



US00D910564S

(12) **United States Design Patent** (10) **Patent No.:** **US D910,564 S**  
**Ganamukhi et al.** (45) **Date of Patent:** **\*\* Feb. 16, 2021**

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

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

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

(21) Appl. No.: **29/685,541**

(22) Filed: **Mar. 28, 2019**

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

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

(58) **Field of Classification Search**  
USPC ..... D13/133, 146, 147, 153, 154, 184  
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D454,333 S *	3/2002	Ikeda	.....	D13/147
D454,335 S *	3/2002	Okada	.....	D13/147

(Continued)

FOREIGN PATENT DOCUMENTS

CN	305654704	*	3/2020
WO	D205298-009	*	3/2020
WO	D205298-019	*	3/2020

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*Assistant Examiner* — Michael Chong

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(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 front perspective view of a connector receptacle showing our new design;

FIG. 4 is a front view thereof;

FIG. 5 is a front perspective view of the connector plug of FIGS. 1-2 and the connector receptacle of FIGS. 3-4, shown together as a pair;

FIG. 6 is a front perspective view of an alternate embodiment of a connector plug showing our new design;

FIG. 7 is a front view thereof;

FIG. 8 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;

FIG. 9 is a front view thereof;

FIG. 10 is a front perspective view of the connector plug of FIGS. 6-7 and the connector receptacle of FIGS. 8-9, shown together as a pair;

FIG. 11 is a front perspective view of an alternate embodiment of a connector plug showing our new design;

FIG. 12 is a front view thereof;

FIG. 13 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;

FIG. 14 is a front view thereof;

FIG. 15 is a front perspective view of the connector plug of FIGS. 11-12 and the connector receptacle of FIGS. 13-14, shown together as a pair;

FIG. 16 is a front perspective view of an alternate embodiment of a connector plug showing our new design;

FIG. 17 is a front 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 front perspective view of the connector plug of FIGS. 16-17 and the connector receptacle of FIGS. 18-19, shown together as a pair;

FIG. 21 is a front perspective view of an alternate embodiment of a connector plug showing our new design;

FIG. 22 is a front view thereof;

FIG. 23 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;

FIG. 24 is a front view thereof;

FIG. 25 is a front perspective view of the connector plug of FIGS. 21-22 and the connector receptacle of FIGS. 23-24, shown together as a pair;

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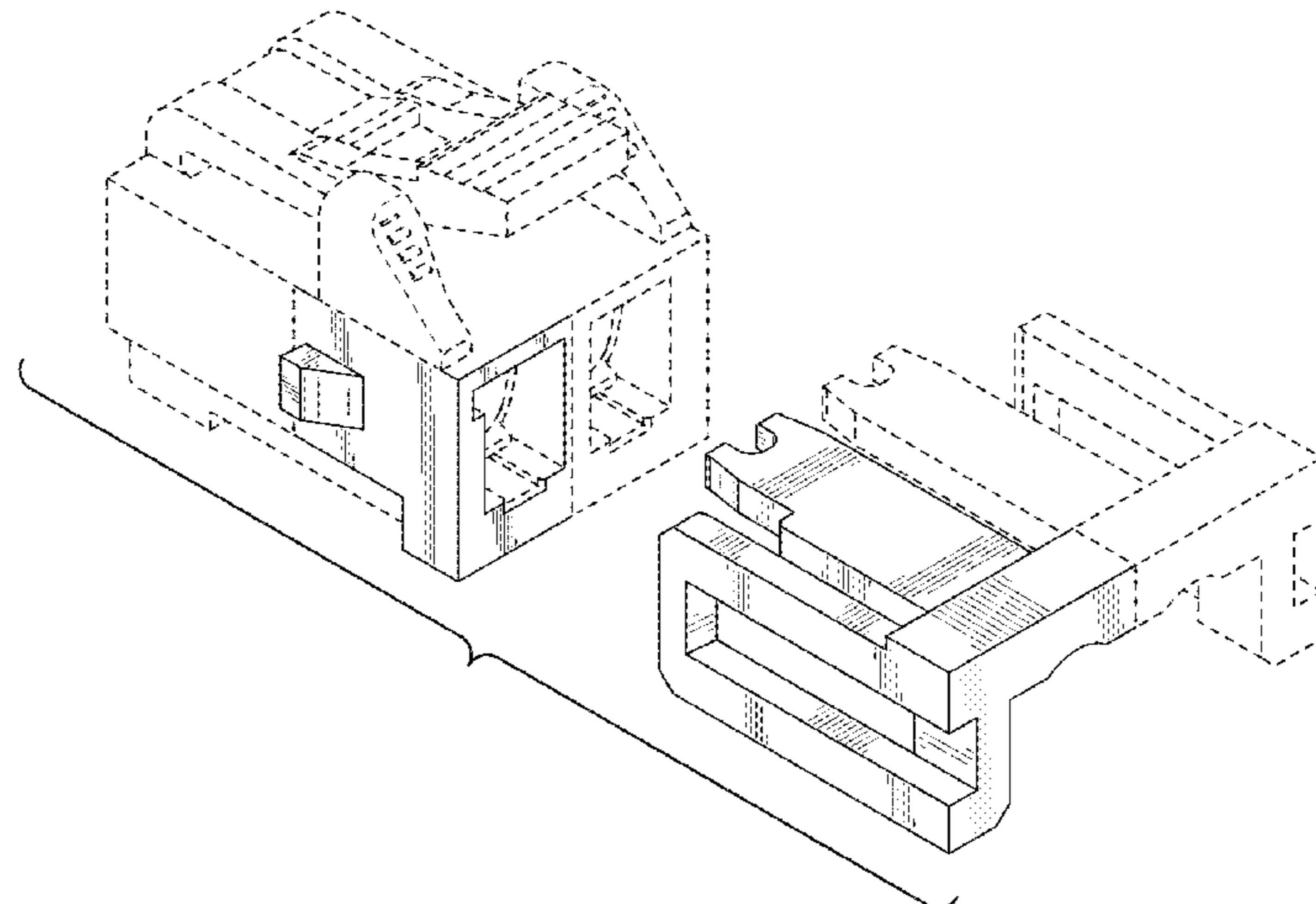


FIG. 26 is a front perspective view of an alternate embodiment of a connector plug showing our new design;  
 FIG. 27 is a front view thereof;  
 FIG. 28 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;  
 FIG. 29 is a front view thereof;  
 FIG. 30 is a front perspective view of the connector plug of FIGS. 26-27 and the connector receptacle of FIGS. 28-29, shown together as a pair;  
 FIG. 31 is a front perspective view of an alternate embodiment of a connector plug showing our new design;  
 FIG. 32 is a front view thereof;  
 FIG. 33 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;  
 FIG. 34 is a front view thereof;  
 FIG. 35 is a front perspective view of the connector plug of FIGS. 31-32 and the connector receptacle of FIGS. 33-34, shown together as a pair;  
 FIG. 36 is a front perspective view of an alternate embodiment of a connector plug showing our new design;  
 FIG. 37 is a front view thereof;  
 FIG. 38 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;  
 FIG. 39 is a front view thereof;  
 FIG. 40 is a front perspective view of the connector plug of FIGS. 36-37 and the connector receptacle of FIGS. 38-39, shown together as a pair;  
 FIG. 41 is a front perspective view of an alternate embodiment of a connector plug showing our new design;  
 FIG. 42 is a front view thereof;  
 FIG. 43 is a front perspective view of an alternate embodiment of a connector receptacle showing our new design;  
 FIG. 44 is a front view thereof; and,  
 FIG. 45 is a front perspective view of the connector plug of FIGS. 41-42 and the connector receptacle of FIGS. 43-44, 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 shaded areas represent the bounds of the claimed design and form no part thereof.

**1 Claim, 45 Drawing Sheets**

(58) **Field of Classification Search**

CPC .... H01R 13/02; H01R 13/436; H01R 13/502;  
 H01R 13/504; H01R 13/506; H01R  
 13/64; H01R 13/4362

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D459,704	S	*	7/2002	Chen	.....	D13/147
D463,370	S	*	9/2002	Chen	.....	D13/147
D524,751	S	*	7/2006	Lee	.....	D13/147
D745,461	S	*	12/2015	Cho	.....	D13/147
D748,580	S	*	2/2016	Endo	.....	D13/146
D748,588	S	*	2/2016	Endo	.....	D13/147
D791,080	S	*	7/2017	Li	.....	D13/133
D791,083	S	*	7/2017	Li	.....	D13/147
D791,705	S	*	7/2017	Li	.....	H01R 13/64 D13/147
D803,162	S	*	11/2017	Li	.....	D13/147
D840,938	S	*	2/2019	Hsu	.....	D13/147
10,461,458	B2	*	10/2019	Kim	.....	H01R 13/4362 D13/133
D895,552	S	*	9/2020	Somanathapura Ramanna	.....	D13/133
D896,181	S	*	9/2020	Somanathapura Ramanna	.....	D13/133
D897,958	S	*	10/2020	Somanathapura Ramanna	.....	D13/133

