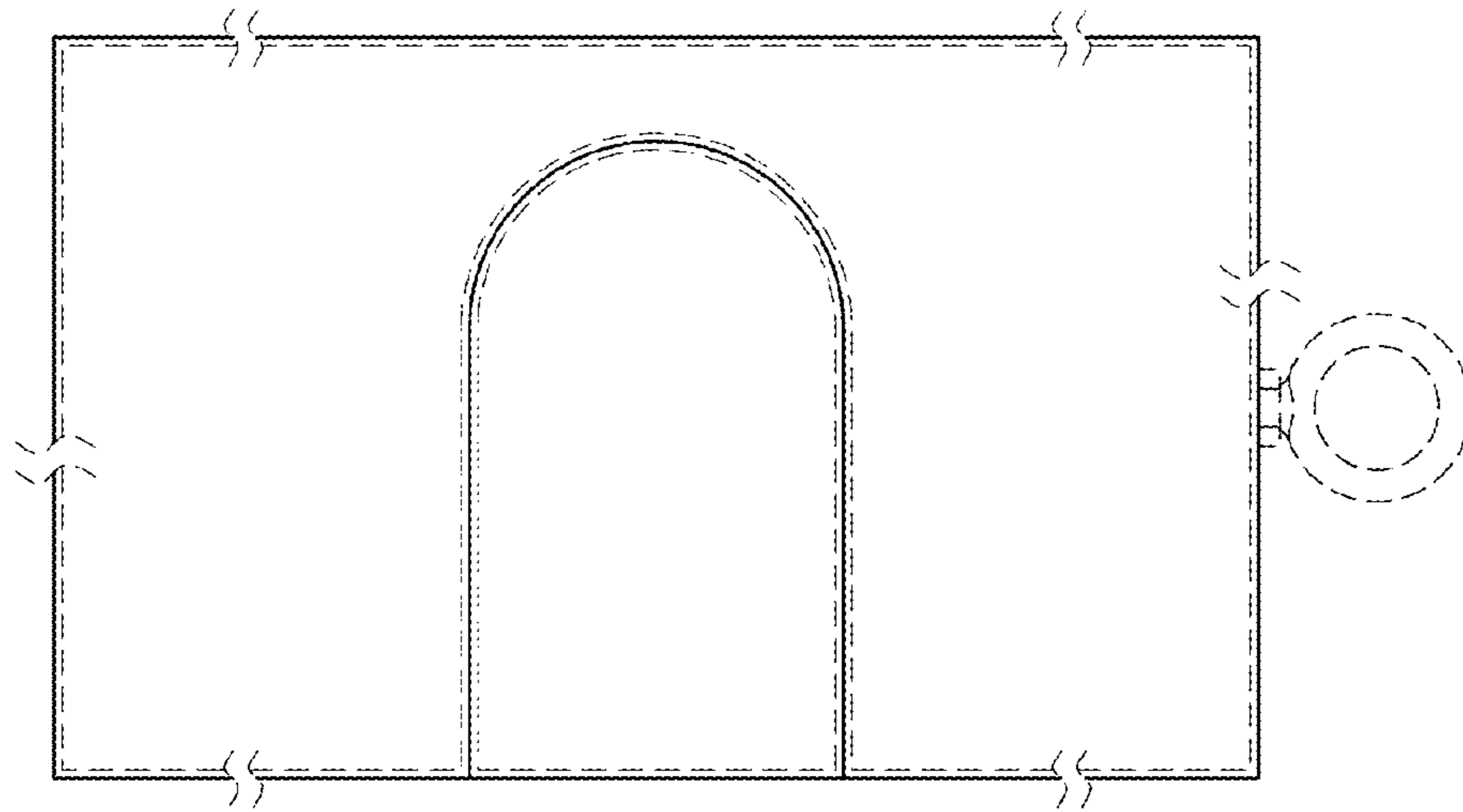


FIG. 59

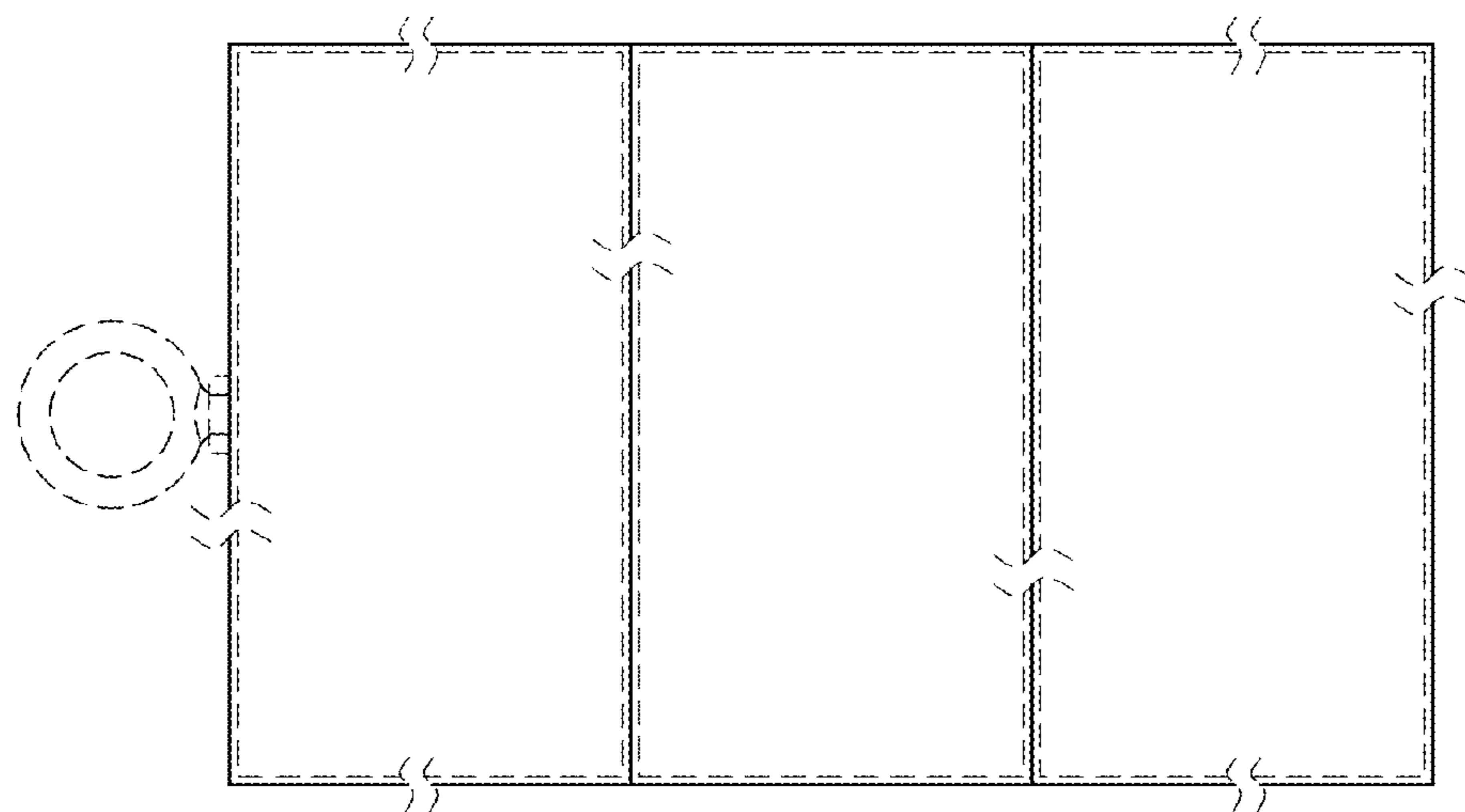


