



US00D897958S

(12) **United States Design Patent**
Somanathapura Ramanna et al.

(10) **Patent No.:** **US D897,958 S**

(45) **Date of Patent:** **** Oct. 6, 2020**

(54) **CONNECTOR**

(71) Applicant: **Molex, LLC**, Lisle, IL (US)

(72) Inventors: **Nrupathunga Chakravarthy Somanathapura Ramanna**, Bangalore (IN); **Pierre Perez**, Aurora, IL (US)

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

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

(21) Appl. No.: **29/676,420**

(22) Filed: **Jan. 10, 2019**

(51) **LOC (12) Cl.** **13-03**

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

(58) **Field of Classification Search**
USPC **D3/203.1-203.3; D13/133, 146, 147, D13/154, 184, 153**

(Continued)

(56) **References Cited**

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(Continued)

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(Continued)

Primary Examiner — Karen K Kearney

Assistant Examiner — Michael Chong

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

(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a front left perspective view of a connector showing our new design;
FIG. 2 is a front right perspective view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a rear view thereof;
FIG. 5 is a left side view thereof;
FIG. 6 is a right side view thereof;
FIG. 7 is a top view thereof;
FIG. 8 is a bottom view thereof;
FIG. 9 is a front right perspective view of an alternate embodiment of a connector showing our new design which is a mirror image of the connector of FIGS. 1-8;
FIG. 10 is a front left perspective view thereof;
FIG. 11 is a front view thereof;
FIG. 12 is a rear view thereof;
FIG. 13 is a left side view thereof;
FIG. 14 is a right side view thereof;
FIG. 15 is a top view thereof;
FIG. 16 is a bottom view thereof;
FIG. 17 is a front left perspective view of an alternate embodiment of a connector showing our new design;
FIG. 18 is a front right perspective view thereof;
FIG. 19 is a front view thereof;
FIG. 20 is a rear view thereof;
FIG. 21 is a left side view thereof;
FIG. 22 is a right side view thereof;
FIG. 23 is a top view thereof;
FIG. 24 is a bottom view thereof;
FIG. 25 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 17-24;
FIG. 26 is a front left perspective view thereof;
FIG. 27 is a front view thereof;
FIG. 28 is a rear view thereof;

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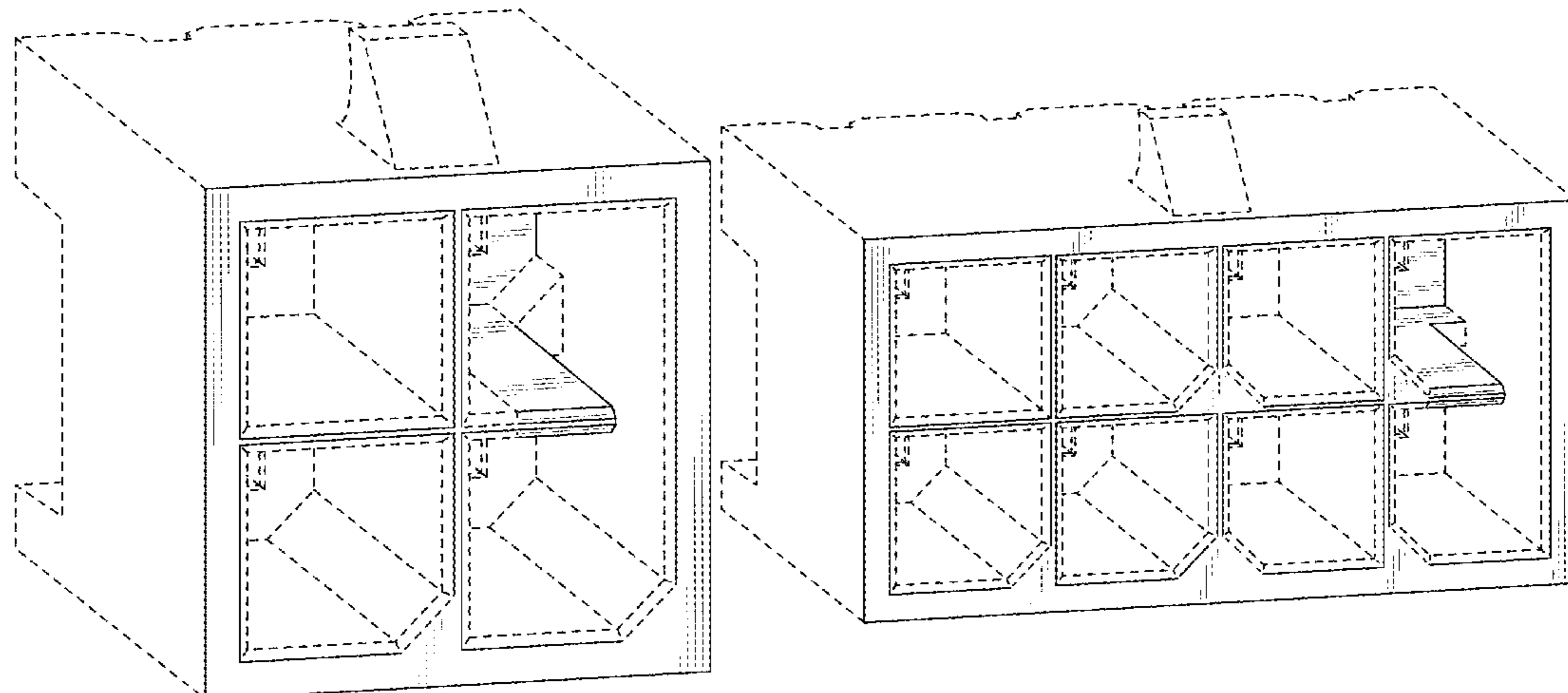


FIG. 29 is a left side view thereof;
FIG. 30 is a right side view thereof;
FIG. 31 is a top view thereof;
FIG. 32 is a bottom view thereof;
FIG. 33 is a front left perspective view of an alternate embodiment of a connector showing our new design;
FIG. 34 is a front right perspective view thereof;
FIG. 35 is a front view thereof;
FIG. 36 is a rear view thereof;
FIG. 37 is a left side view thereof;
FIG. 38 is a right side view thereof;
FIG. 39 is a top view thereof;
FIG. 40 is a bottom view thereof;
FIG. 41 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 33-40;
FIG. 42 is a front left perspective view thereof;
FIG. 43 is a front view thereof;
FIG. 44 is a rear view thereof;
FIG. 45 is a left side view thereof;
FIG. 46 is a right side view thereof;
FIG. 47 is a top view thereof;
FIG. 48 is a bottom view thereof;
FIG. 49 is a front left perspective view of an alternate embodiment of a connector showing our new design;
FIG. 50 is a front right perspective view thereof;
FIG. 51 is a front view thereof;
FIG. 52 is a rear view thereof;
FIG. 53 is a left side view thereof;
FIG. 54 is a right side view thereof;
FIG. 55 is a top view thereof;
FIG. 56 is a bottom view thereof;
FIG. 57 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 49-56;
FIG. 58 is a front left perspective view thereof;
FIG. 59 is a front view thereof;
FIG. 60 is a rear view thereof;
FIG. 61 is a left side view thereof;
FIG. 62 is a right side view thereof;
FIG. 63 is a top view thereof;
FIG. 64 is a bottom view thereof;
FIG. 65 is a front left perspective view of an alternate embodiment of a connector showing our new design;
FIG. 66 is a front right perspective view thereof;
FIG. 67 is a front view thereof;
FIG. 68 is a rear view thereof;
FIG. 69 is a left side view thereof;
FIG. 70 is a right side view thereof;
FIG. 71 is a top view thereof;
FIG. 72 is a bottom view thereof;
FIG. 73 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 65-72;
FIG. 74 is a front left perspective view thereof;
FIG. 75 is a front view thereof;
FIG. 76 is a rear view thereof;
FIG. 77 is a left side view thereof;
FIG. 78 is a right side view thereof;
FIG. 79 is a top view thereof;
FIG. 80 is a bottom view thereof;
FIG. 81 is a front left perspective view of an alternate embodiment of a connector showing our new design;
FIG. 82 is a front right perspective view thereof;
FIG. 83 is a front view thereof;
FIG. 84 is a rear view thereof;
FIG. 85 is a left side view thereof;
FIG. 86 is a right side view thereof;
FIG. 87 is a top view thereof;
FIG. 88 is a bottom view thereof;
FIG. 89 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 81-88;
FIG. 90 is a front left perspective view thereof;
FIG. 91 is a front view thereof;
FIG. 92 is a rear view thereof;
FIG. 93 is a left side view thereof;
FIG. 94 is a right side view thereof;
FIG. 95 is a top view thereof;
FIG. 96 is a bottom view thereof;
FIG. 97 is a front left perspective view of an alternate embodiment of a connector showing our new design;
FIG. 98 is a front right perspective view thereof;
FIG. 99 is a front view thereof;
FIG. 100 is a rear view thereof;
FIG. 101 is a left side view thereof;
FIG. 102 is a right side view thereof;
FIG. 103 is a top view thereof;
FIG. 104 is a bottom view thereof;
FIG. 105 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 97-104;
FIG. 106 is a front left perspective view thereof;
FIG. 107 is a front view thereof;
FIG. 108 is a rear view thereof;
FIG. 109 is a left side view thereof;
FIG. 110 is a right side view thereof;
FIG. 111 is a top view thereof;
FIG. 112 is a bottom view thereof;
FIG. 113 is a front left perspective view of an alternate embodiment of a connector showing our new design;
FIG. 114 is a front right perspective view thereof;
FIG. 115 is a front view thereof;
FIG. 116 is a rear view thereof;
FIG. 117 is a left side view thereof;
FIG. 118 is a right side view thereof;
FIG. 119 is a top view thereof;
FIG. 120 is a bottom view thereof;
FIG. 121 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 113-120;
FIG. 122 is a front left perspective view thereof;
FIG. 123 is a front view thereof;
FIG. 124 is a rear view thereof;
FIG. 125 is a left side view thereof;
FIG. 126 is a right side view thereof;
FIG. 127 is a top view thereof;
FIG. 128 is a bottom view thereof;
FIG. 129 is a front left perspective view of an alternate embodiment of a connector showing our new design;
FIG. 130 is a front right perspective view thereof;
FIG. 131 is a front view thereof;
FIG. 132 is a rear view thereof;
FIG. 133 is a left side view thereof;
FIG. 134 is a right side view thereof;
FIG. 135 is a top view thereof;
FIG. 136 is a bottom view thereof;

FIG. 137 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 129-136;
 FIG. 138 is a front left perspective view thereof;
 FIG. 139 is a front view thereof;
 FIG. 140 is a rear view thereof;
 FIG. 141 is a left side view thereof;
 FIG. 142 is a right side view thereof;
 FIG. 143 is a top view thereof;
 FIG. 144 is a bottom view thereof;
 FIG. 145 is a front left perspective view of an alternate embodiment of a connector showing our new design;
 FIG. 146 is a front right perspective view thereof;
 FIG. 147 is a front view thereof;
 FIG. 148 is a rear view thereof;
 FIG. 149 is a left side view thereof;
 FIG. 150 is a right side view thereof;
 FIG. 151 is a top view thereof;
 FIG. 152 is a bottom view thereof;
 FIG. 153 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 145-152;
 FIG. 154 is a front left perspective view thereof;
 FIG. 155 is a front view thereof;
 FIG. 156 is a rear view thereof;
 FIG. 157 is a left side view thereof;
 FIG. 158 is a right side view thereof;
 FIG. 159 is a top view thereof;
 FIG. 160 is a bottom view thereof;
 FIG. 161 is a front left perspective view of an alternate embodiment of a connector showing our new design;
 FIG. 162 is a front right perspective view thereof;
 FIG. 163 is a front view thereof;
 FIG. 164 is a rear view thereof;
 FIG. 165 is a left side view thereof;
 FIG. 166 is a right side view thereof;
 FIG. 167 is a top view thereof;
 FIG. 168 is a bottom view thereof;
 FIG. 169 is a front right perspective view of a connector showing our new design which is a mirror image of the connector of FIGS. 161-168;
 FIG. 170 is a front left perspective view thereof;
 FIG. 171 is a front view thereof;

FIG. 172 is a rear view thereof;
 FIG. 173 is a left side view thereof;
 FIG. 174 is a right side view thereof;
 FIG. 175 is a top view thereof; and,
 FIG. 176 is a bottom view thereof.
 The broken lines immediately adjacent to the shaded areas represent the bounds of the claimed design and form no part thereof. The broken lines depicting the remainder of the connector show features that form no part of the claimed design.

1 Claim, 84 Drawing Sheets

(58) **Field of Classification Search**
 CPC .. H01R 13/506; H01R 13/516; H01R 13/518;
 H01R 13/58; H01R 13/627; H01R
 13/6315; H01R 13/6586; H01R 13/5897;
 H01R 13/24; H01R 13/5205
 See application file for complete search history.

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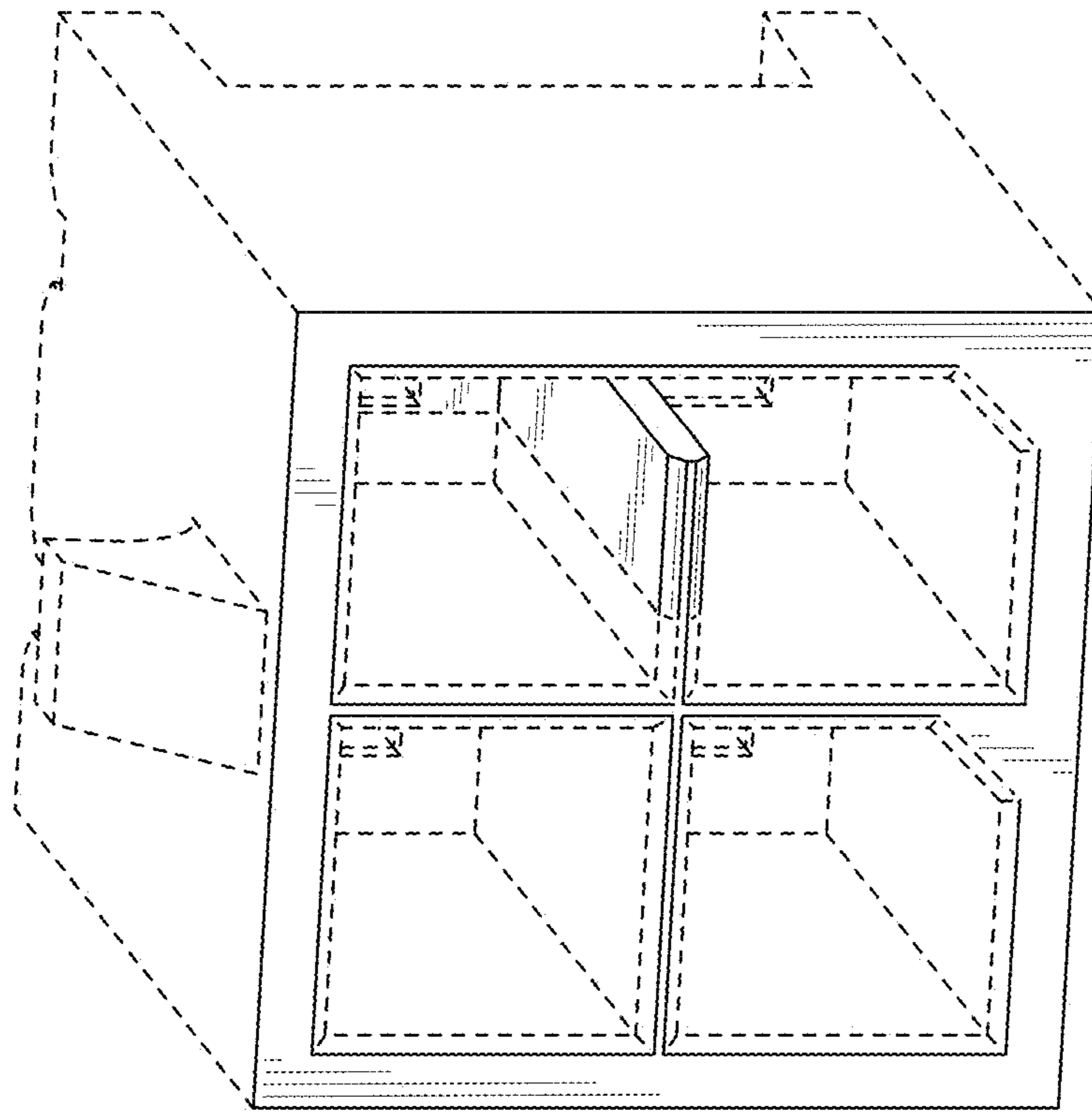