\* cited by examiner

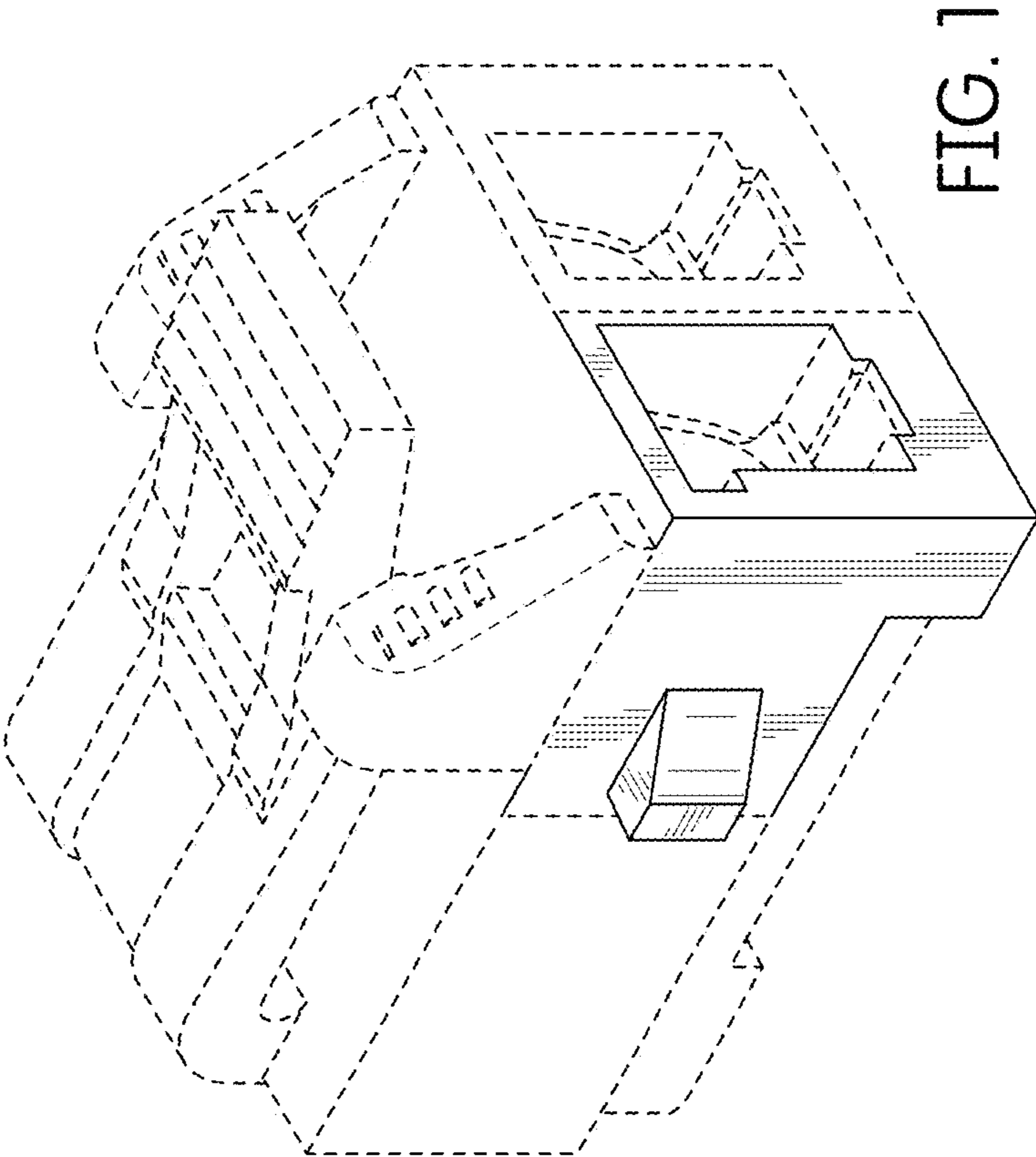


FIG. 1

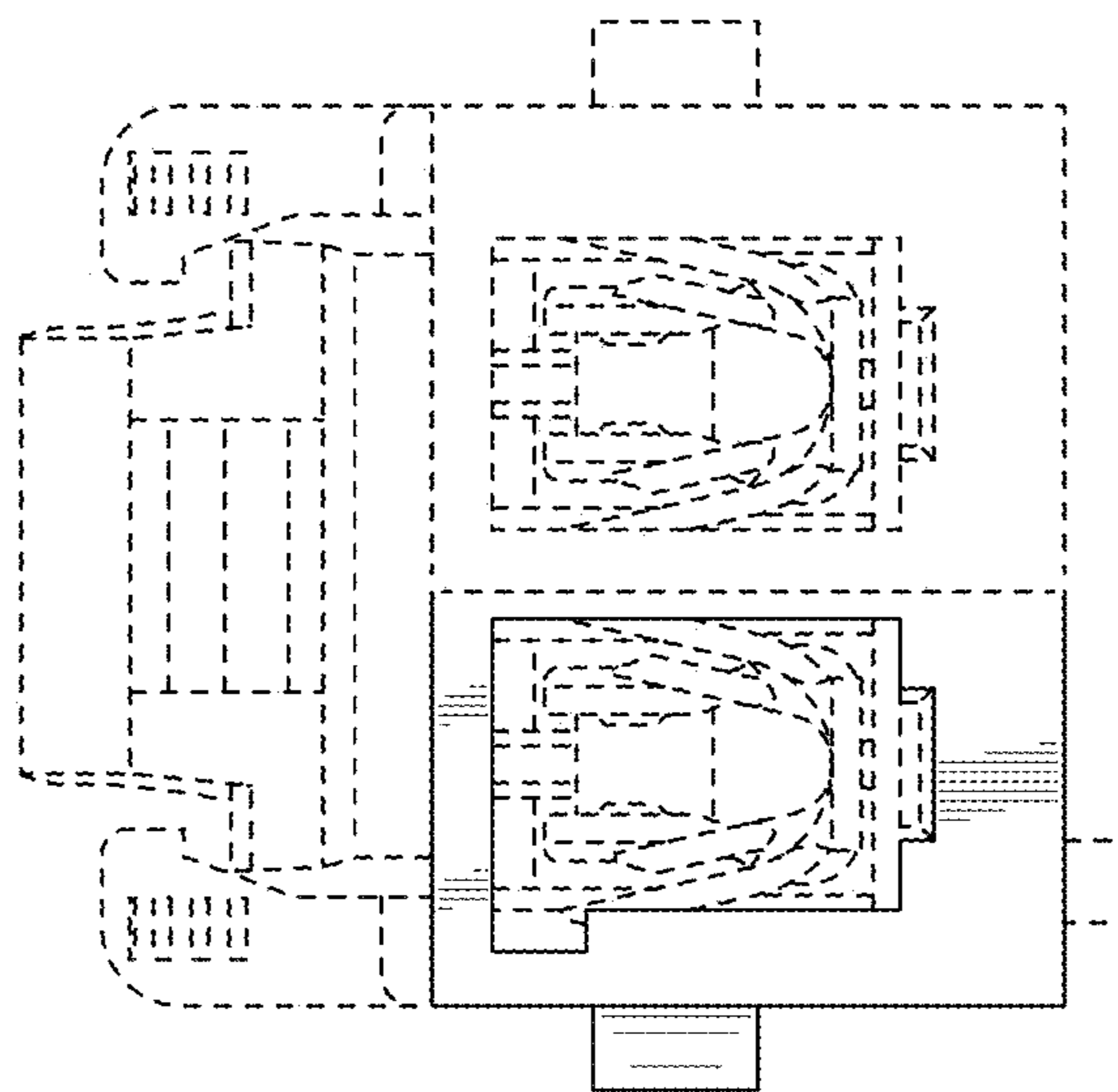


FIG. 2

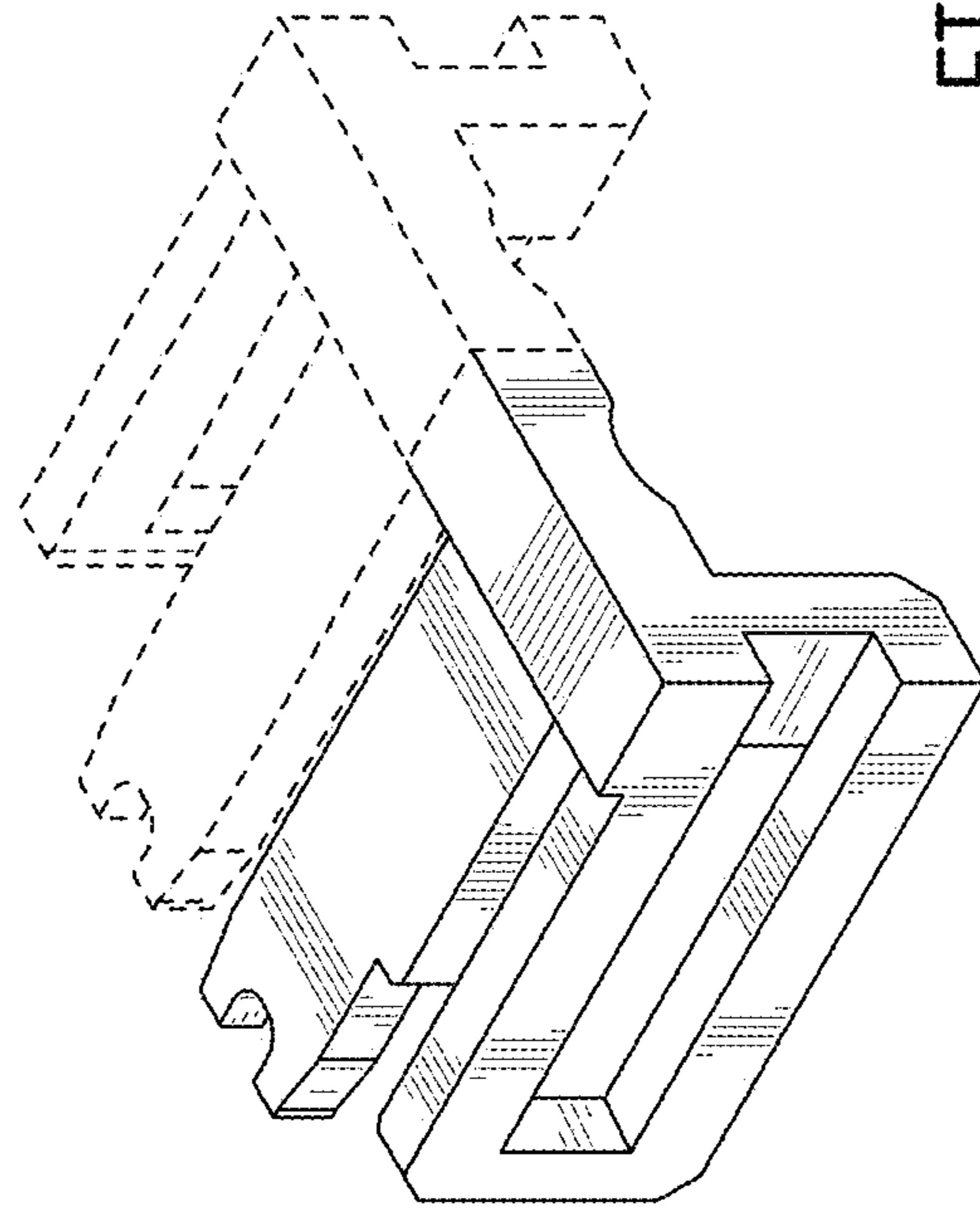


FIG. 3

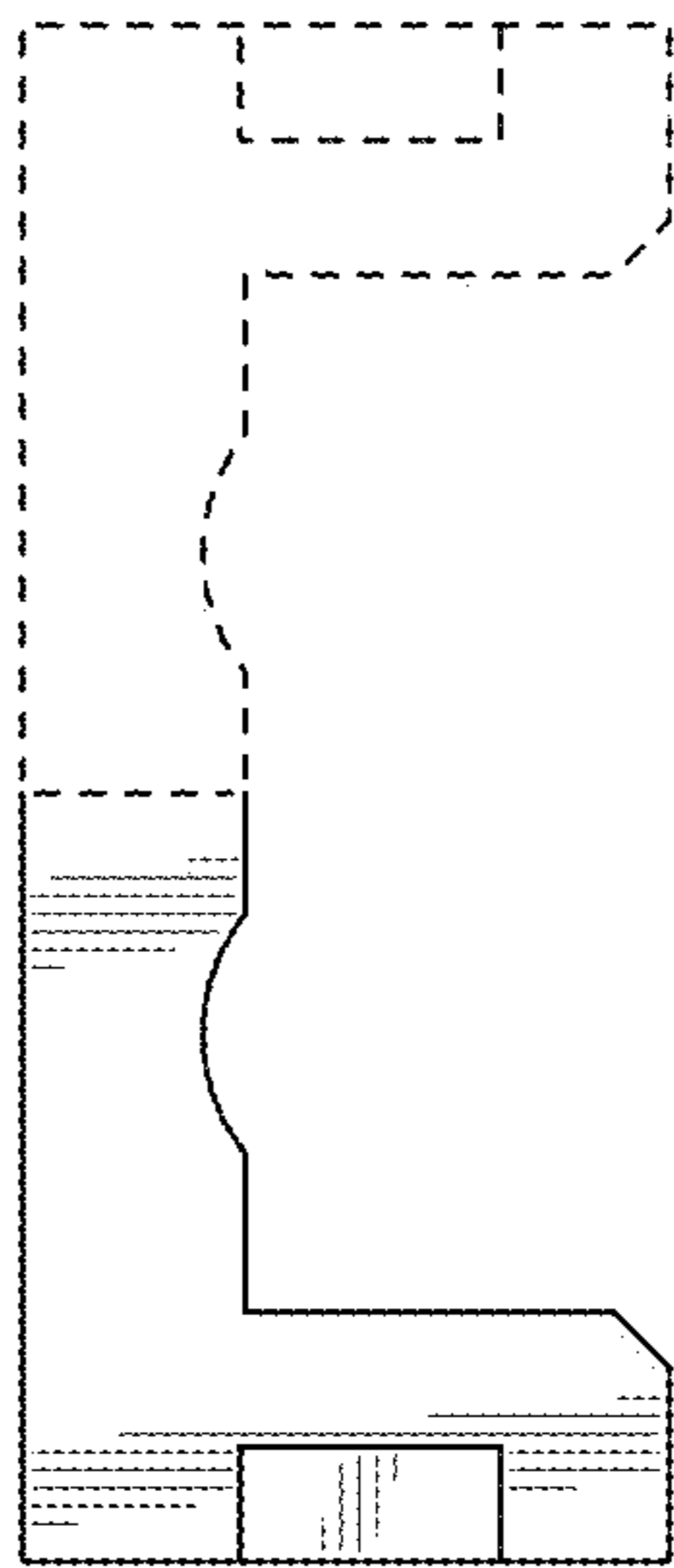


FIG. 4

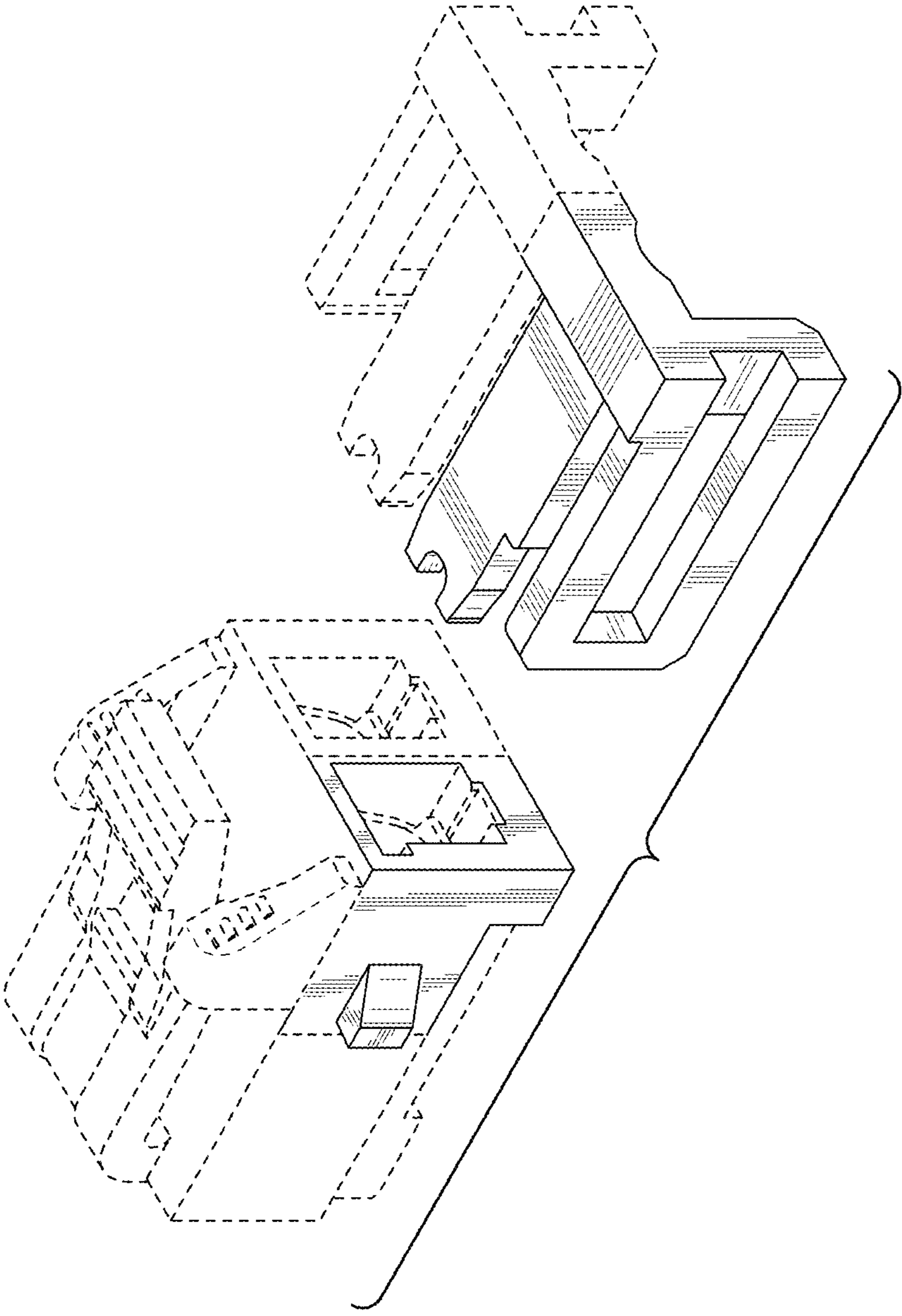


FIG. 5