FIG. 60

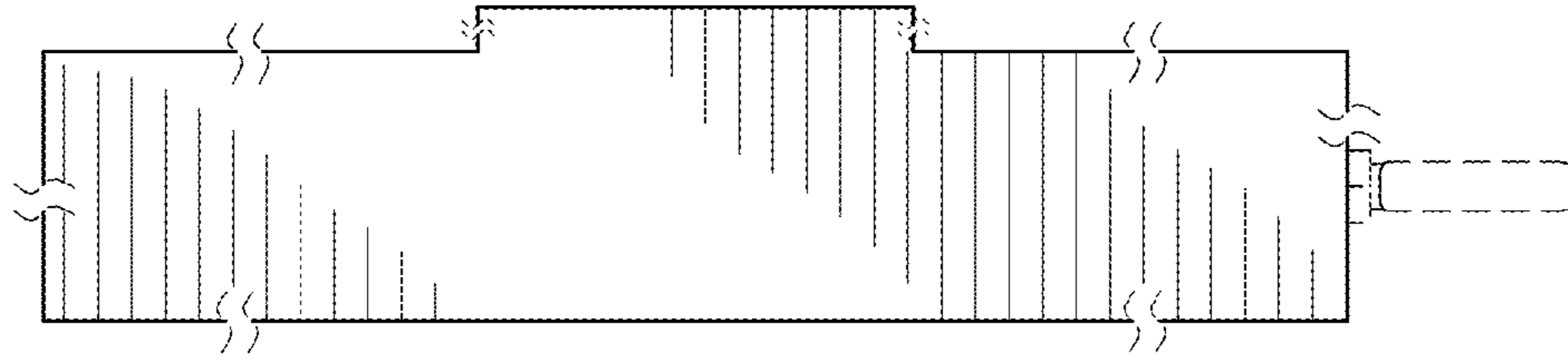


FIG. 61

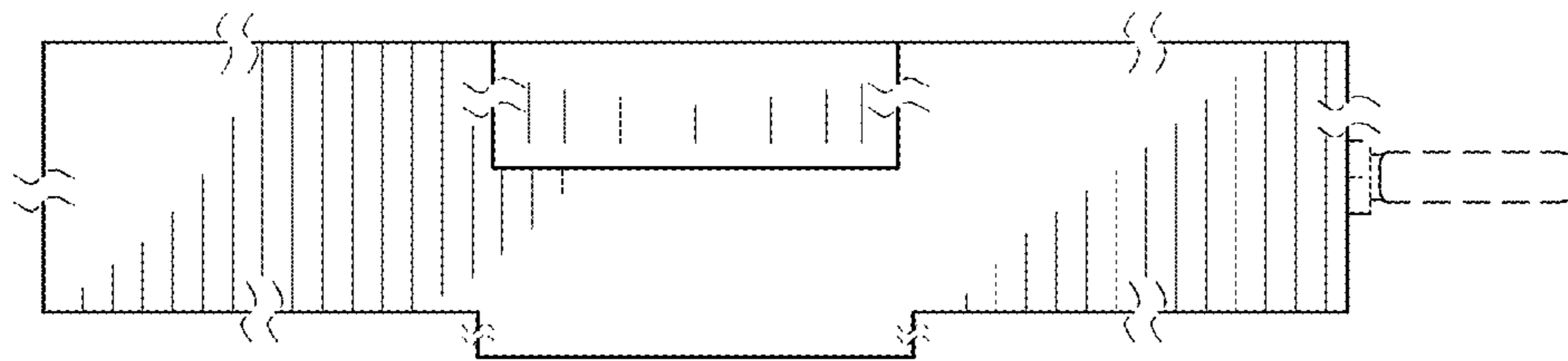