FIG. 1

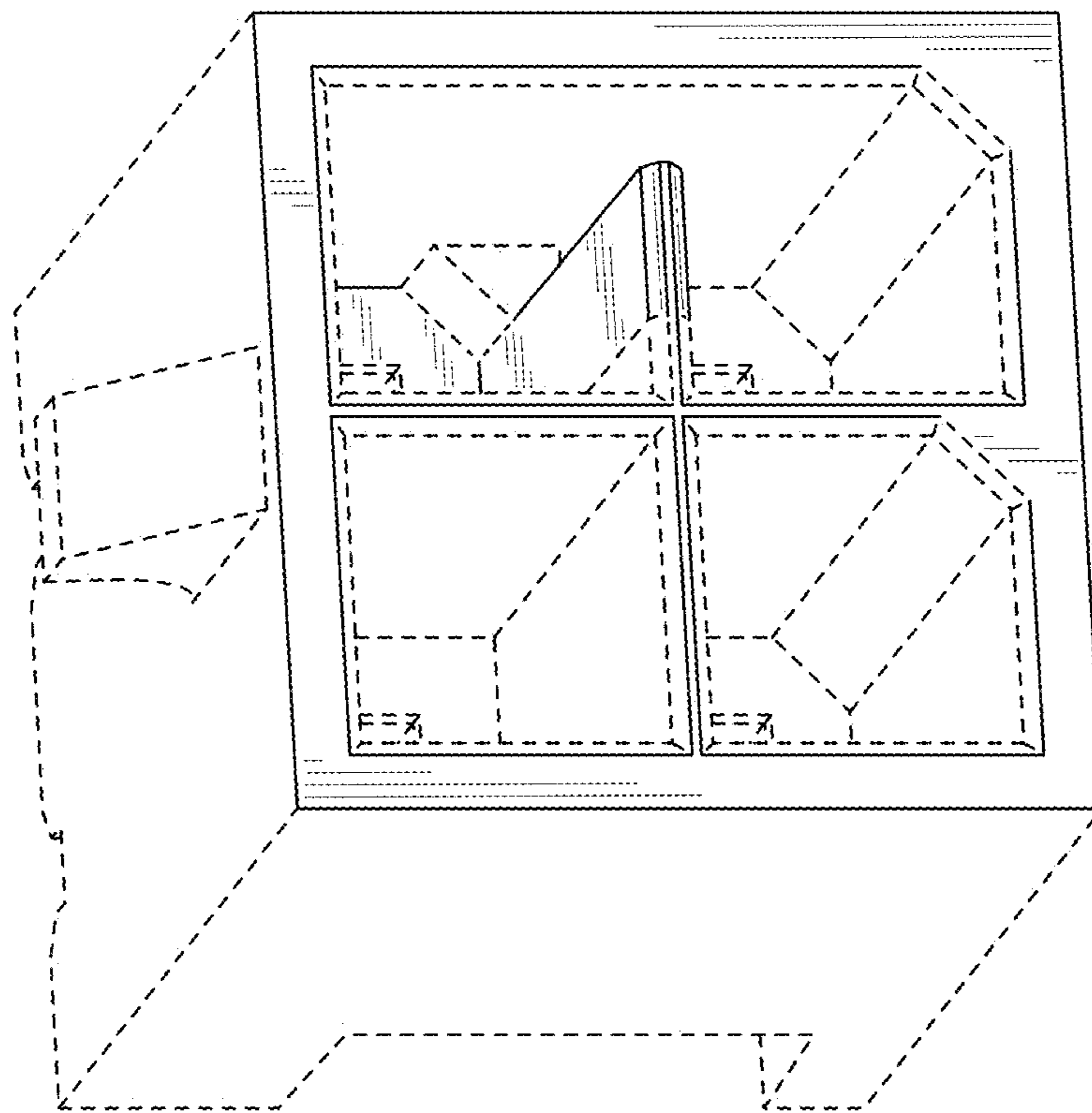


FIG. 2

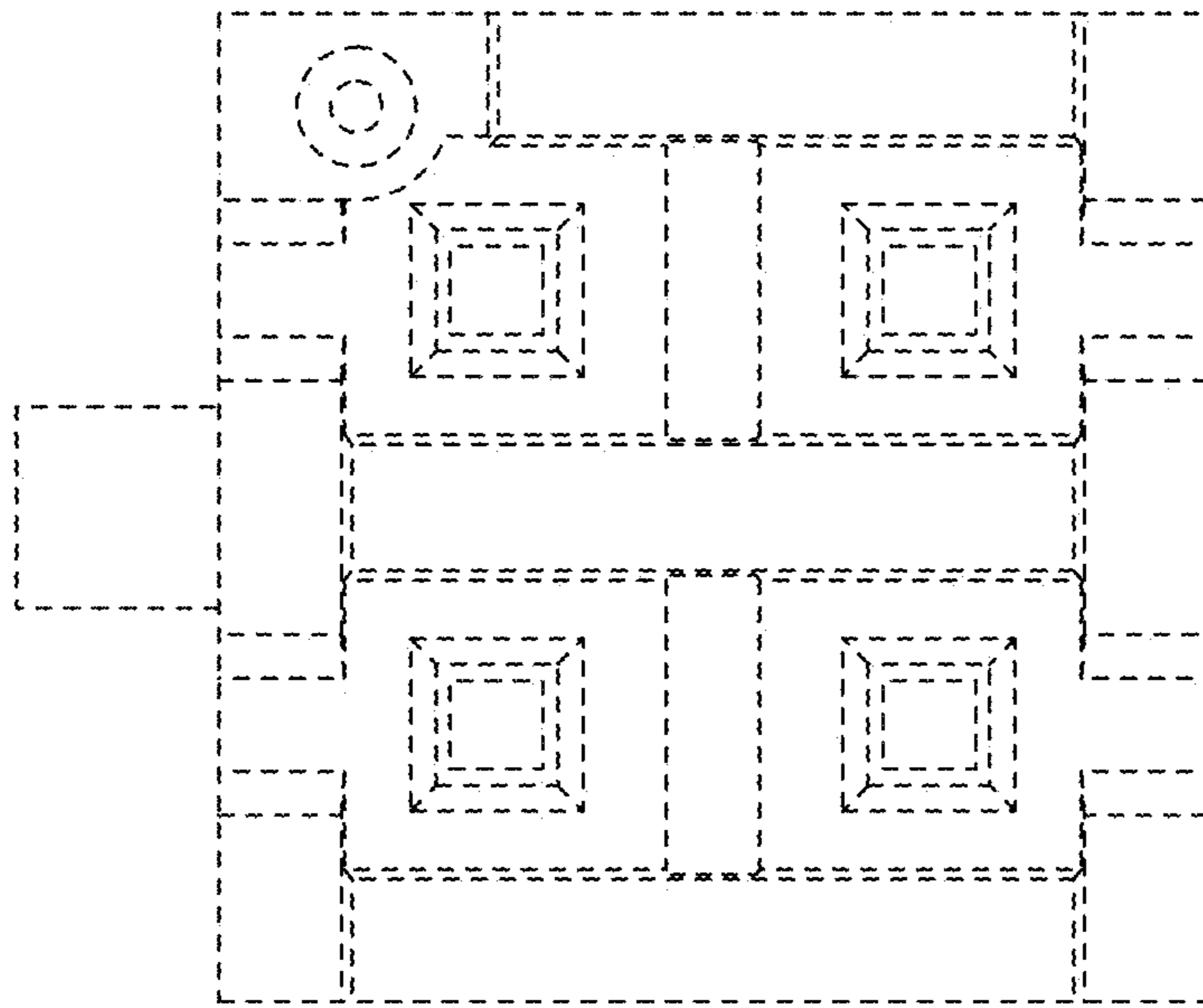


FIG. 4

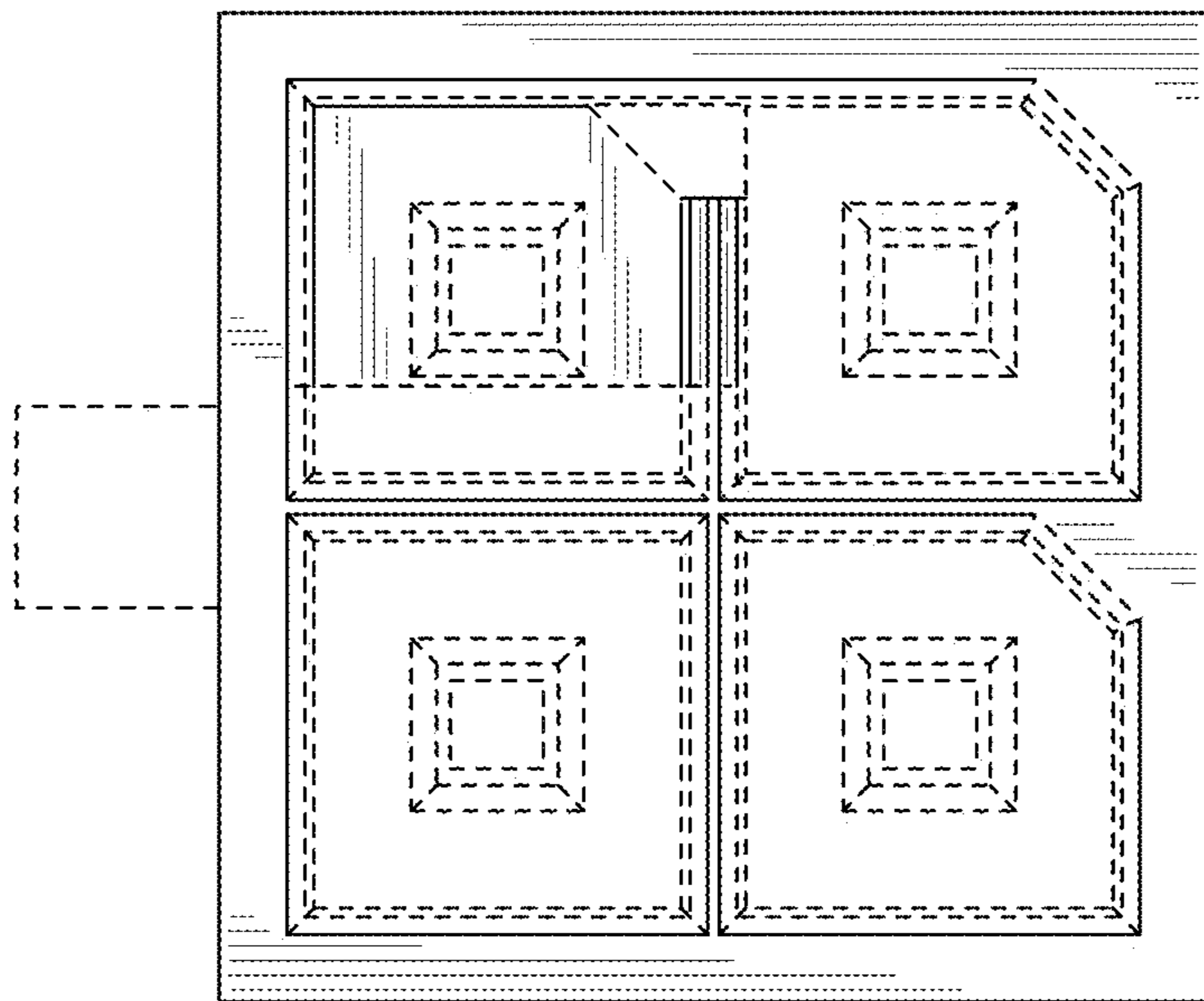


FIG. 3

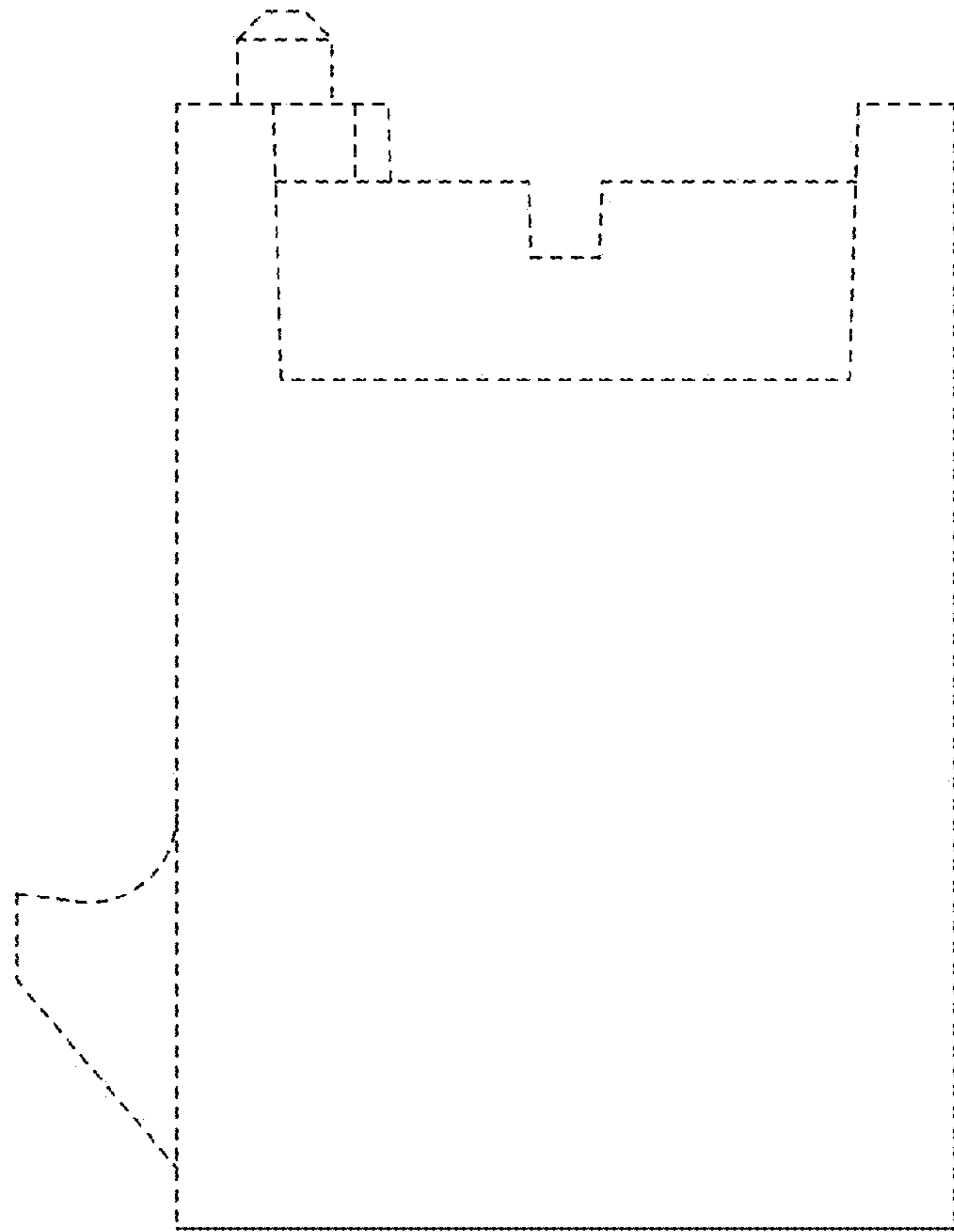


FIG. 6