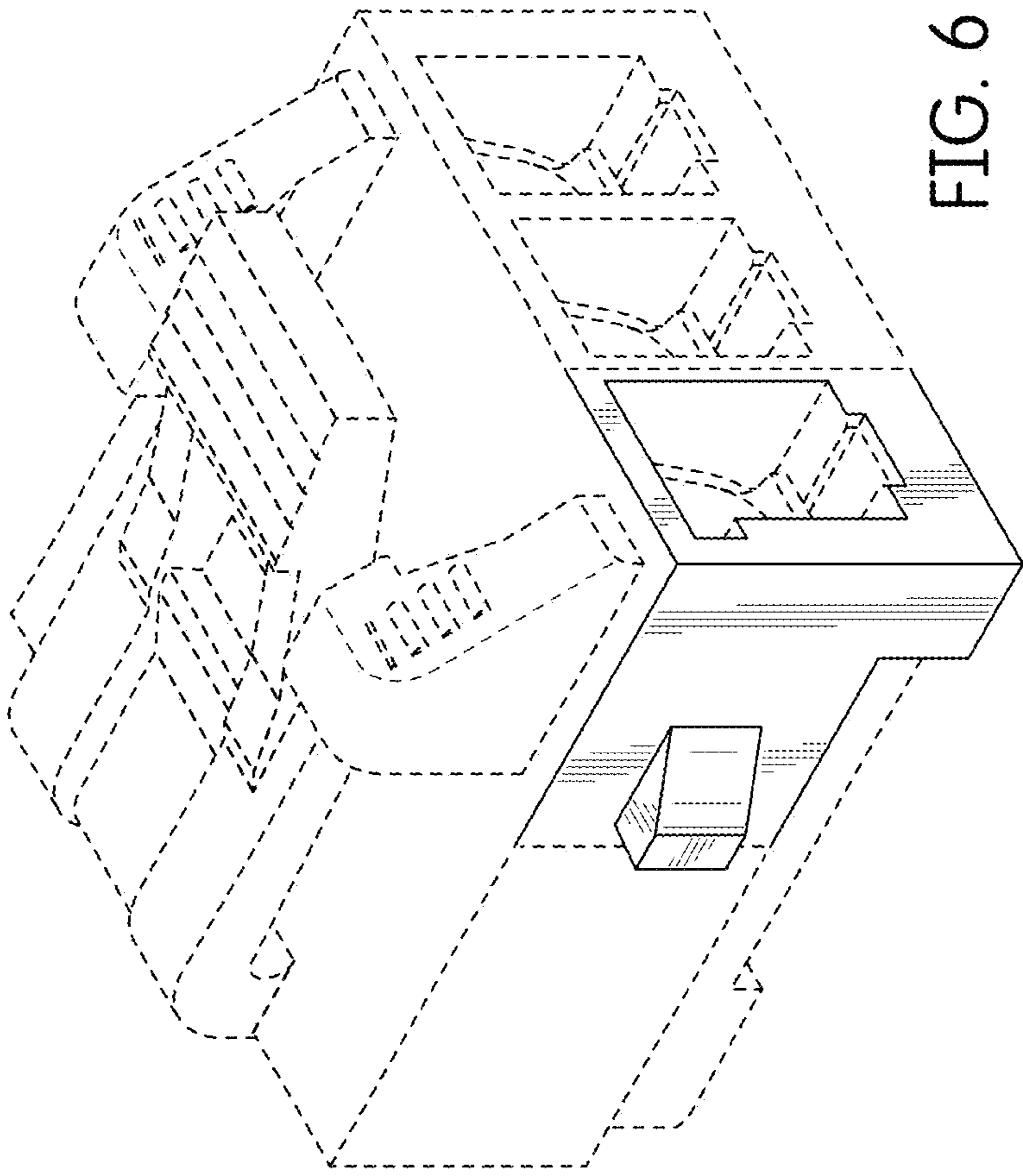


FIG. 6



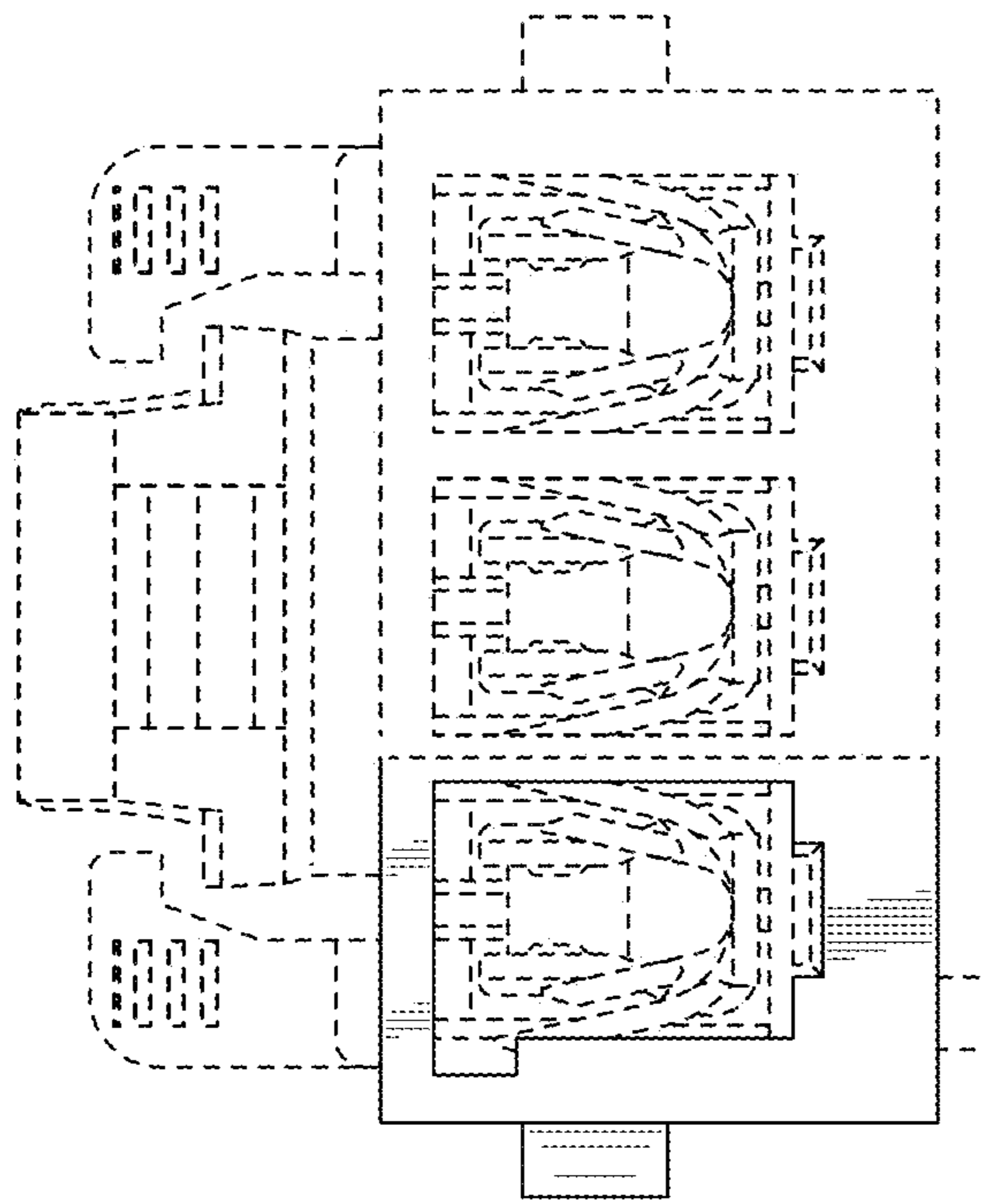


FIG. 7

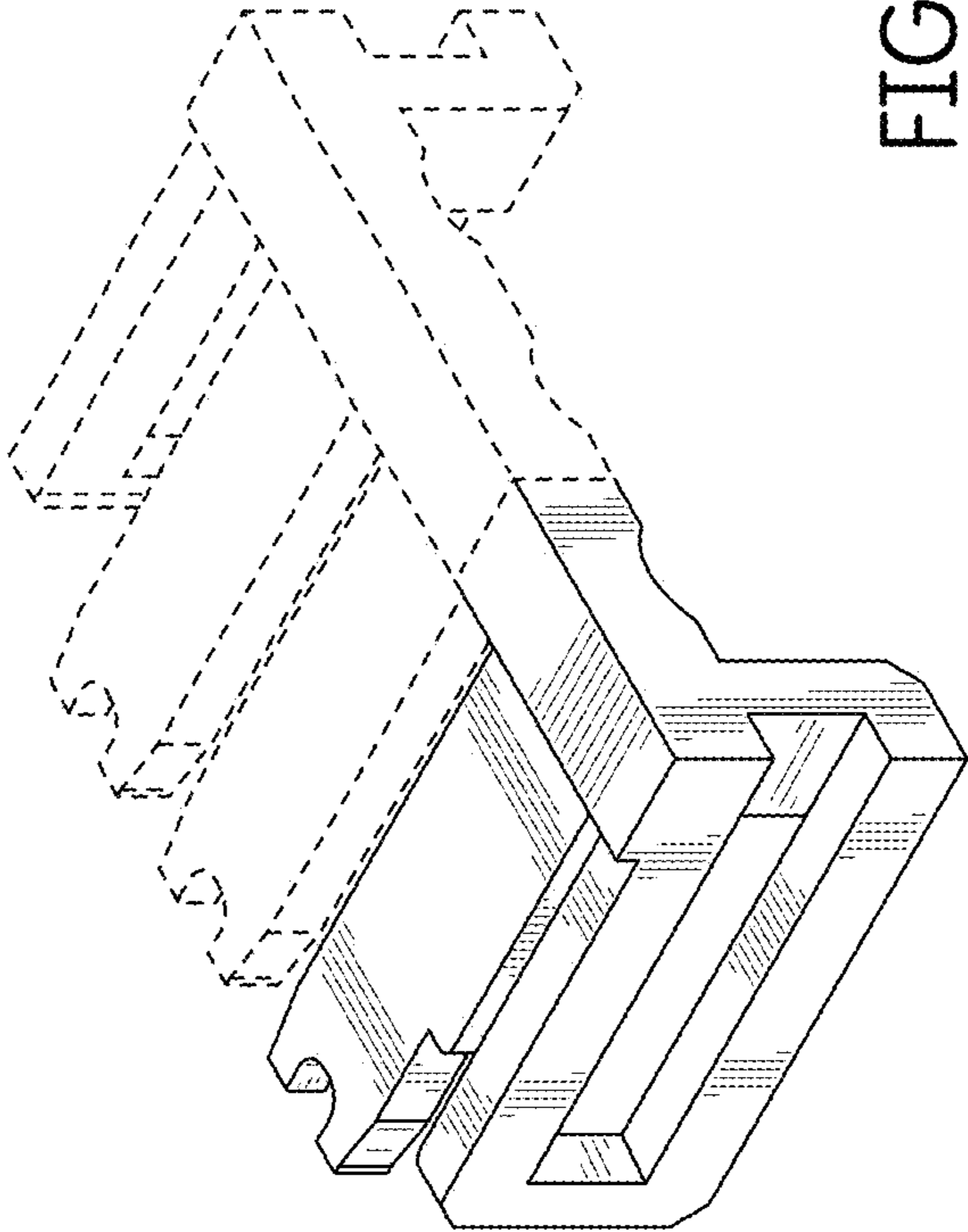


FIG. 8

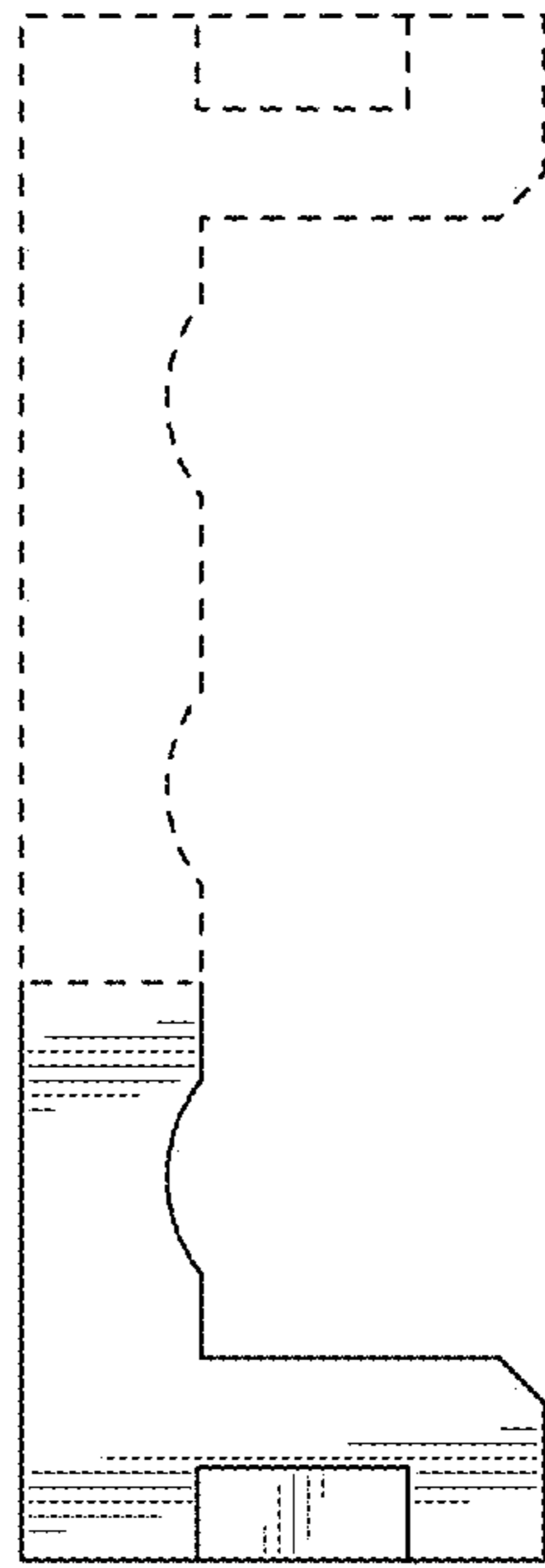


FIG. 9

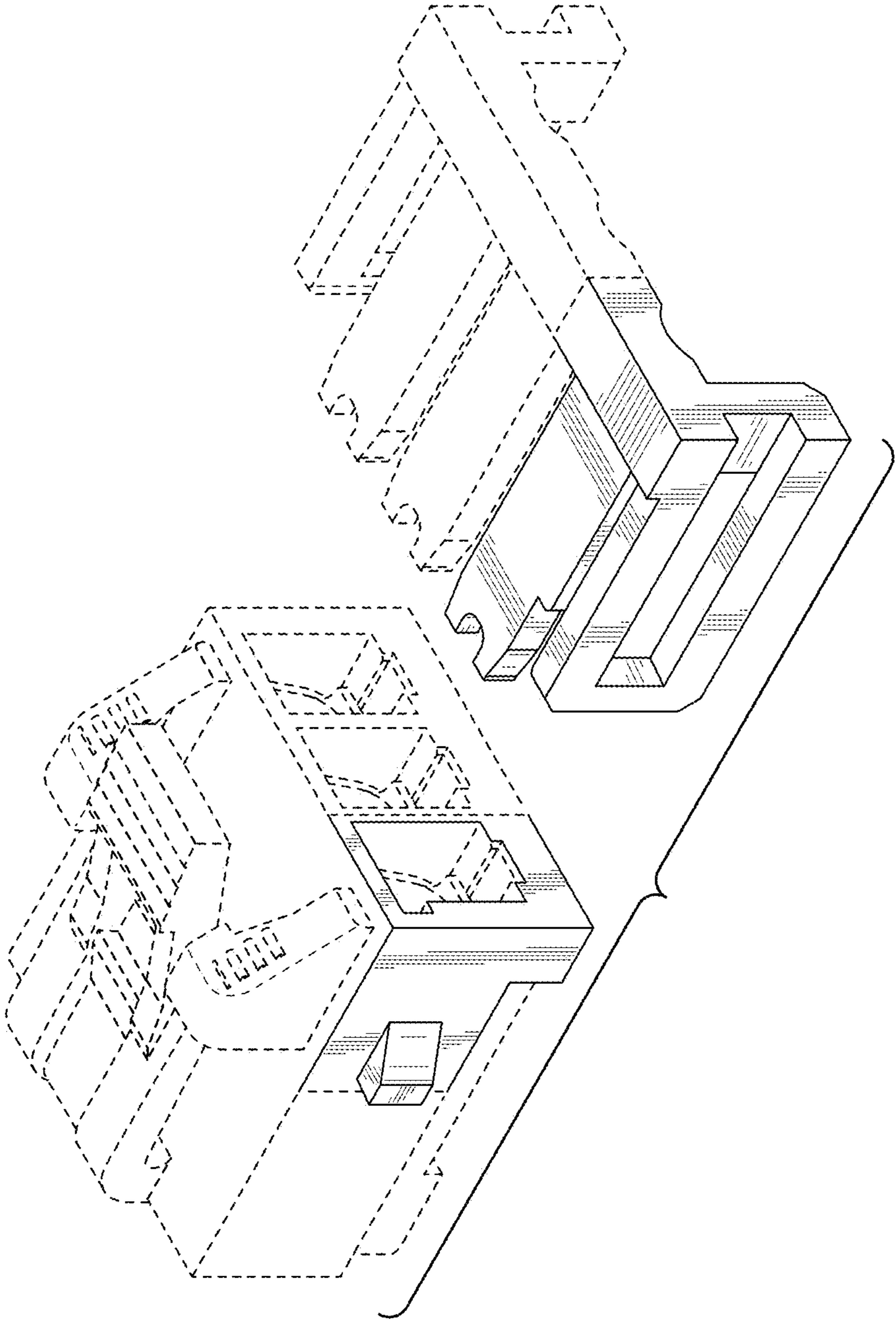
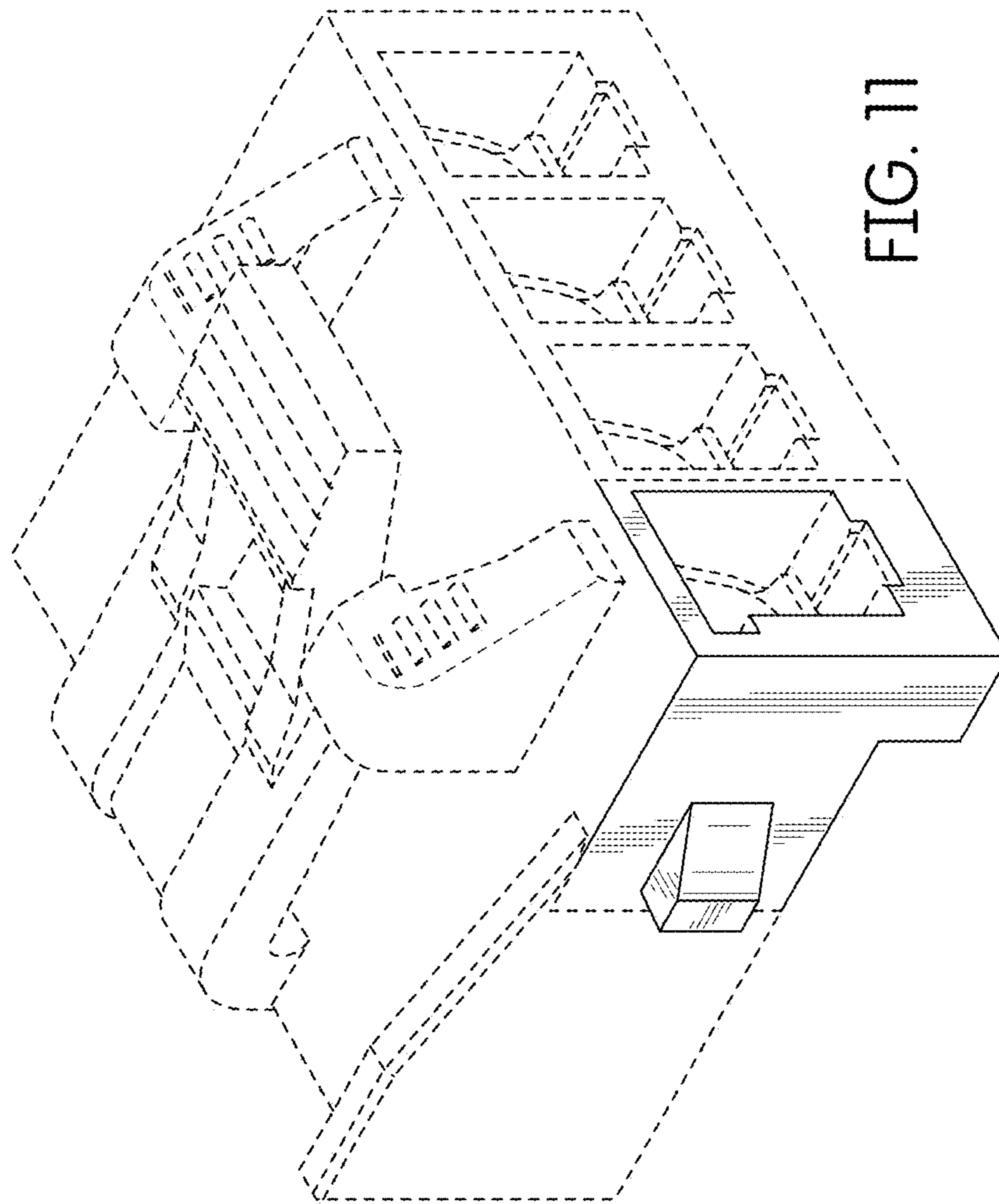


