



US00D906974S

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

(10) **Patent No.:** **US D906,974 S**  
(45) **Date of Patent:** **\*\* Jan. 5, 2021**

(54) **CONNECTOR PLUG AND RECEPTACLE PAIR**

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**Pierre Perez**, Aurora, IL (US)

(73) Assignee: **Molex, LLC**, Lisle, IL (US)

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

(21) Appl. No.: **29/679,013**

(22) Filed: **Jan. 31, 2019**

(51) **LOC (13) Cl.** ..... **13-03**

(52) **U.S. Cl.**  
USPC ..... **D13/133; D13/147**

(58) **Field of Classification Search**  
USPC ..... **D13/133, 146, 147, 153, 154, 155**

(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,169,336 A \* 12/1992 Taguchi ..... H01R 13/64  
439/354  
5,876,230 A \* 3/1999 Nishide ..... H01R 13/6272  
439/352

(Continued)

**FOREIGN PATENT DOCUMENTS**

WO D207799-002 \* 5/2020  
WO D207799-006 \* 5/2020

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*Assistant Examiner* — Michael Chong

(74) *Attorney, Agent, or Firm* — Banner & Witcoff, Ltd.

(57) **CLAIM**

The ornamental design for a connector plug and receptacle pair, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of a connector plug showing our new design;

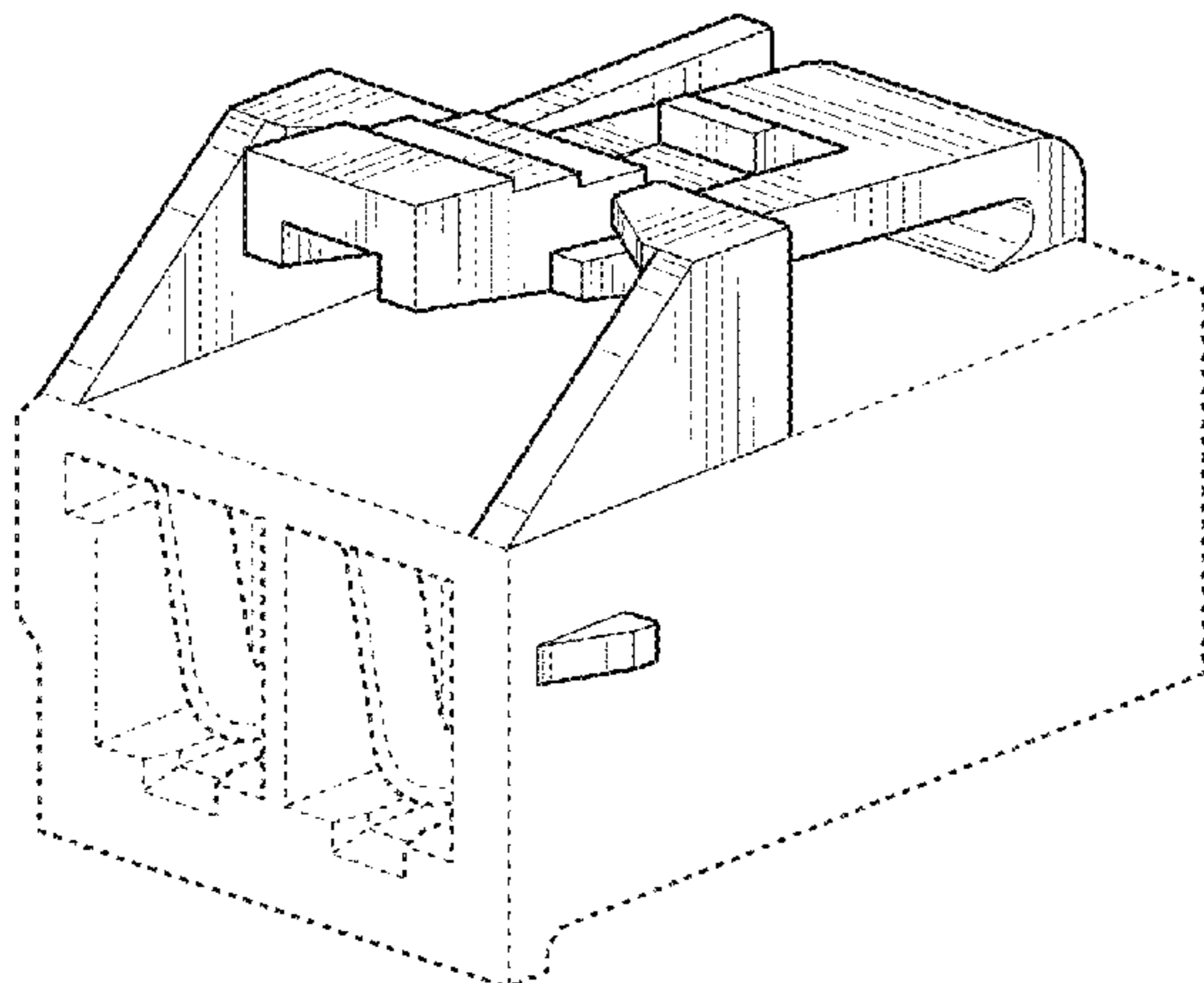


FIG. 2 is a front view thereof;  
FIG. 3 is a rear perspective view thereof;  
FIG. 4 is a front perspective view of a connector receptacle showing our new design;  
FIG. 5 is a front view thereof;  
FIG. 6 is a rear perspective view thereof;  
FIG. 7 is a front perspective view of the connector plug of FIGS. 1-3 and the receptacle pair of FIGS. 4-6, shown together as a pair;  
FIG. 8 is a front perspective view of an alternate embodiment of a connector plug showing our new design;  
FIG. 9 is a front view thereof;  
FIG. 10 is a rear perspective view thereof;  
FIG. 11 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;  
FIG. 12 is a front view thereof;  
FIG. 13 is a rear perspective view thereof;  
FIG. 14 is a front perspective view of the connector plug of FIGS. 8-10 and the receptacle pair of FIGS. 11-13, shown together as a pair;  
FIG. 15 is a front perspective view of an alternate embodiment of a connector plug showing our new design;  
FIG. 16 is a front view thereof;  
FIG. 17 is a rear perspective view thereof;  
FIG. 18 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;  
FIG. 19 is a front view thereof;  
FIG. 20 is a rear perspective view thereof;  
FIG. 21 is a front perspective view of the connector plug of FIGS. 15-17 and the receptacle pair of FIGS. 18-20, shown together as a pair;  
FIG. 22 is a front perspective view of an alternate embodiment of a connector plug showing our new design;  
FIG. 23 is a front view thereof;  
FIG. 24 is a rear perspective view thereof;  
FIG. 25 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;  
FIG. 26 is a front view thereof;  
FIG. 27 is a rear perspective view thereof;  
FIG. 28 is a front perspective view of the connector plug of FIGS. 22-24 and the receptacle pair of FIGS. 25-27, shown together as a pair;  
FIG. 29 is a front perspective view of an alternate embodiment of a connector plug showing our new design;

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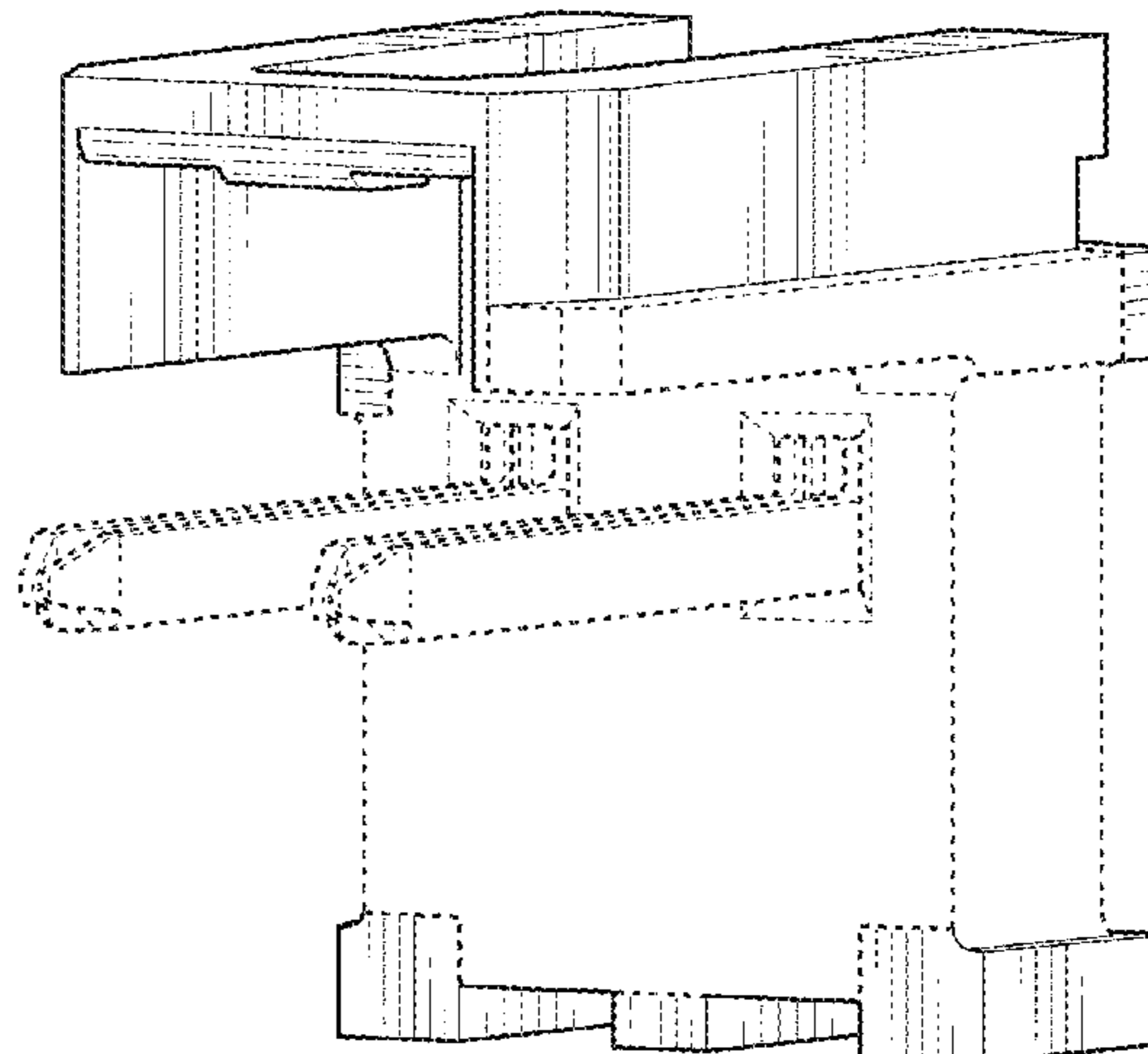


FIG. 30 is a front view thereof;  
 FIG. 31 is a rear perspective view thereof;  
 FIG. 32 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;  
 FIG. 33 is a front view thereof;  
 FIG. 34 is a rear perspective view thereof; and,  
 FIG. 35 is a front perspective view of the connector plug of FIGS. 29-31 and the receptacle pair of FIGS. 32-34, shown together as a pair.  
 The broken lines depicting the remainder of the connector plug and the connector receptacle show features that form no part of the claimed design. The broken lines immediately adjacent to the shading areas represent the bounds of the claimed design and form no part thereof.

**1 Claim, 35 Drawing Sheets**

(58) **Field of Classification Search**

CPC .... H01R 13/02; H01R 13/436; H01R 13/502;  
 H01R 13/504; H01R 13/506; H01R  
 13/58; H01R 13/627; H01R 13/6315;  
 H01R 13/6586

See application file for complete search history.

(56)

**References Cited**

U.S. PATENT DOCUMENTS

D425,869	S *	5/2000	Yokomizo	.....	D13/147
6,241,547	B1 *	6/2001	Fukuda	.....	H01R 13/641 439/352
D745,461	S *	12/2015	Cho	.....	D13/146
D748,588	S *	2/2016	Endo	.....	D13/147
D791,082	S *	7/2017	Li	.....	D13/147
D791,083	S *	7/2017	Li	.....	D13/147
D791,704	S *	7/2017	Li	.....	D13/147
D791,705	S	7/2017	Li et al.		
D791,706	S *	7/2017	Li	.....	D13/147
D791,707	S *	7/2017	Li	.....	D13/147
D792,851	S *	7/2017	Li	.....	D13/147
D792,852	S *	7/2017	Li	.....	D13/147
D792,853	S *	7/2017	Li	.....	D13/147
D801,278	S *	10/2017	Li	.....	D13/147
D802,538	S *	11/2017	Li	.....	D13/147
D803,161	S *	11/2017	Li	.....	D13/147
10,461,458	B2 *	10/2019	Kim	.....	H01R 13/4362