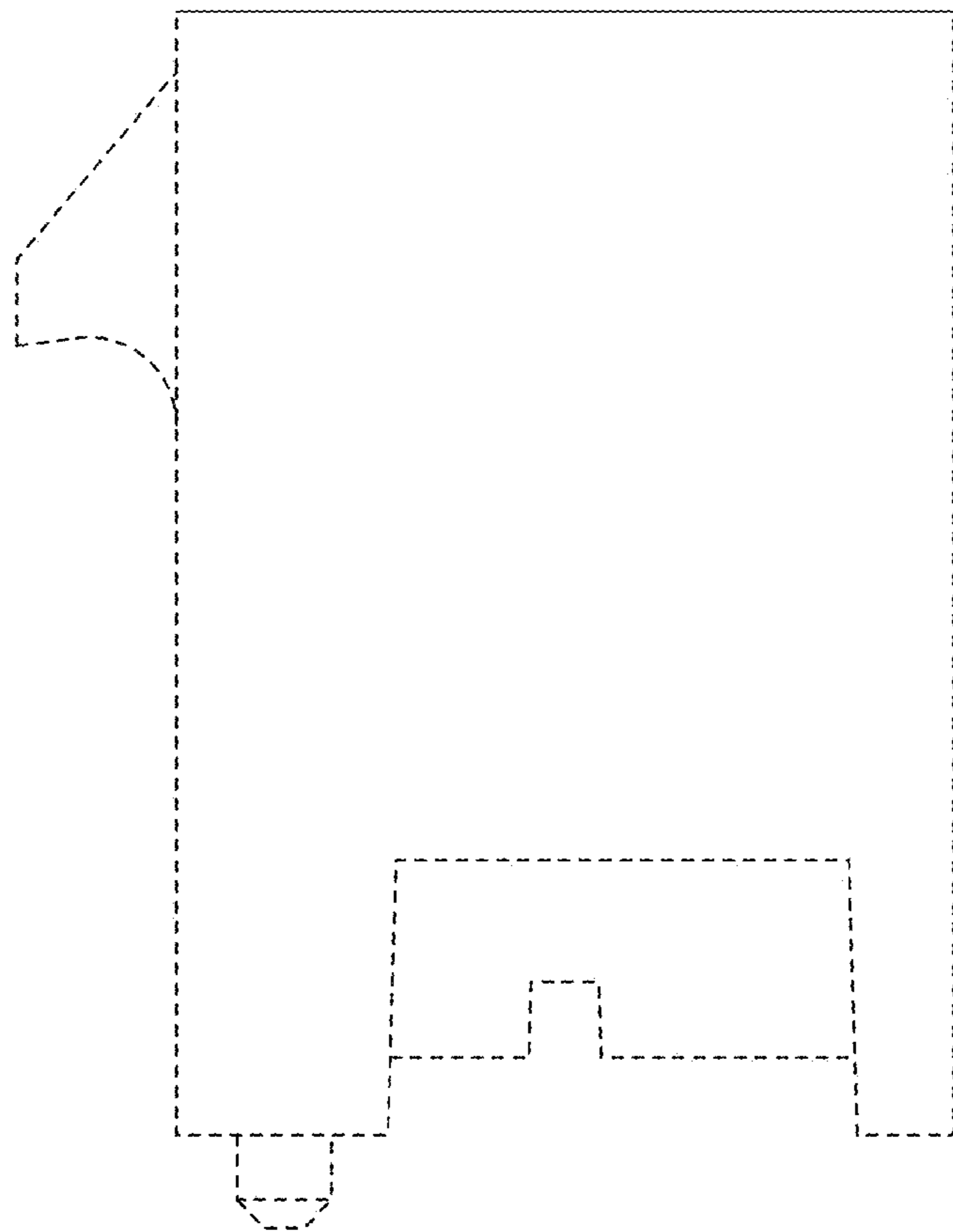


FIG. 5



FIG. 7

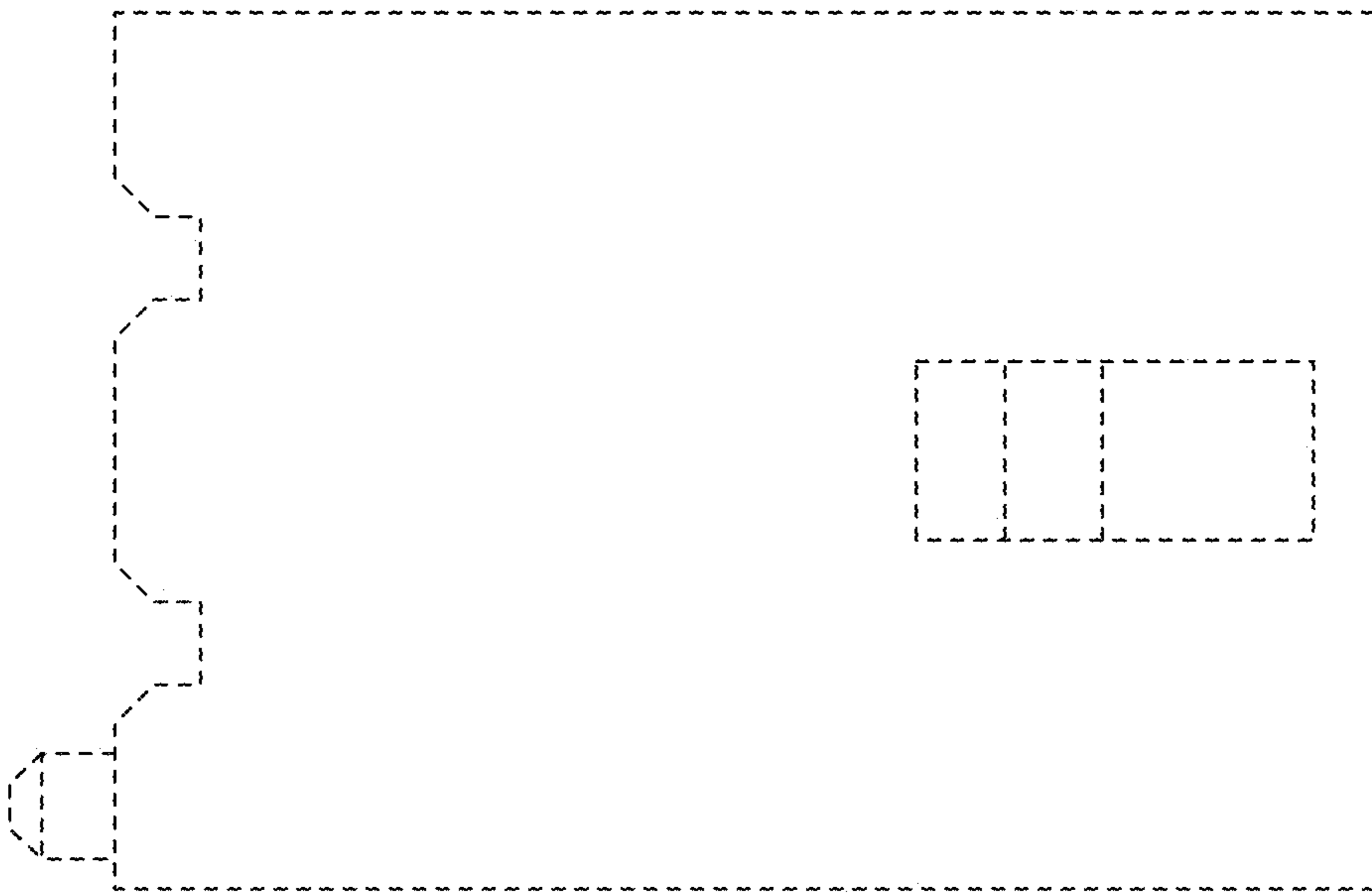


FIG. 8

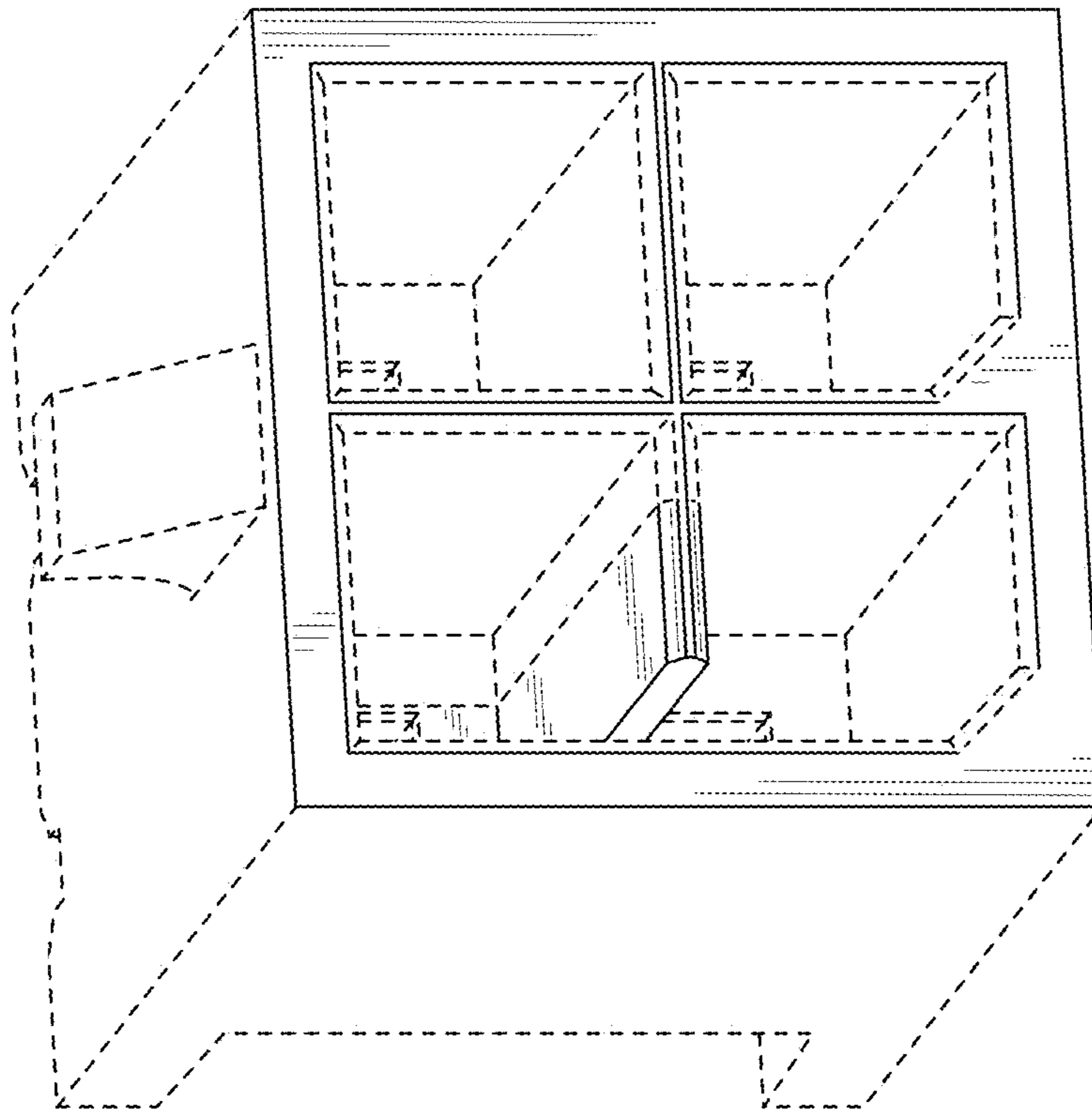


FIG. 10

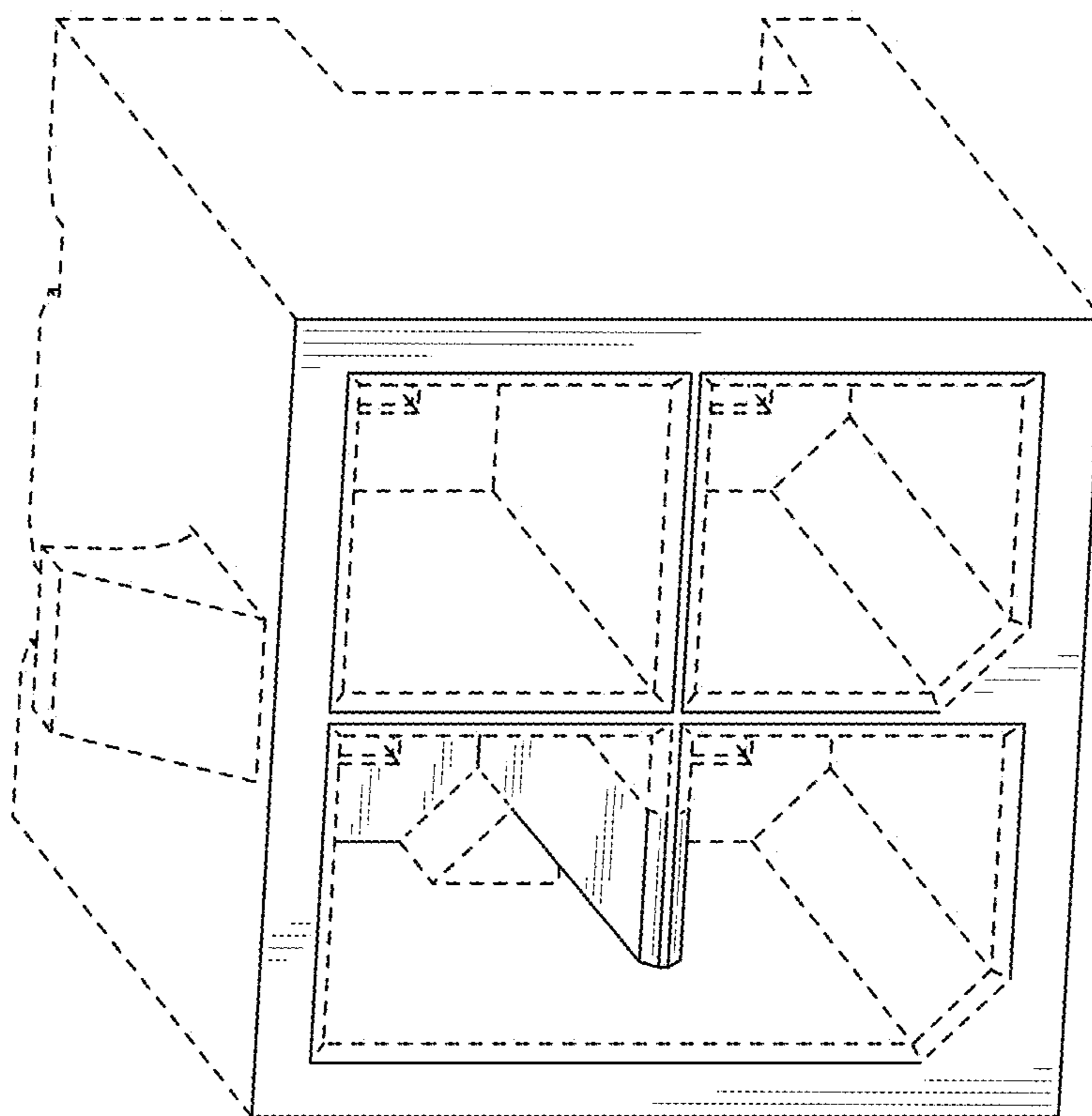


FIG. 9

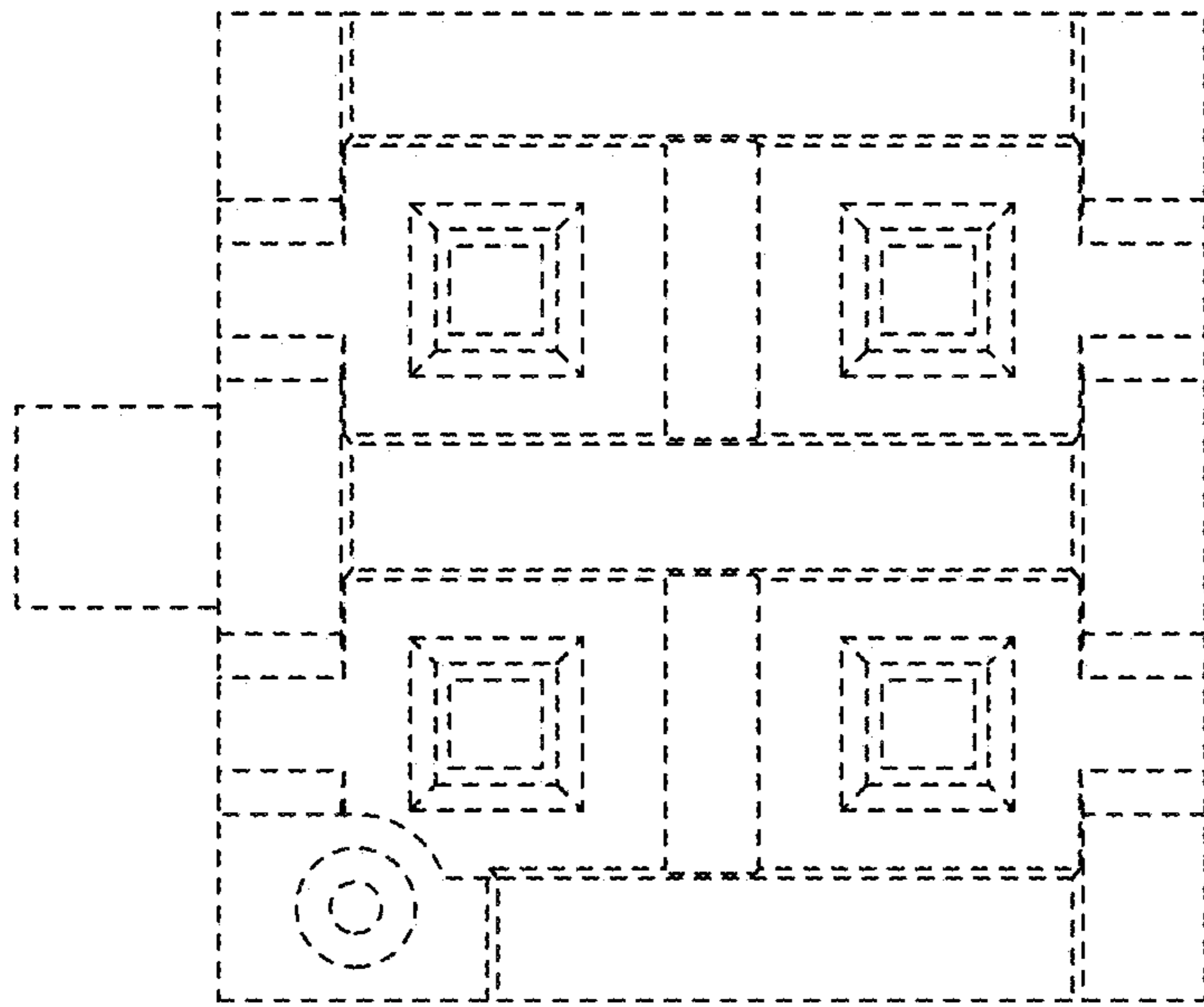