FIG. 10



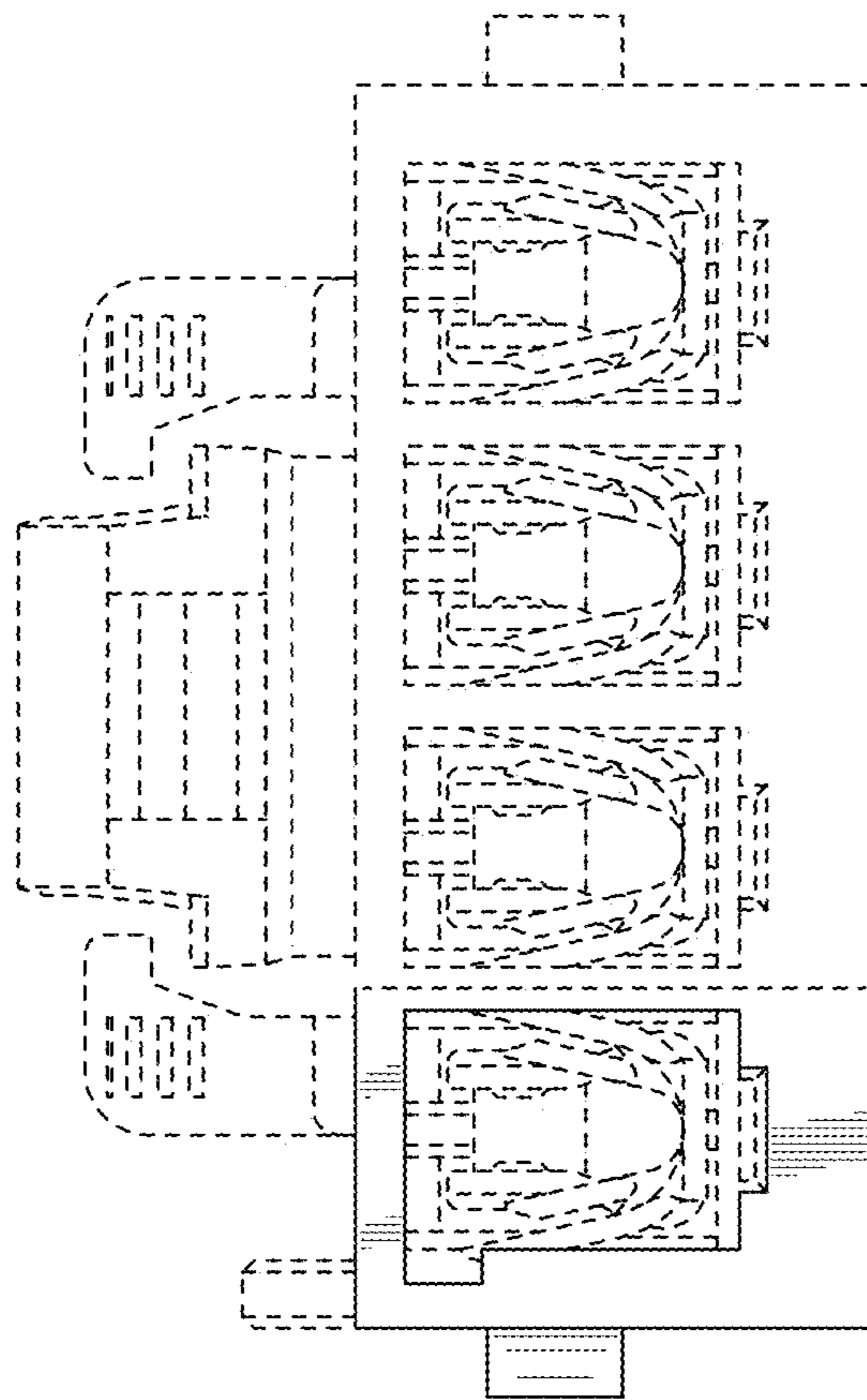


FIG. 12

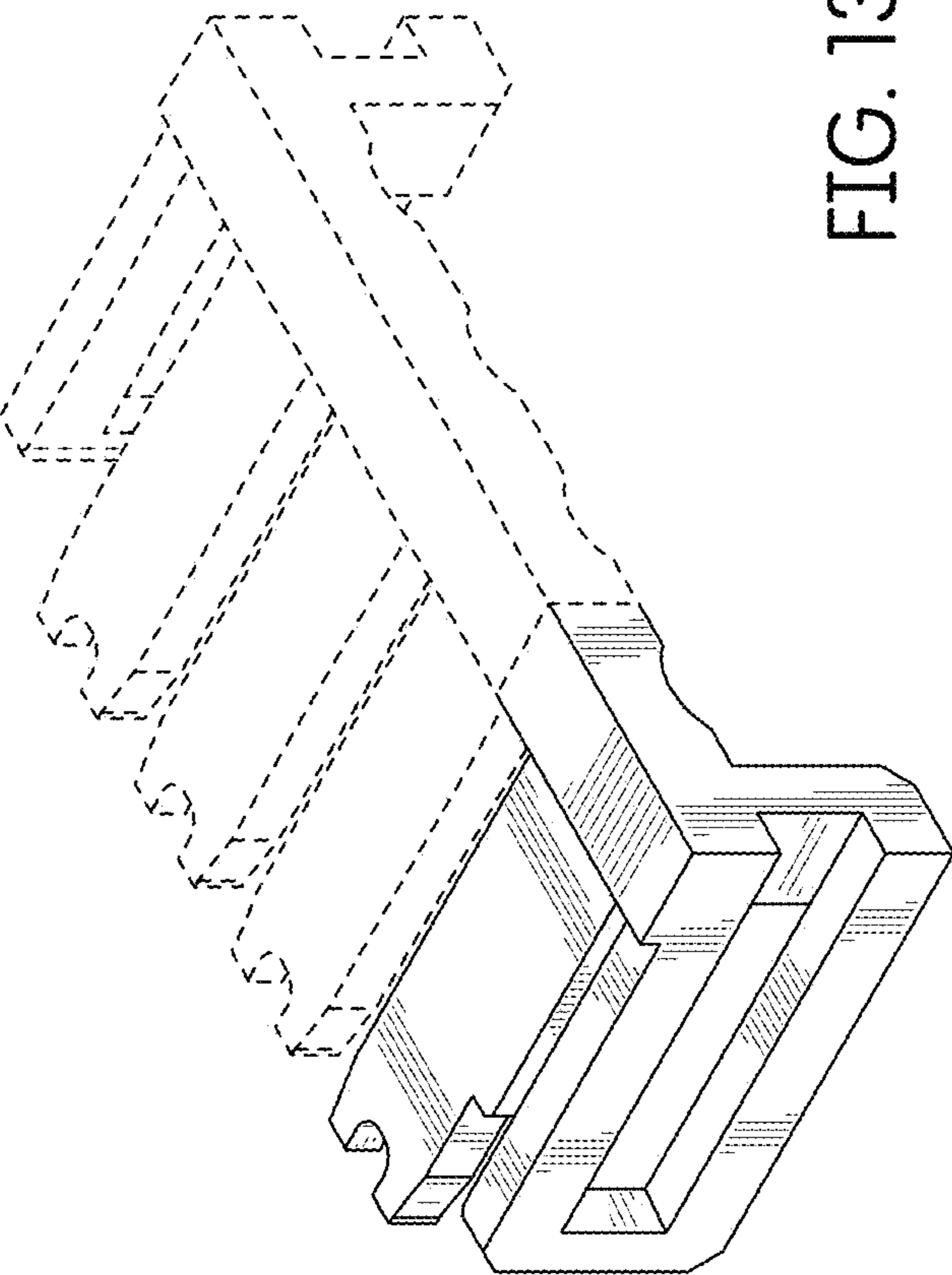


FIG. 13

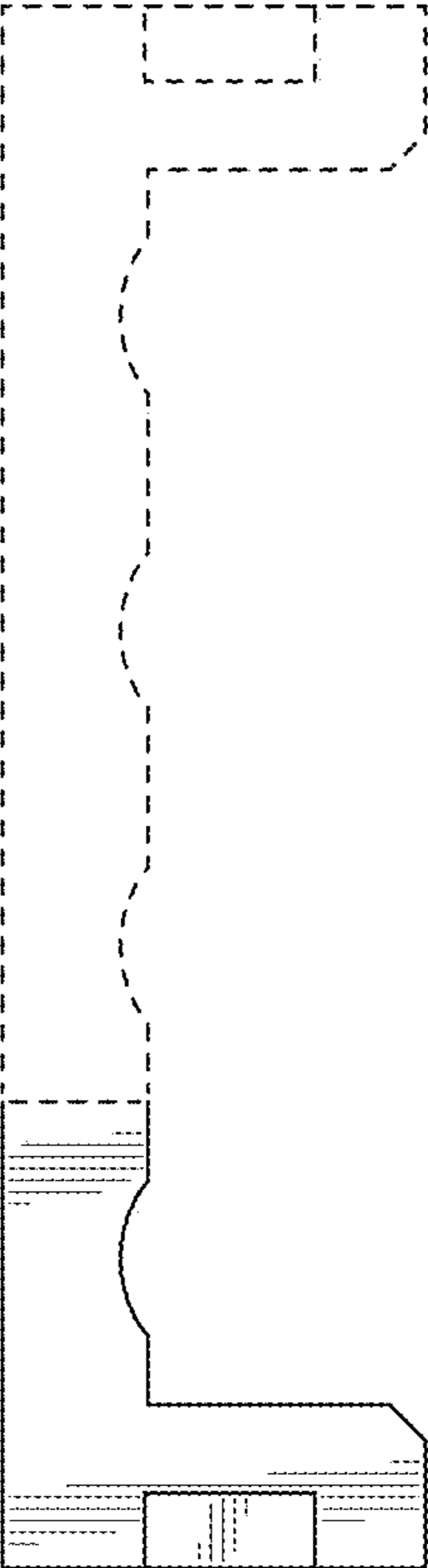


FIG. 14



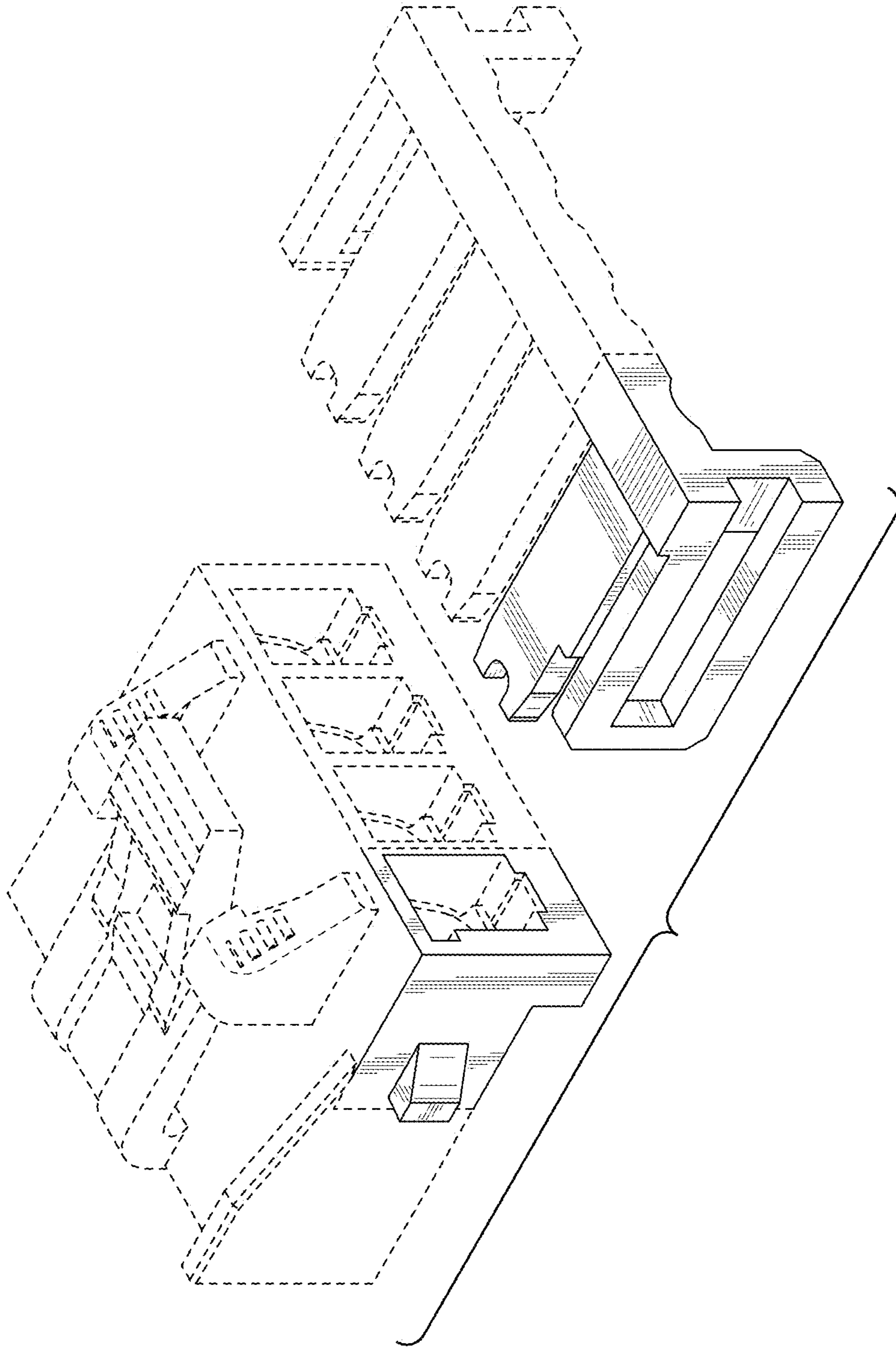


FIG. 15

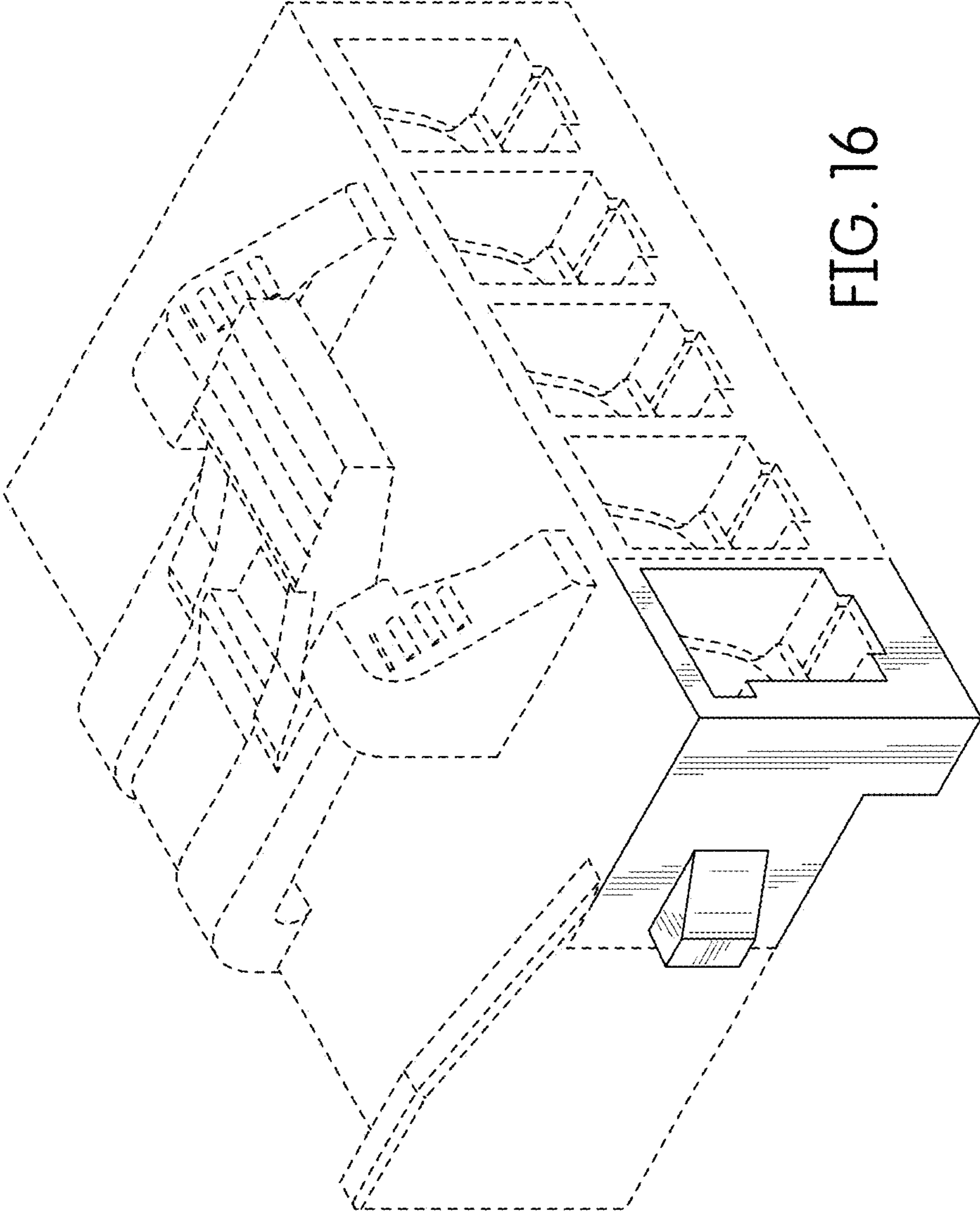


FIG. 16

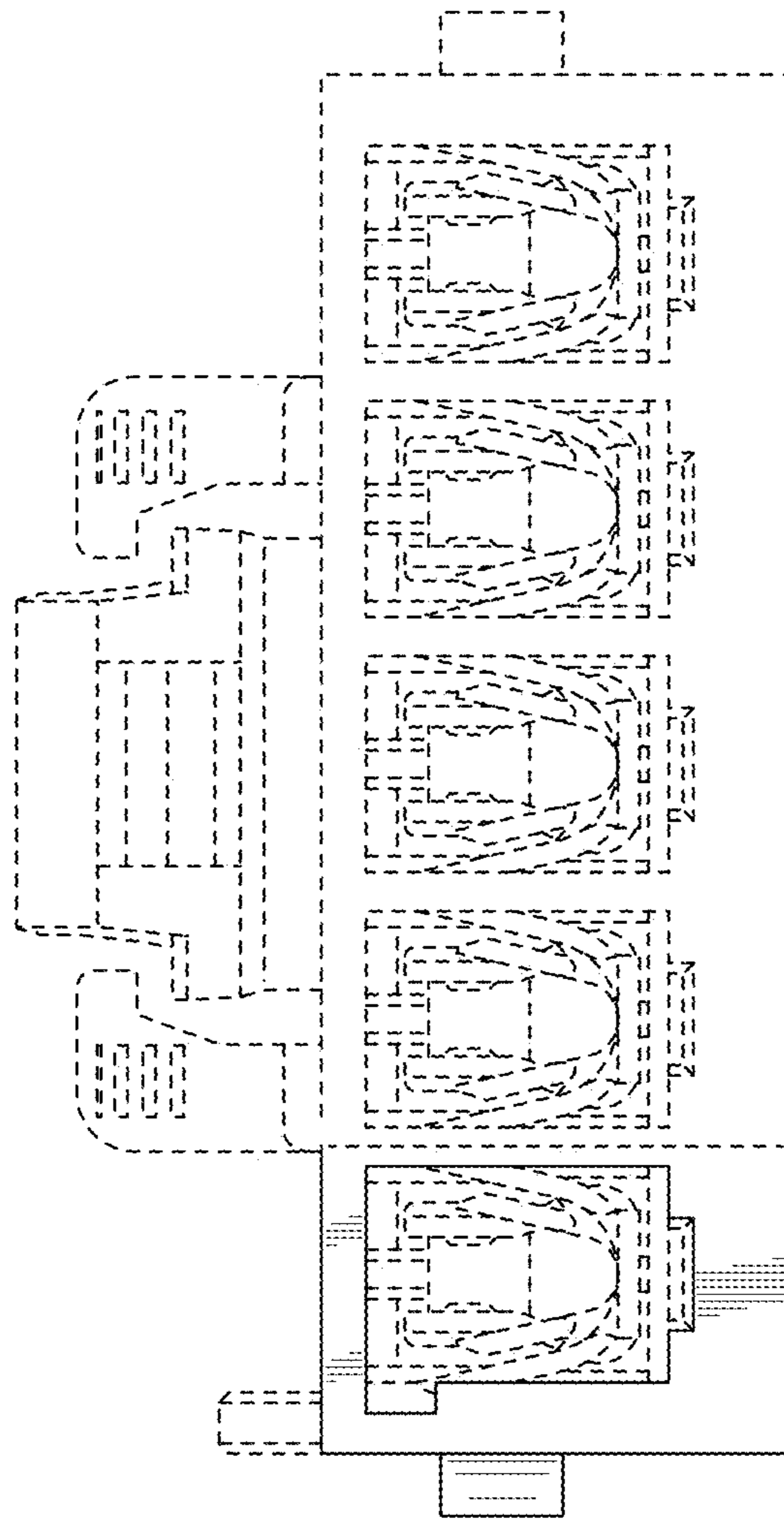


FIG. 17

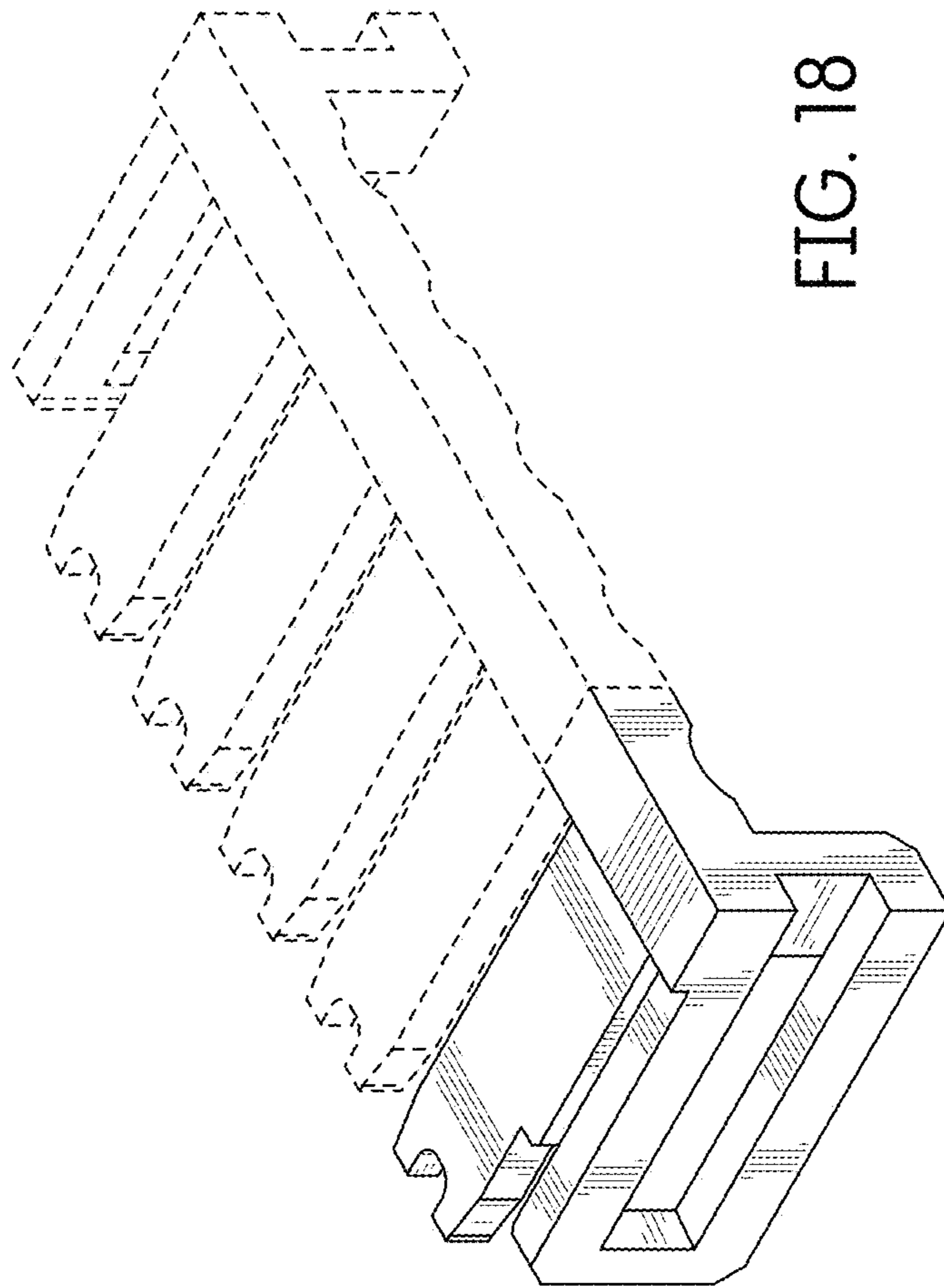