FIG. 62

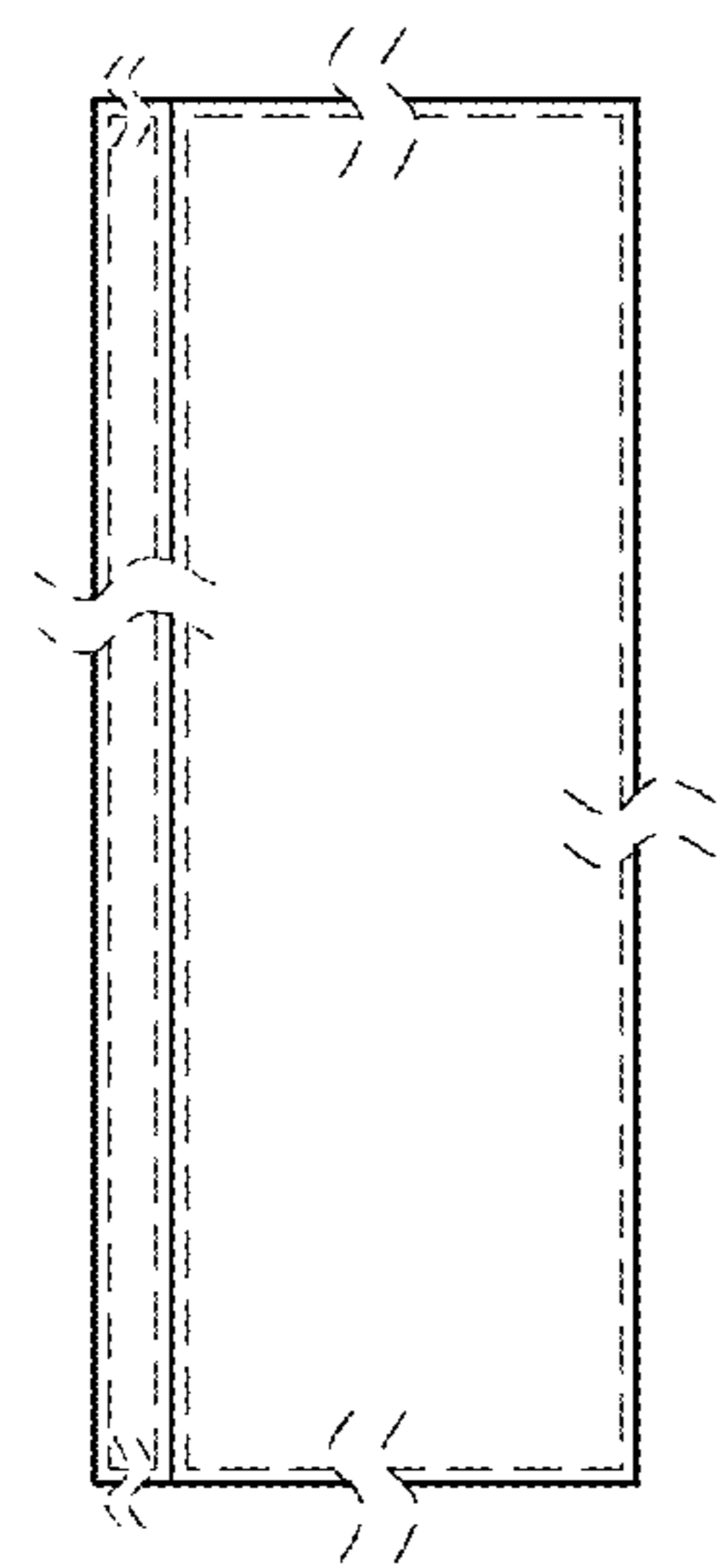


FIG. 63