\* cited by examiner

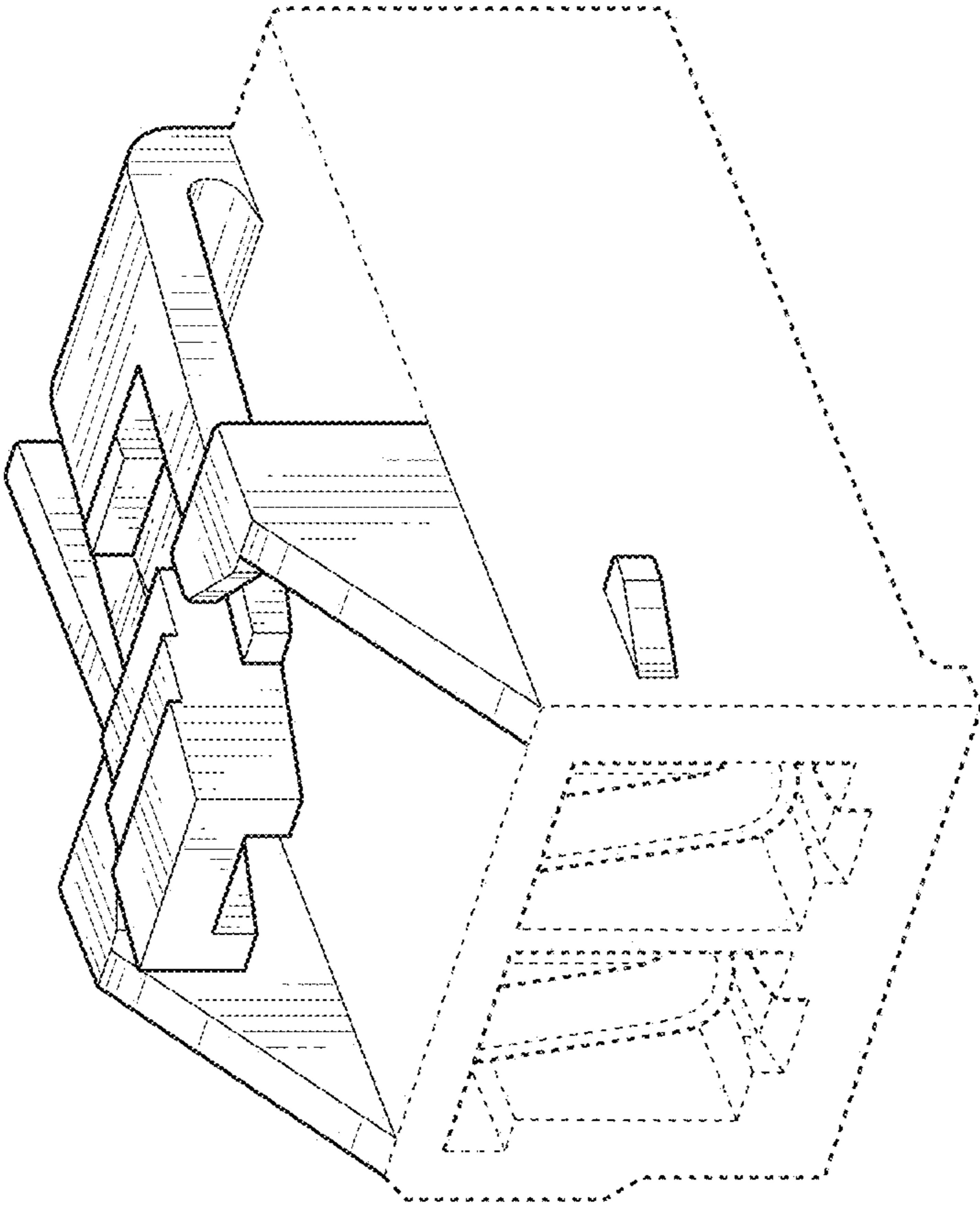


FIG. 1

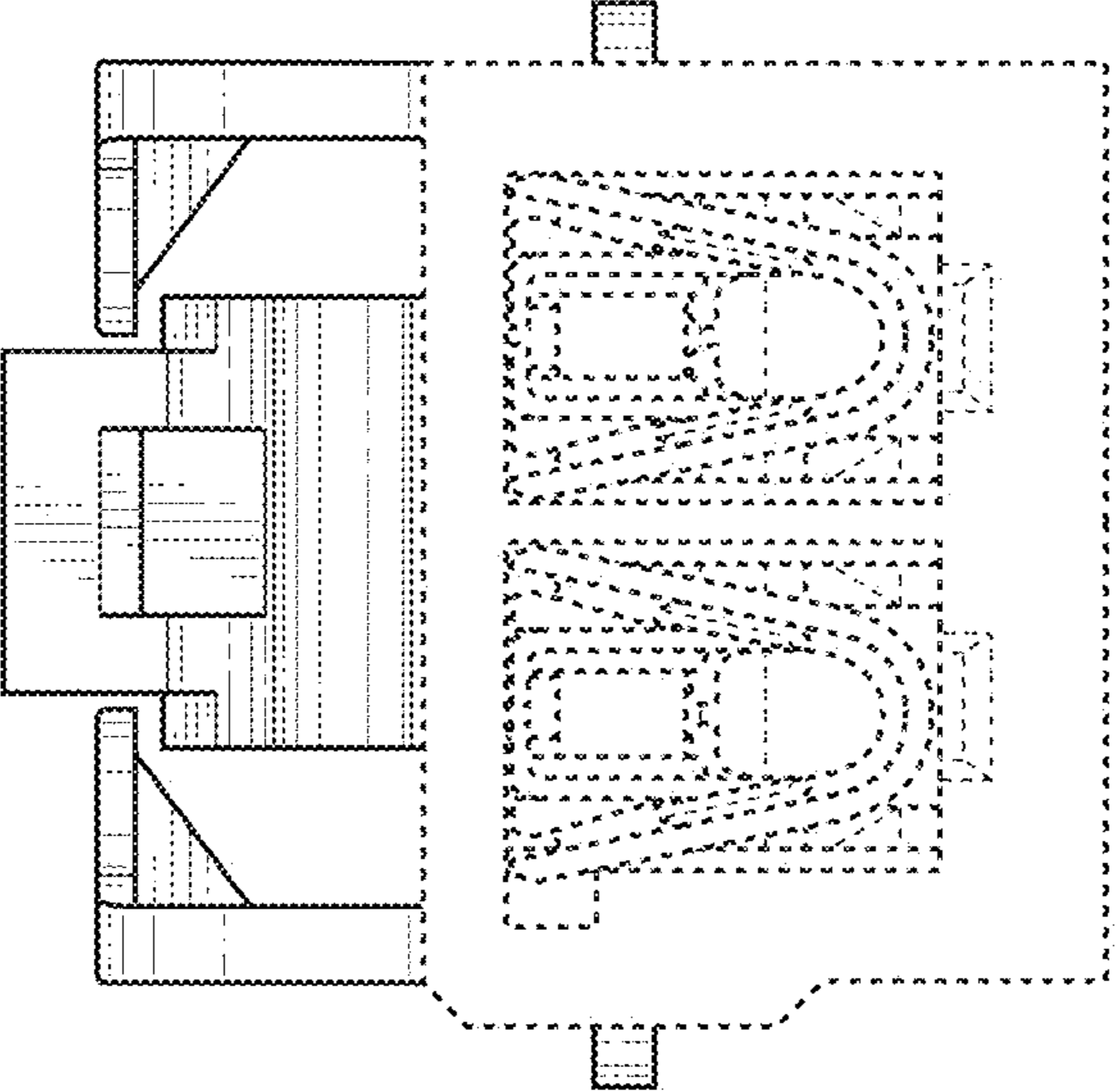


FIG. 2

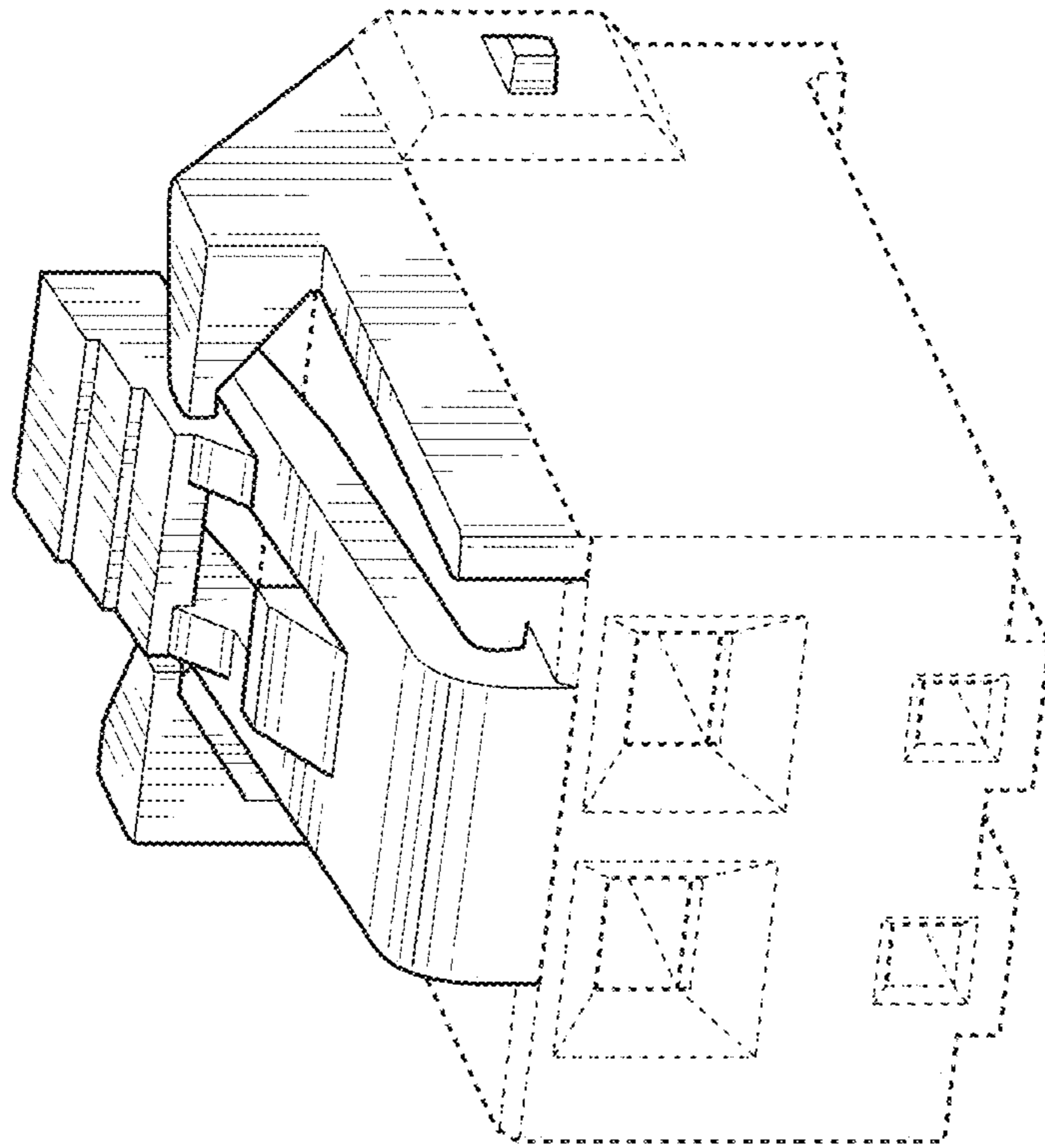


FIG. 3

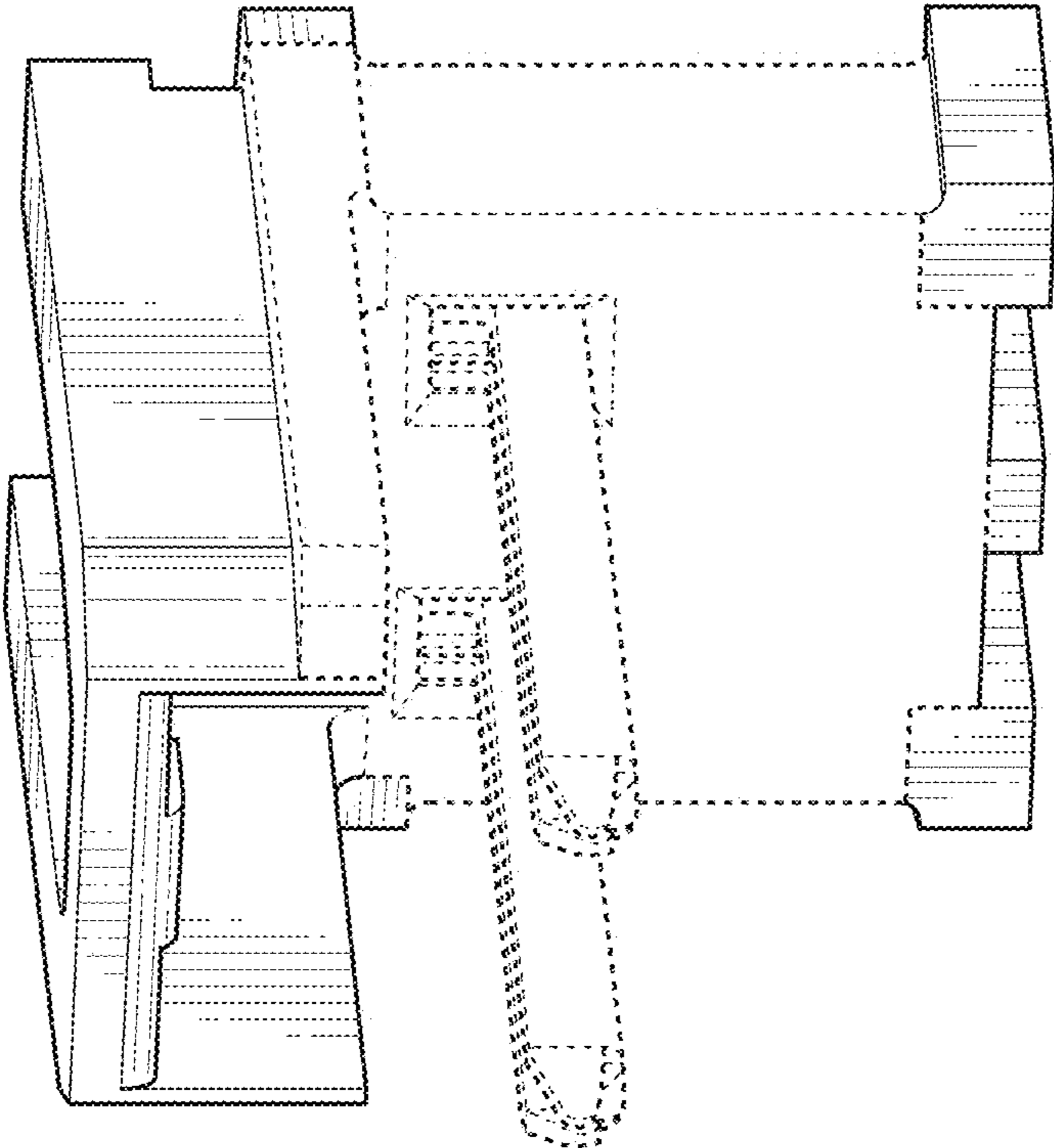