FIG. 18

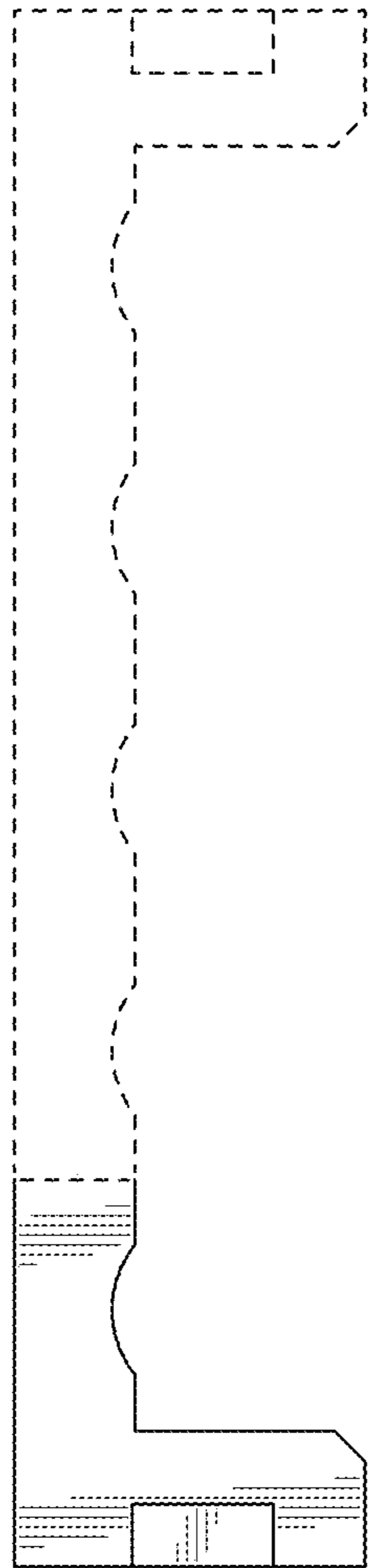


FIG. 19

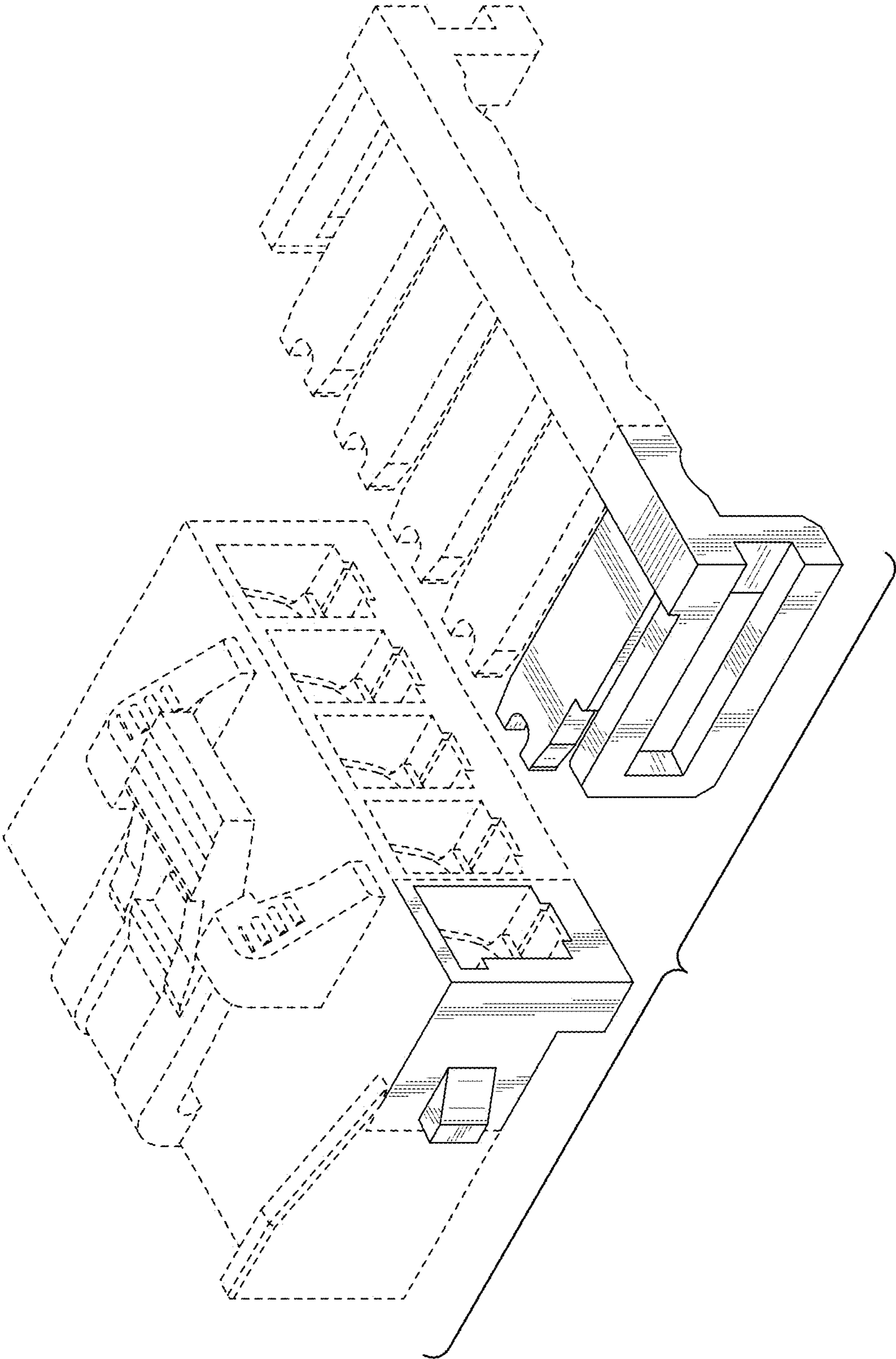


FIG. 20

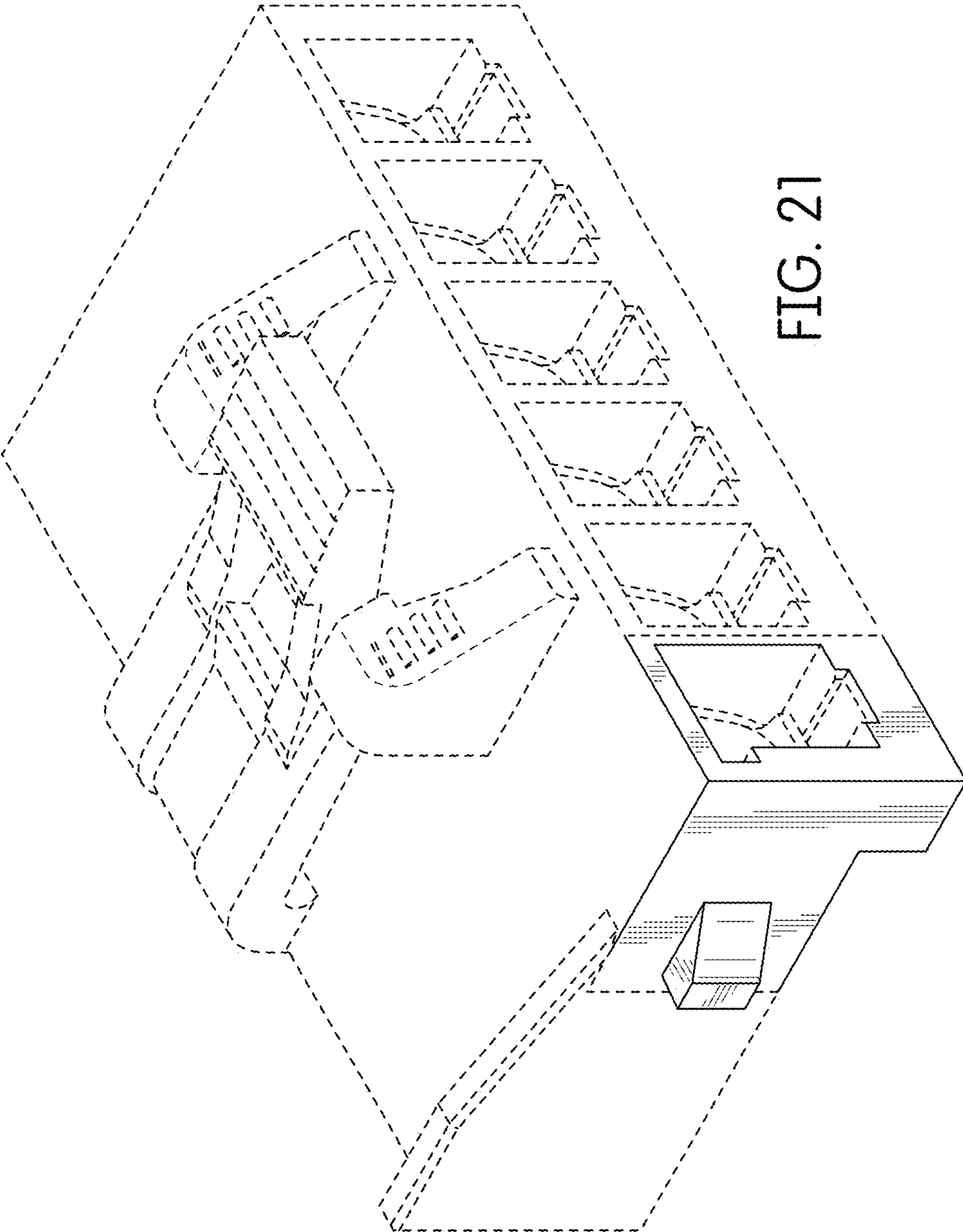


FIG. 21

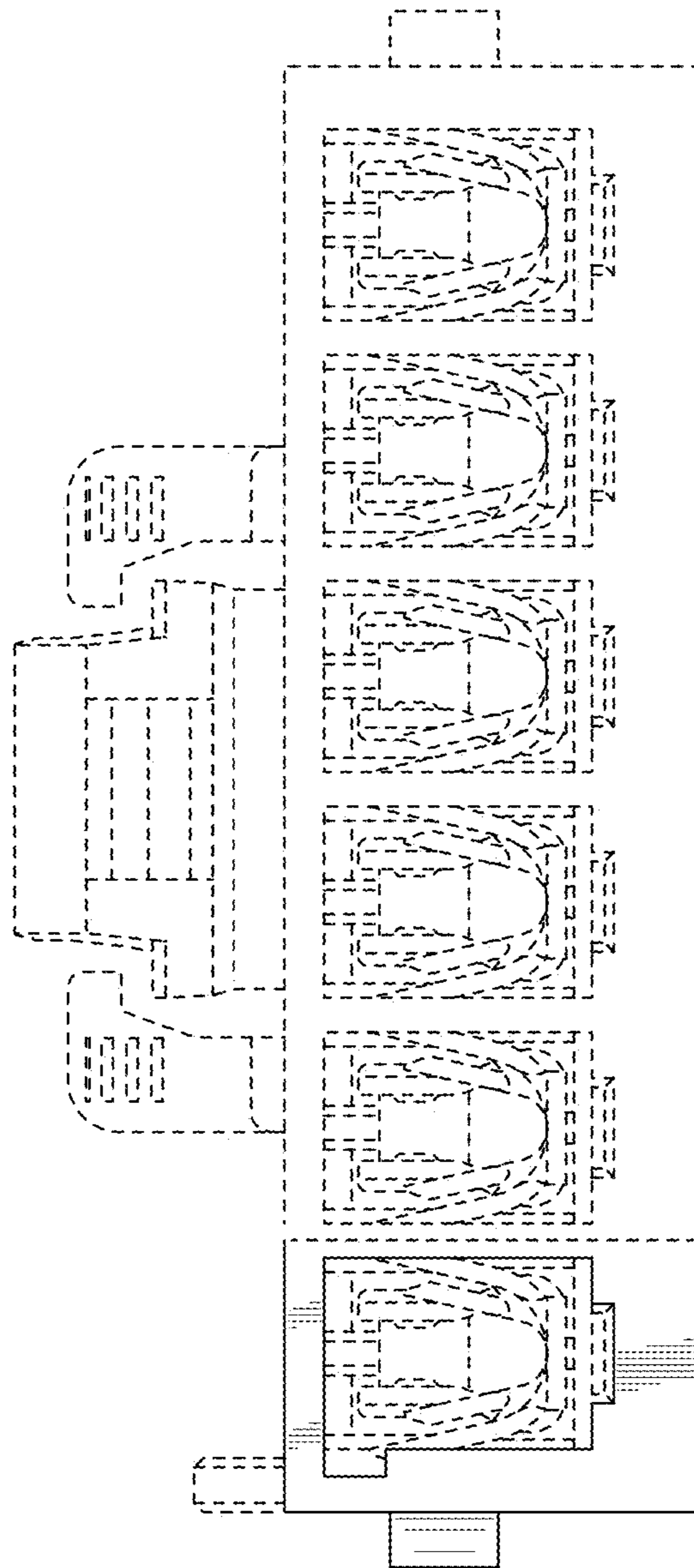


FIG. 22



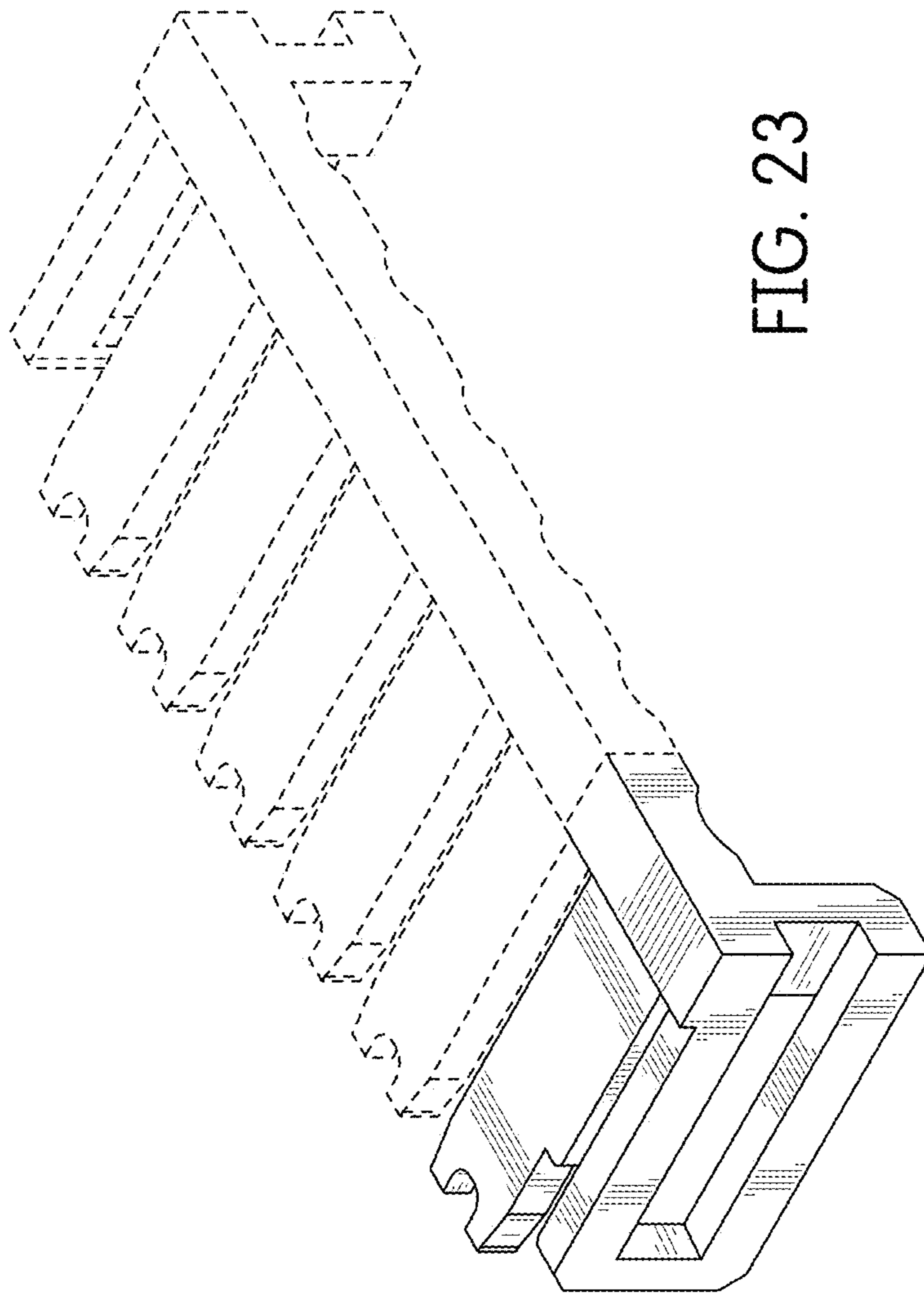


FIG. 23

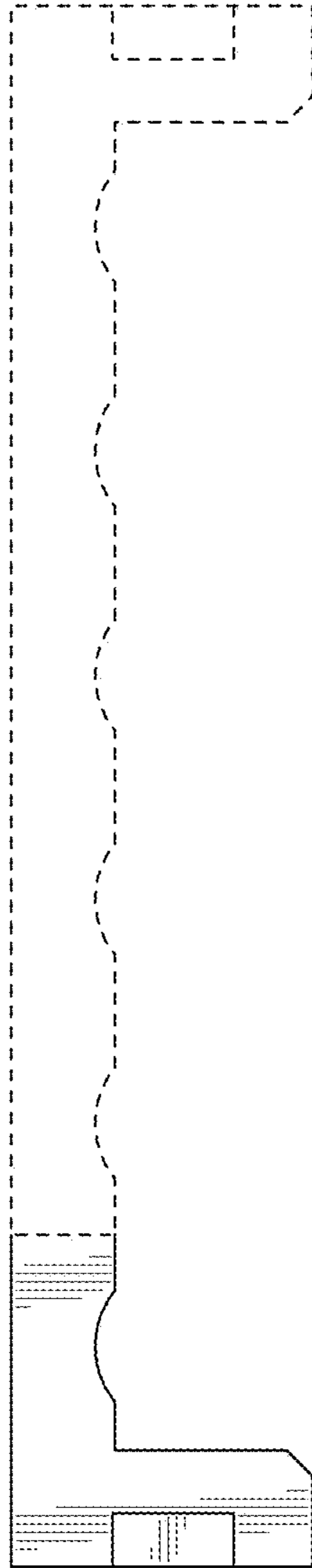


FIG. 24

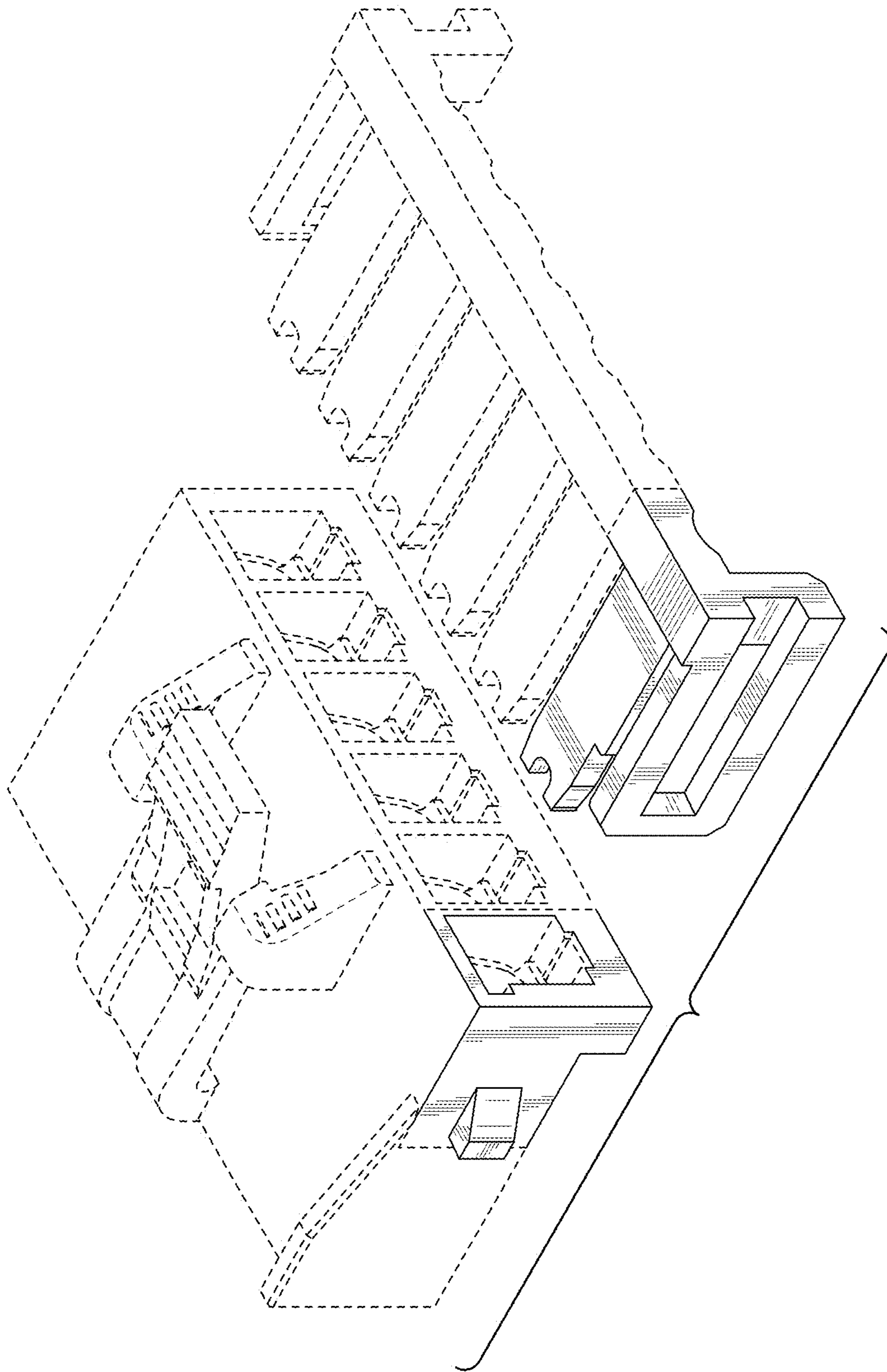