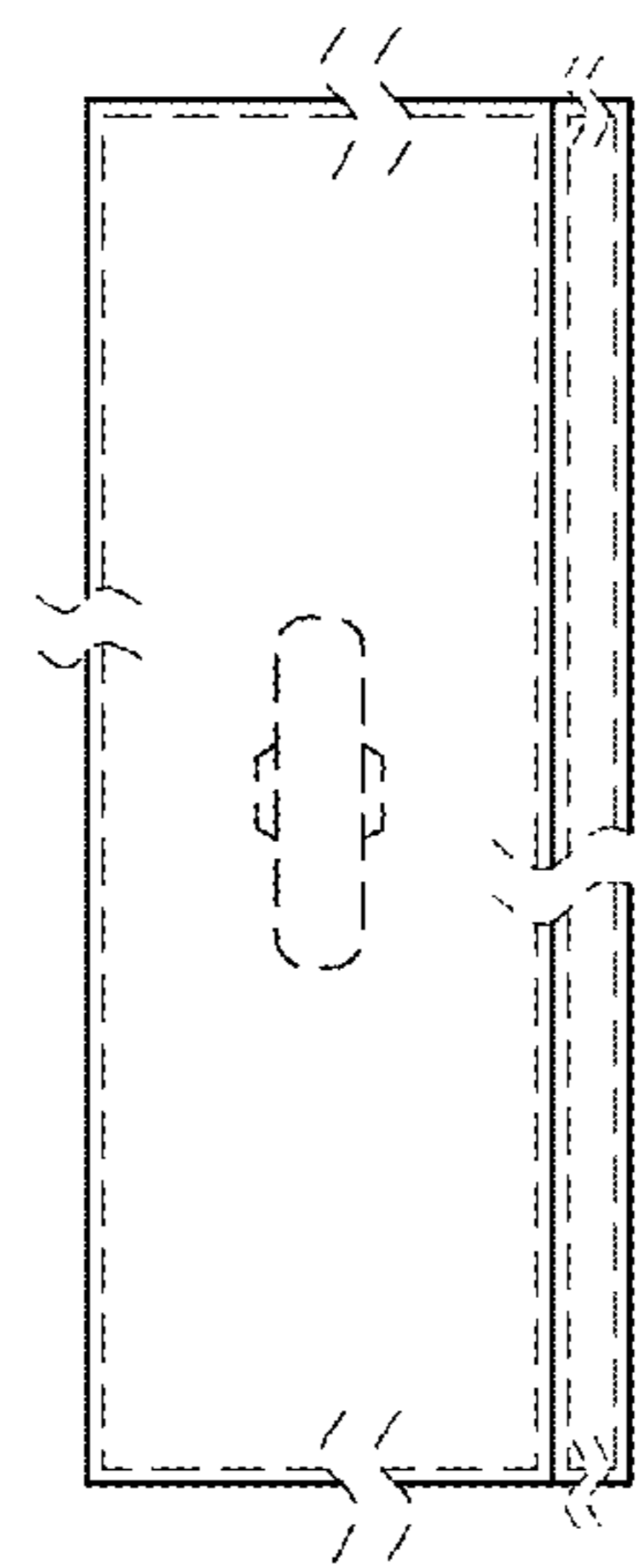


FIG. 64

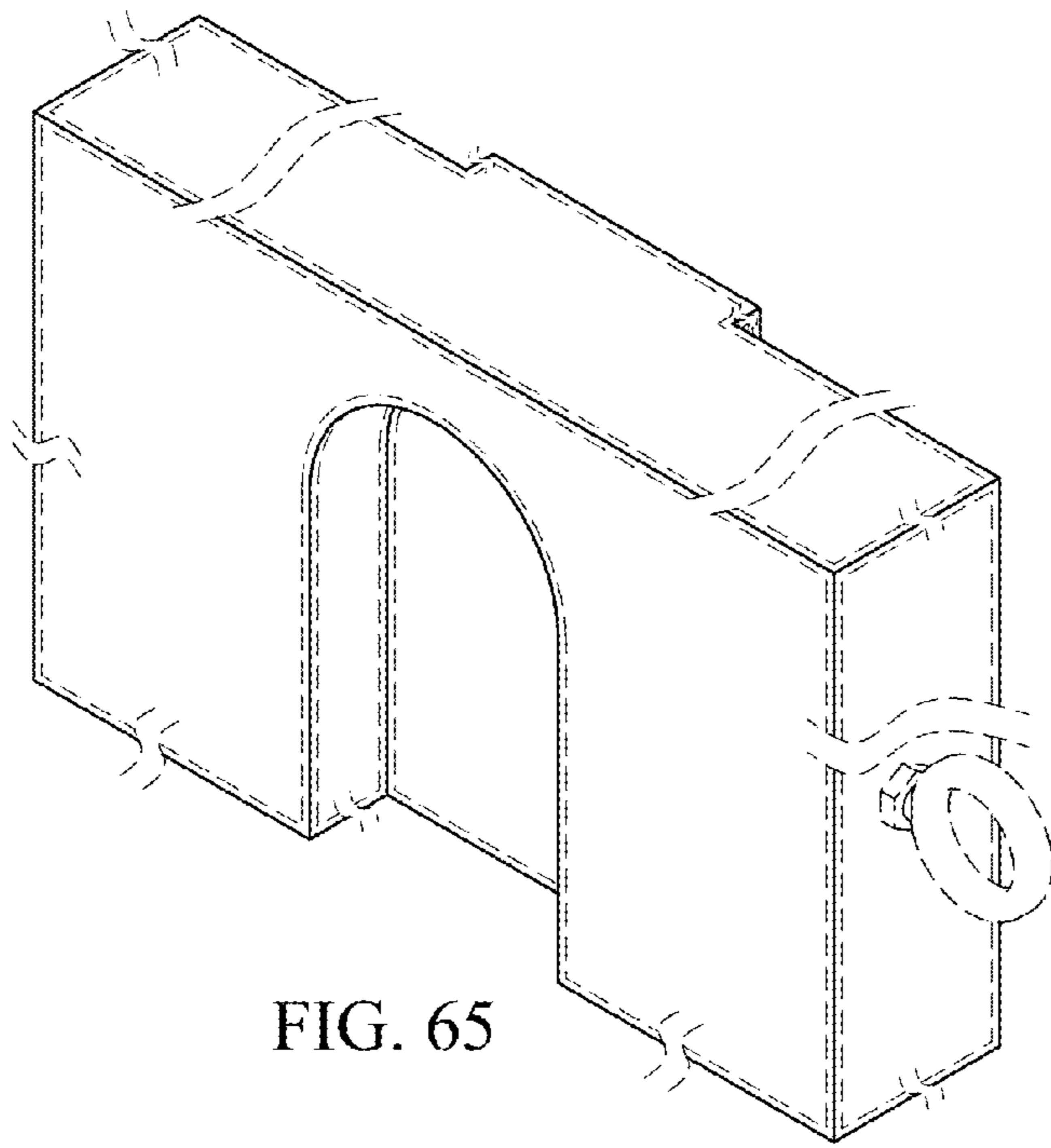


FIG. 65