FIG. 4

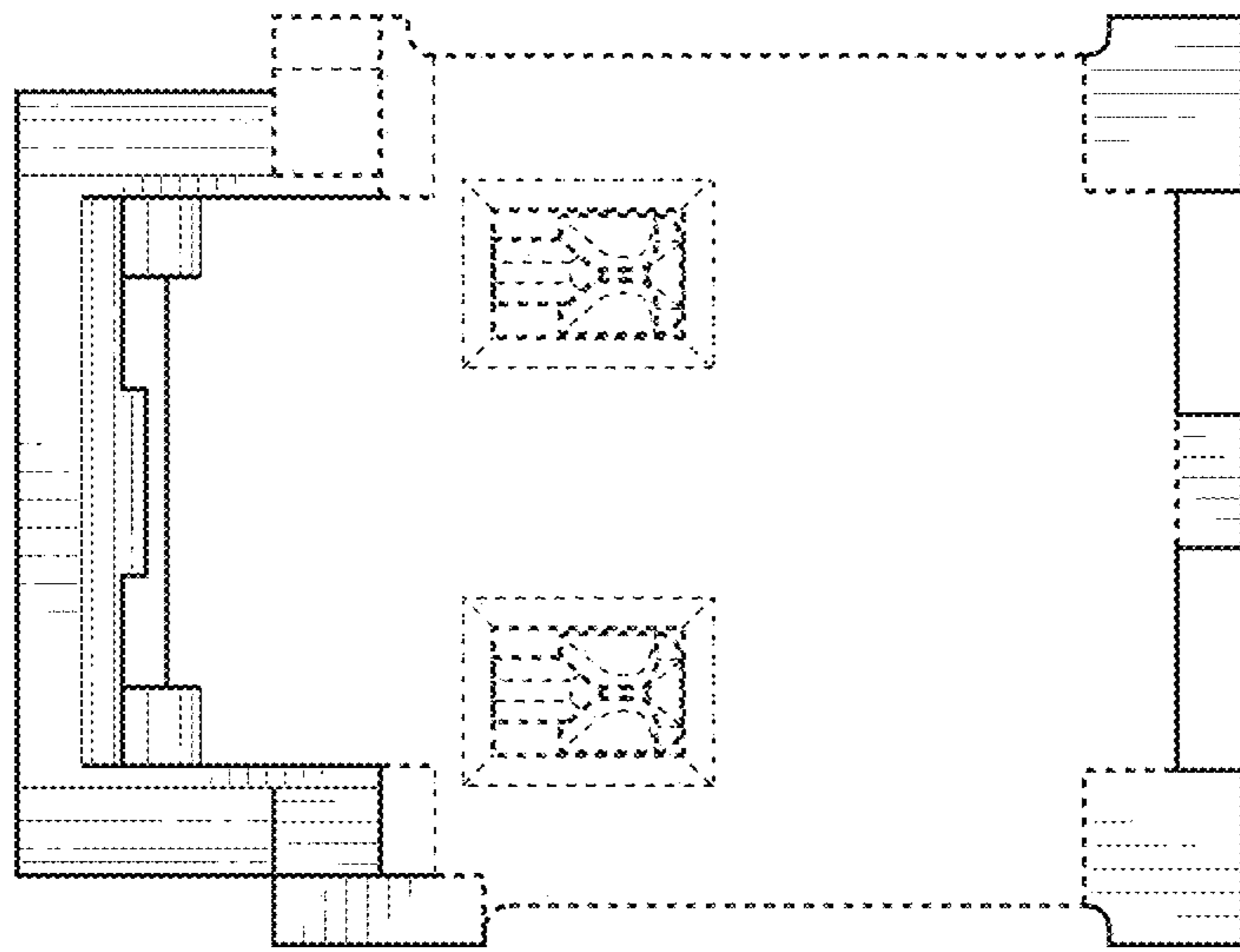


FIG. 5

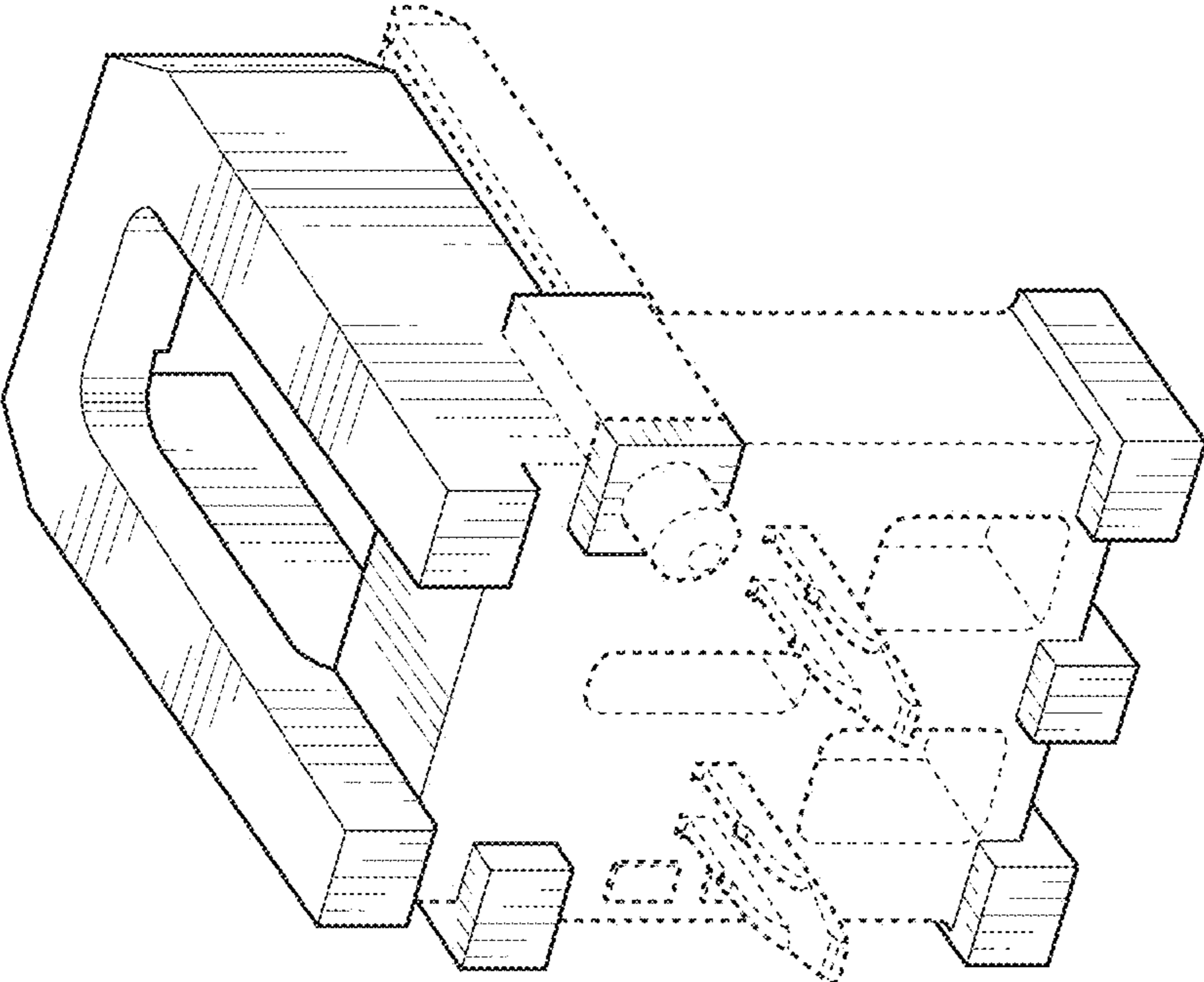


FIG. 6



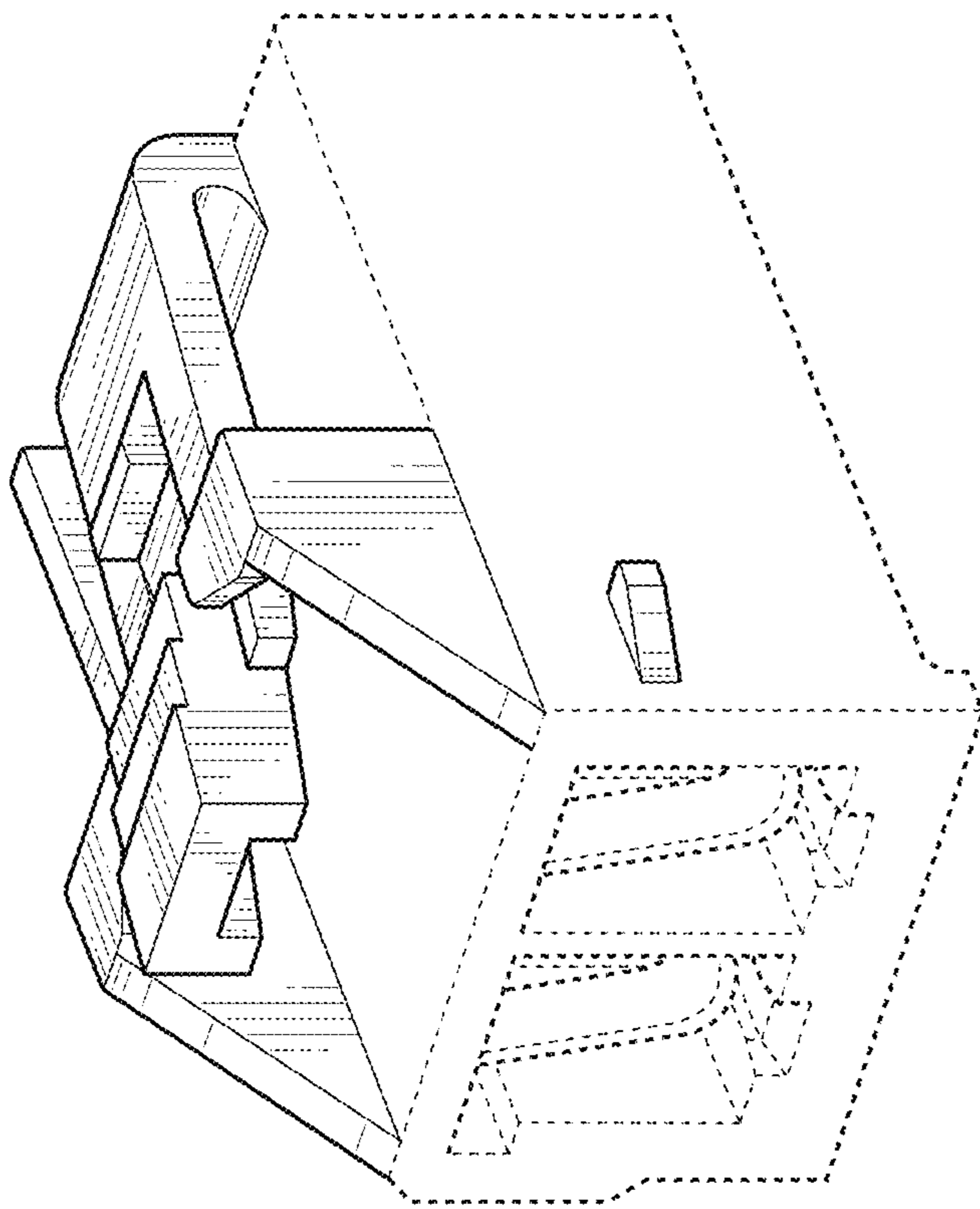
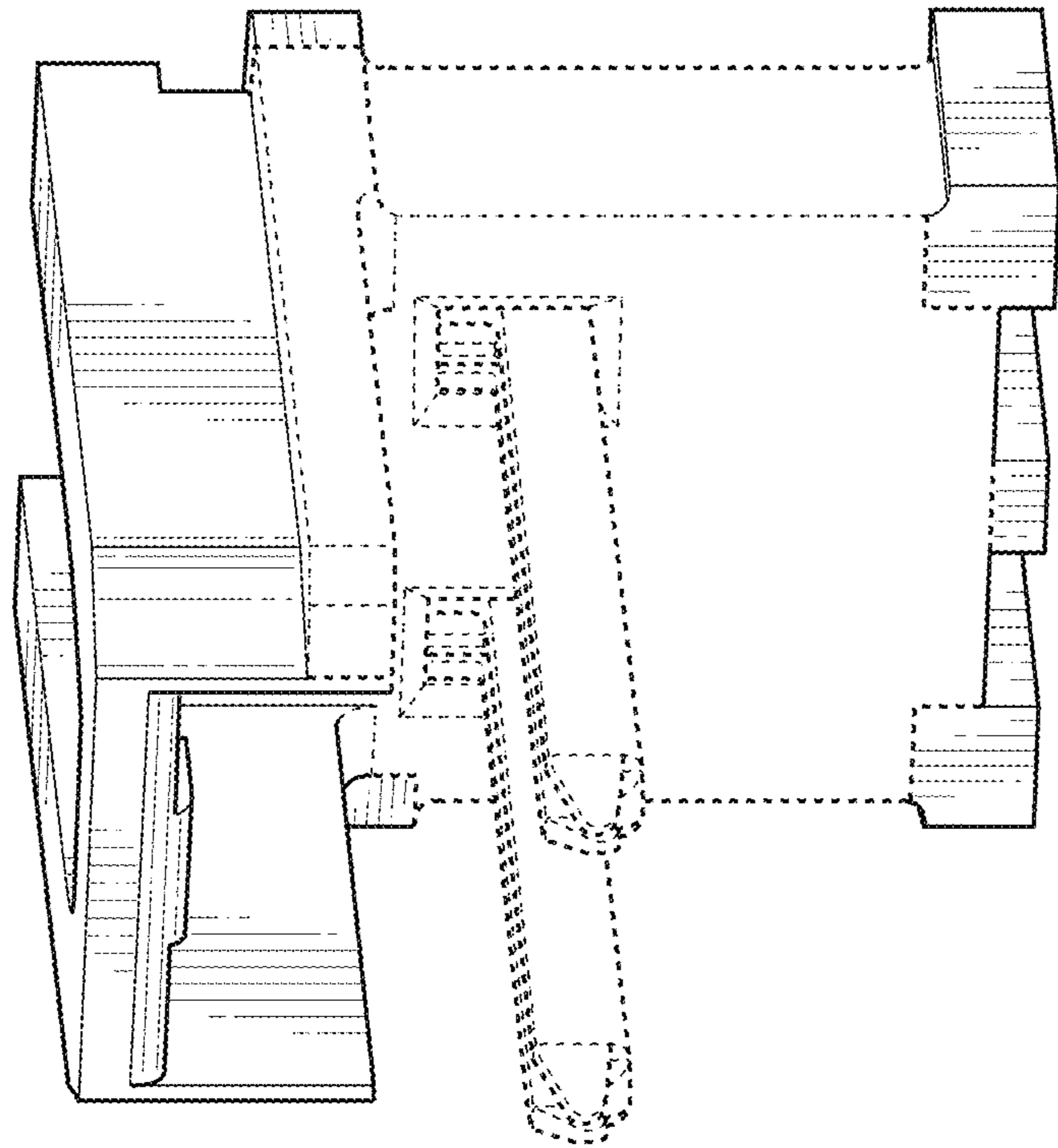