FIG. 25

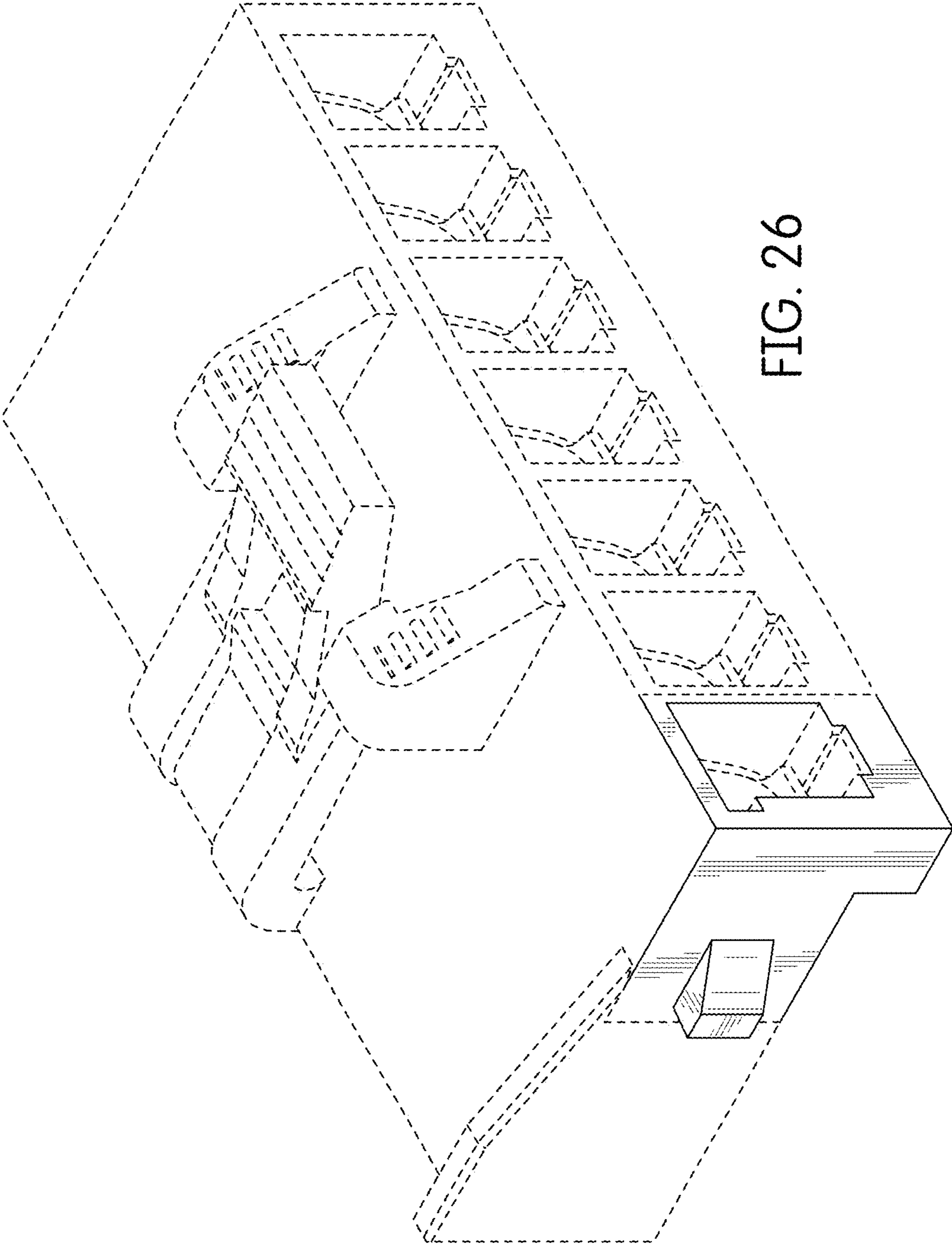


FIG. 26

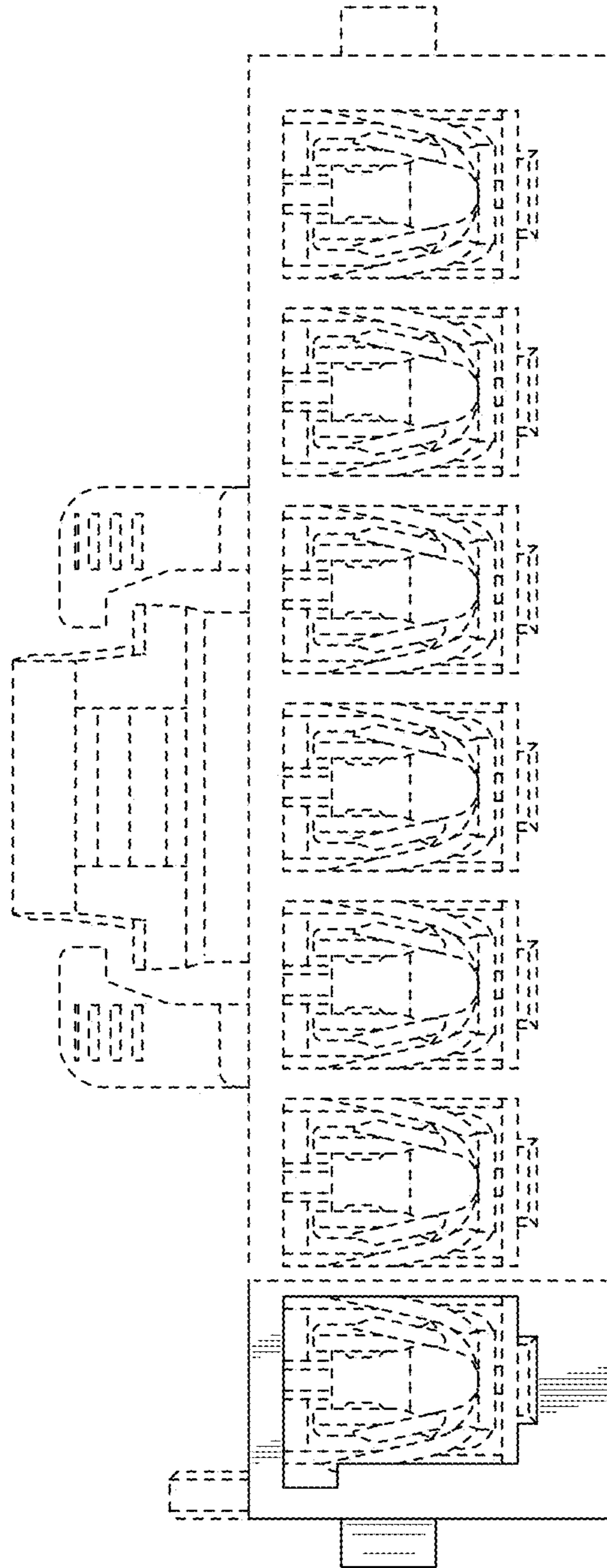


FIG. 27

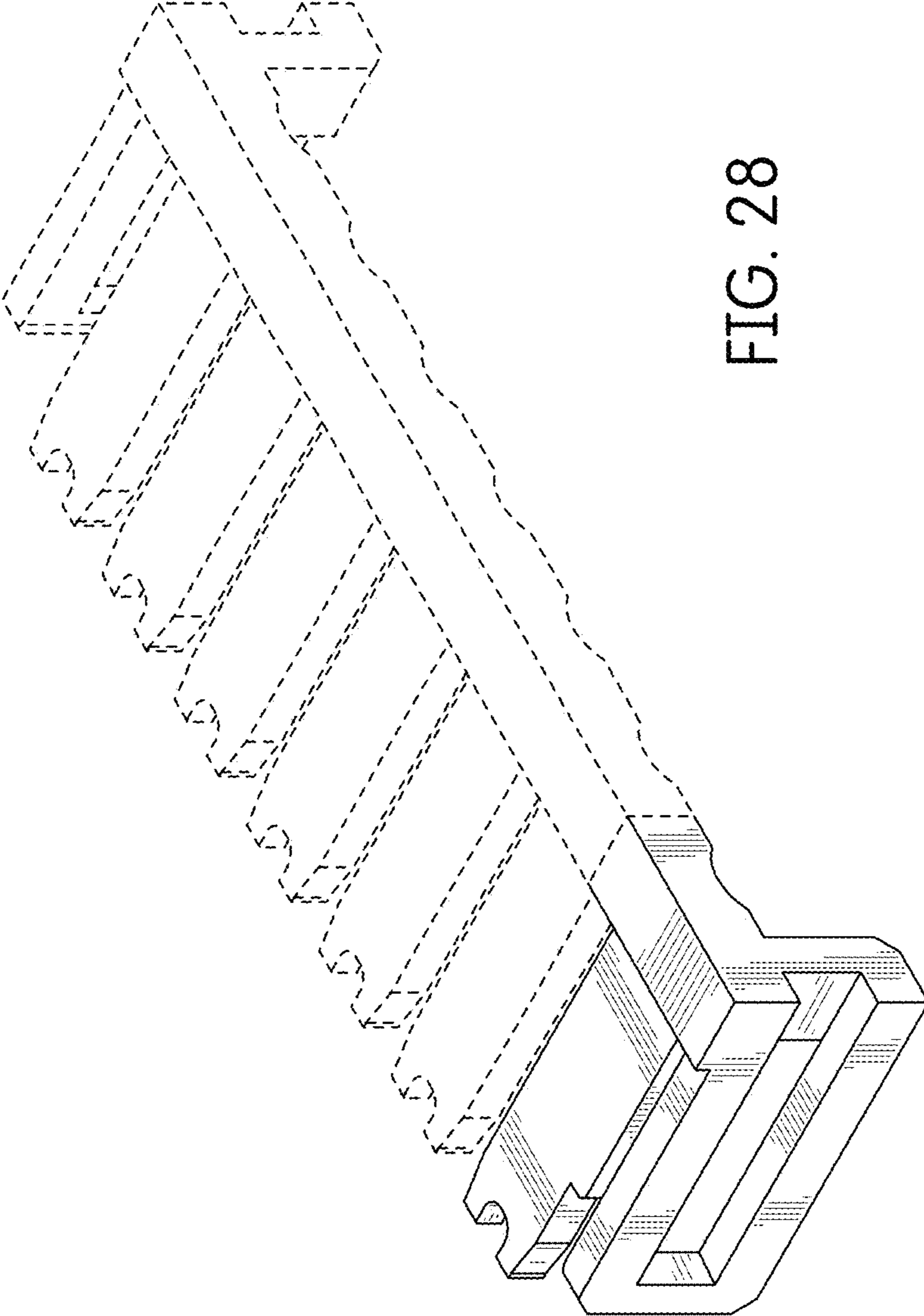


FIG. 28

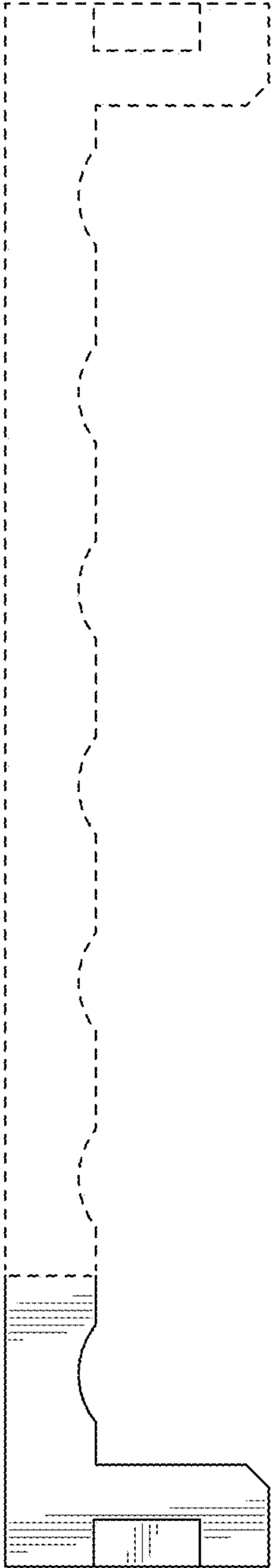


FIG. 29

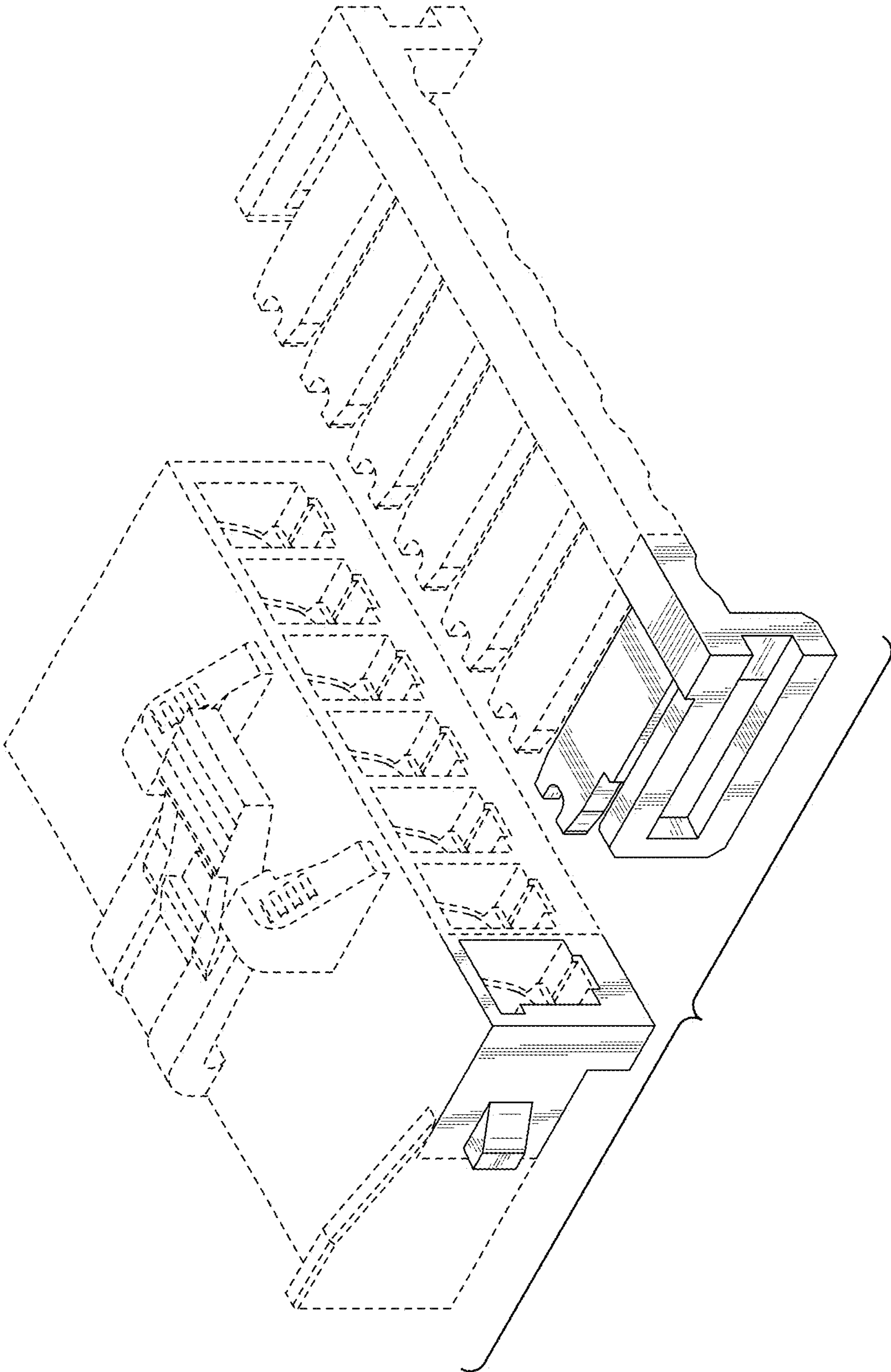


FIG. 30



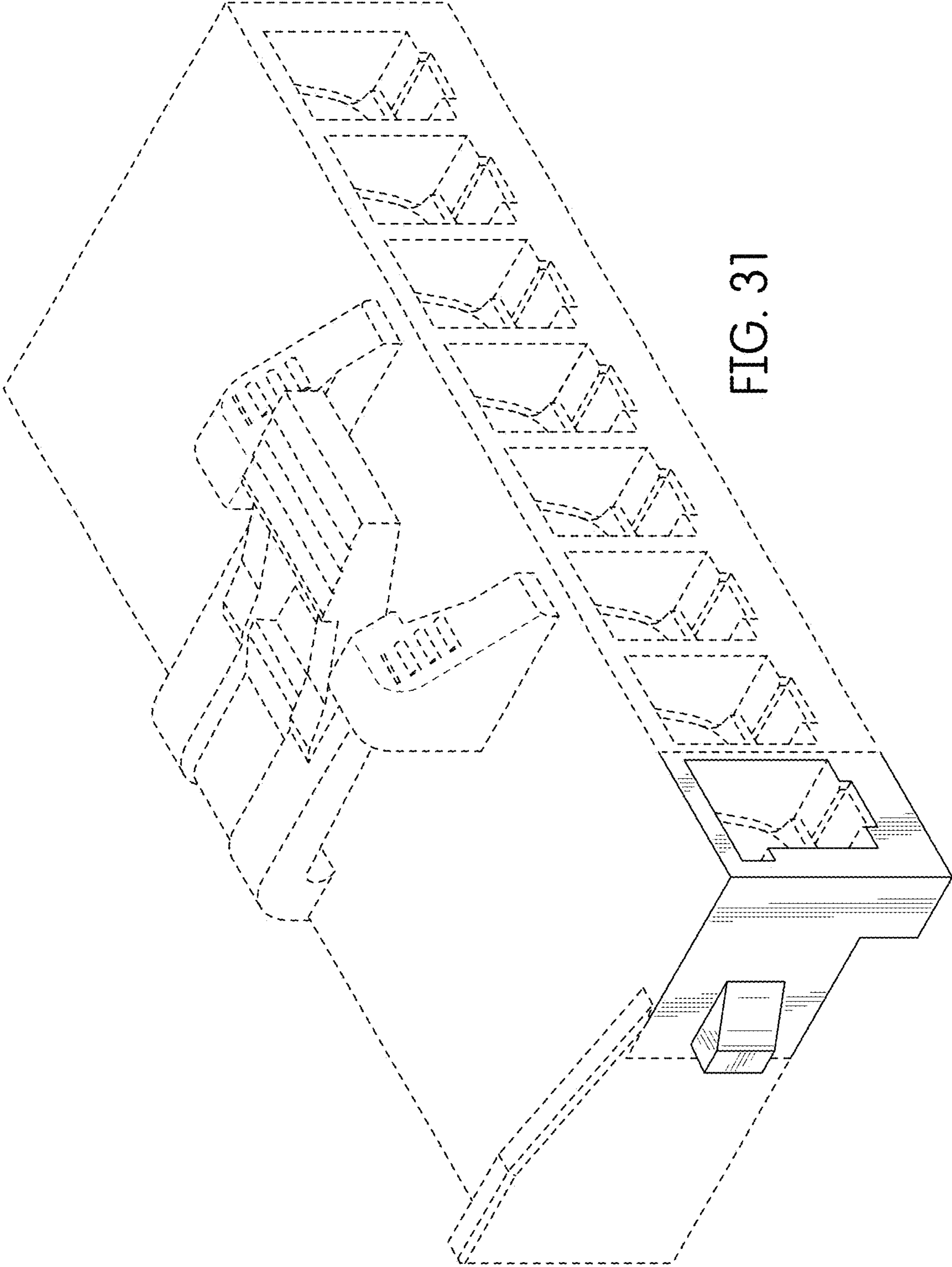


FIG. 31