FIG. 11

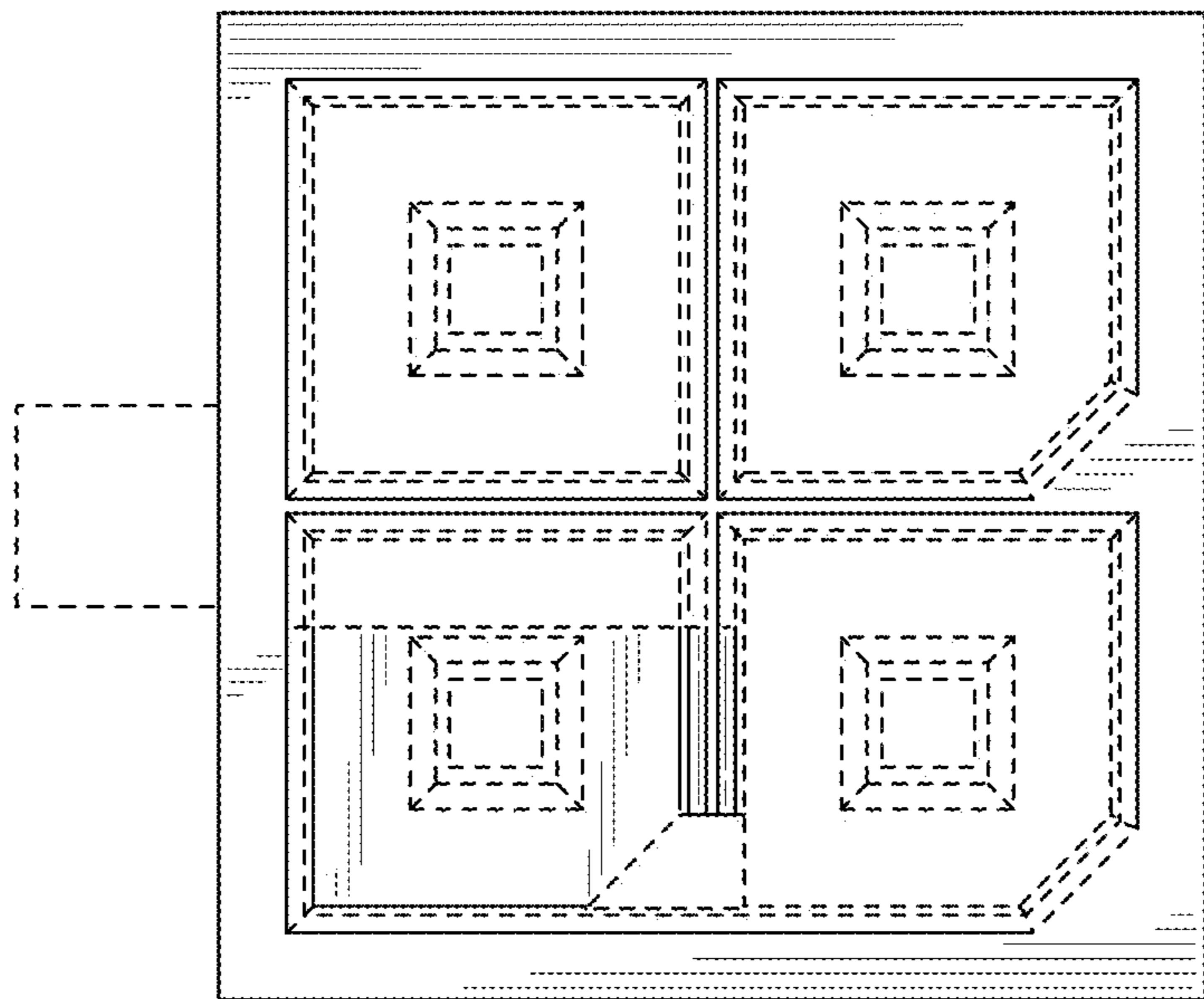


FIG. 12

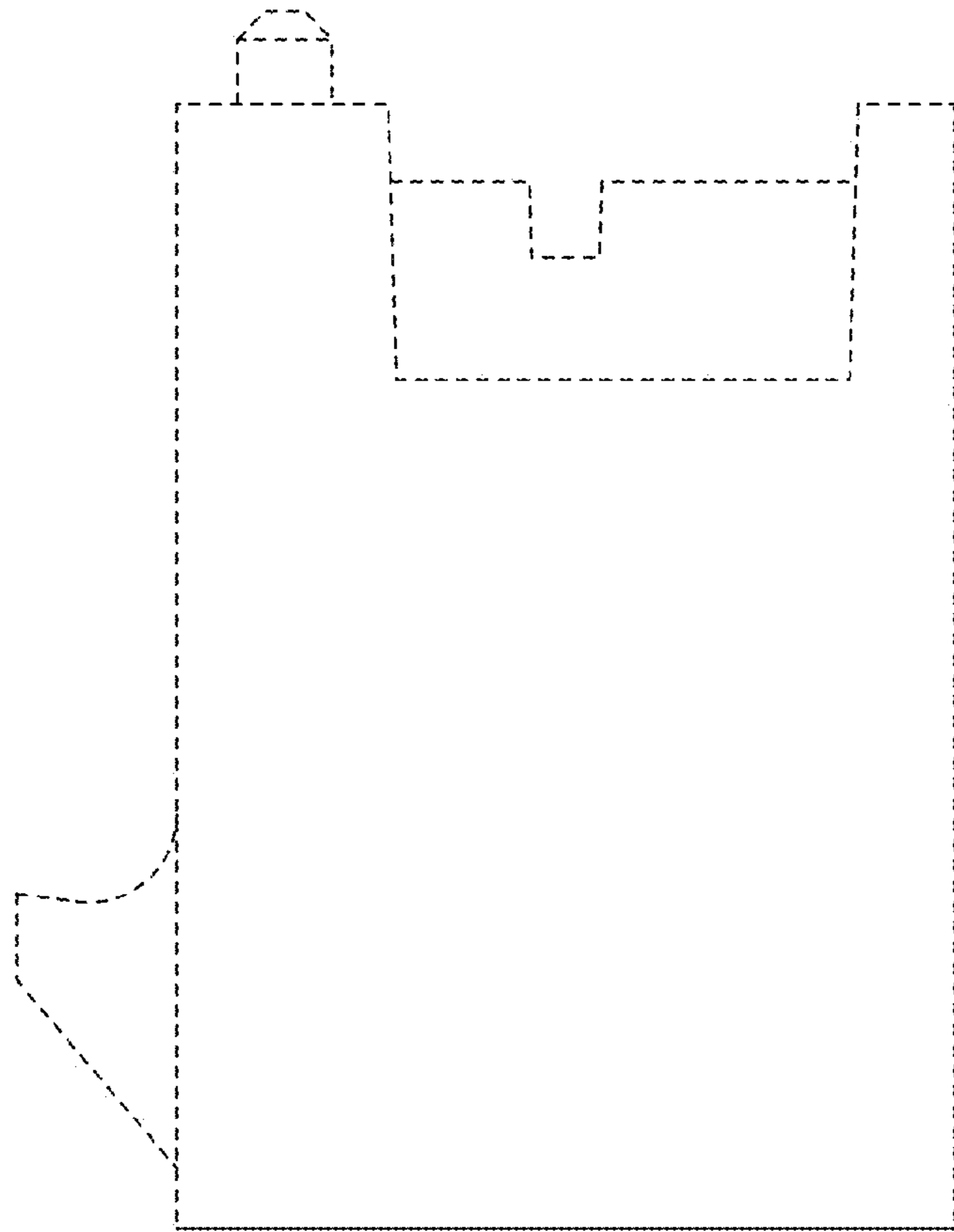


FIG. 14

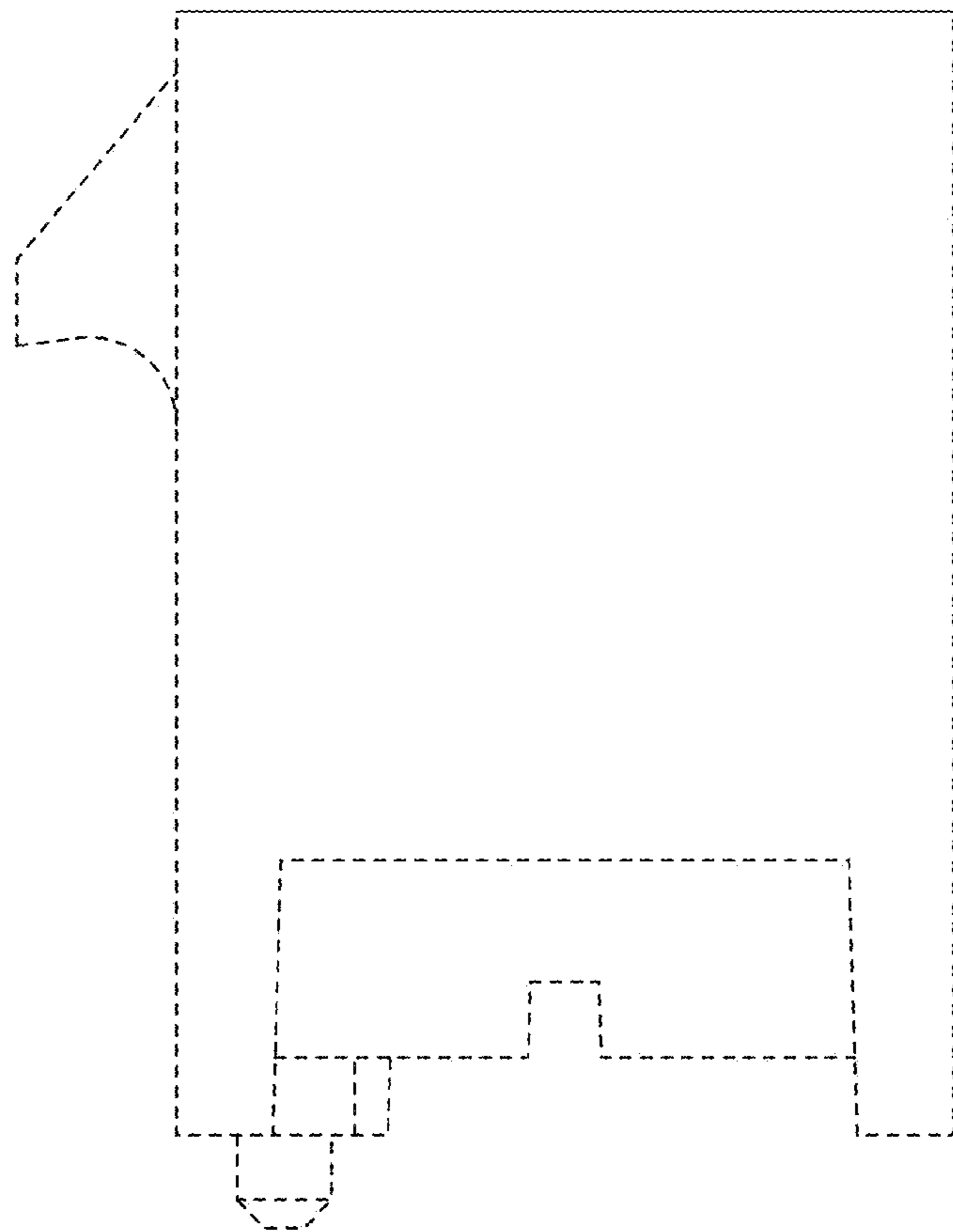


FIG. 13



FIG. 16

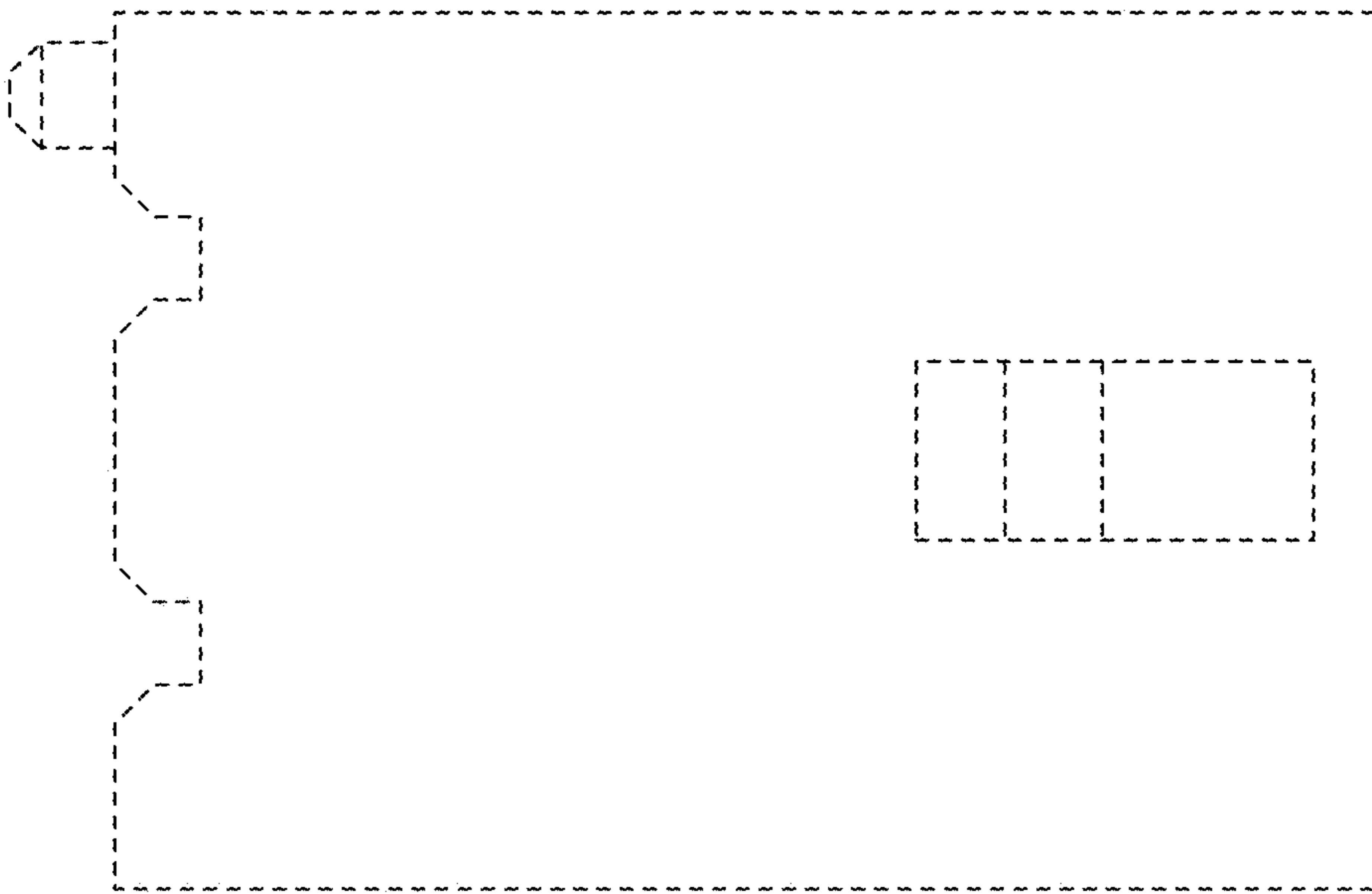


FIG. 15