FIG. 7

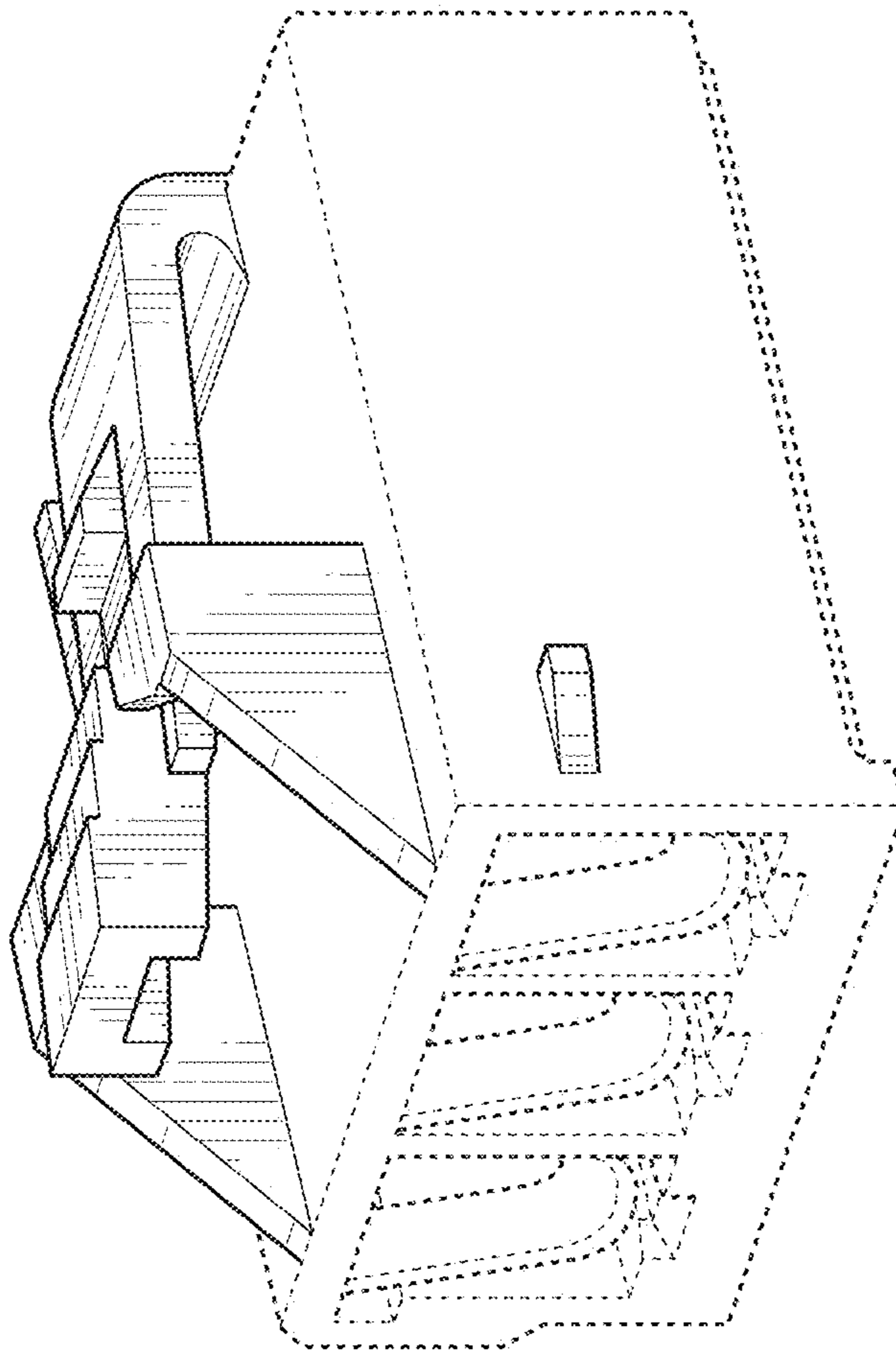


FIG. 8

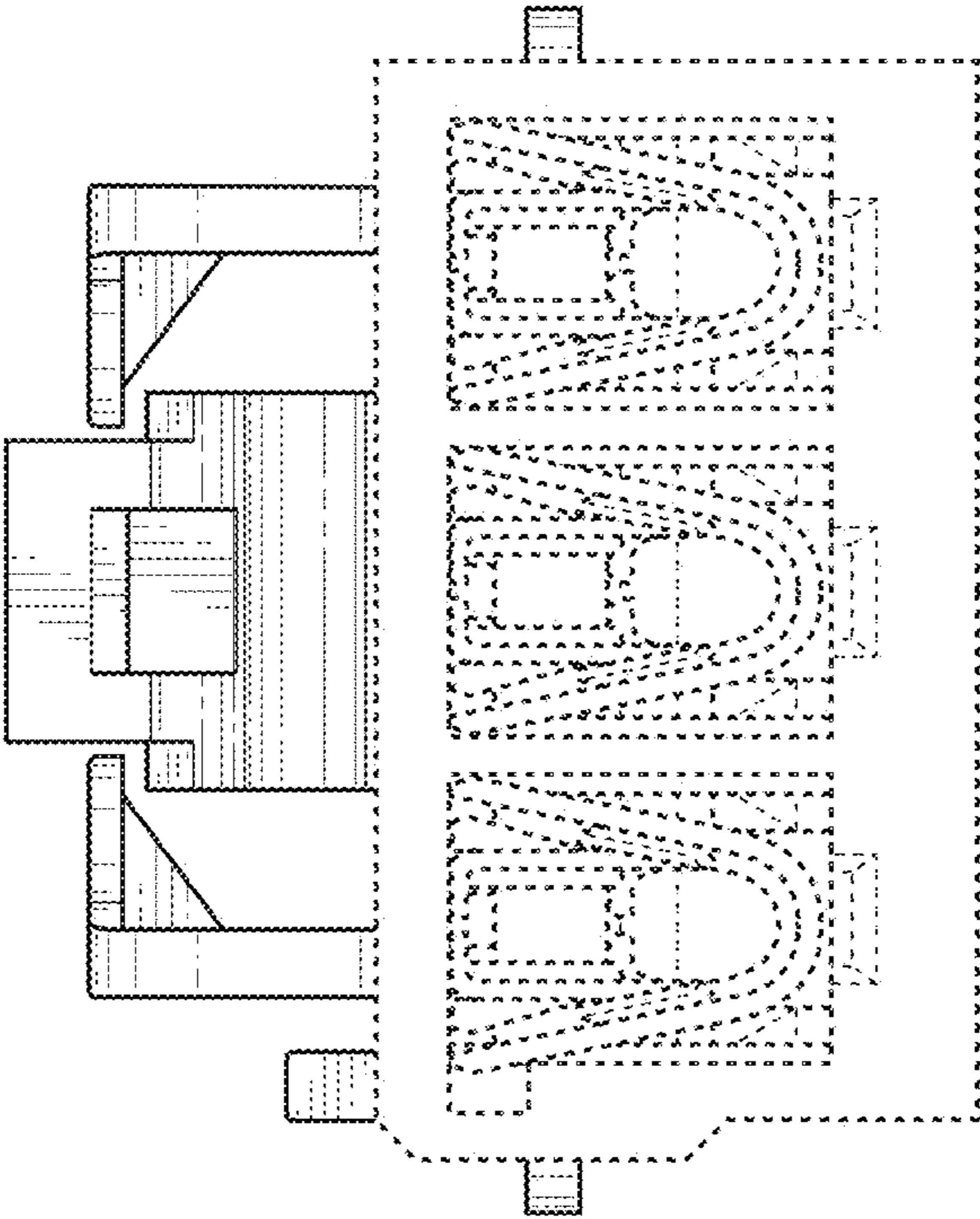


FIG. 9

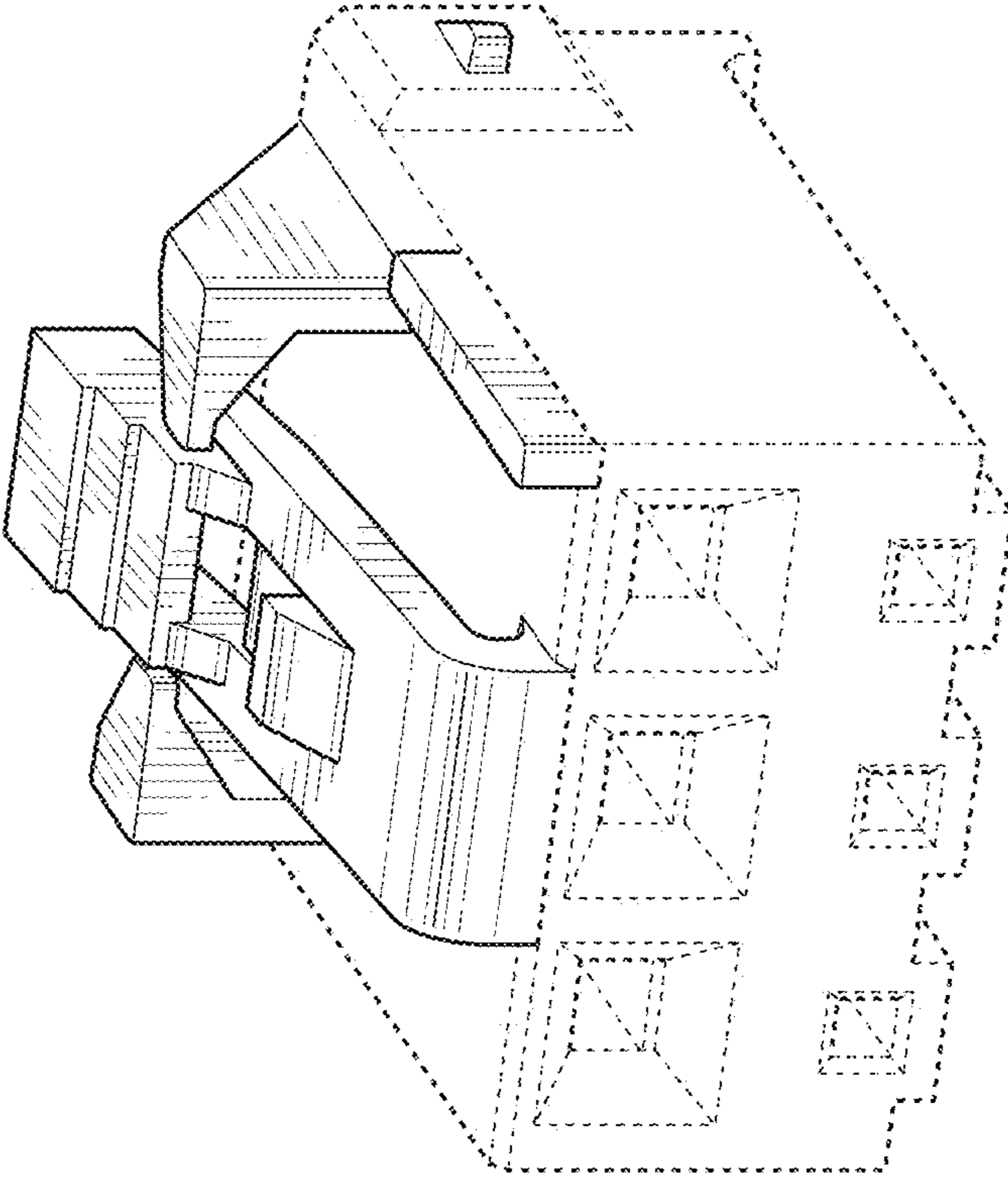


FIG. 10

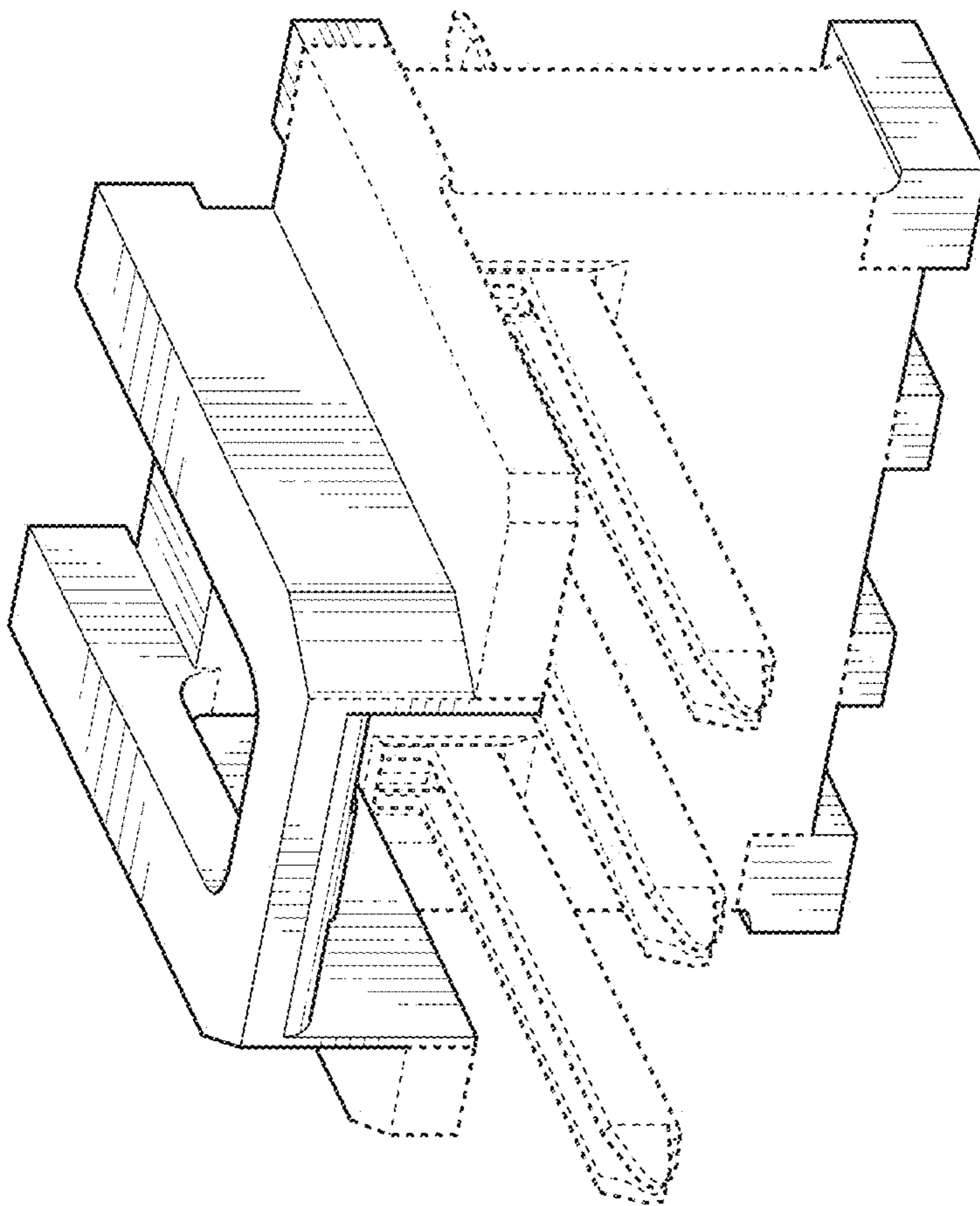


FIG. 11

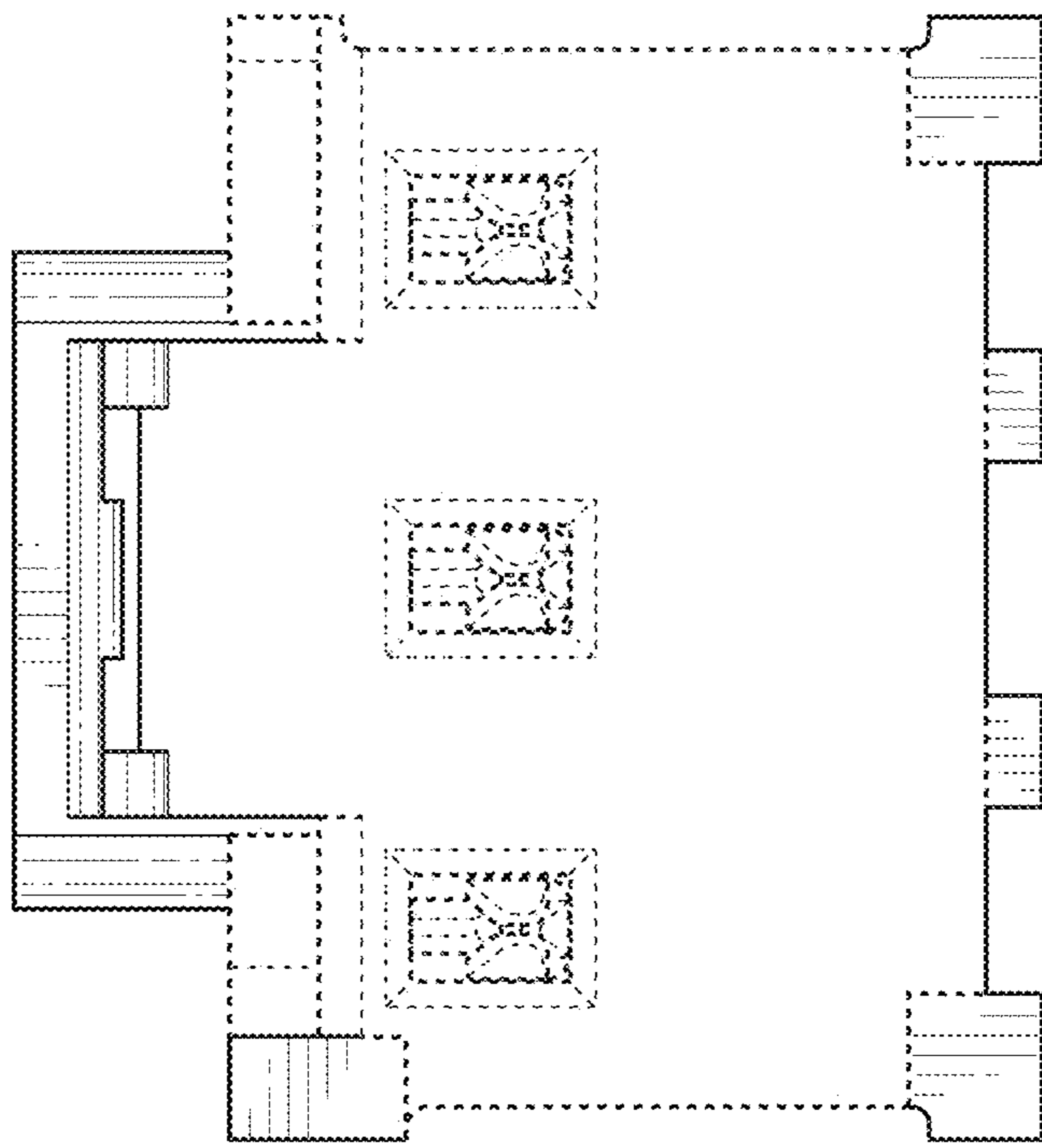


FIG. 12

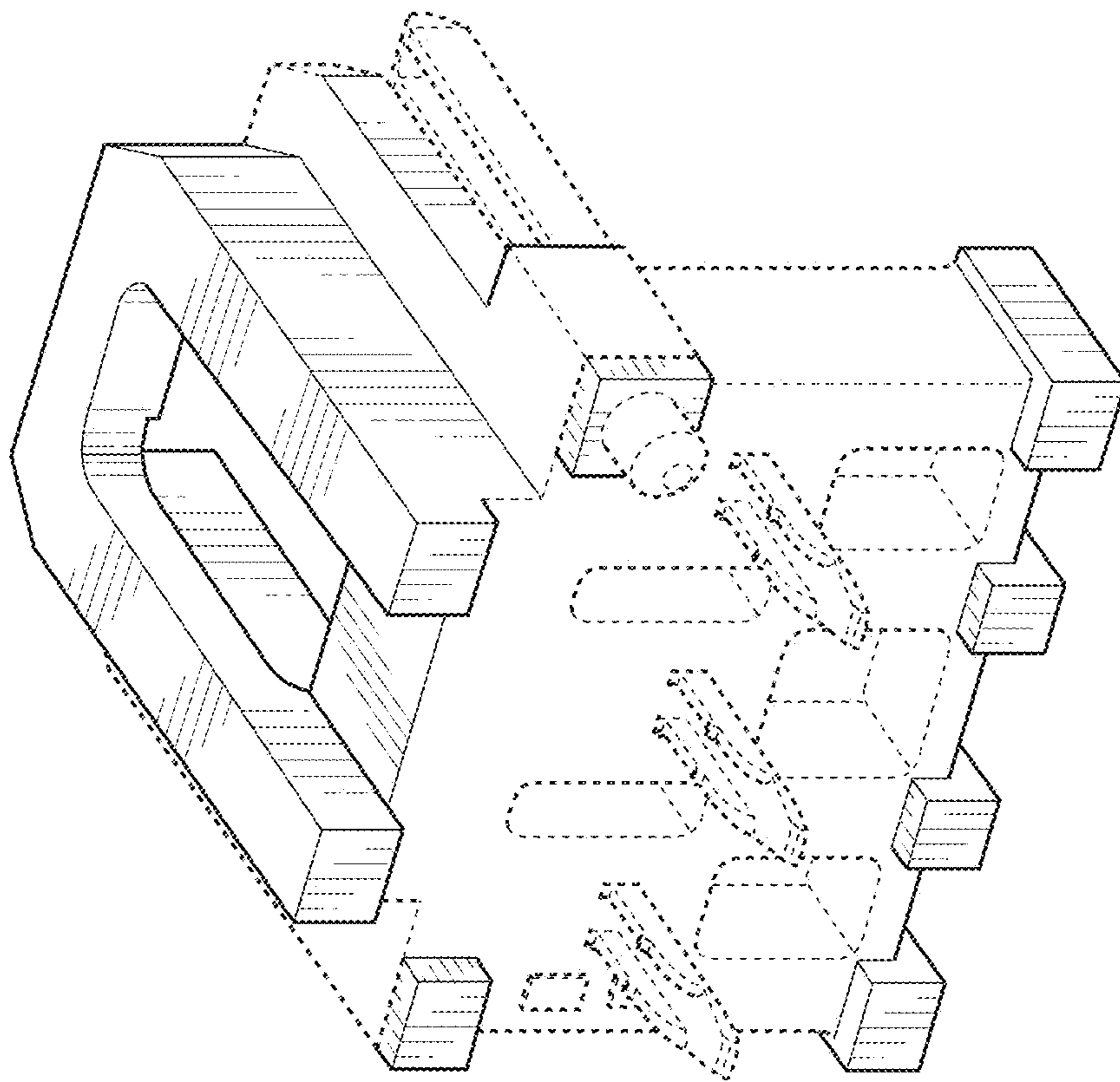