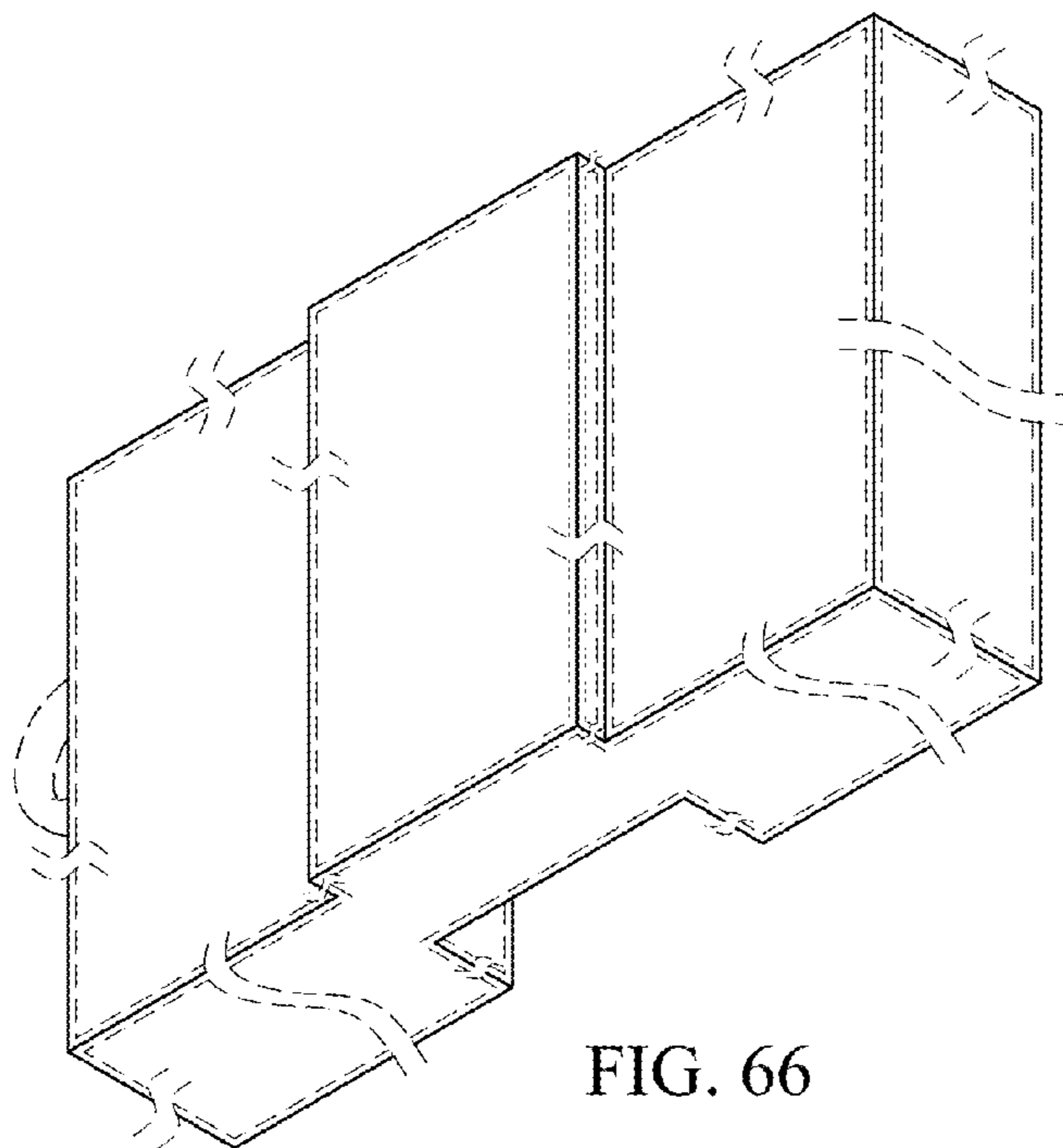


FIG. 66

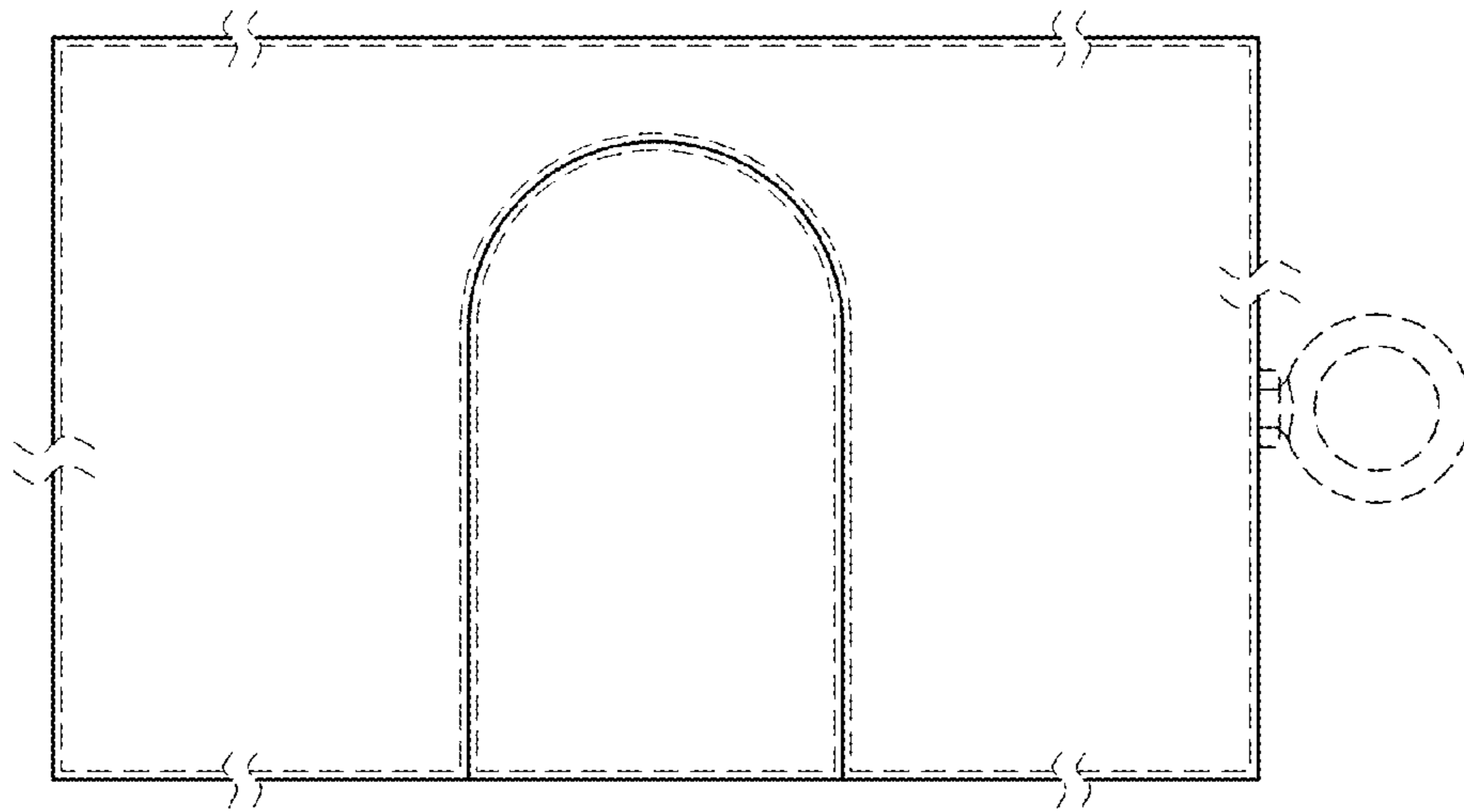