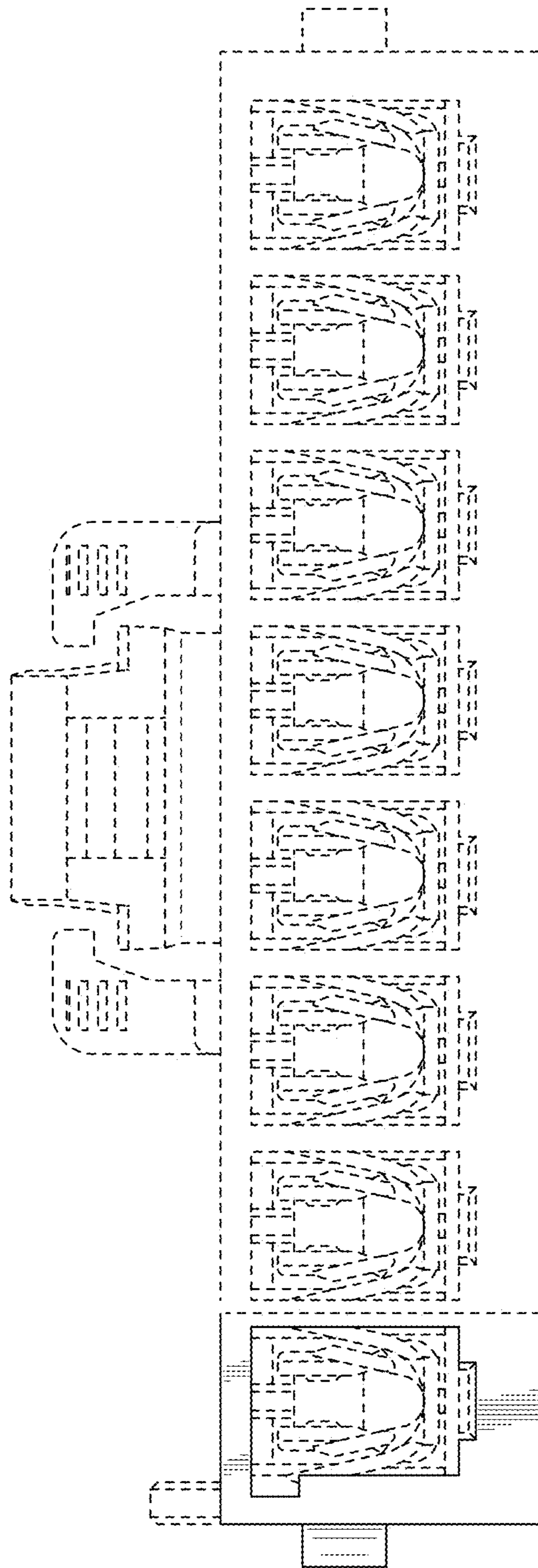


FIG. 32

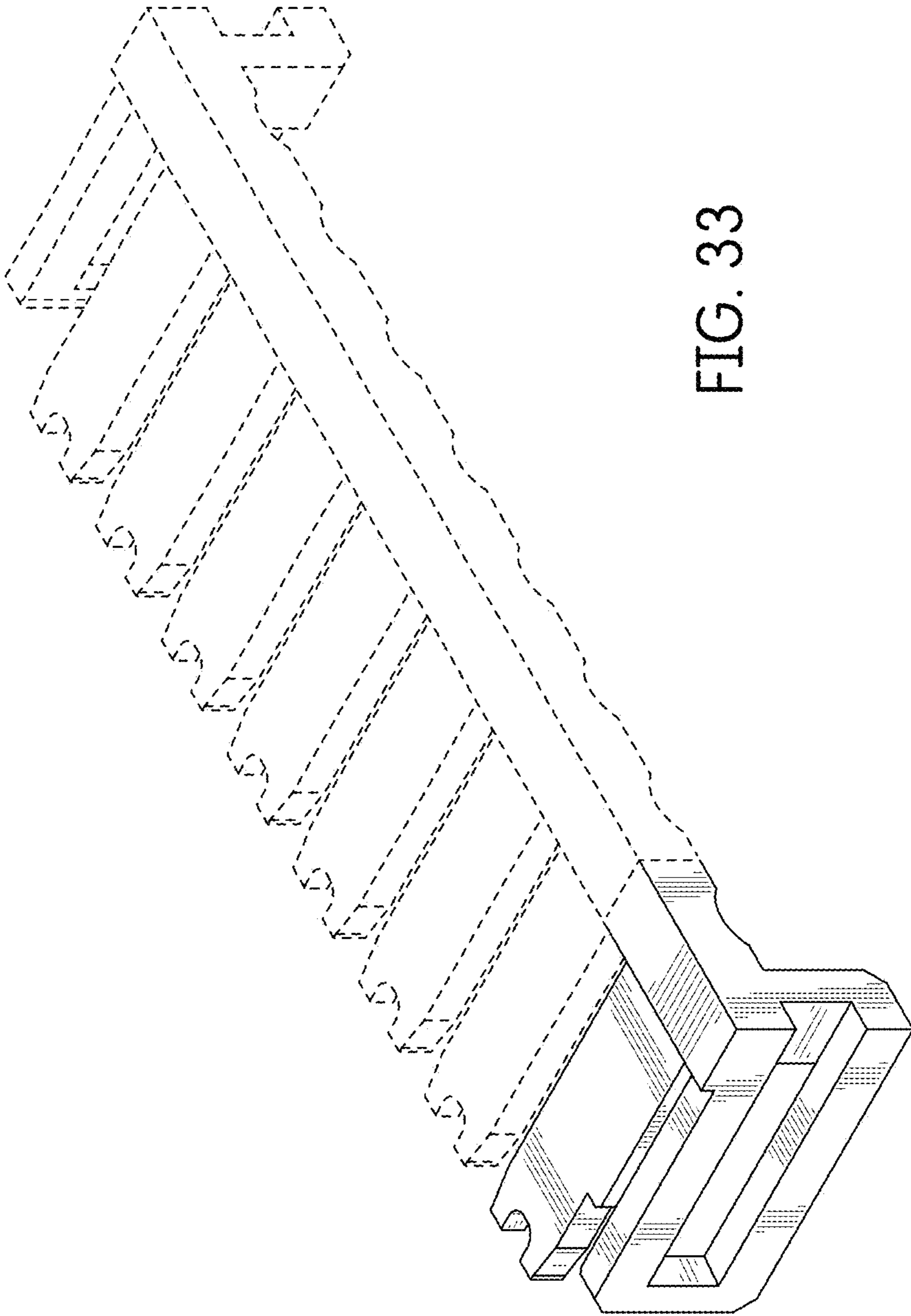


FIG. 33

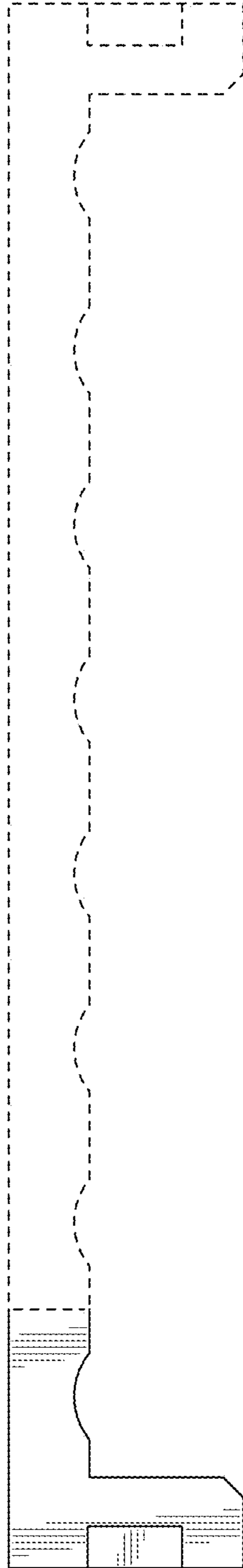


FIG. 34

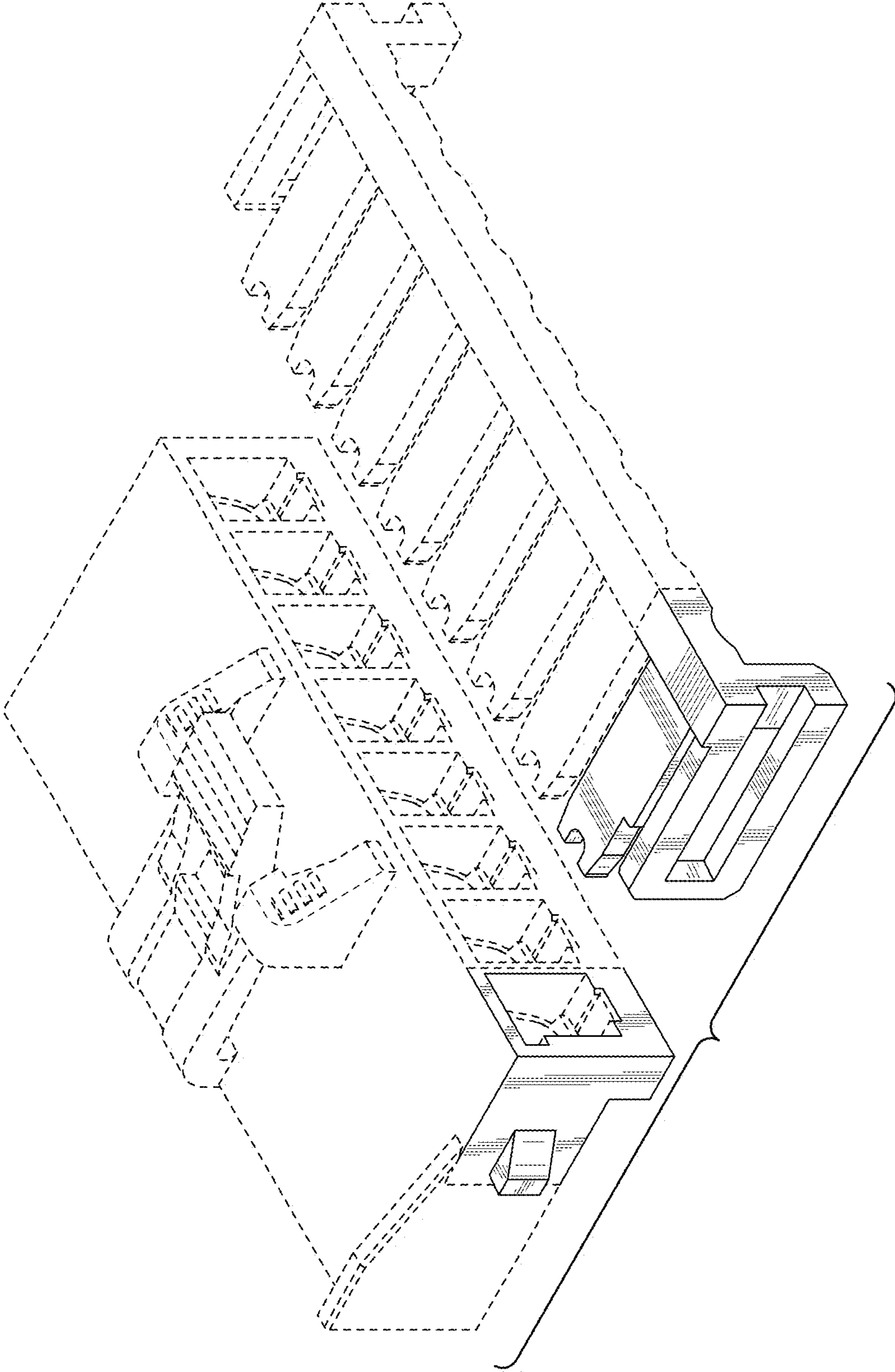


FIG. 35

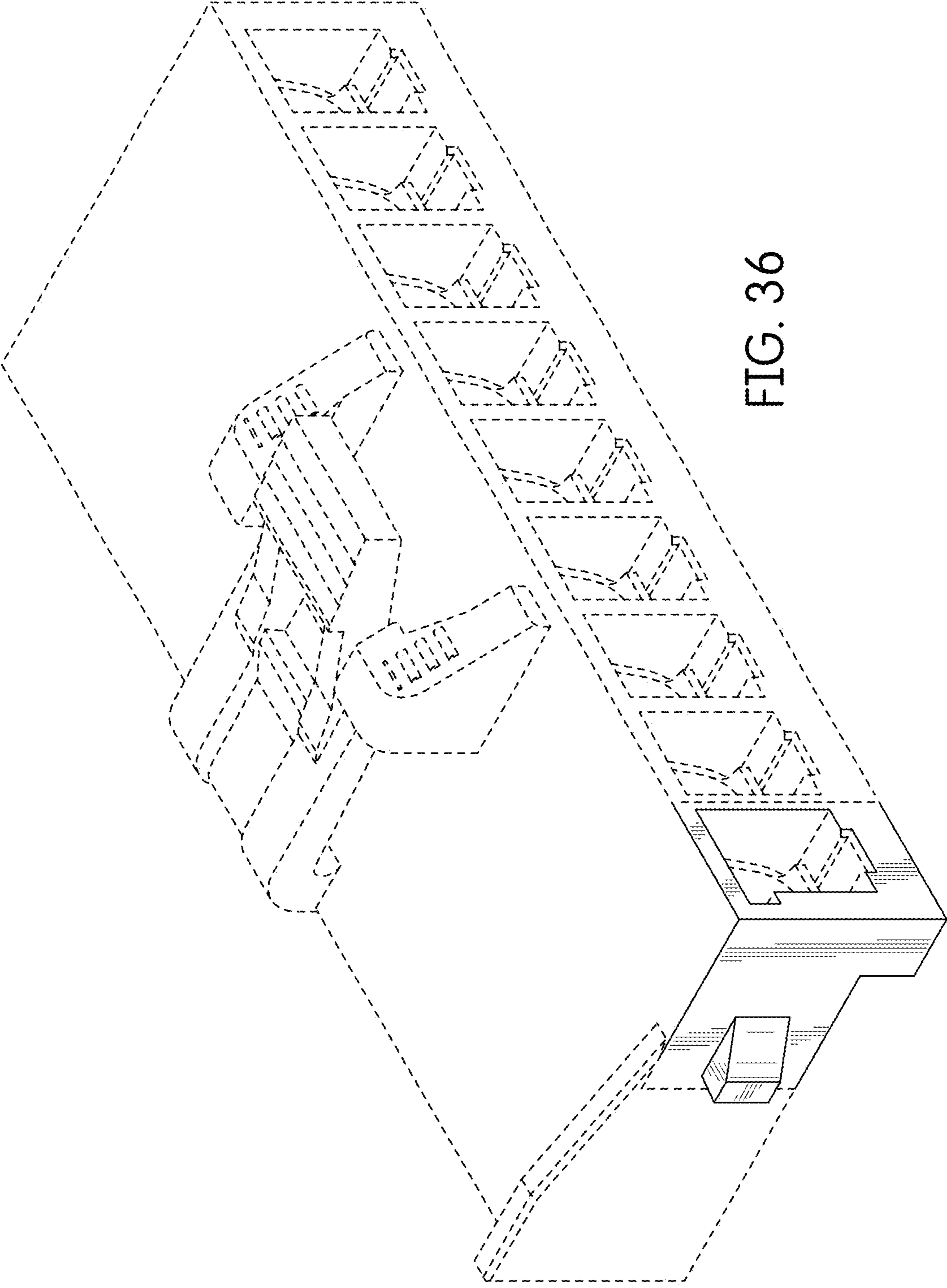


FIG. 36

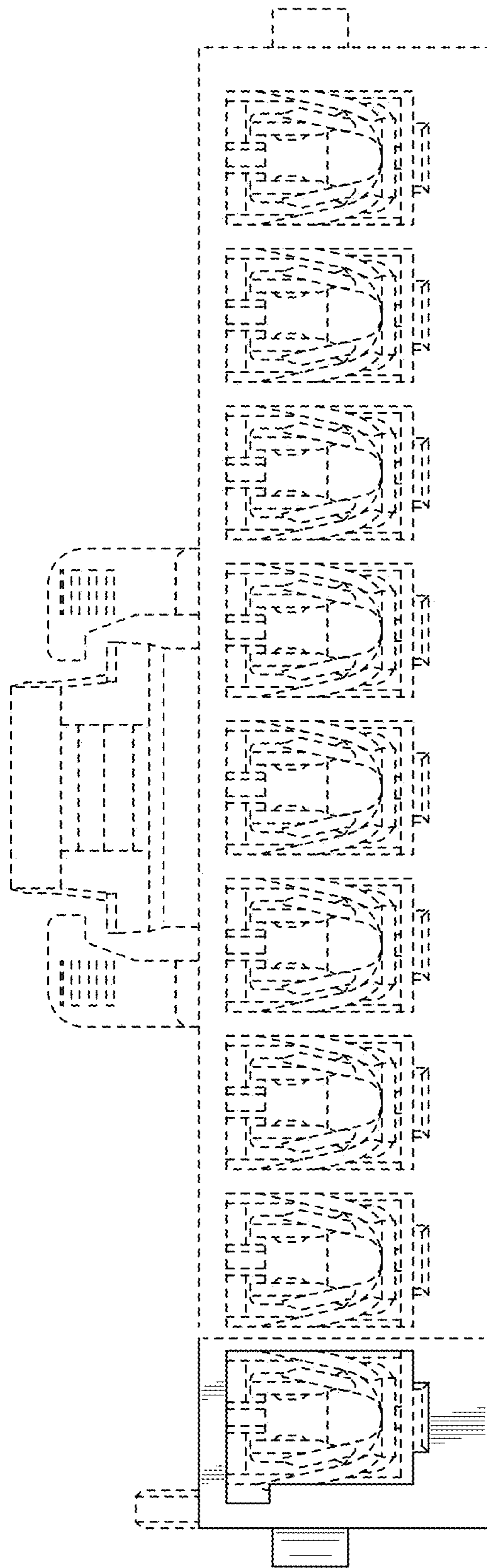


FIG. 37

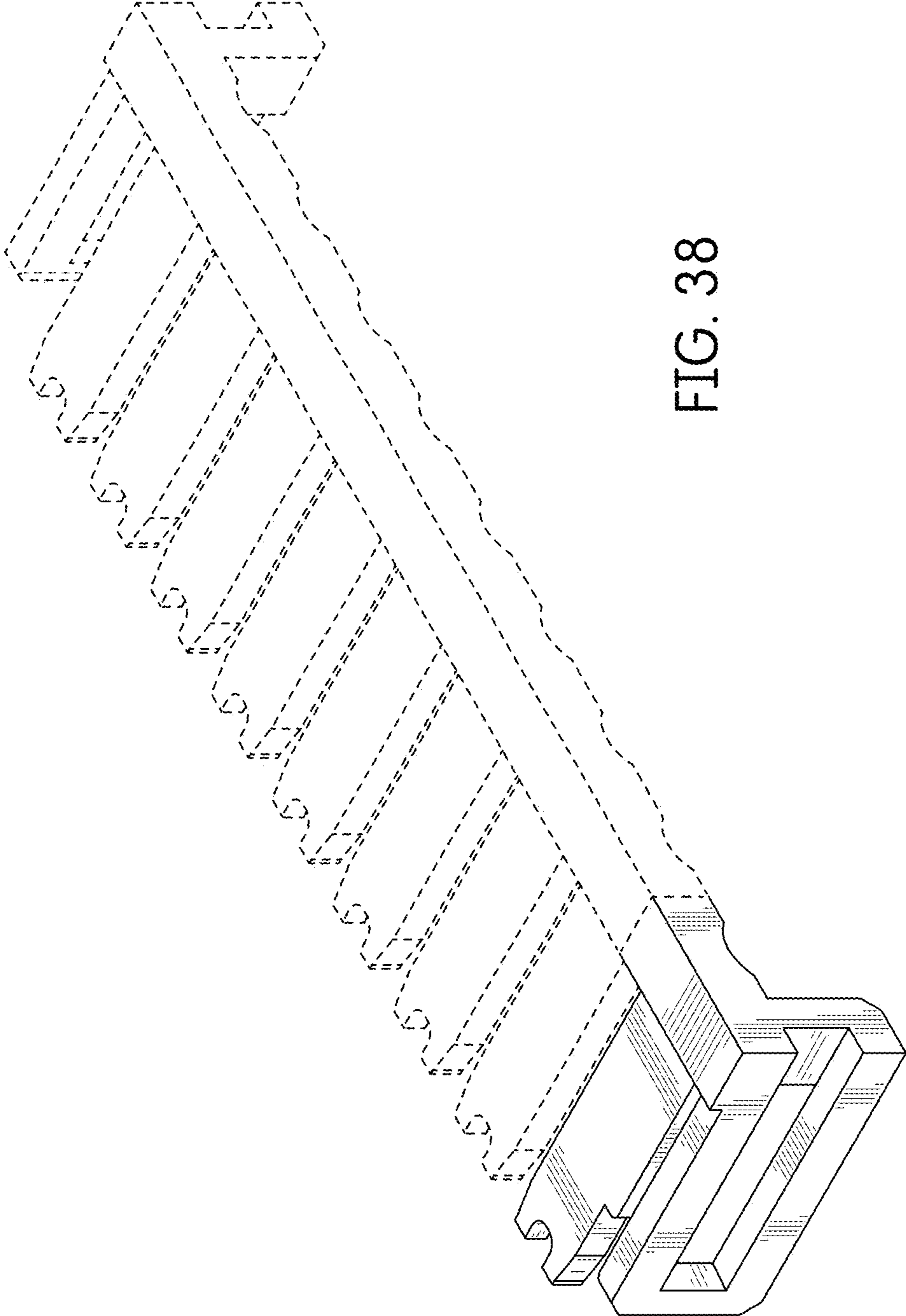


FIG. 38