FIG. 13

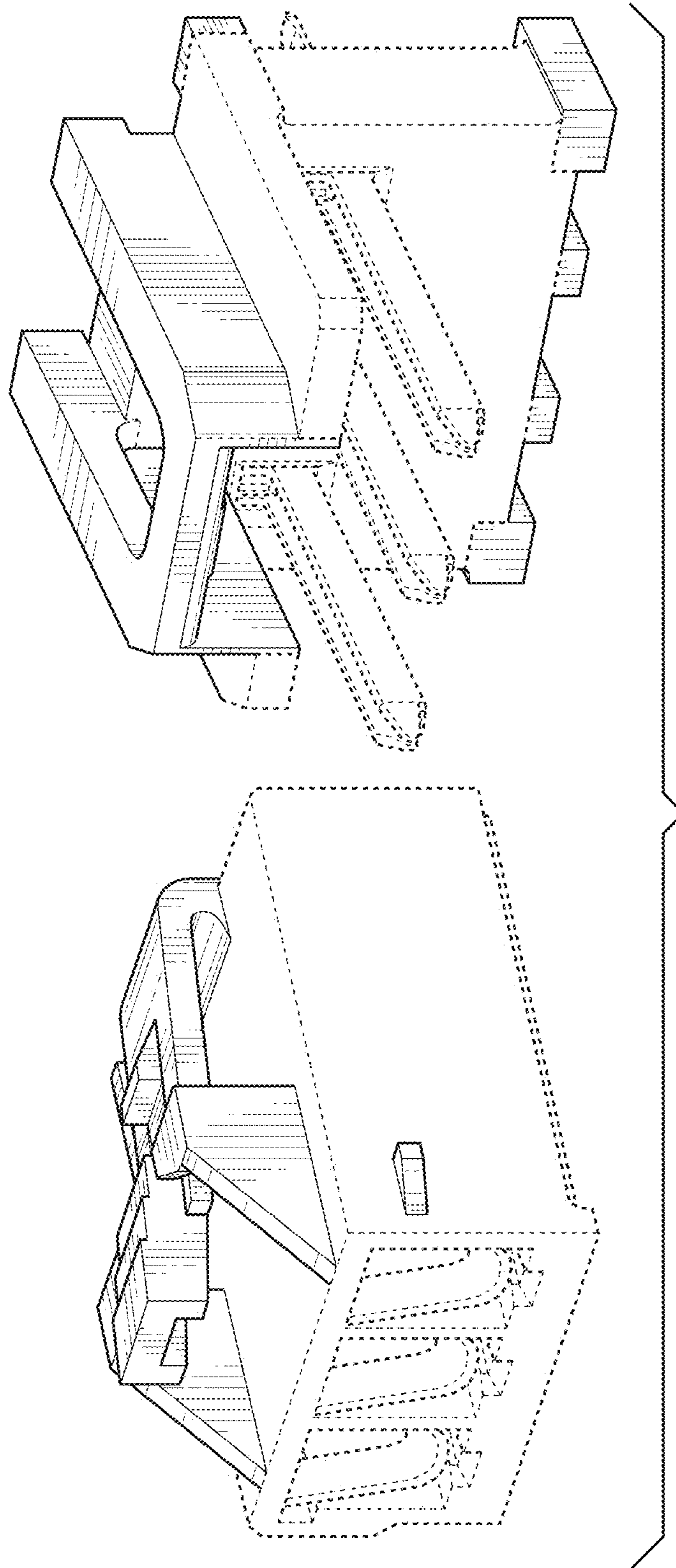


FIG. 14



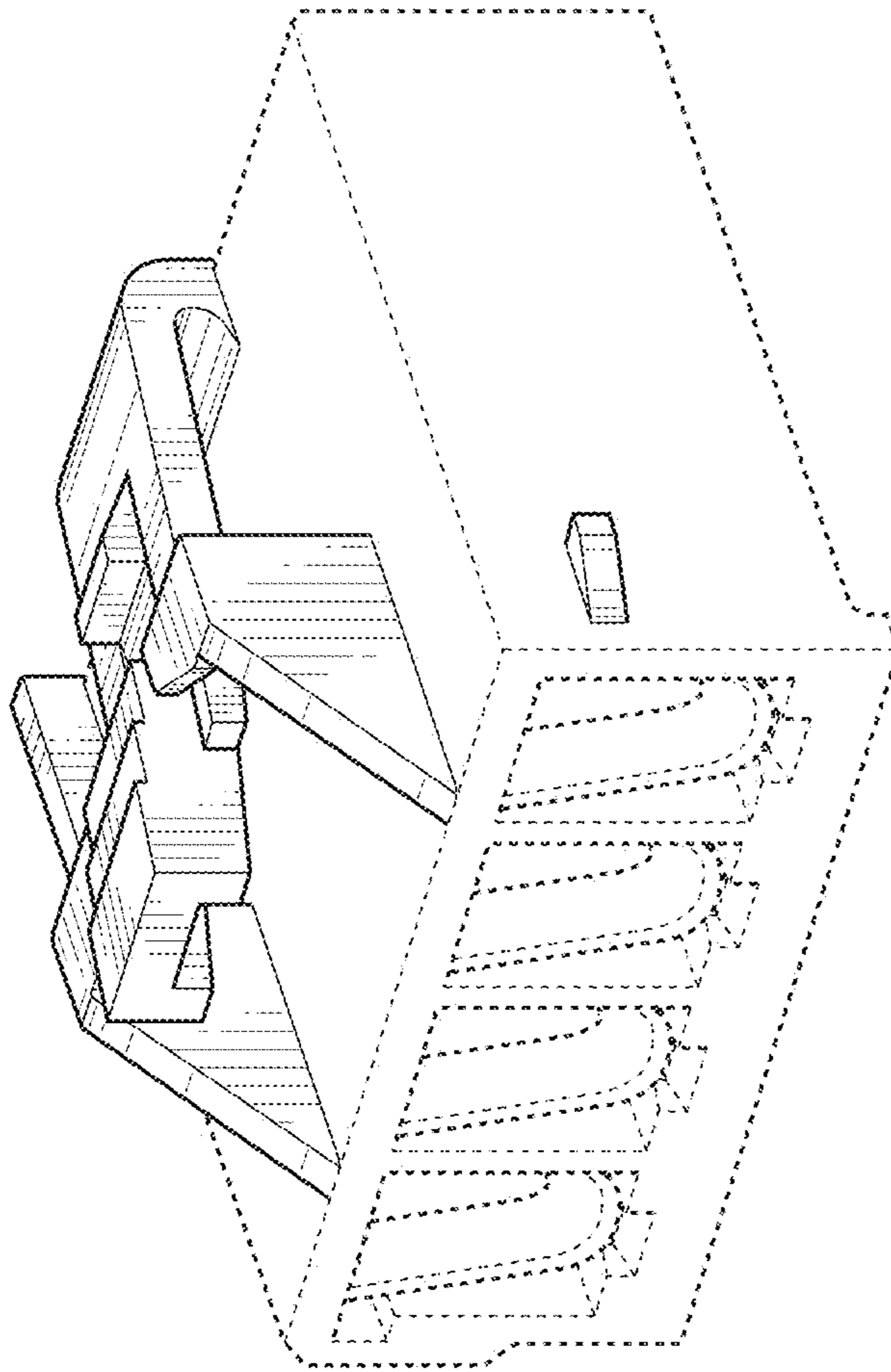


FIG. 15

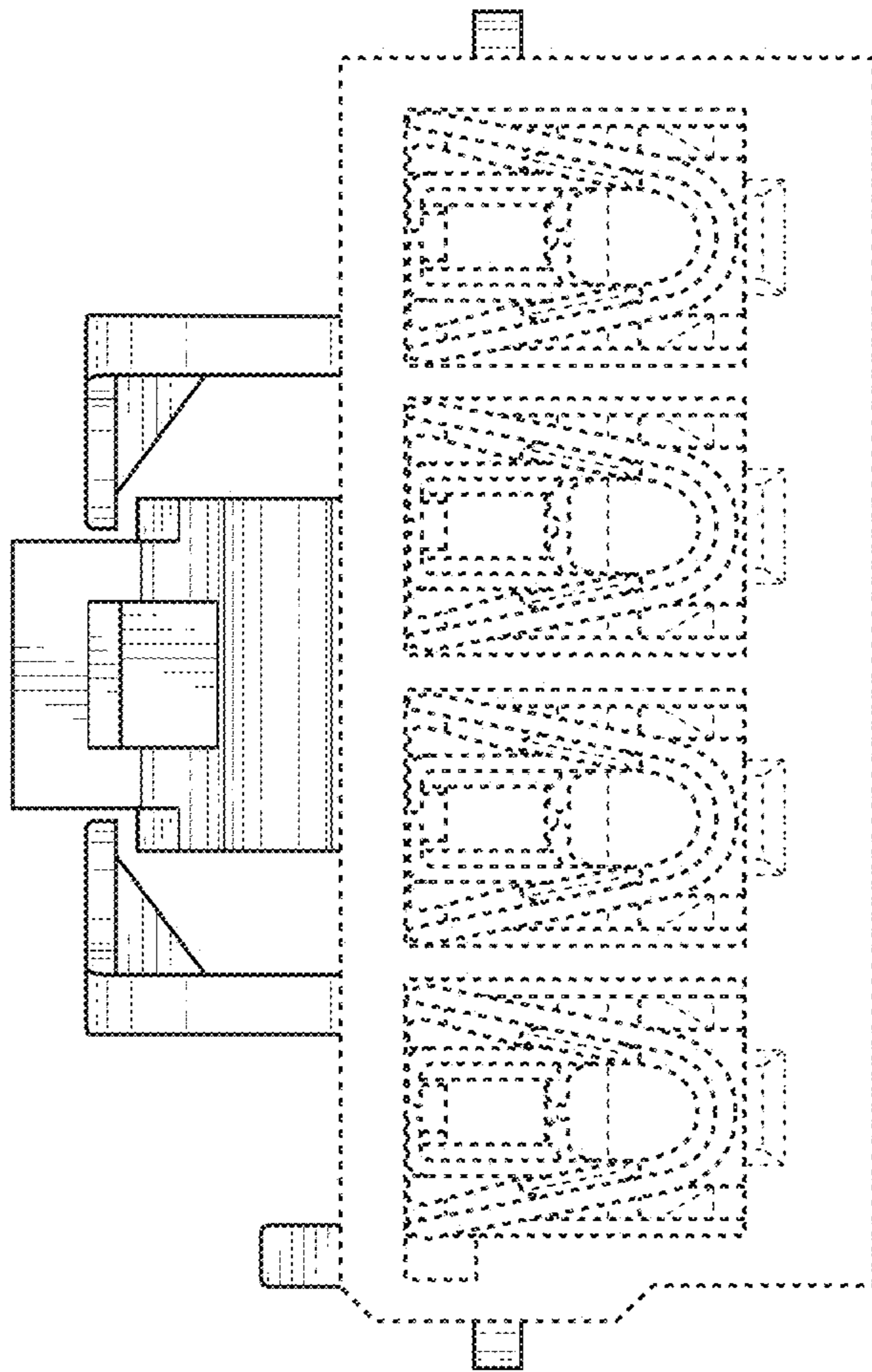


FIG. 16

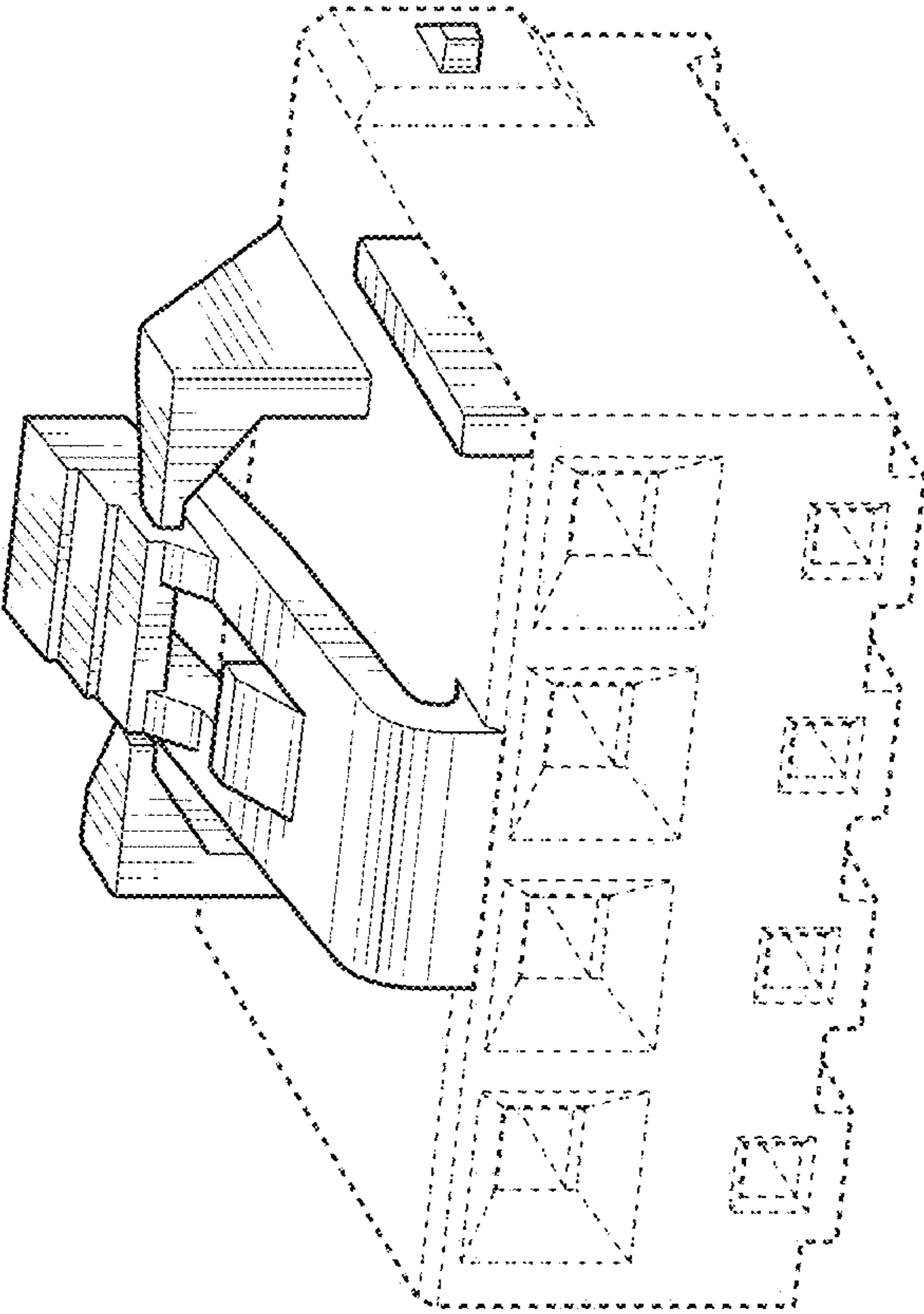


FIG. 17

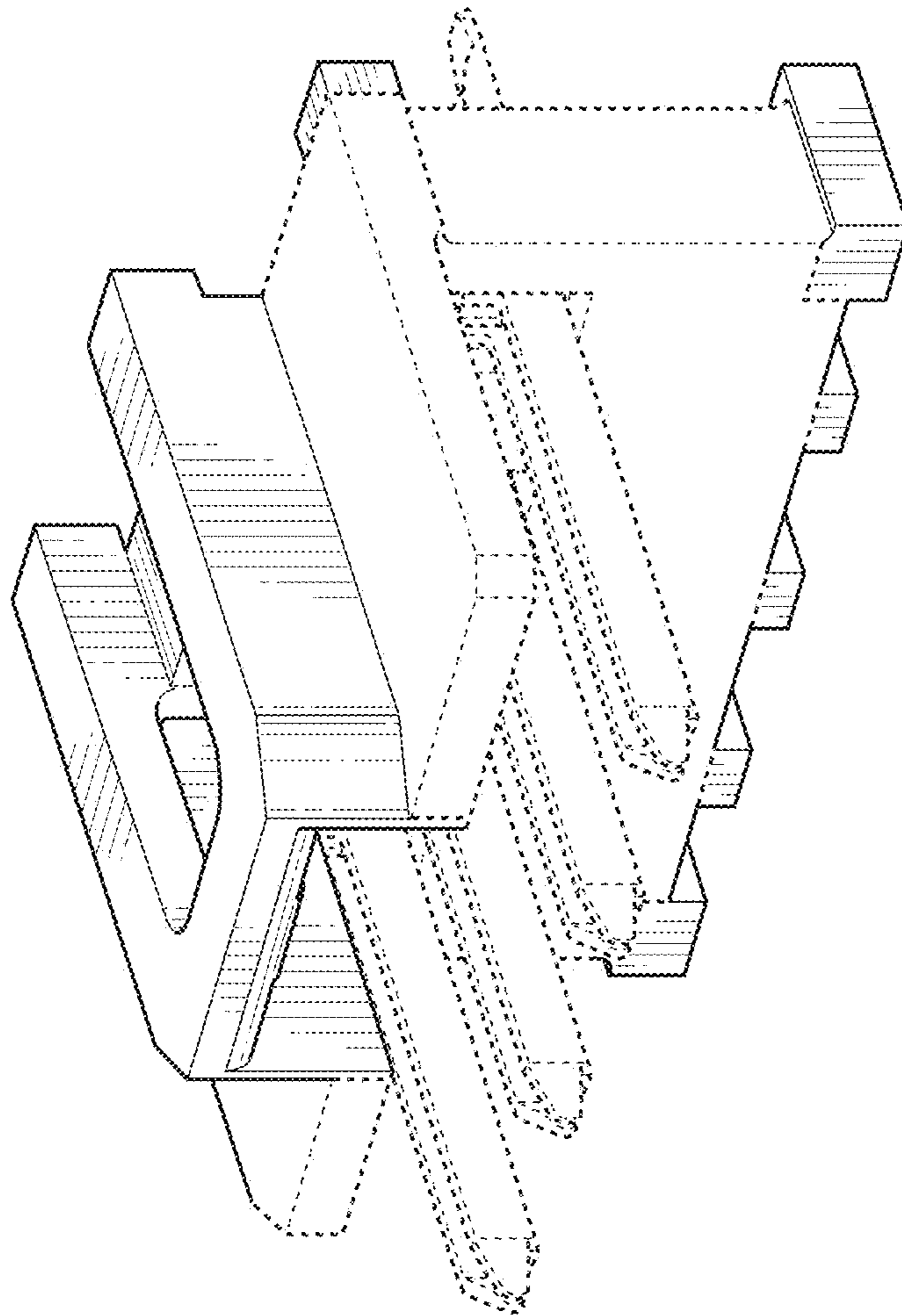


FIG. 18