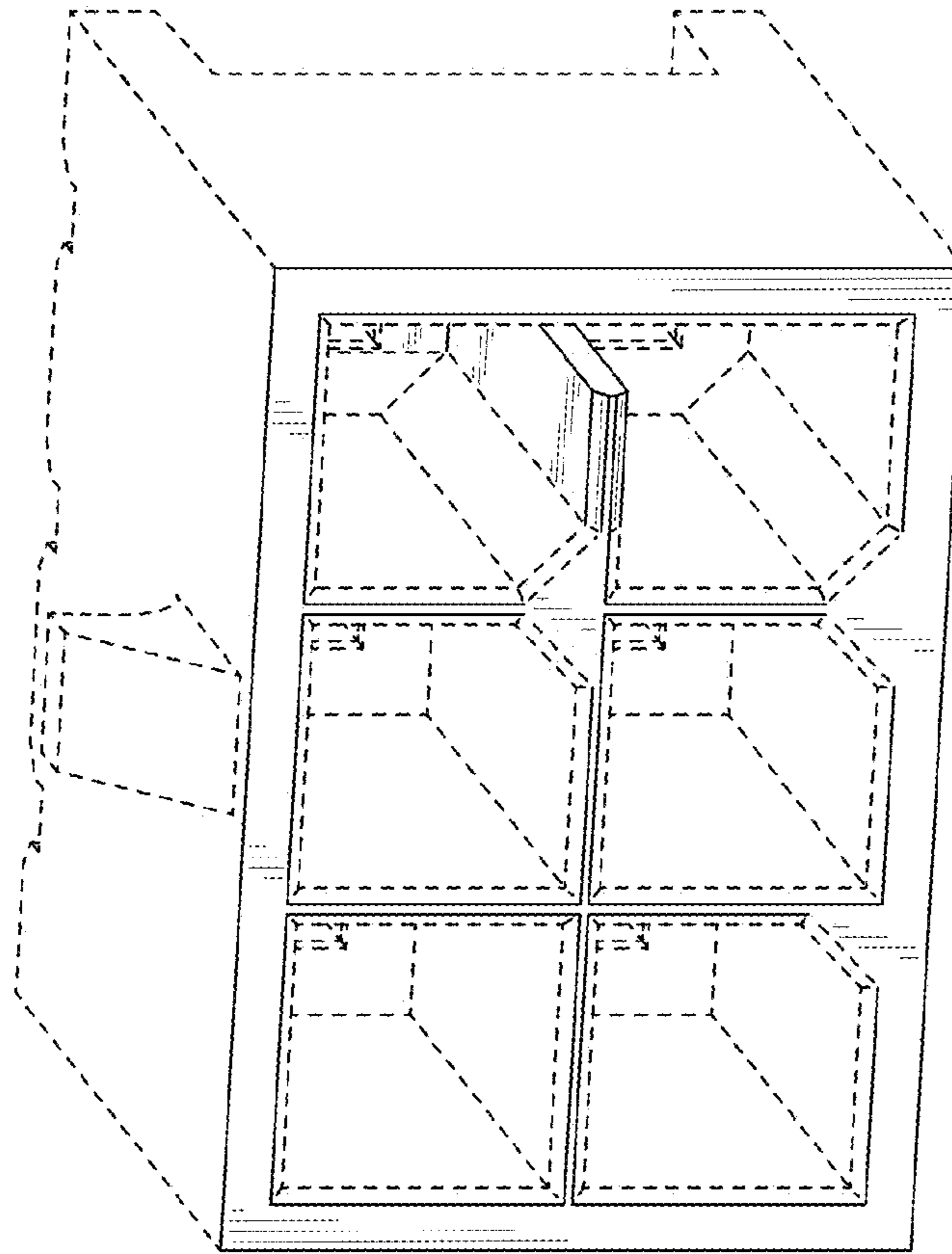


FIG. 18

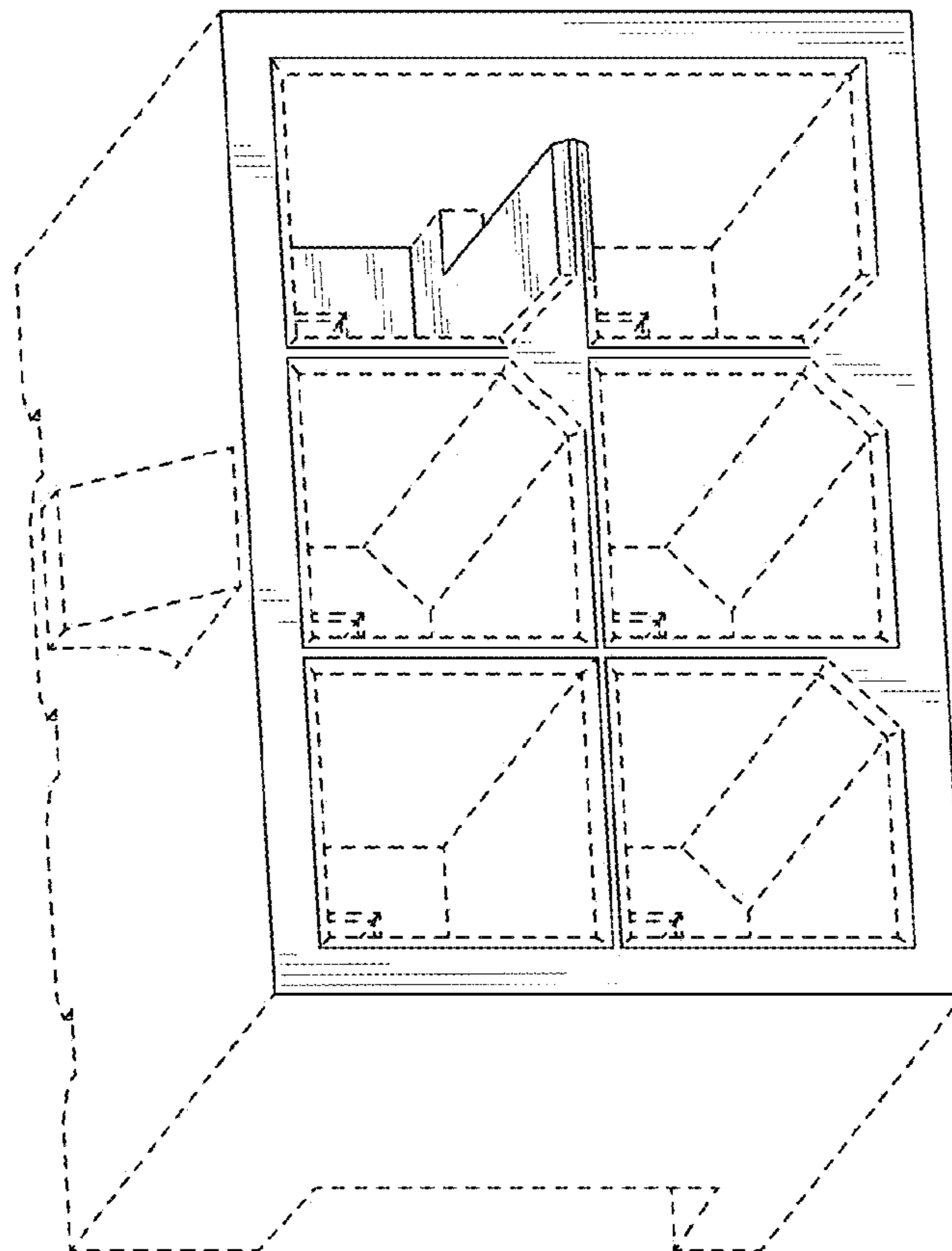


FIG. 17

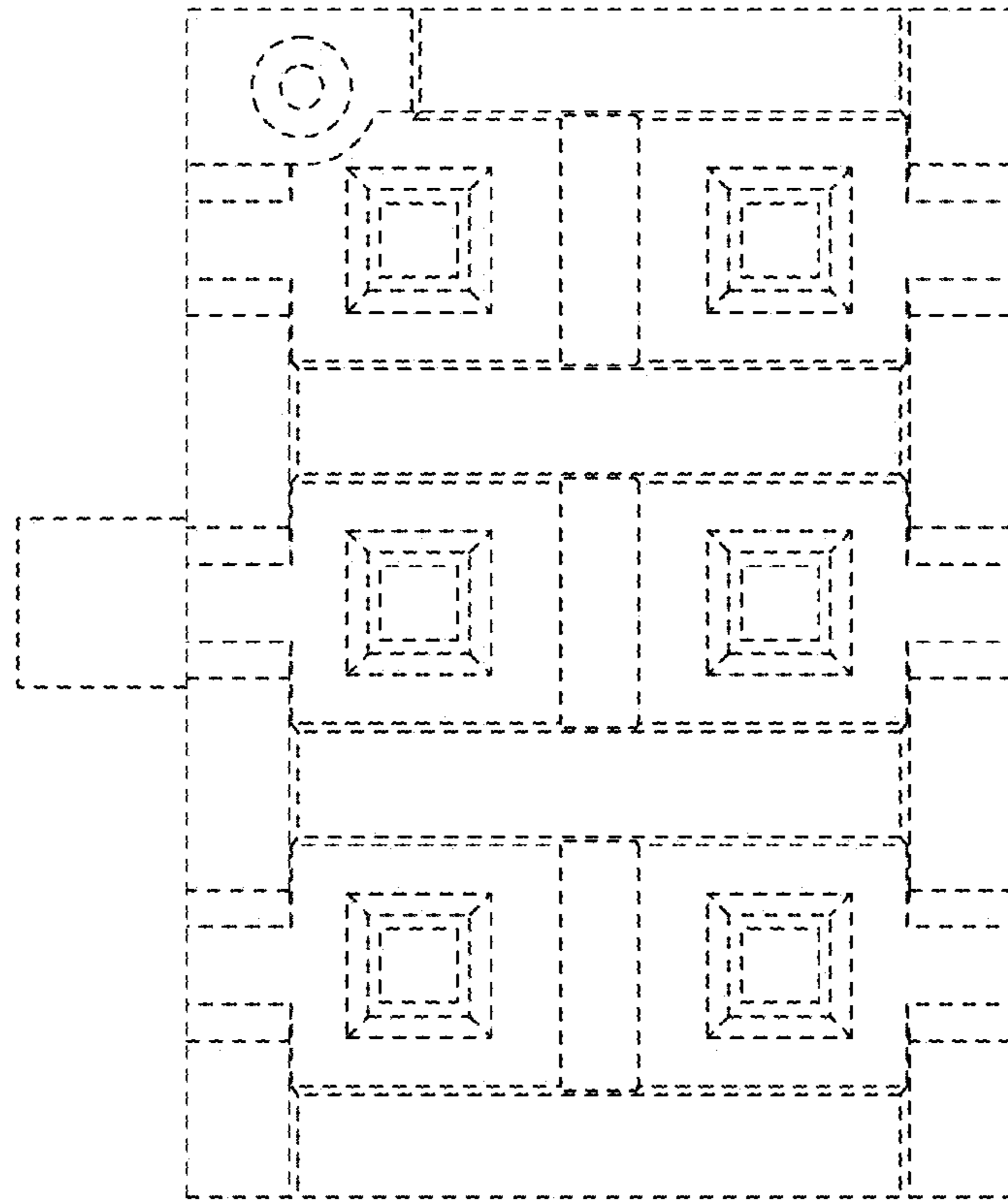


FIG. 20

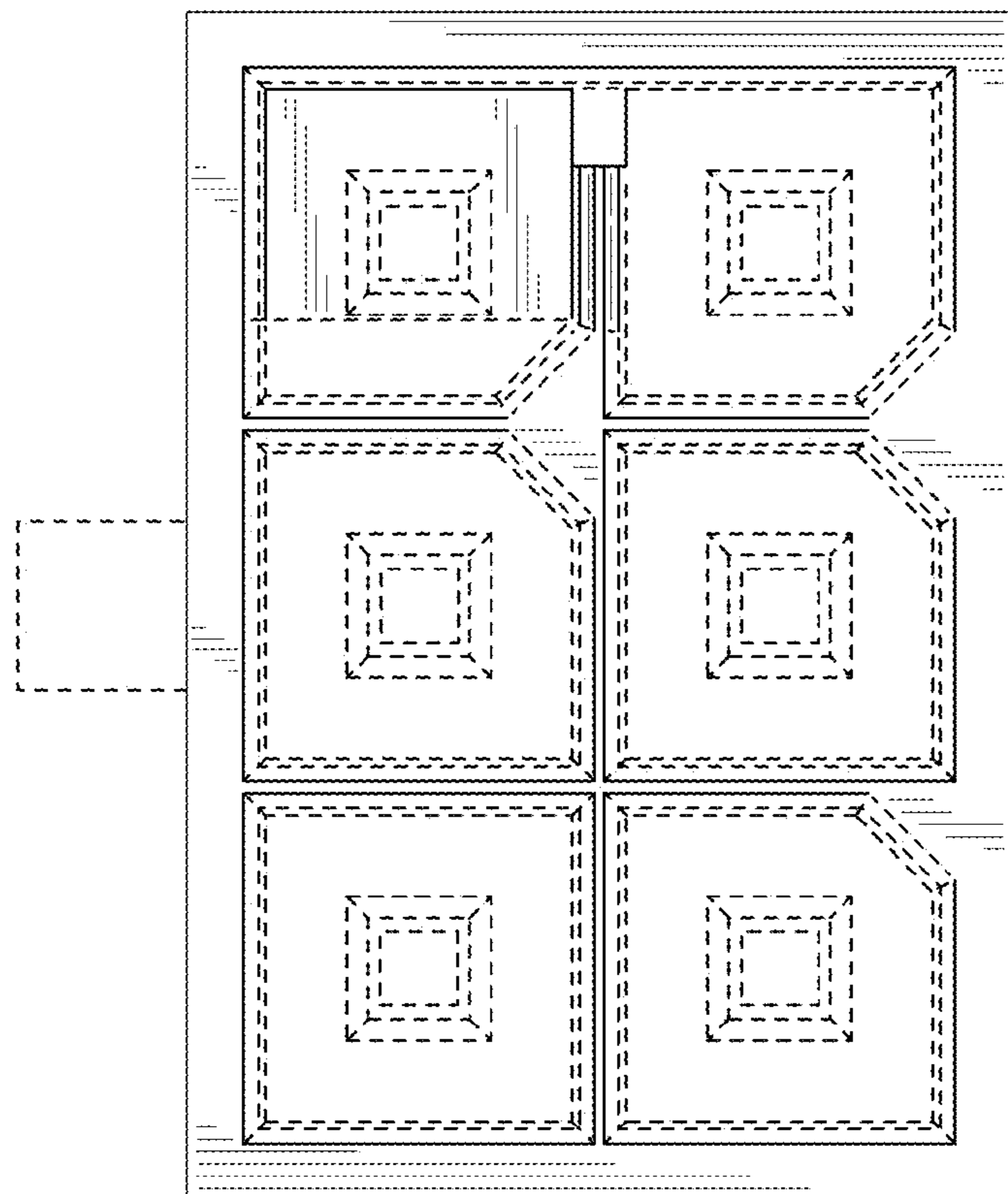


FIG. 19

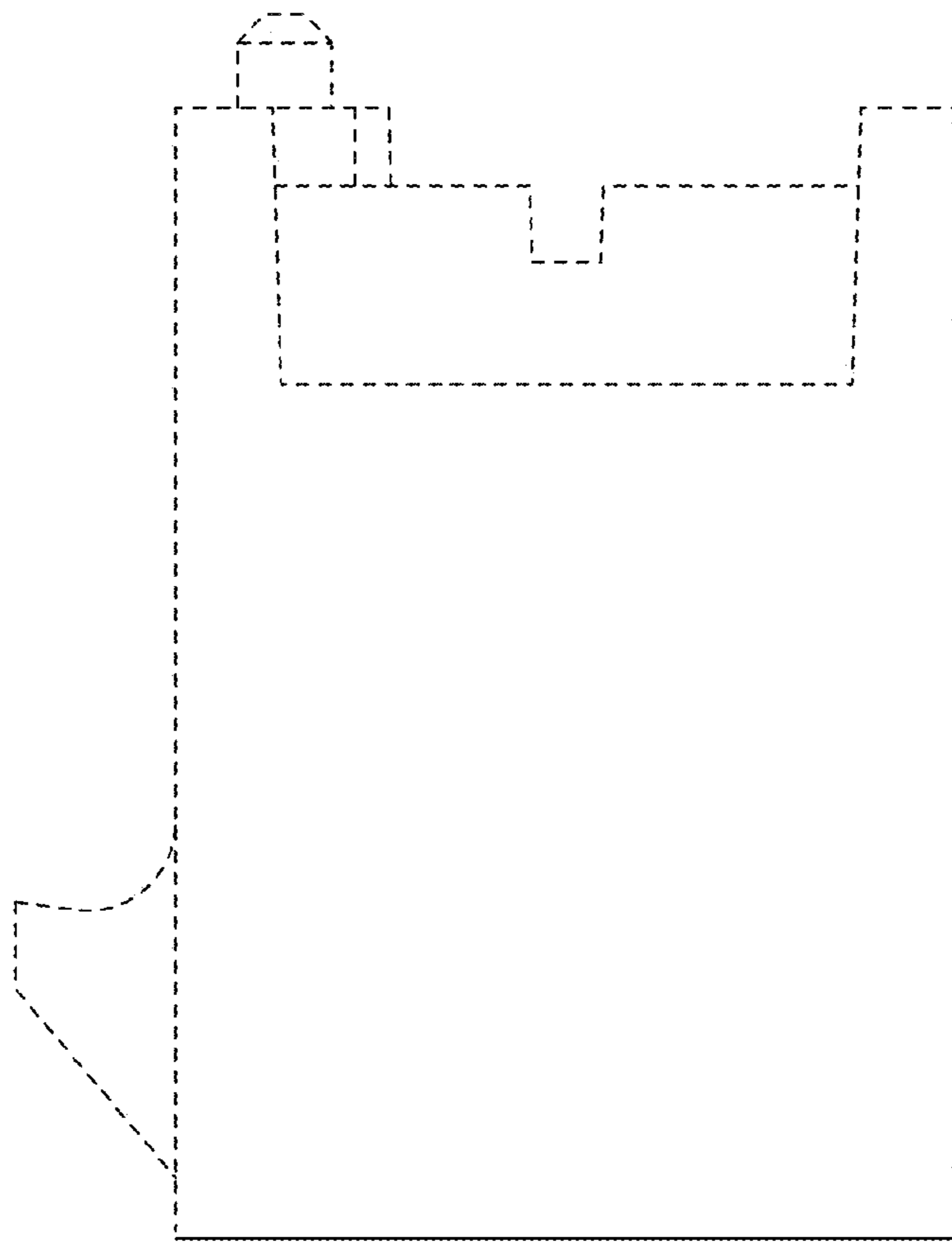