FIG. 67

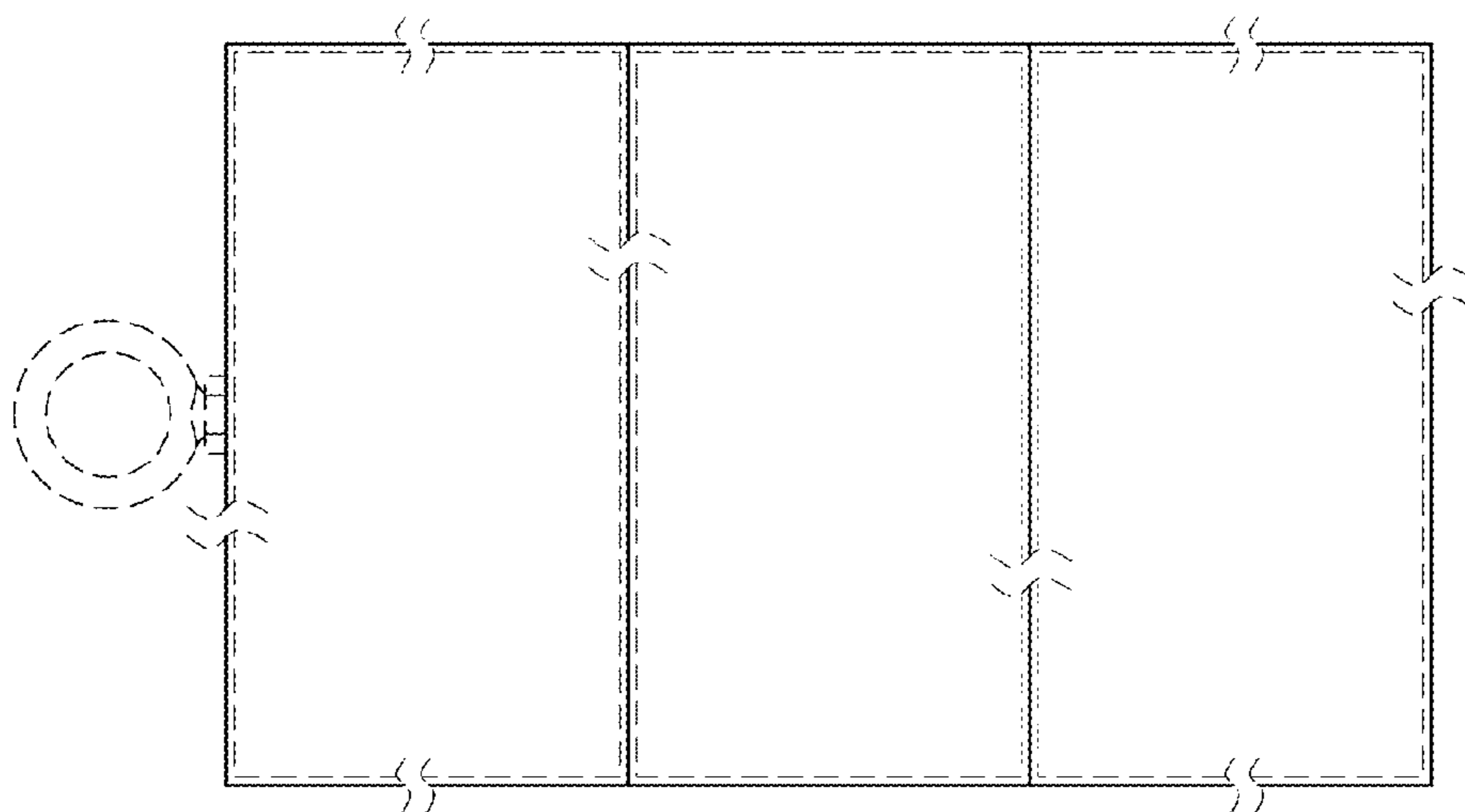


FIG. 68

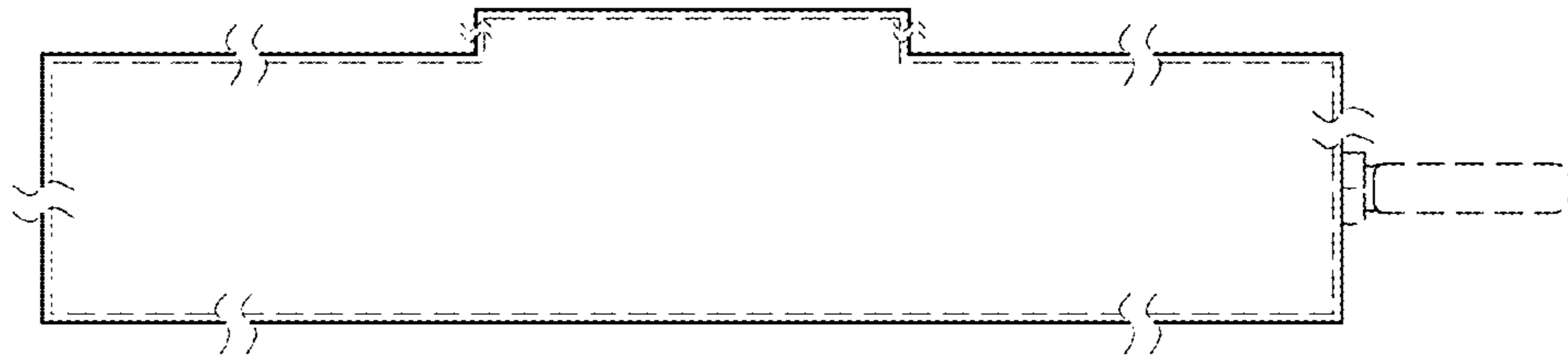