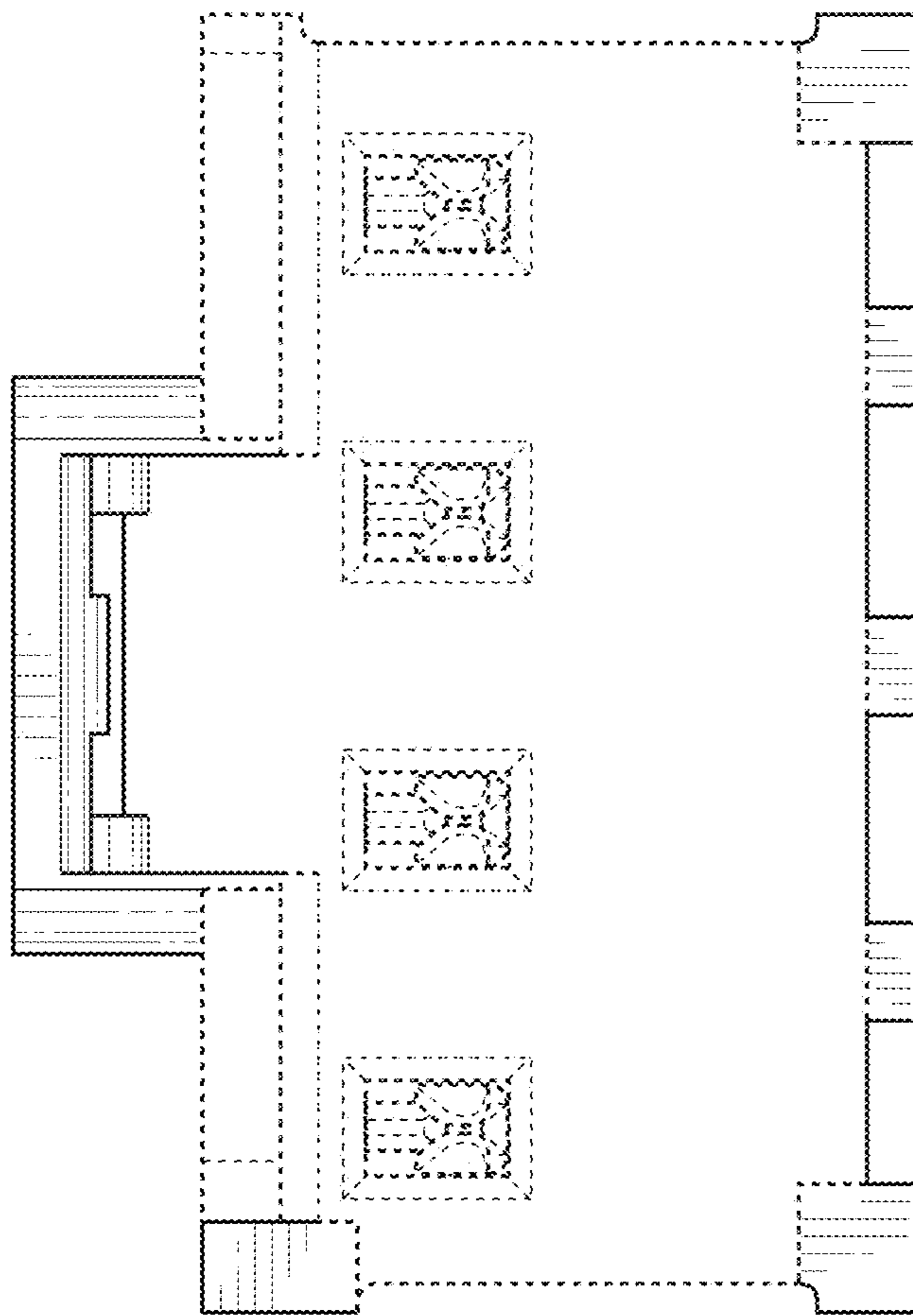


FIG. 19

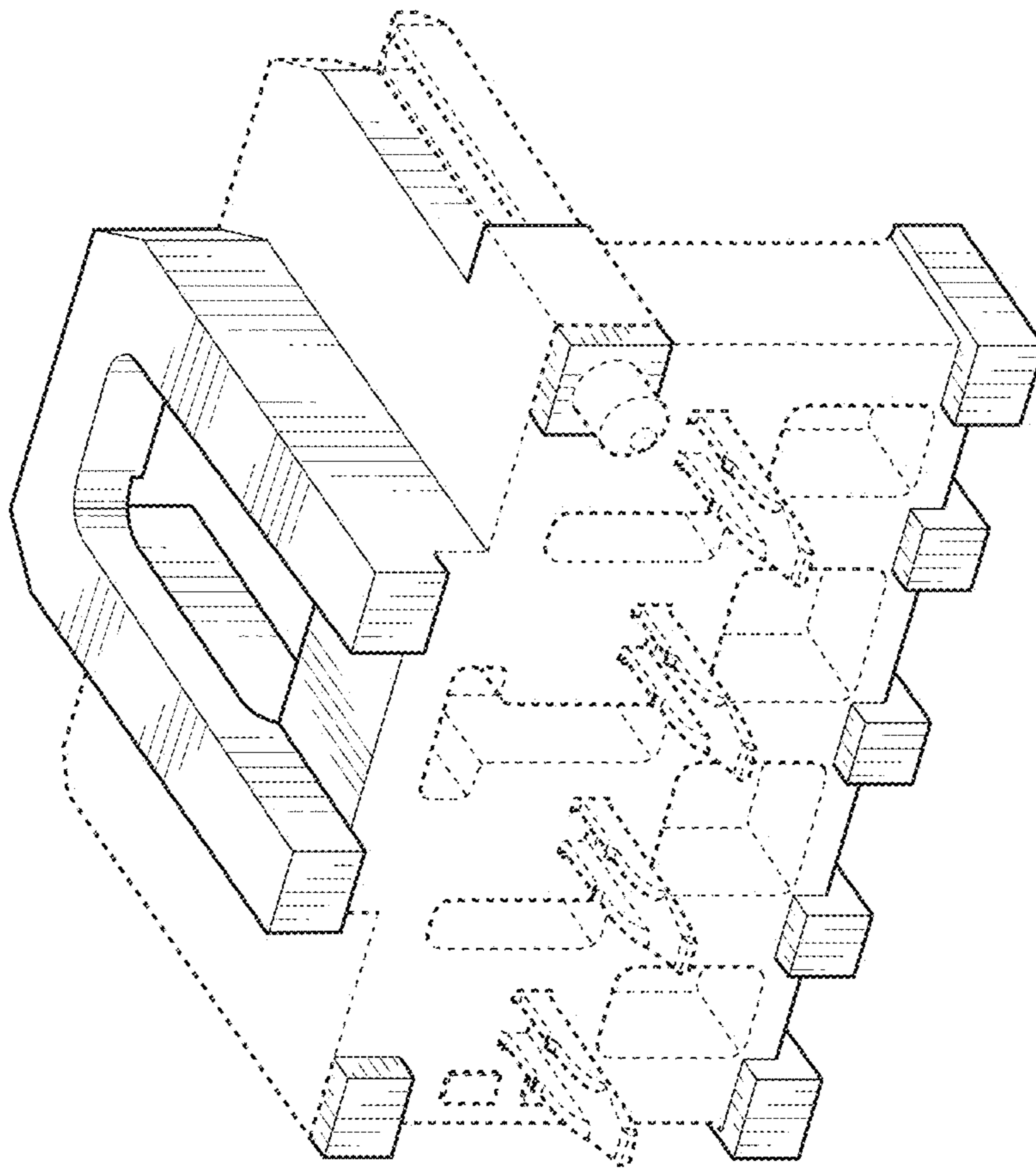


FIG. 20

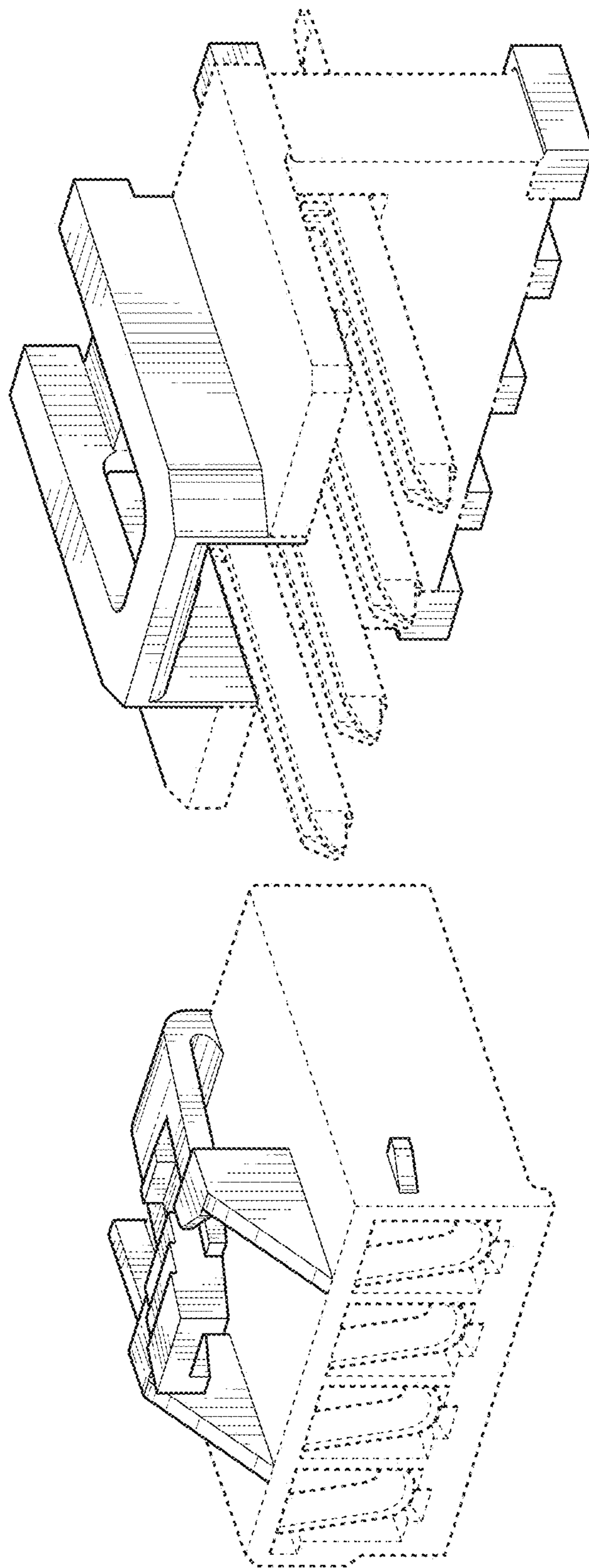


FIG. 21

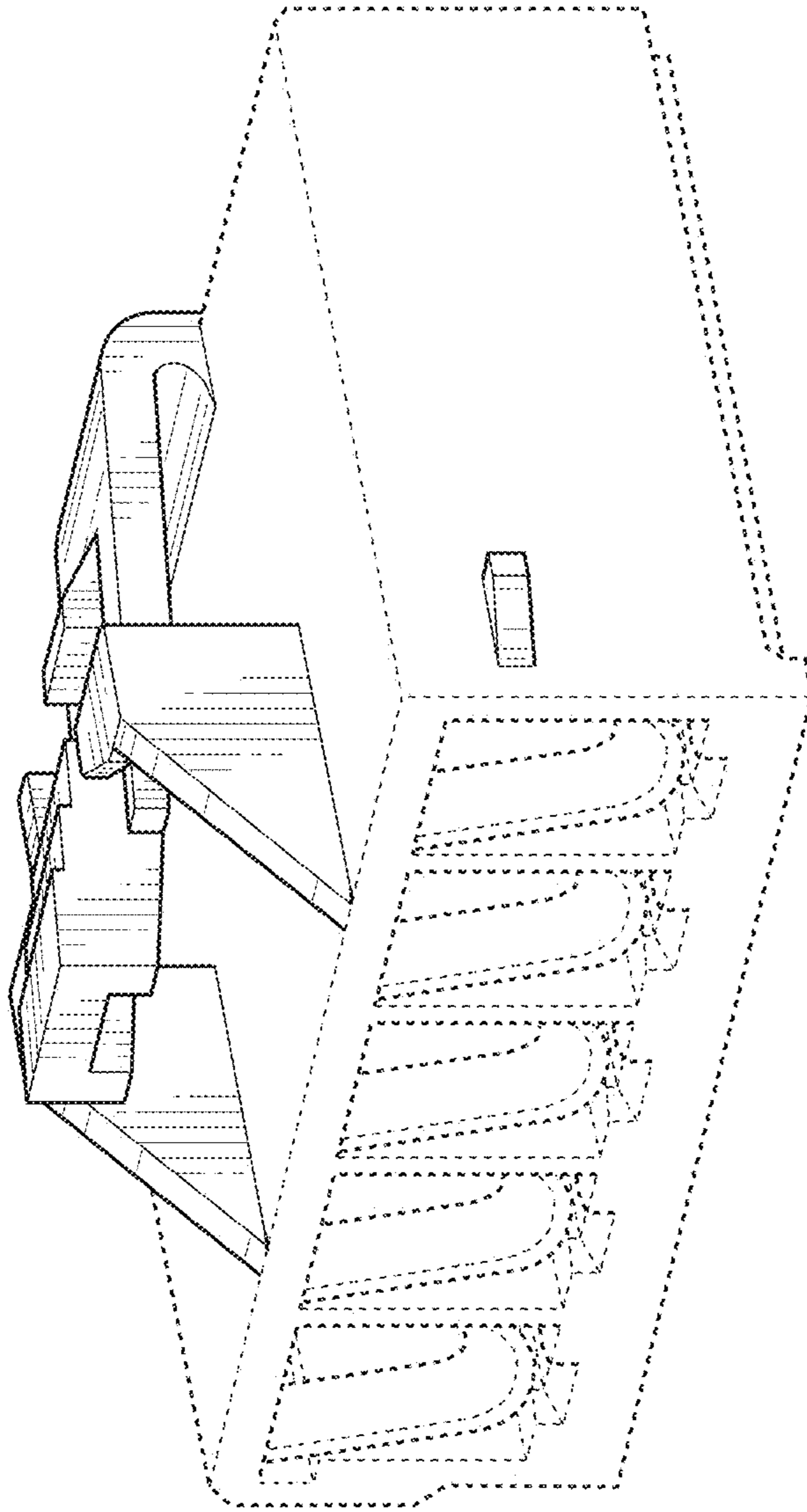


FIG. 22



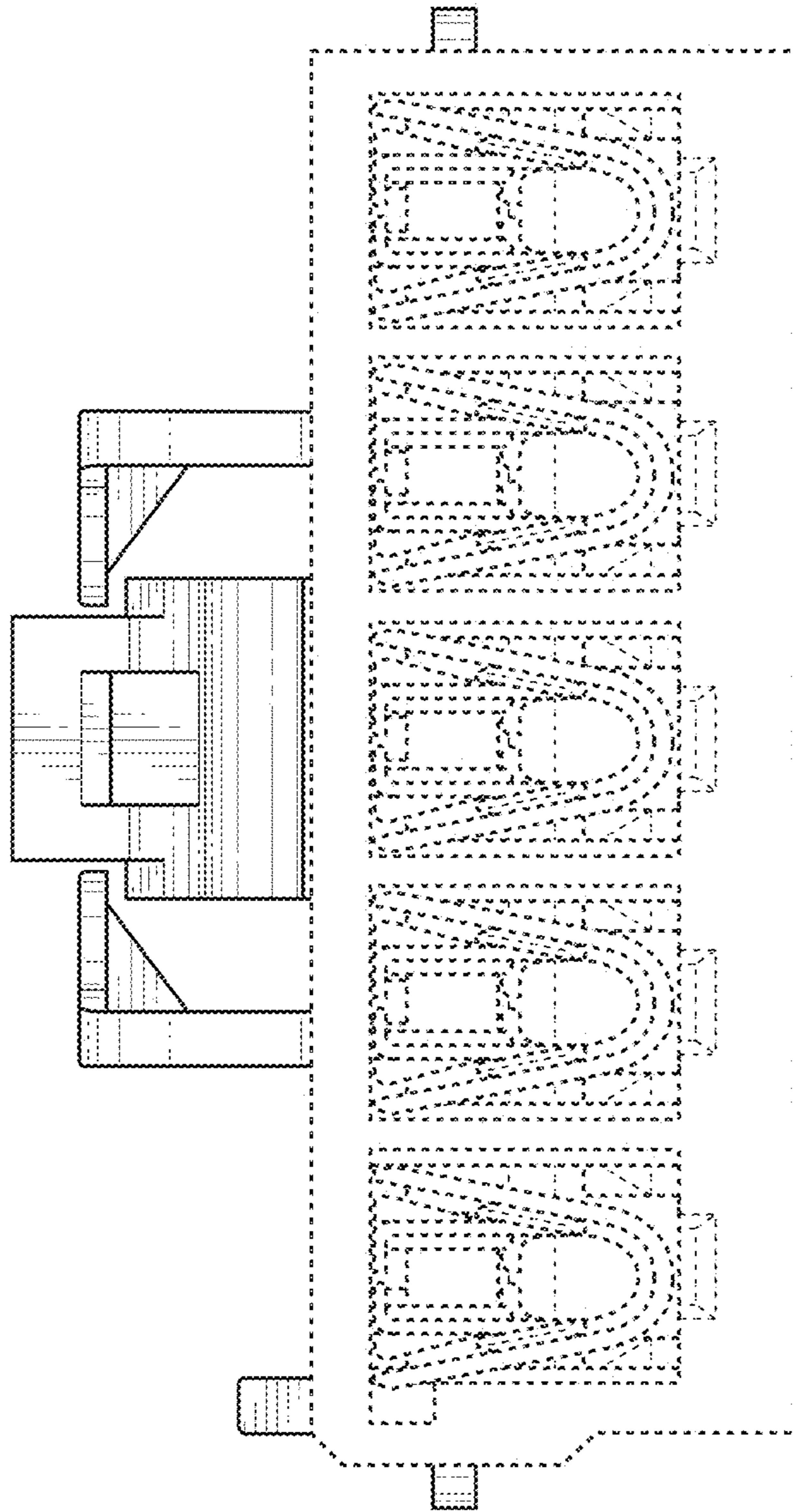


FIG. 23

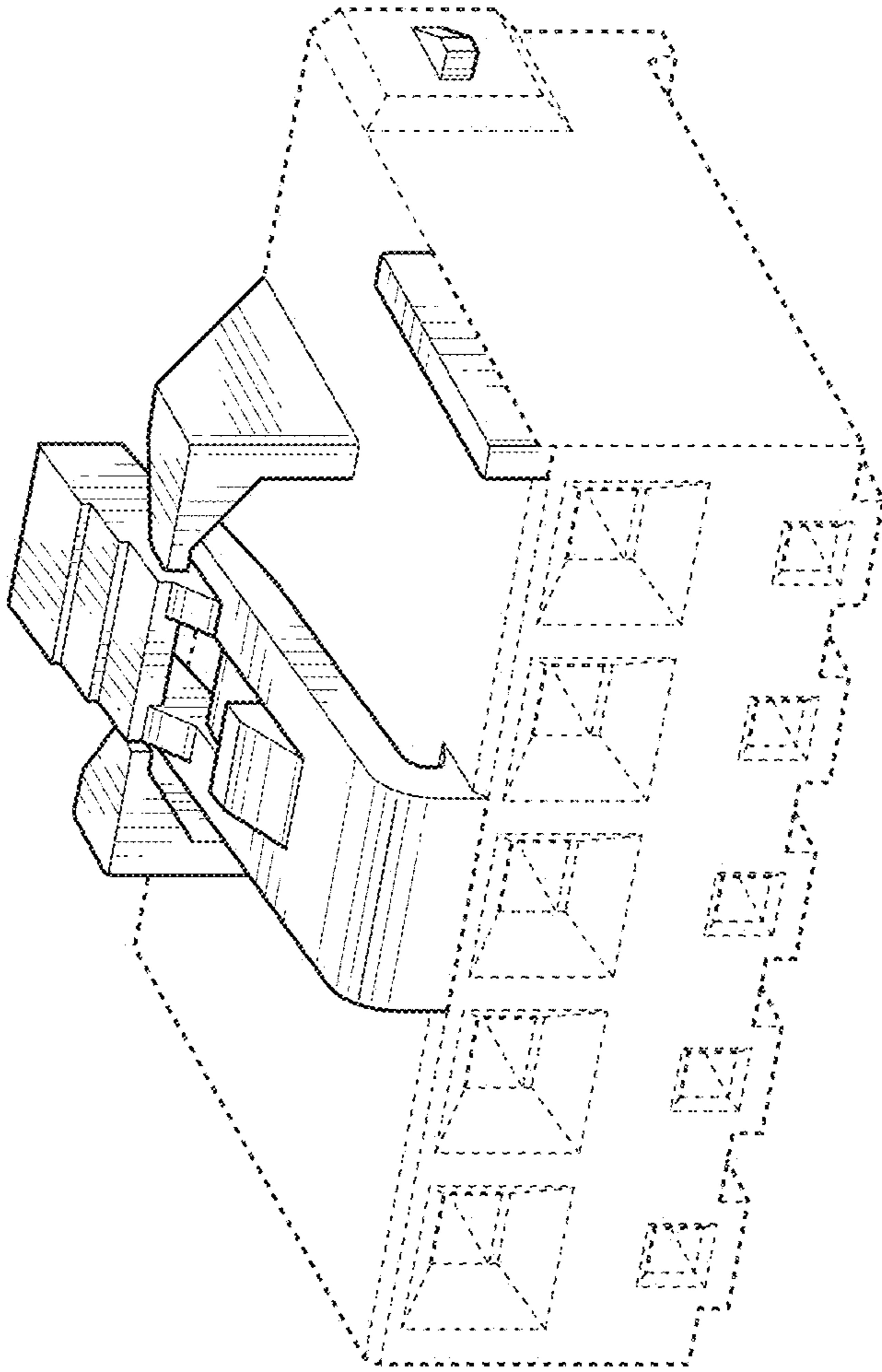