FIG. 21

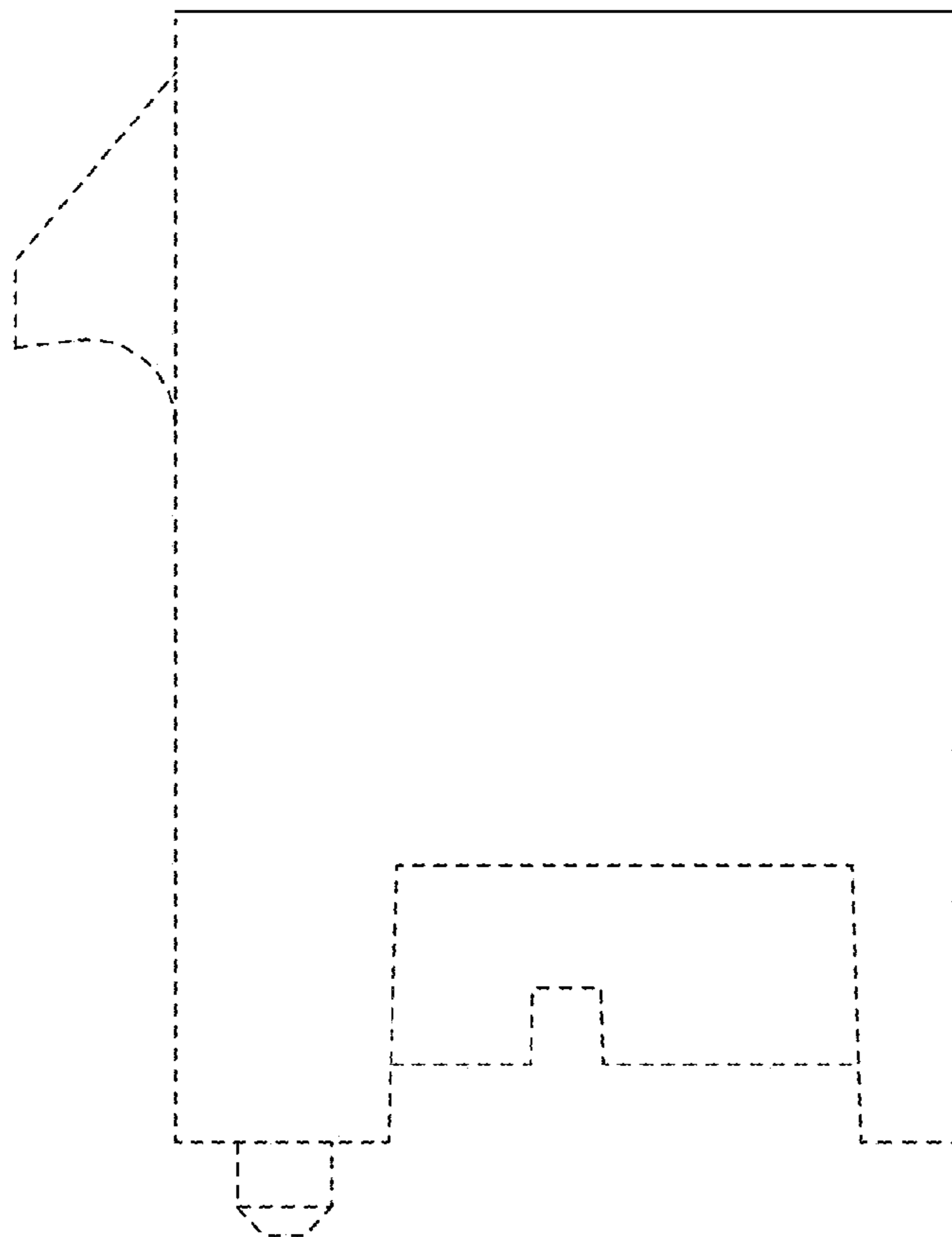


FIG. 22

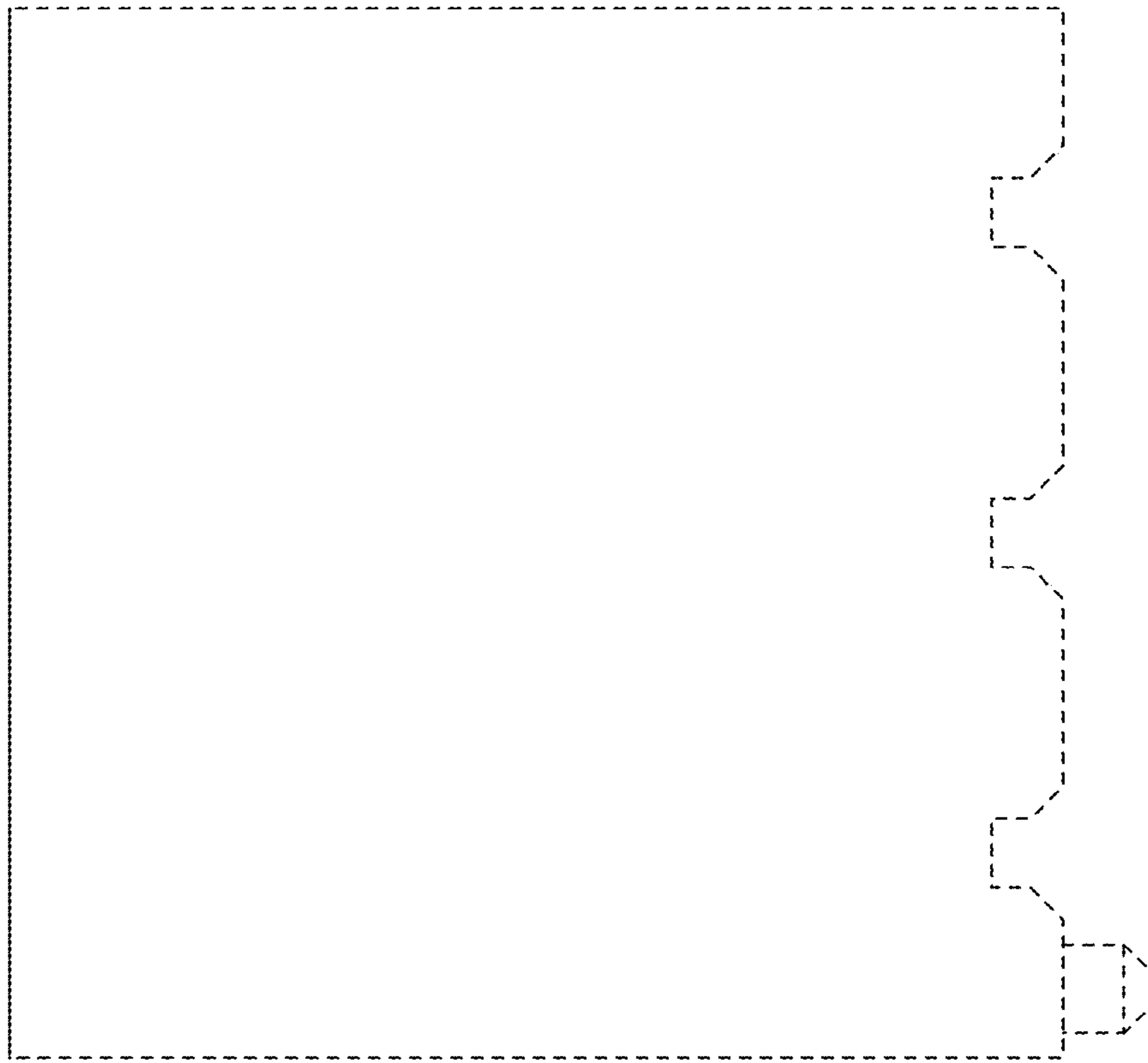


FIG. 24

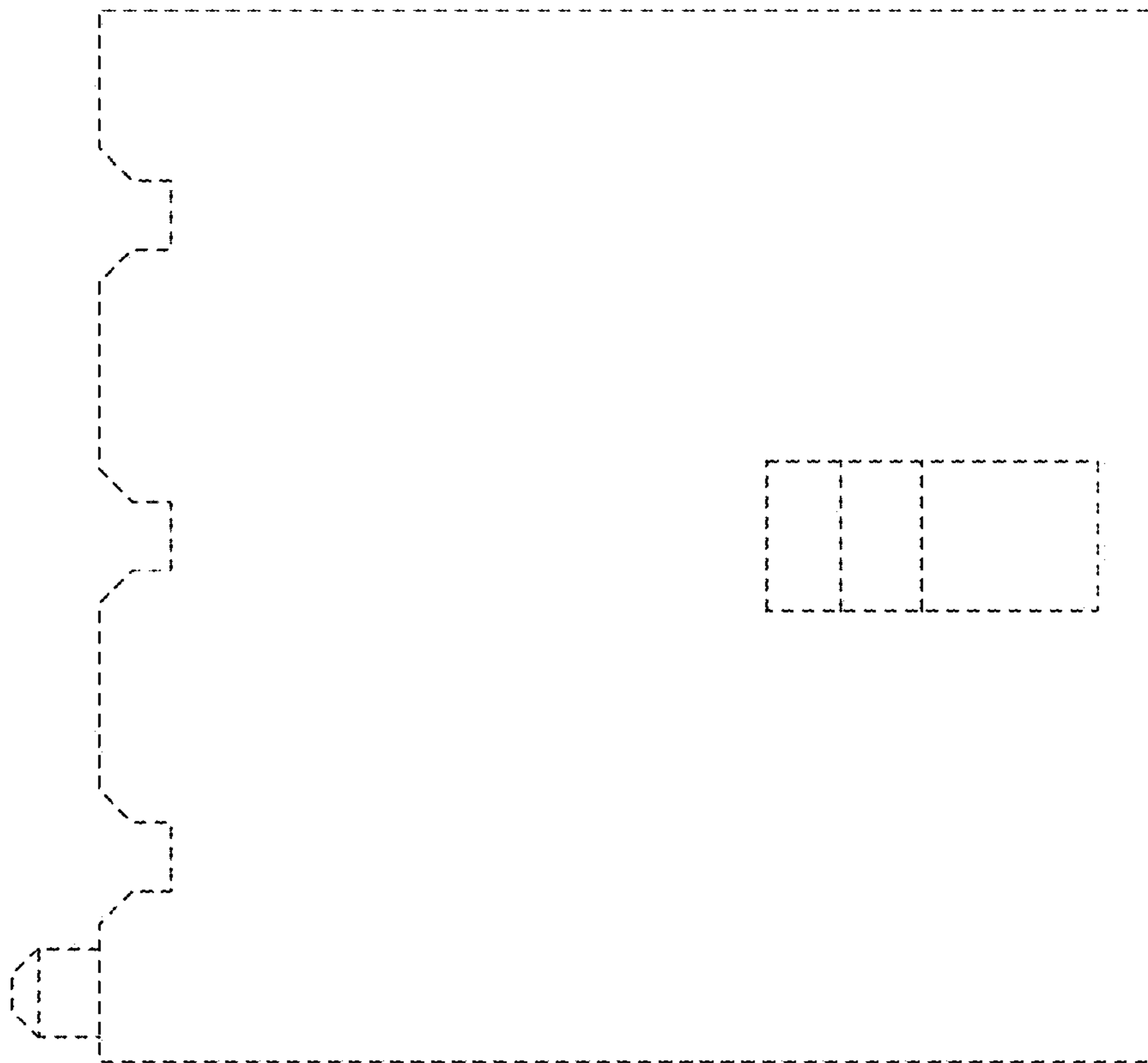


FIG. 23

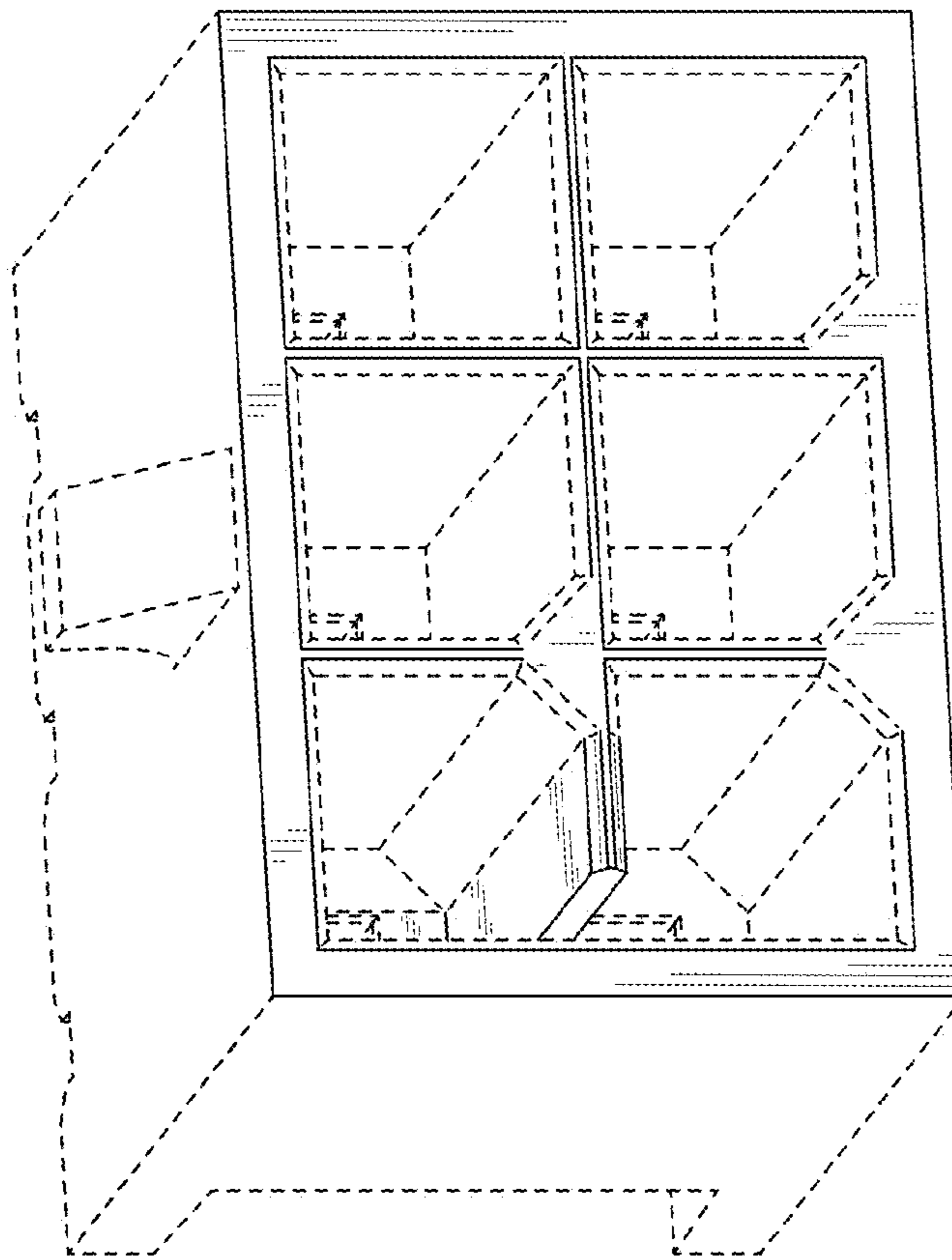


FIG. 26