FIG. 69

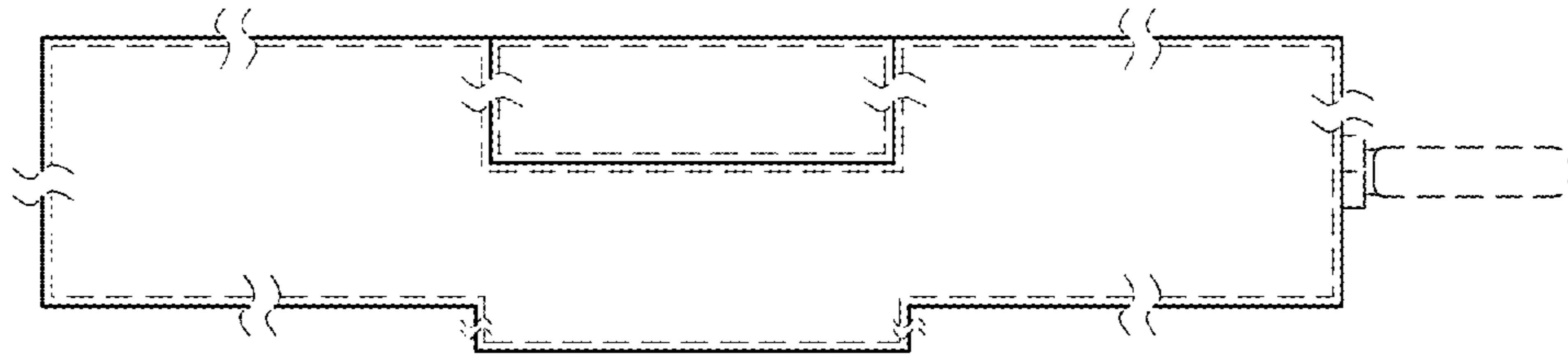


FIG. 70