FIG. 24

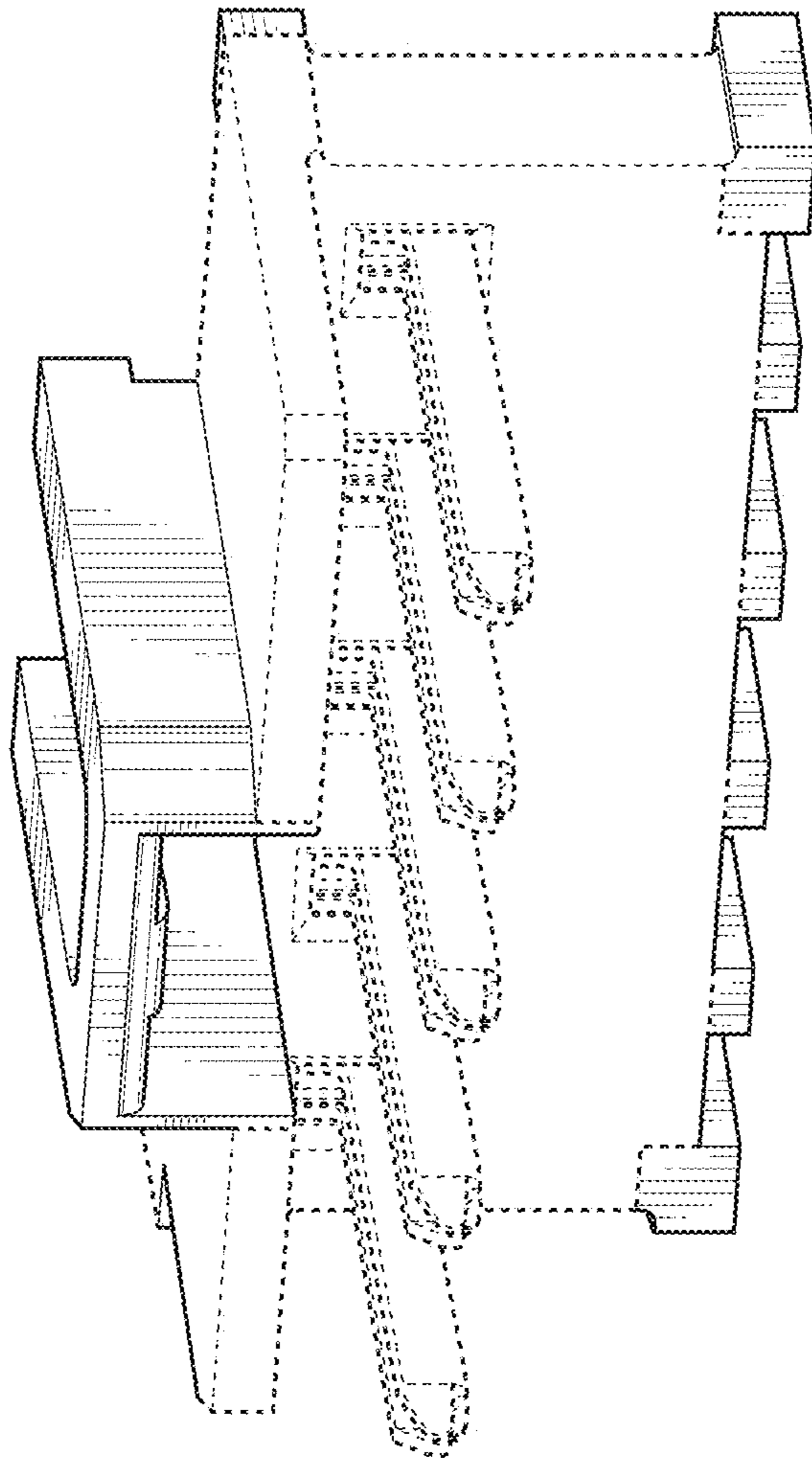


FIG. 25

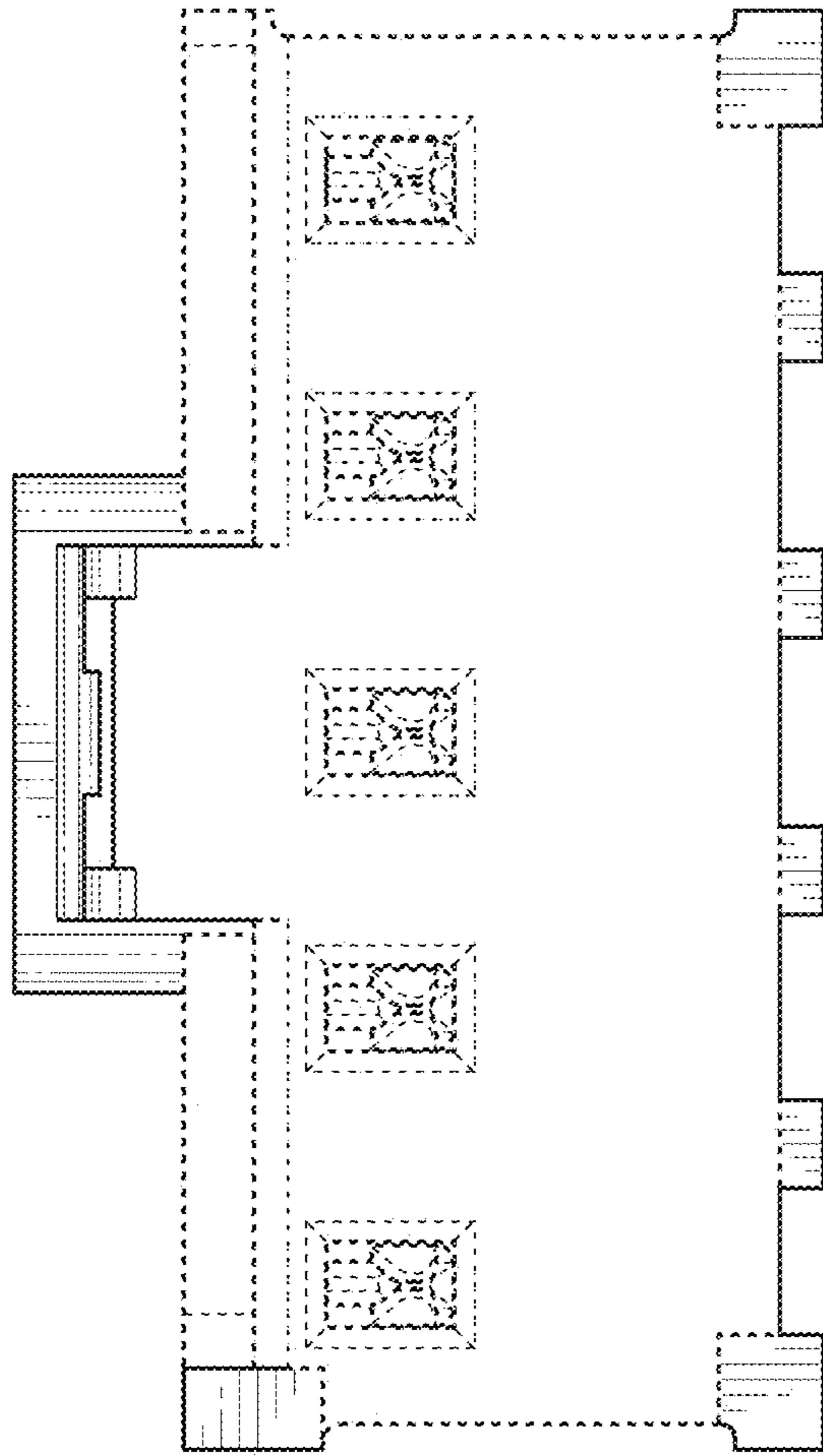


FIG. 26

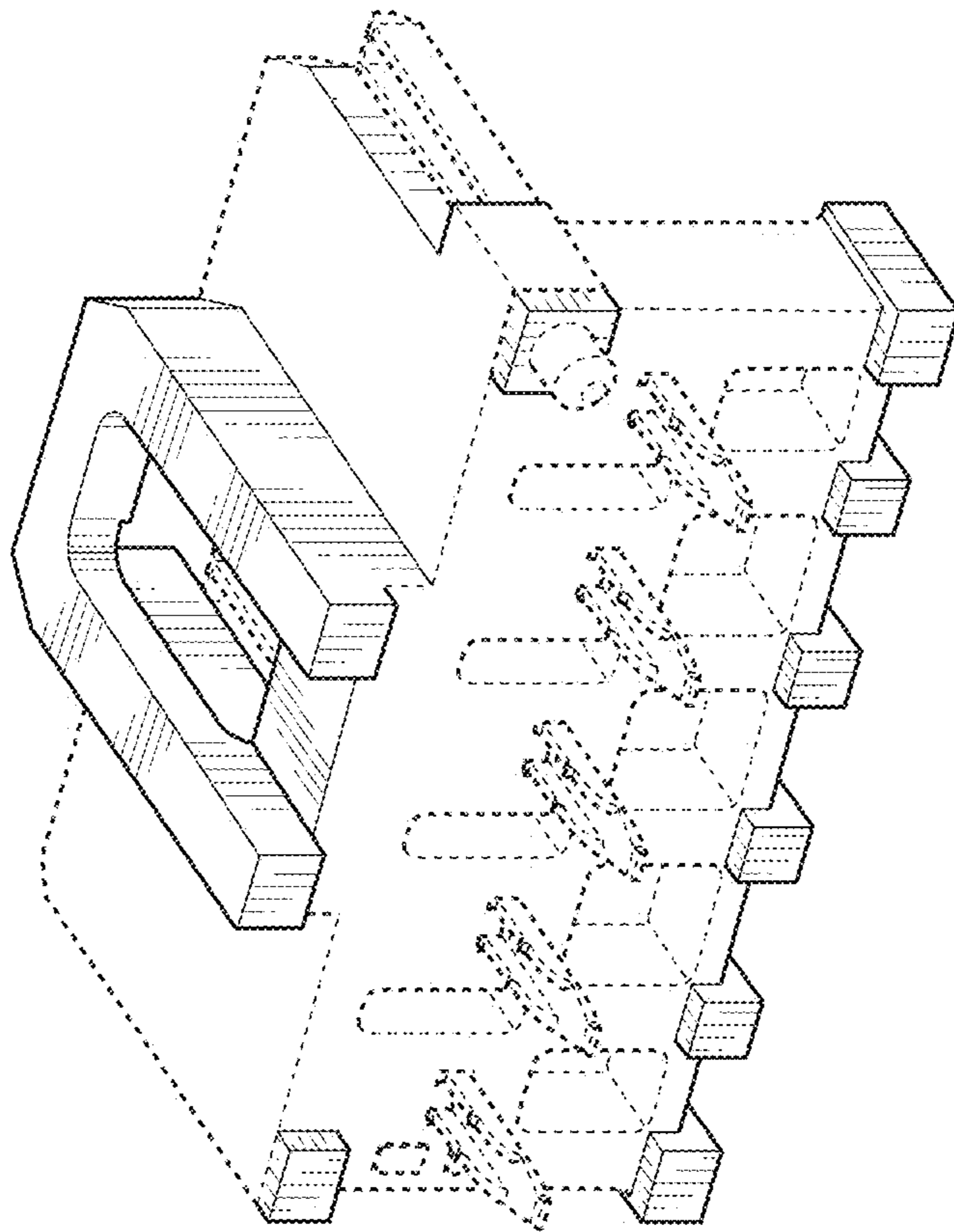


FIG. 27

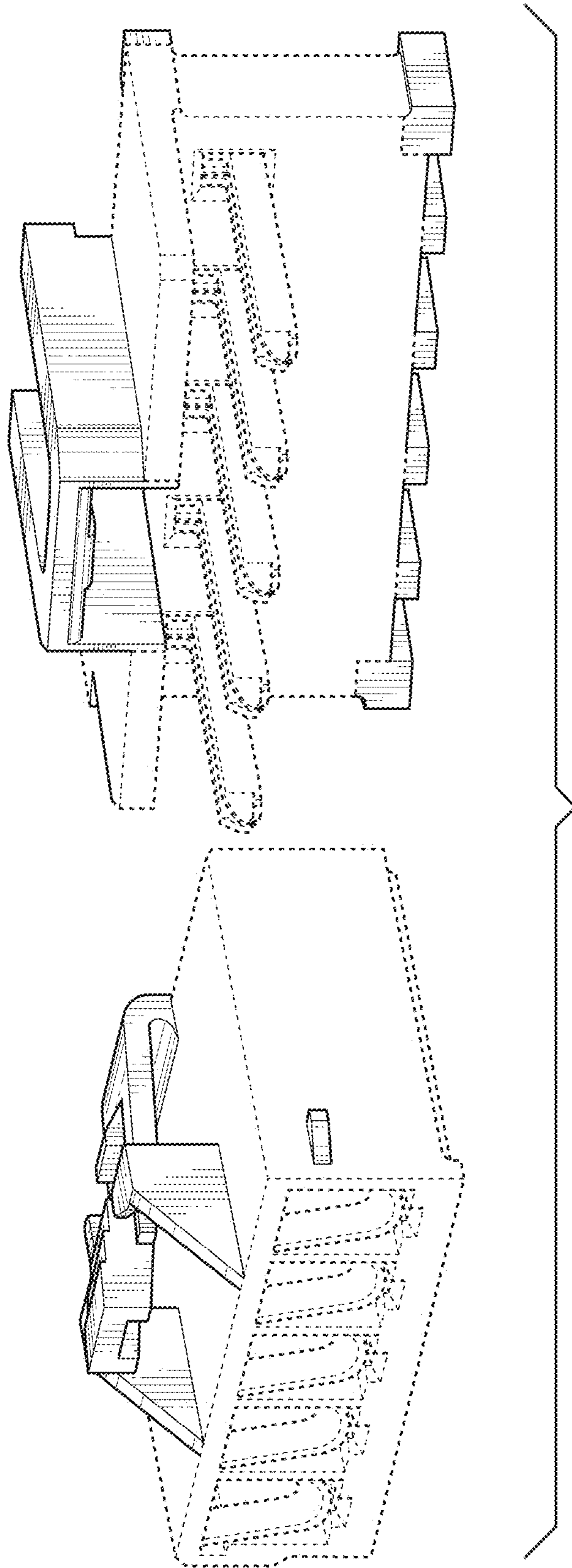


FIG. 28

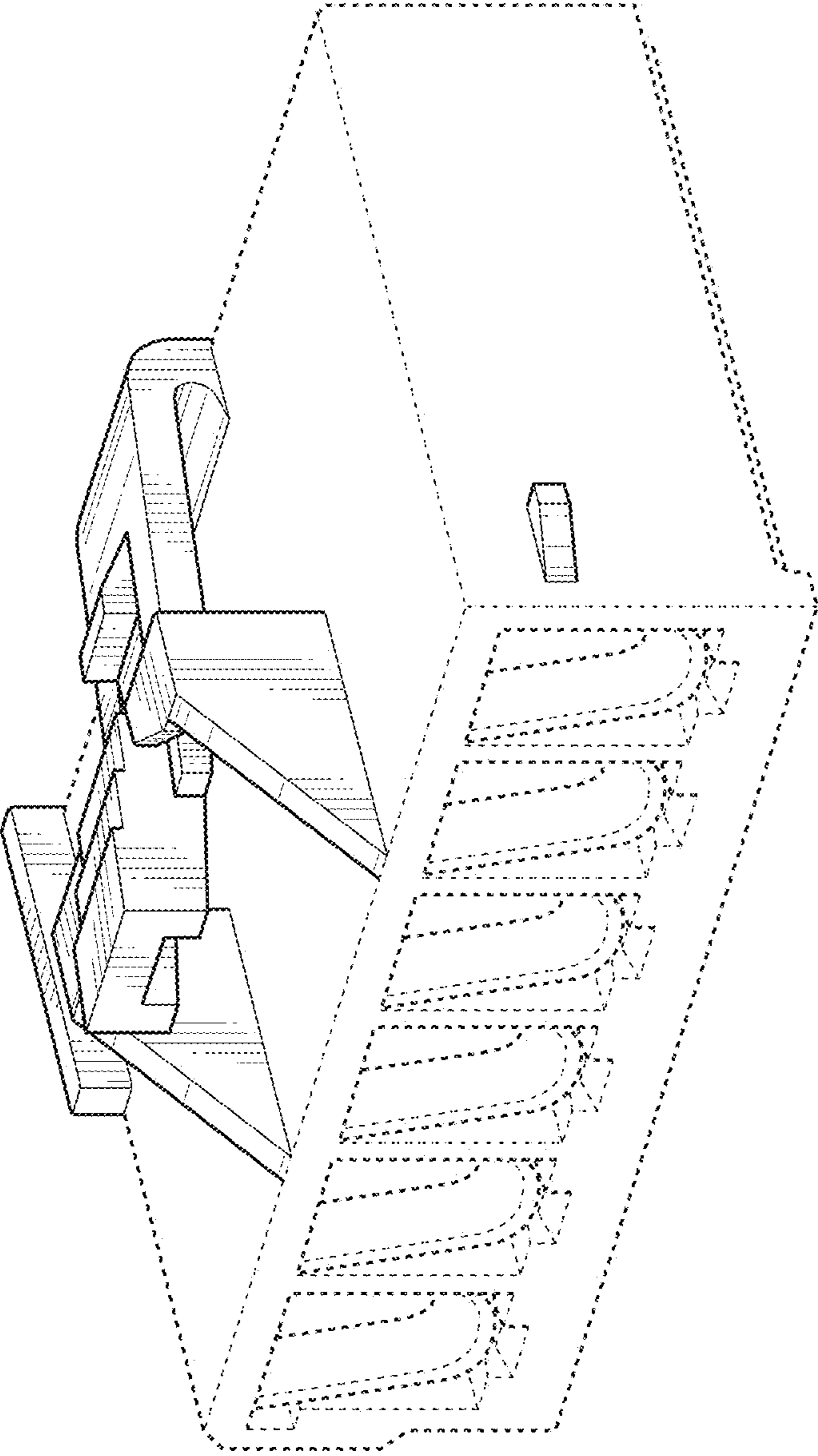


FIG. 29