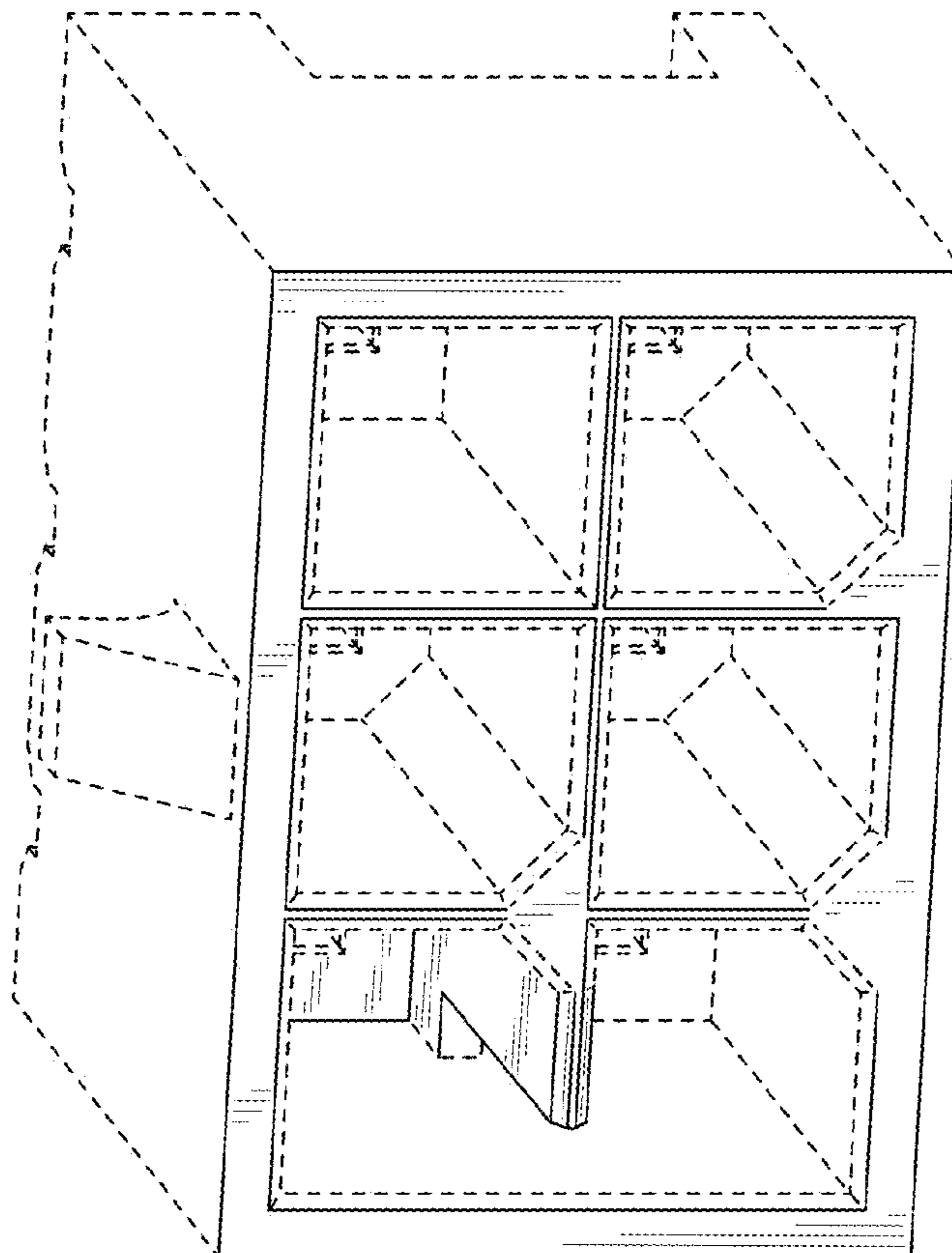


FIG. 25

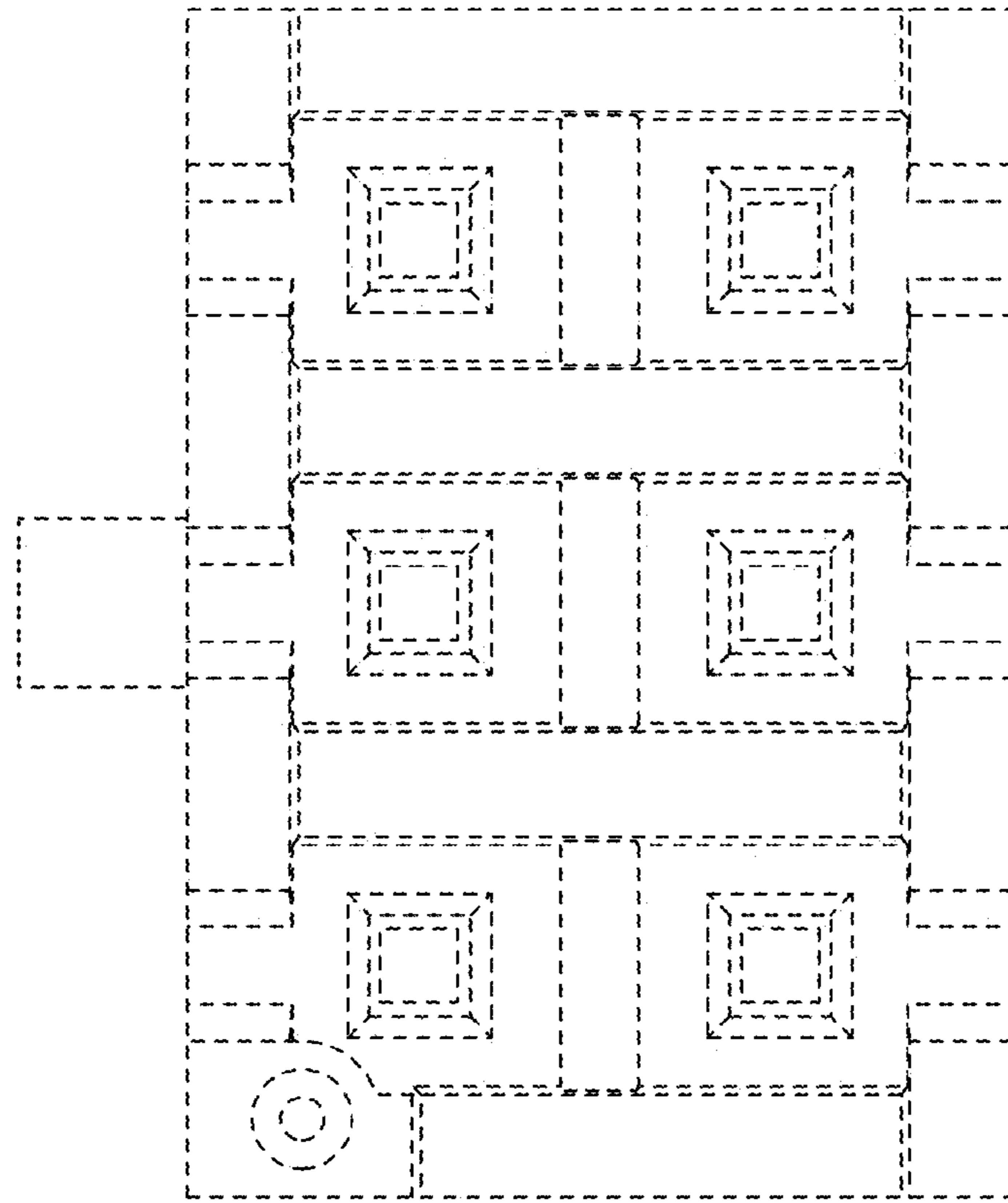


FIG. 27

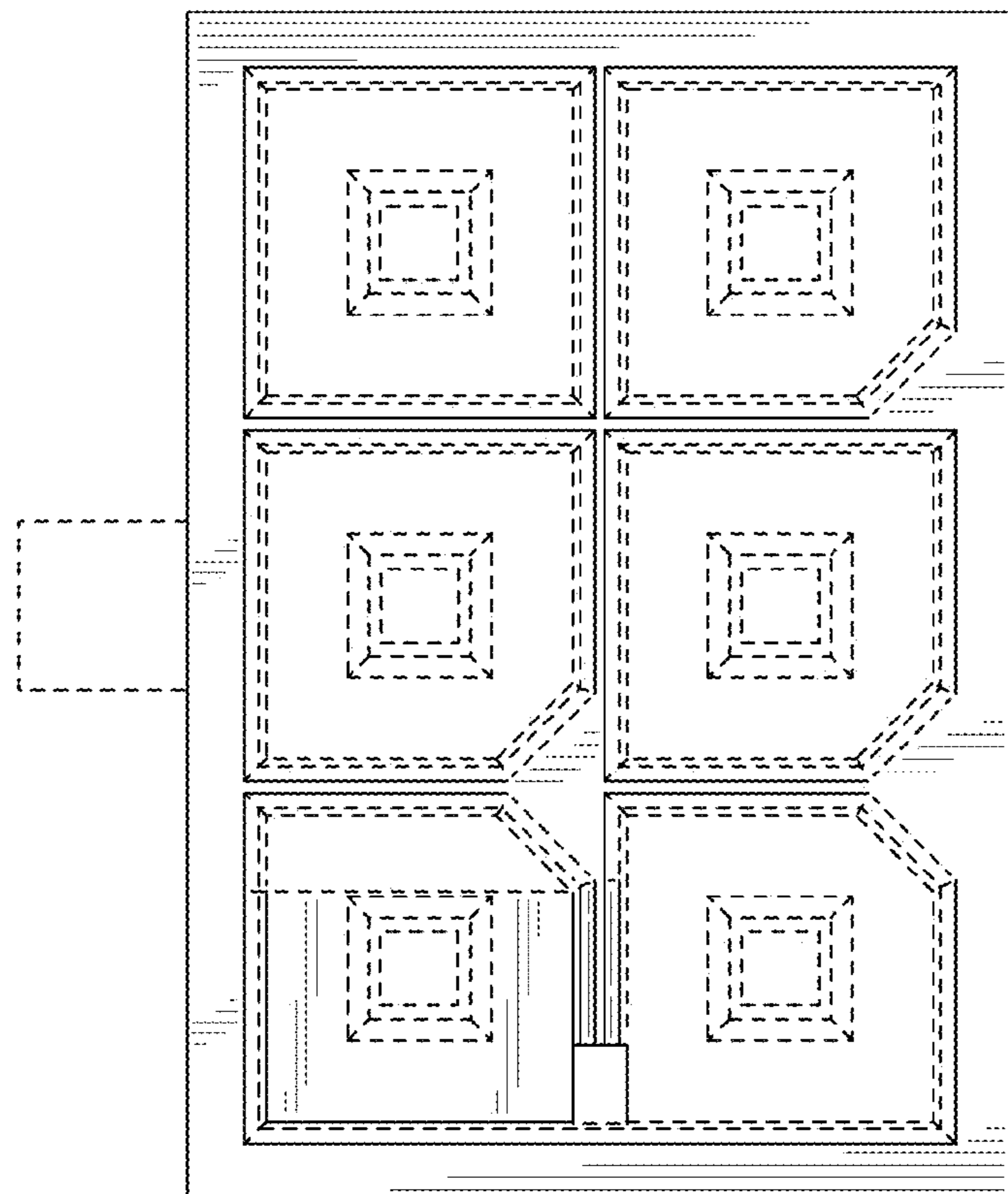


FIG. 28

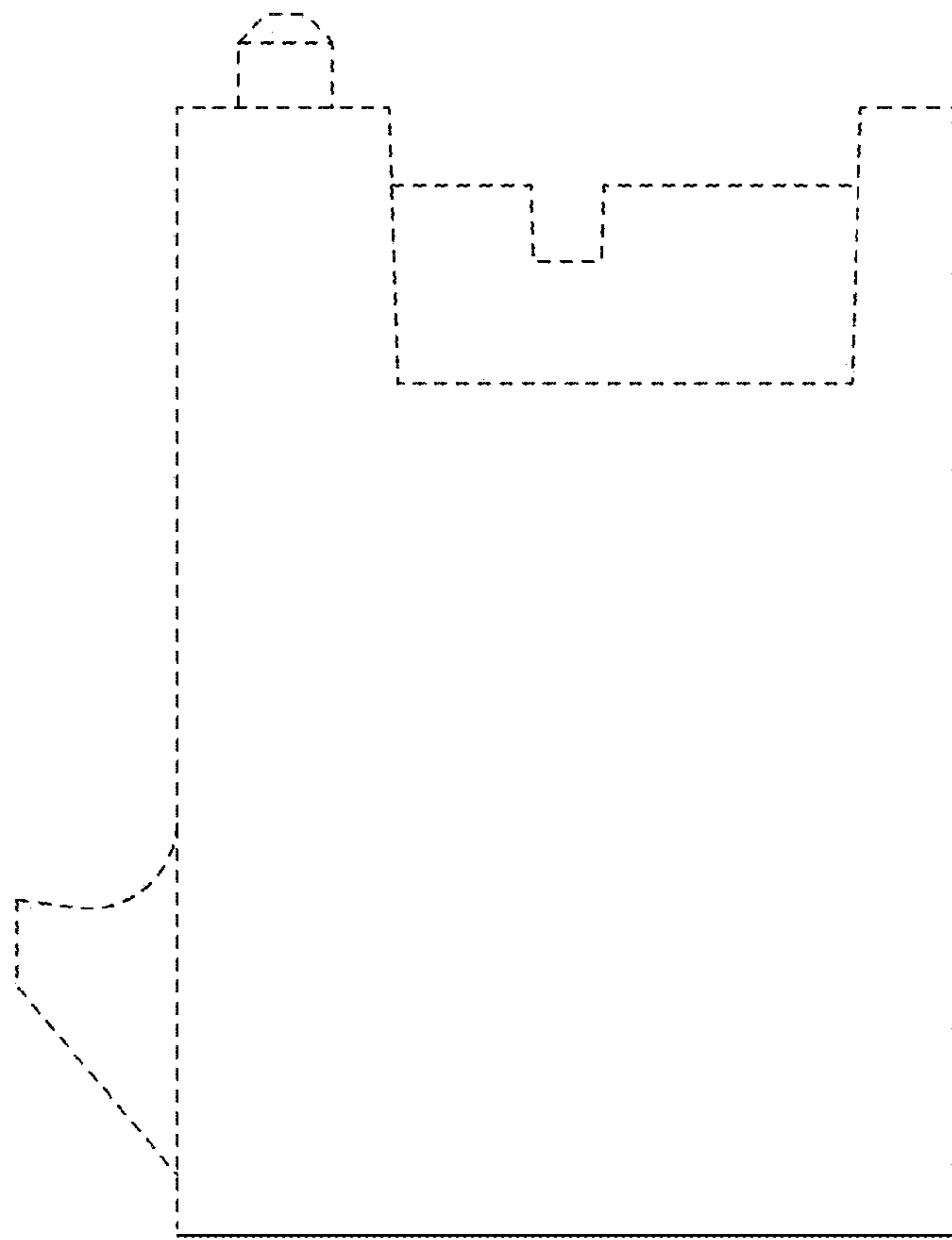


FIG. 29

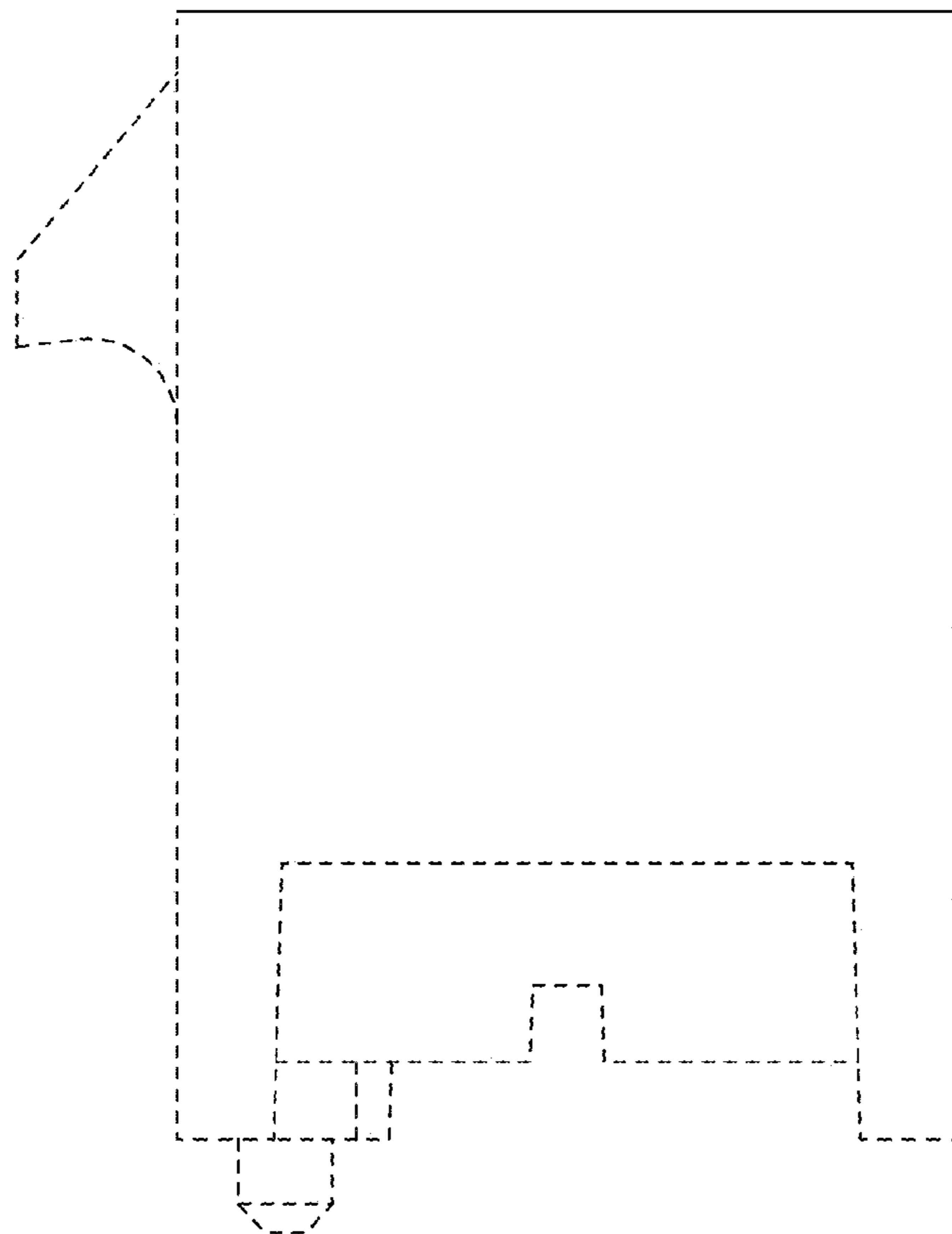