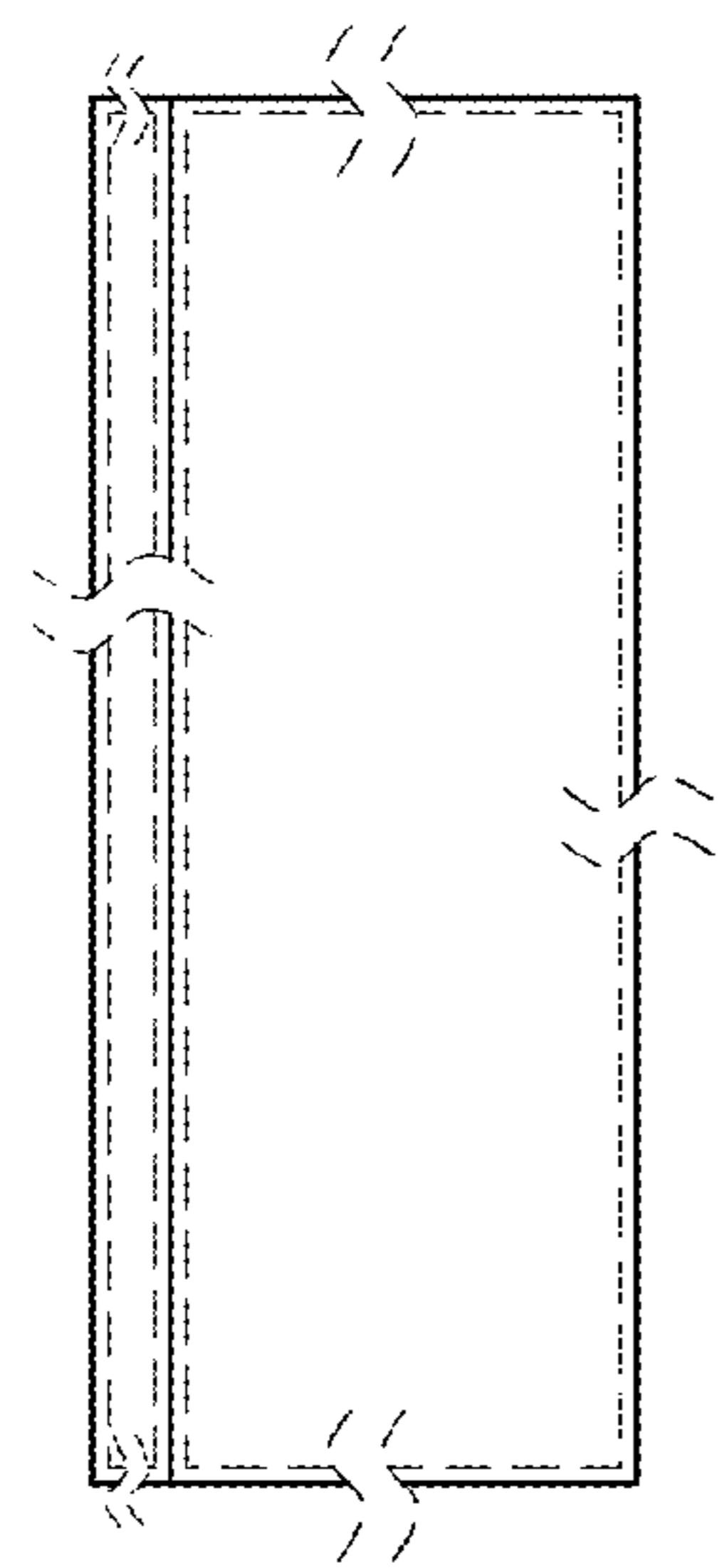


FIG. 71

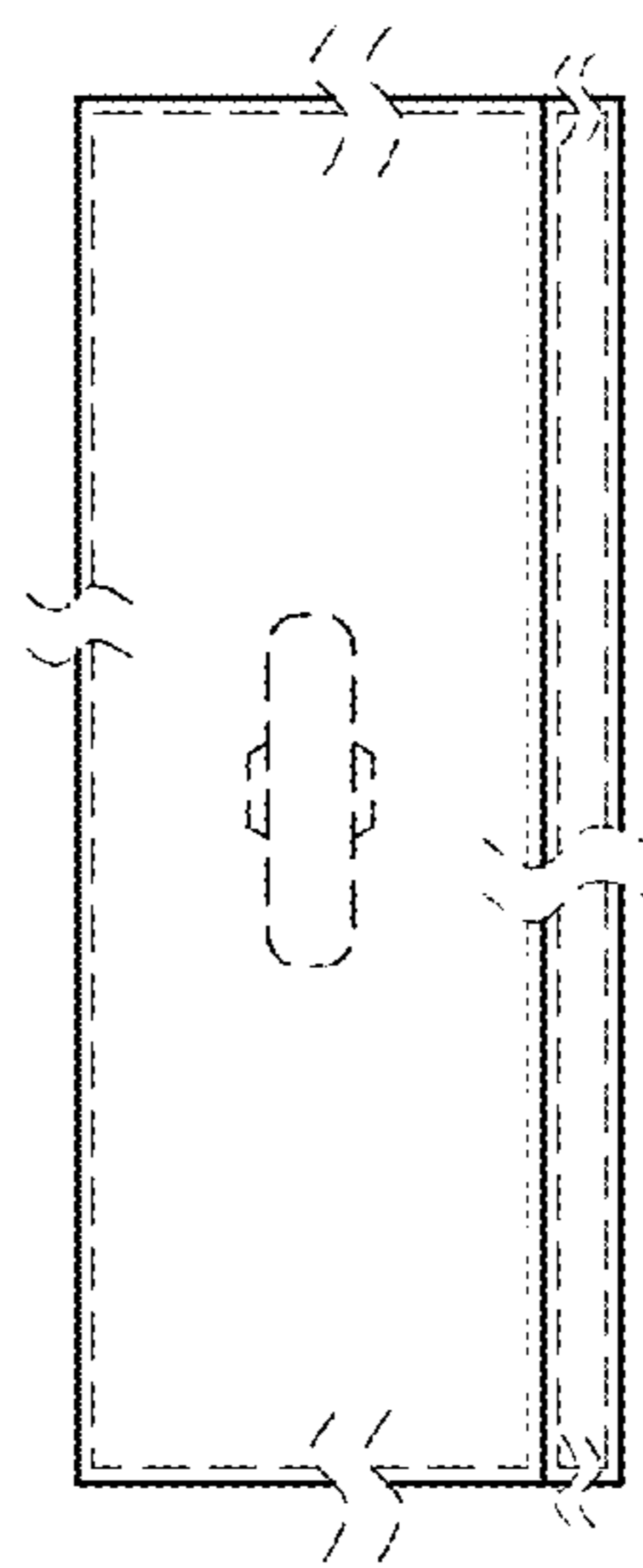


FIG. 72