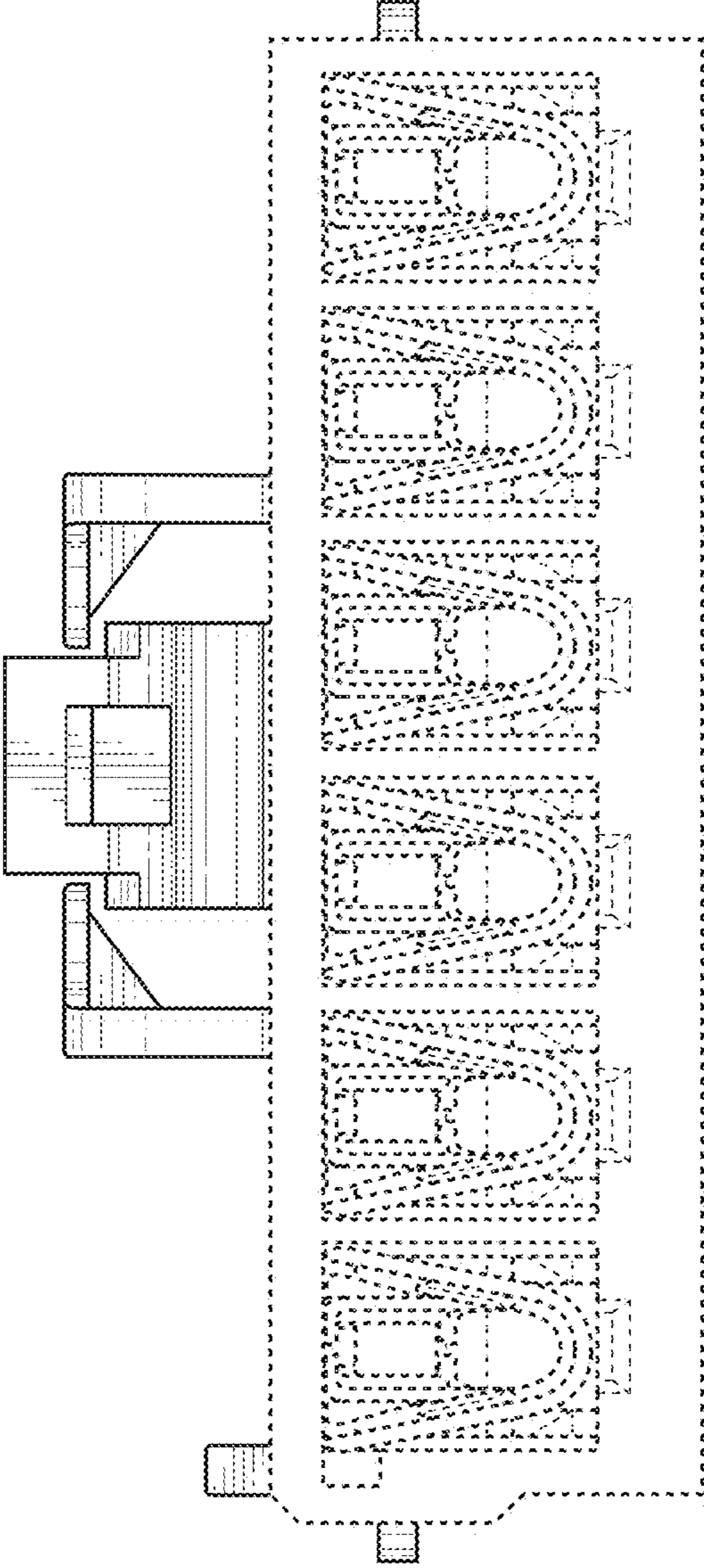


FIG. 30



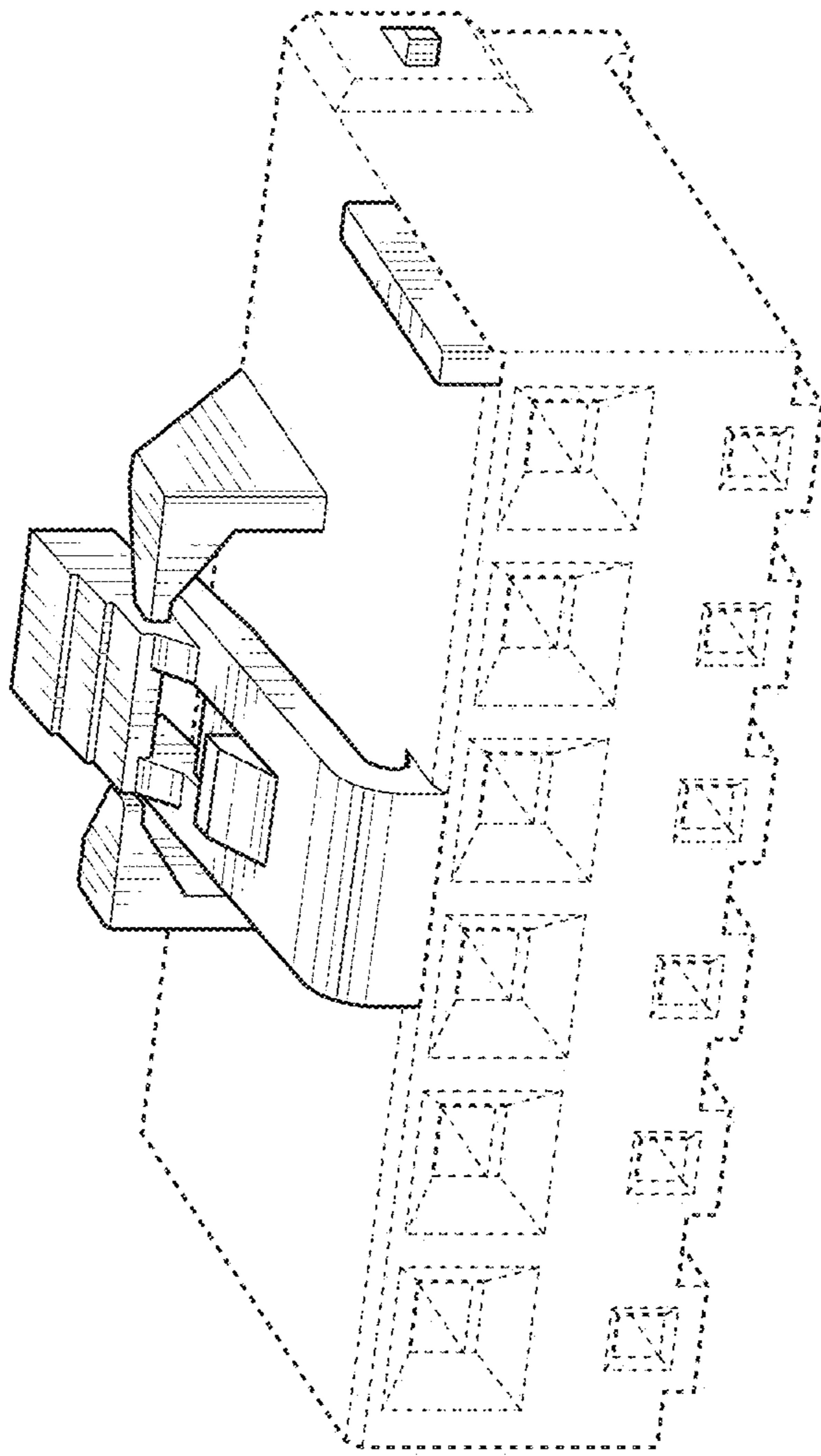


FIG. 31

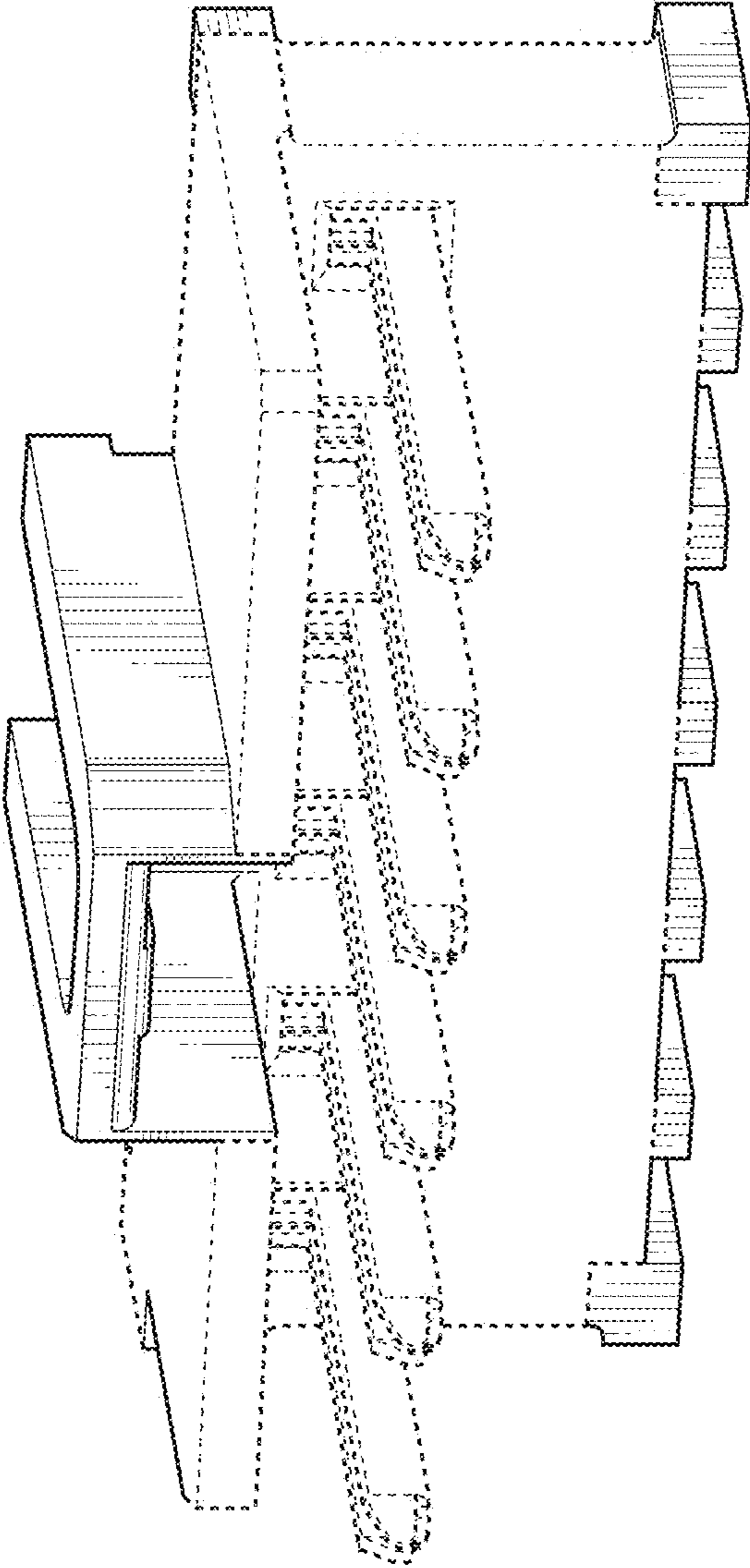


FIG. 32

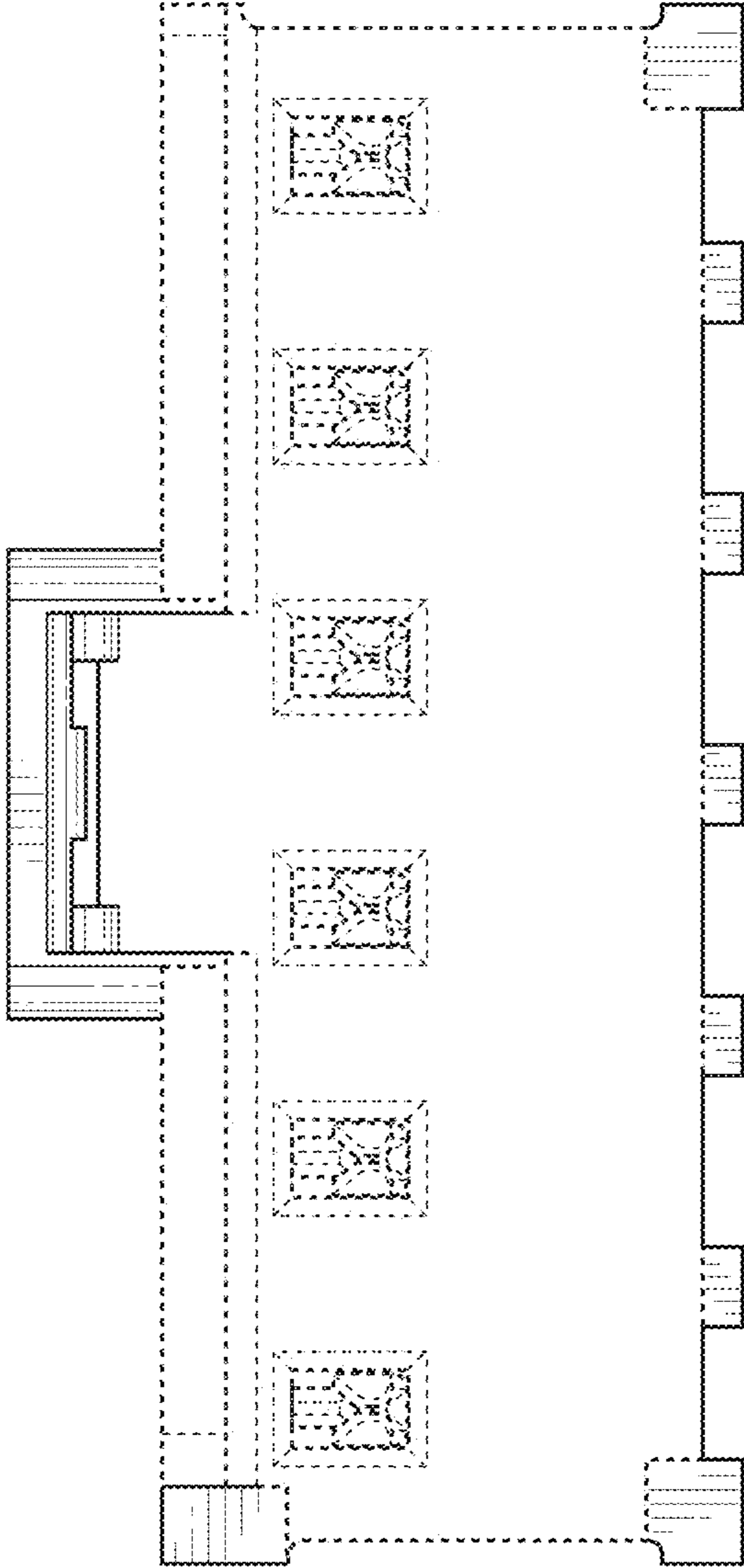


FIG. 33

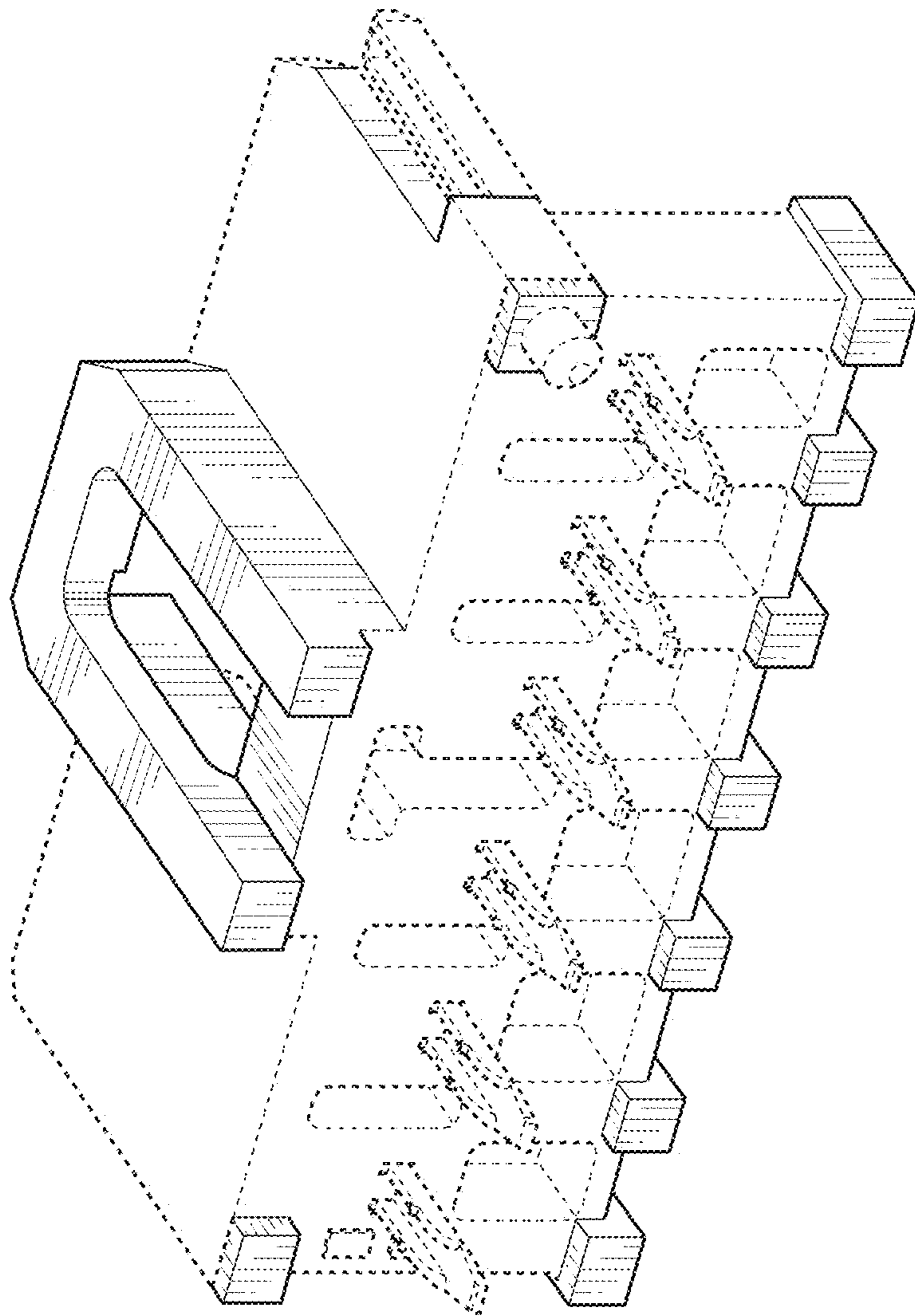


FIG. 34

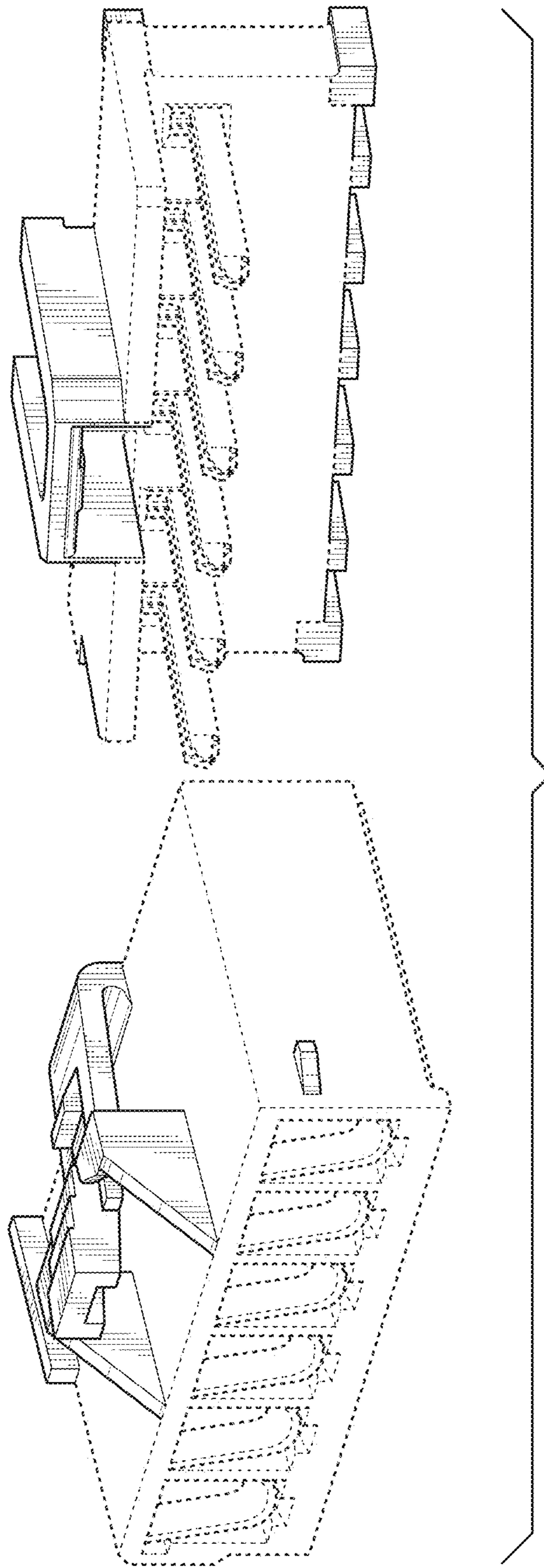


FIG. 35