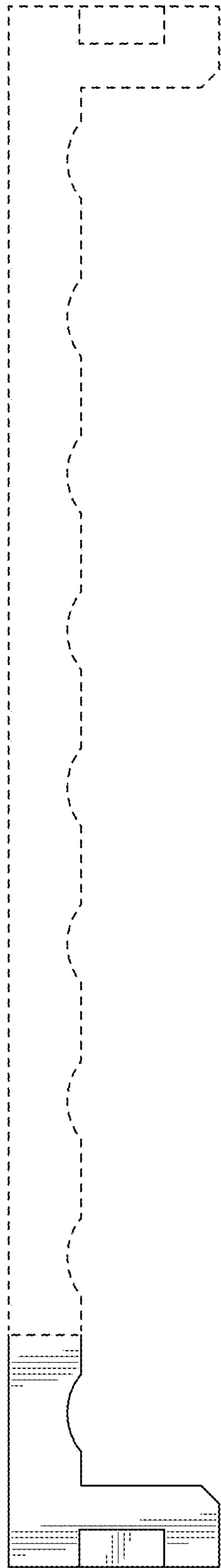


FIG. 39

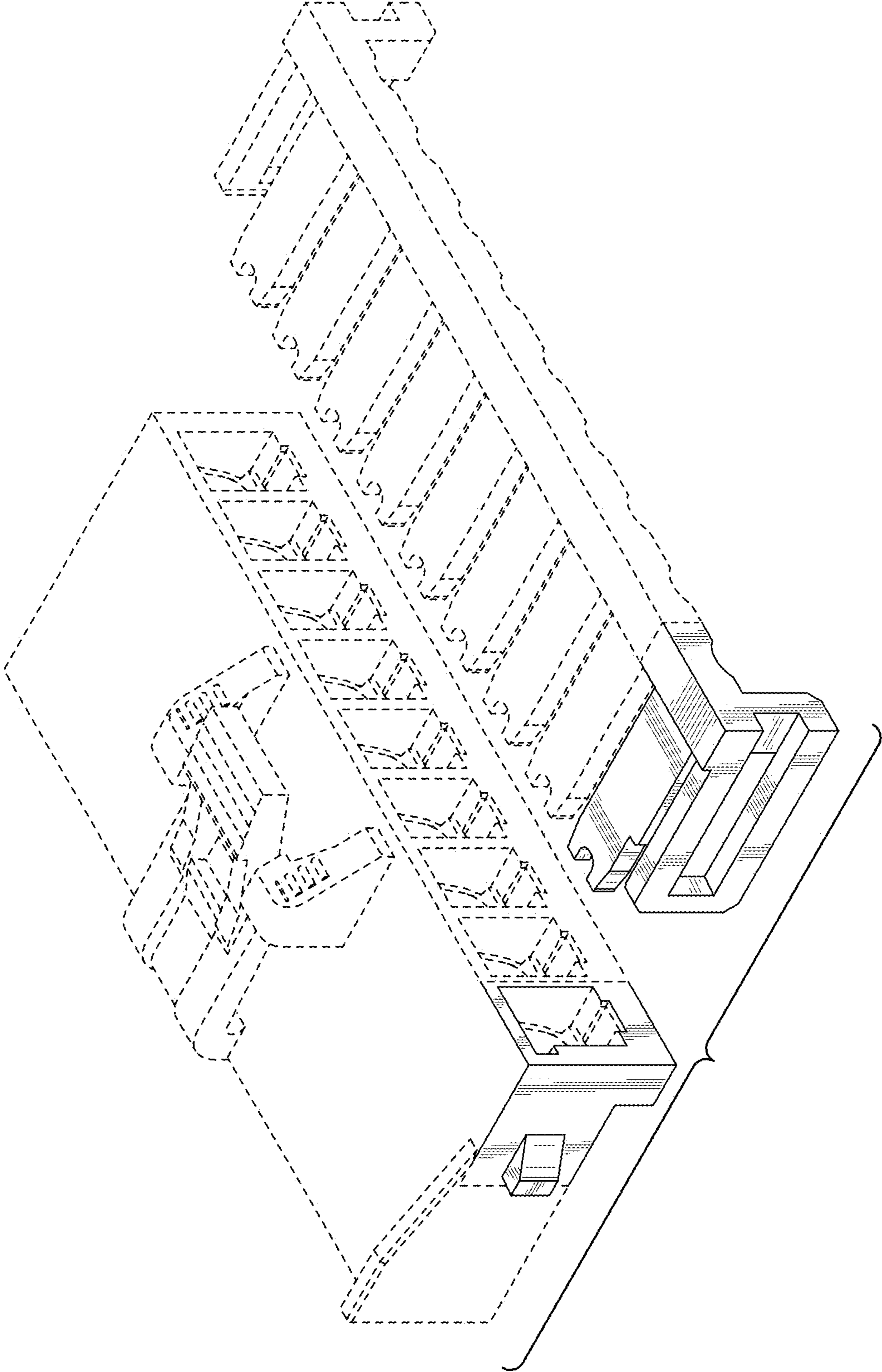


FIG. 40

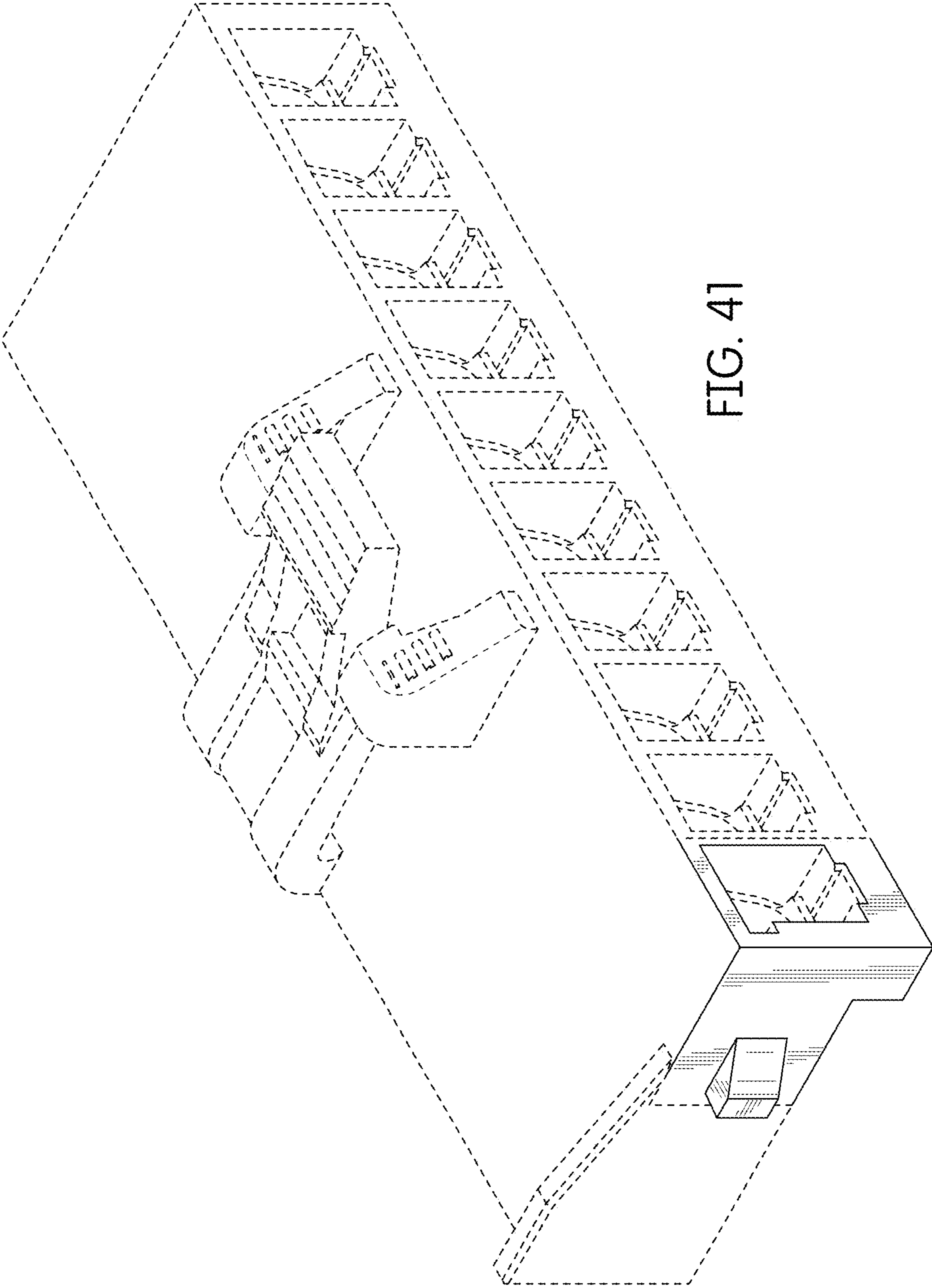


FIG. 41

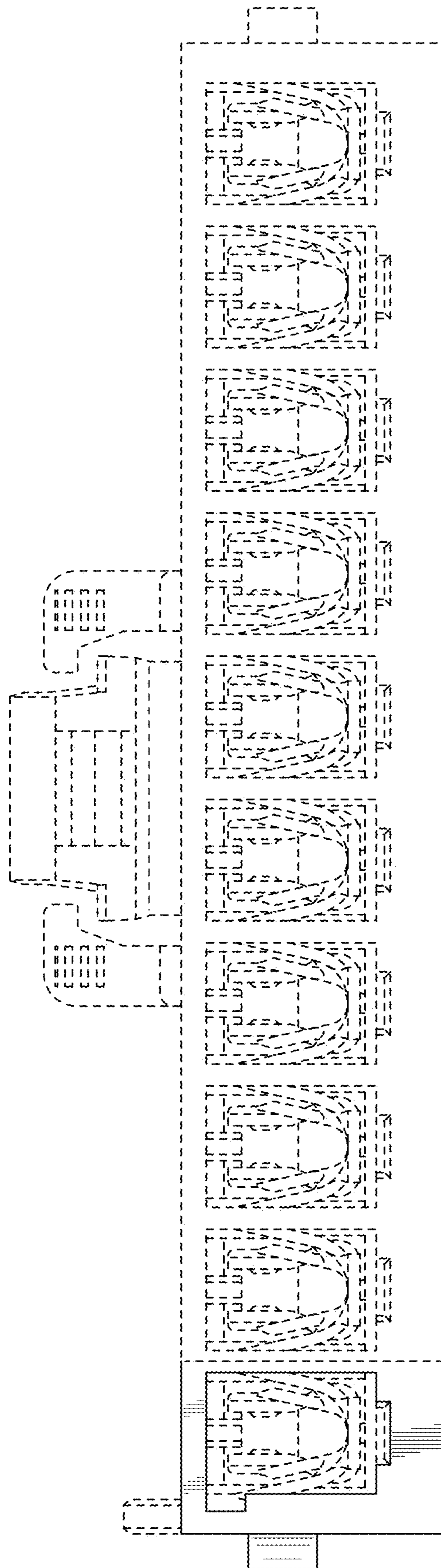


FIG. 42

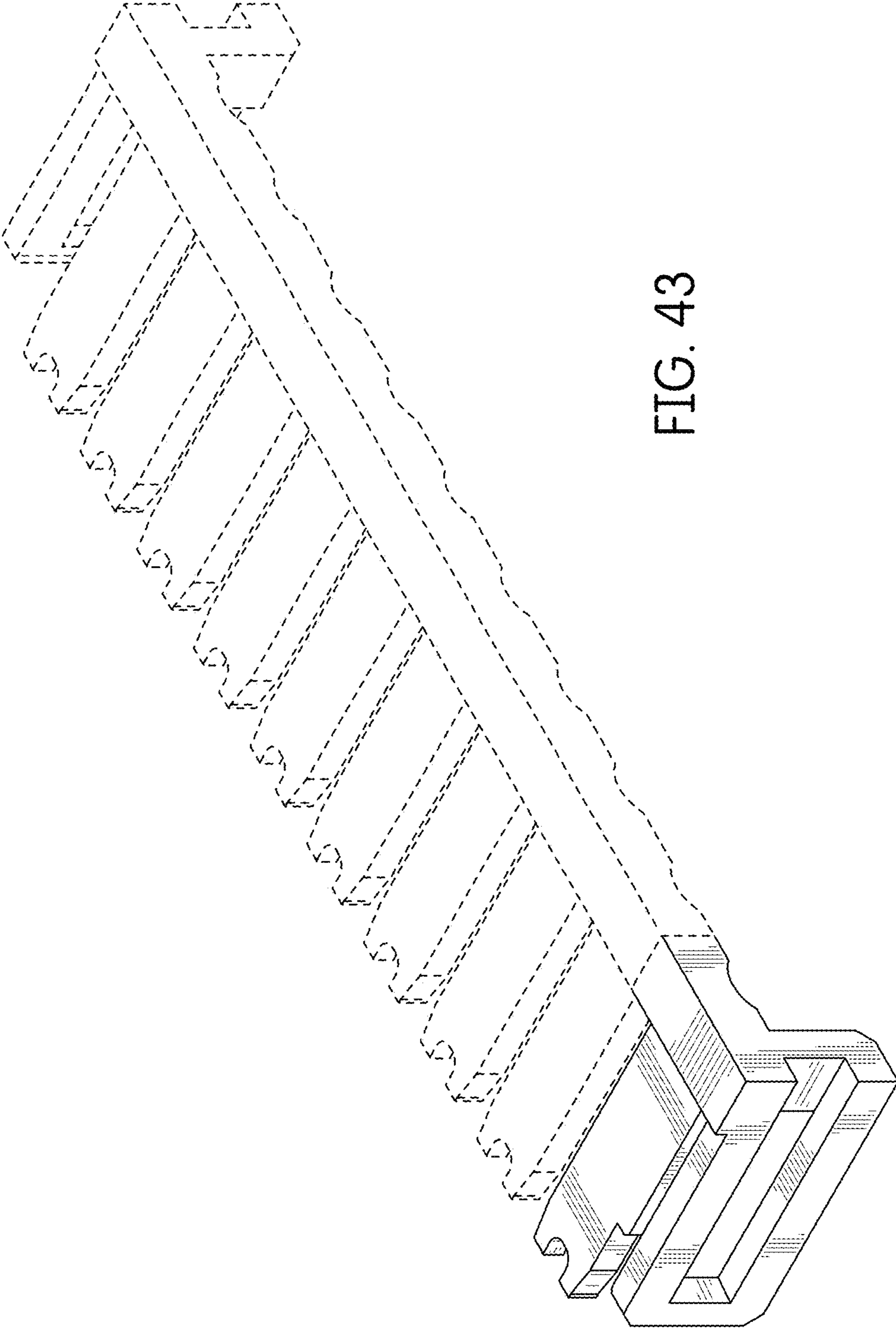


FIG. 43

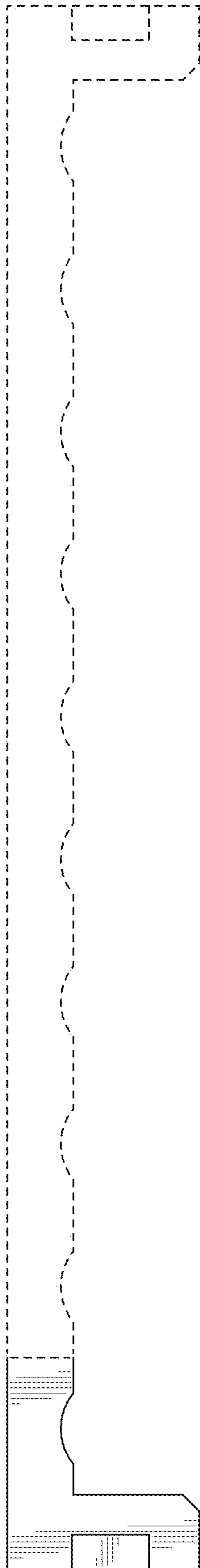


FIG. 44

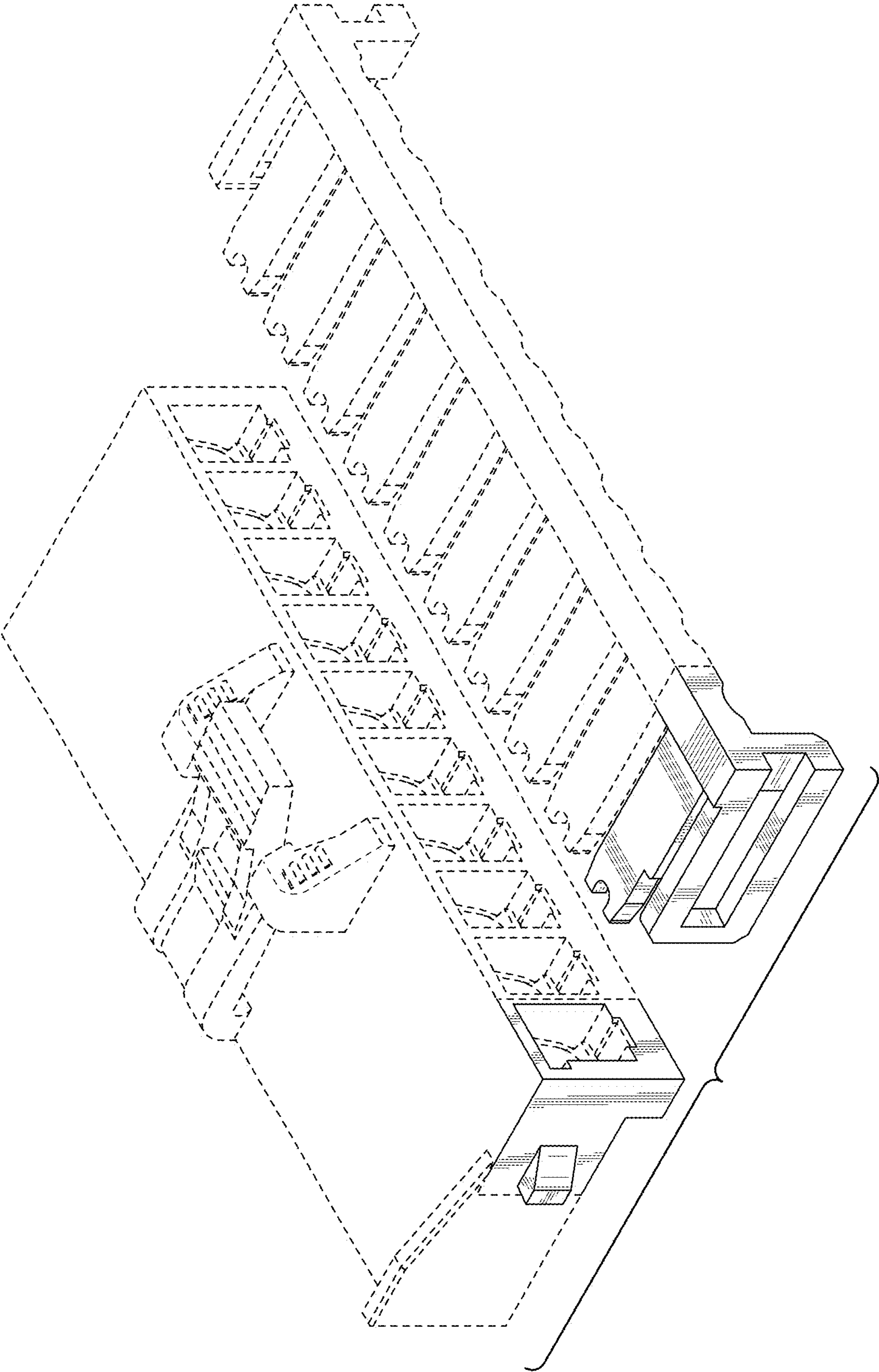


FIG. 45