FIG. 30

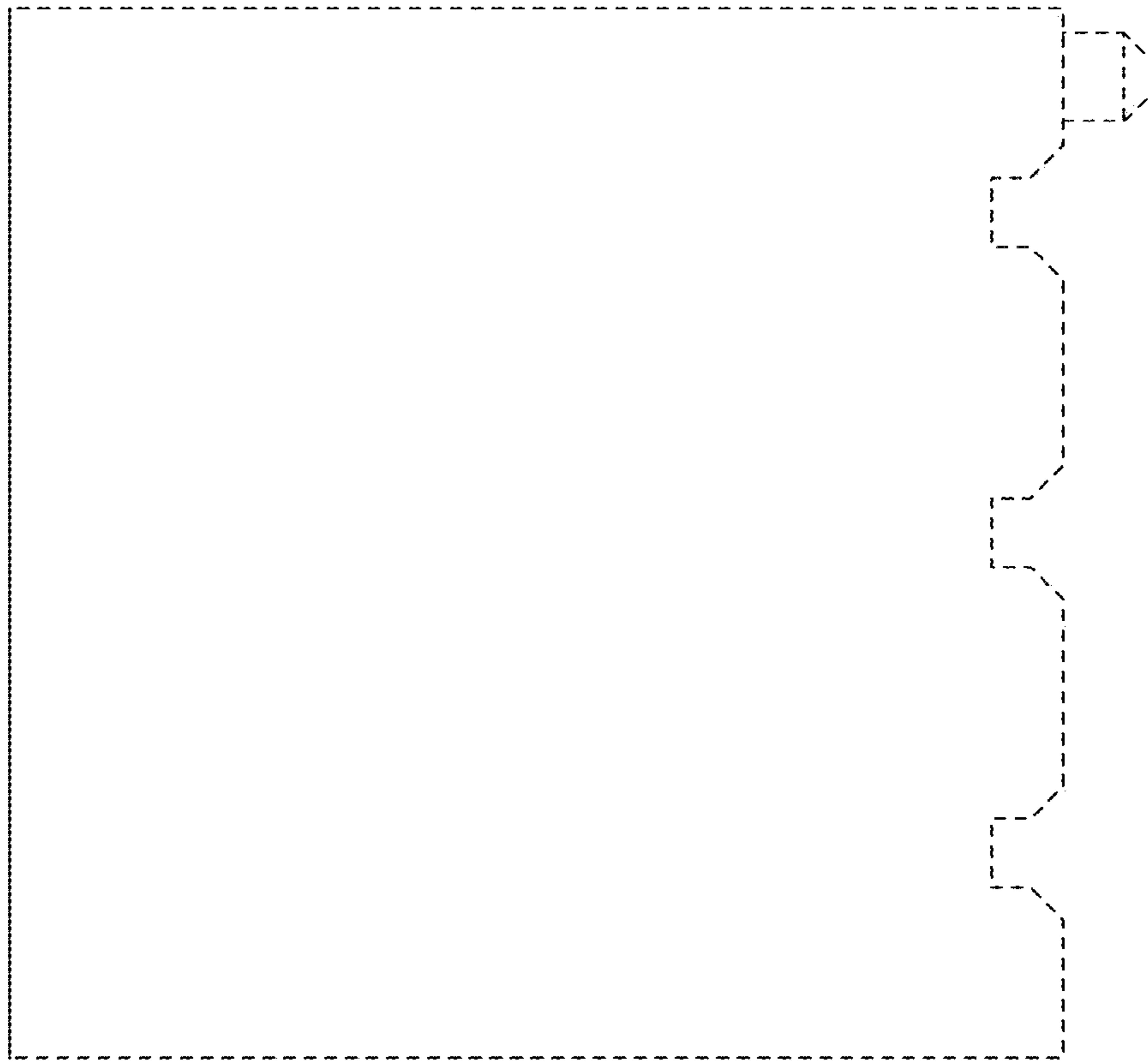


FIG. 32

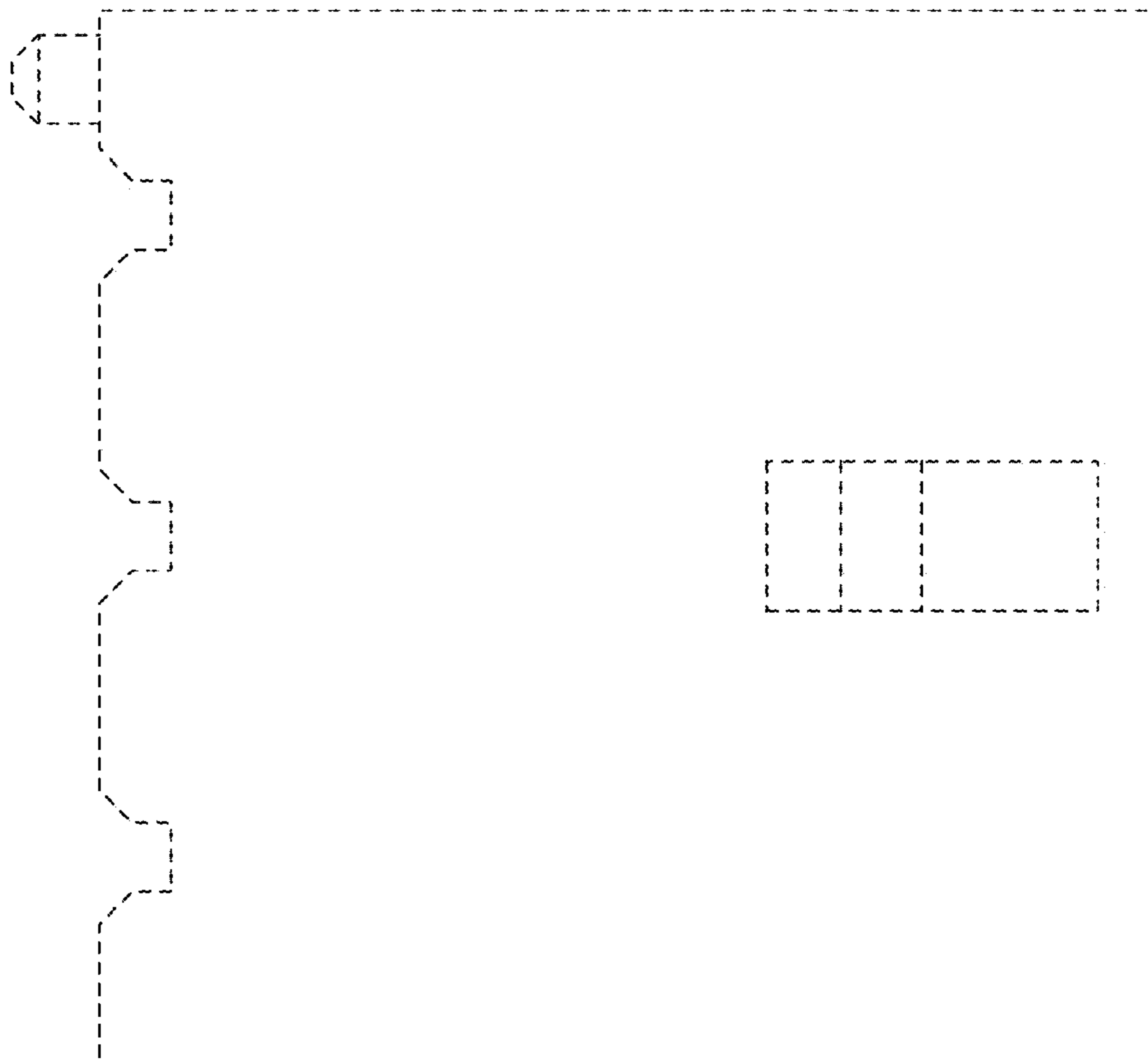


FIG. 31

FIG. 33

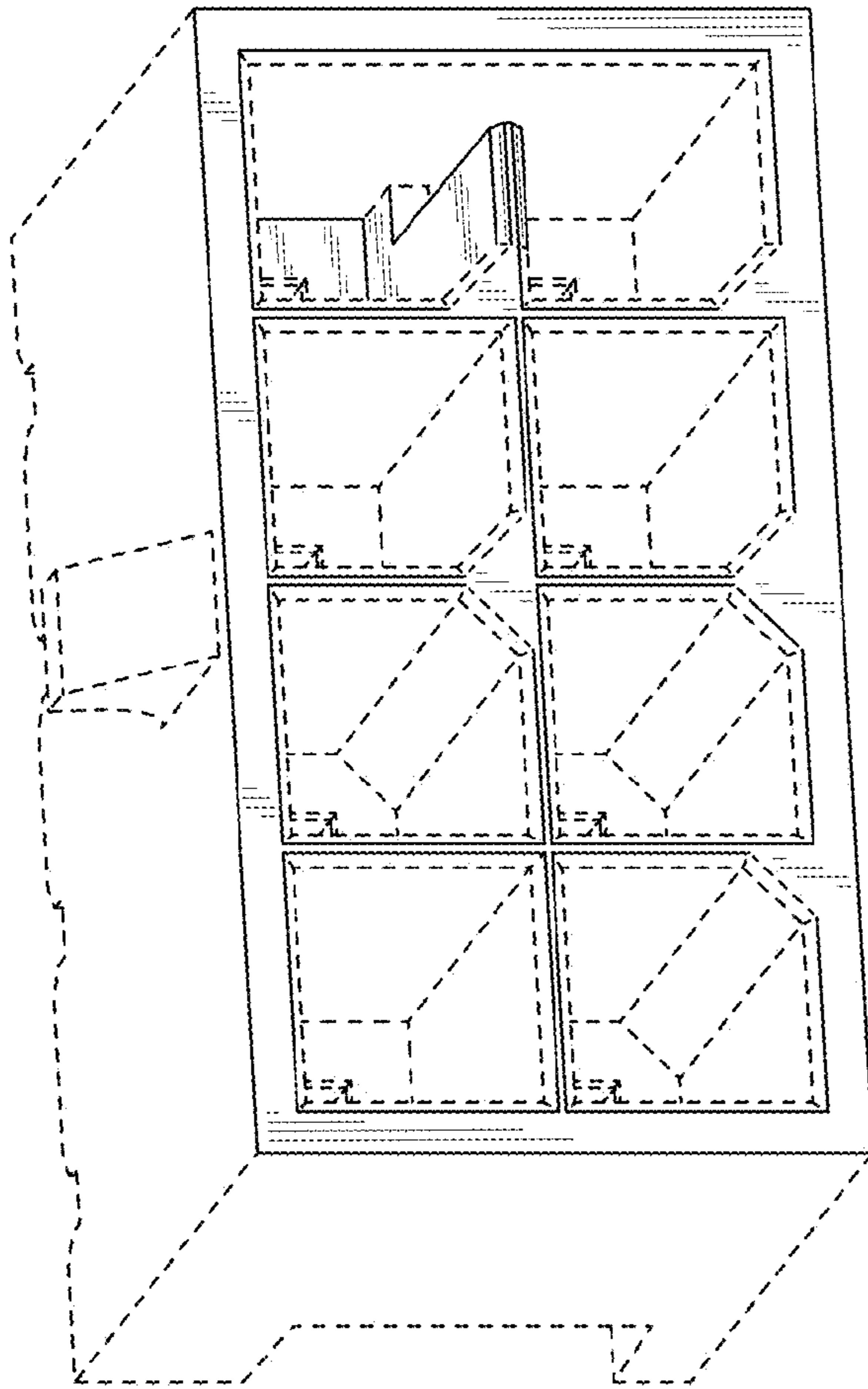
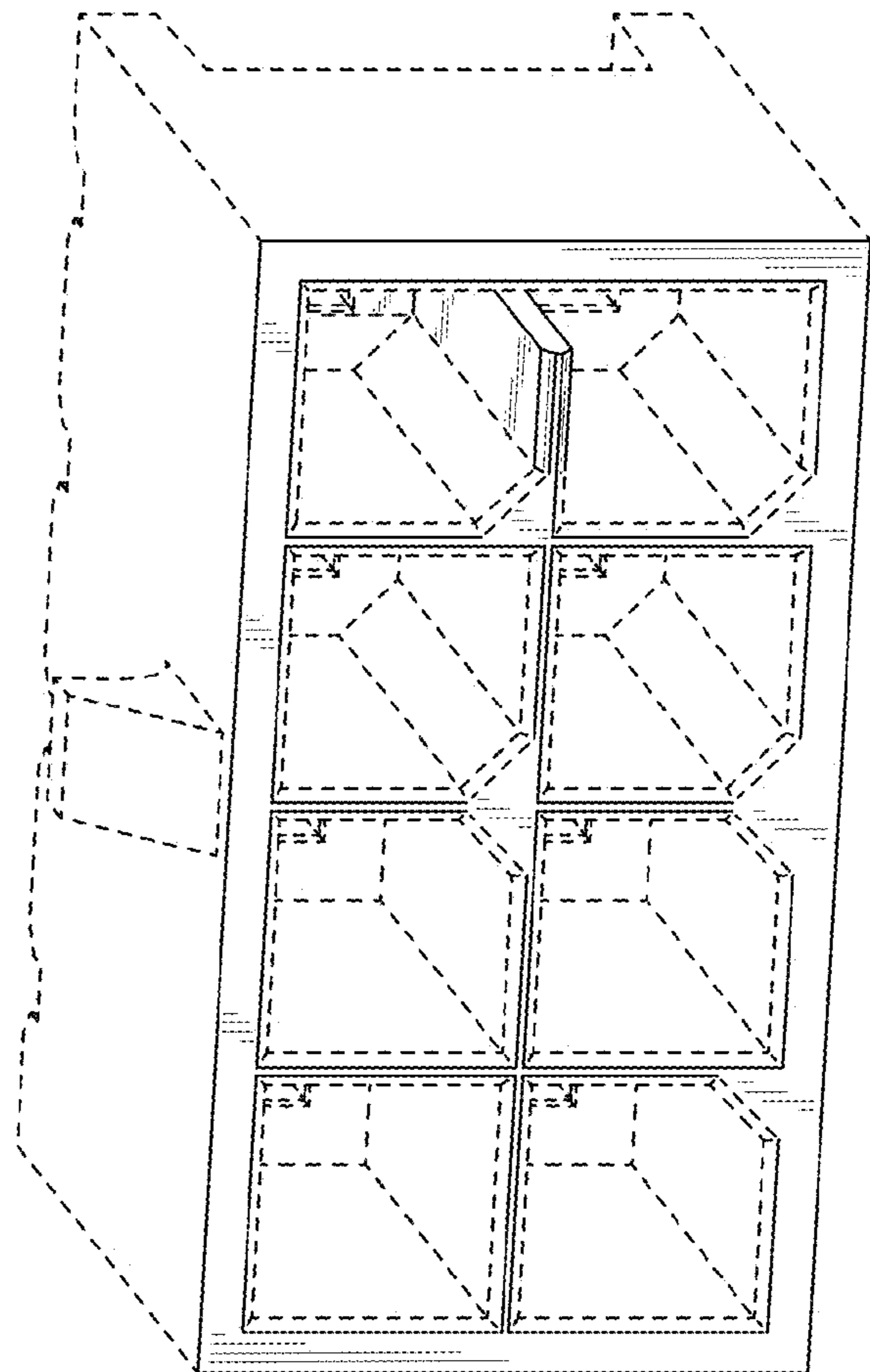


FIG. 34



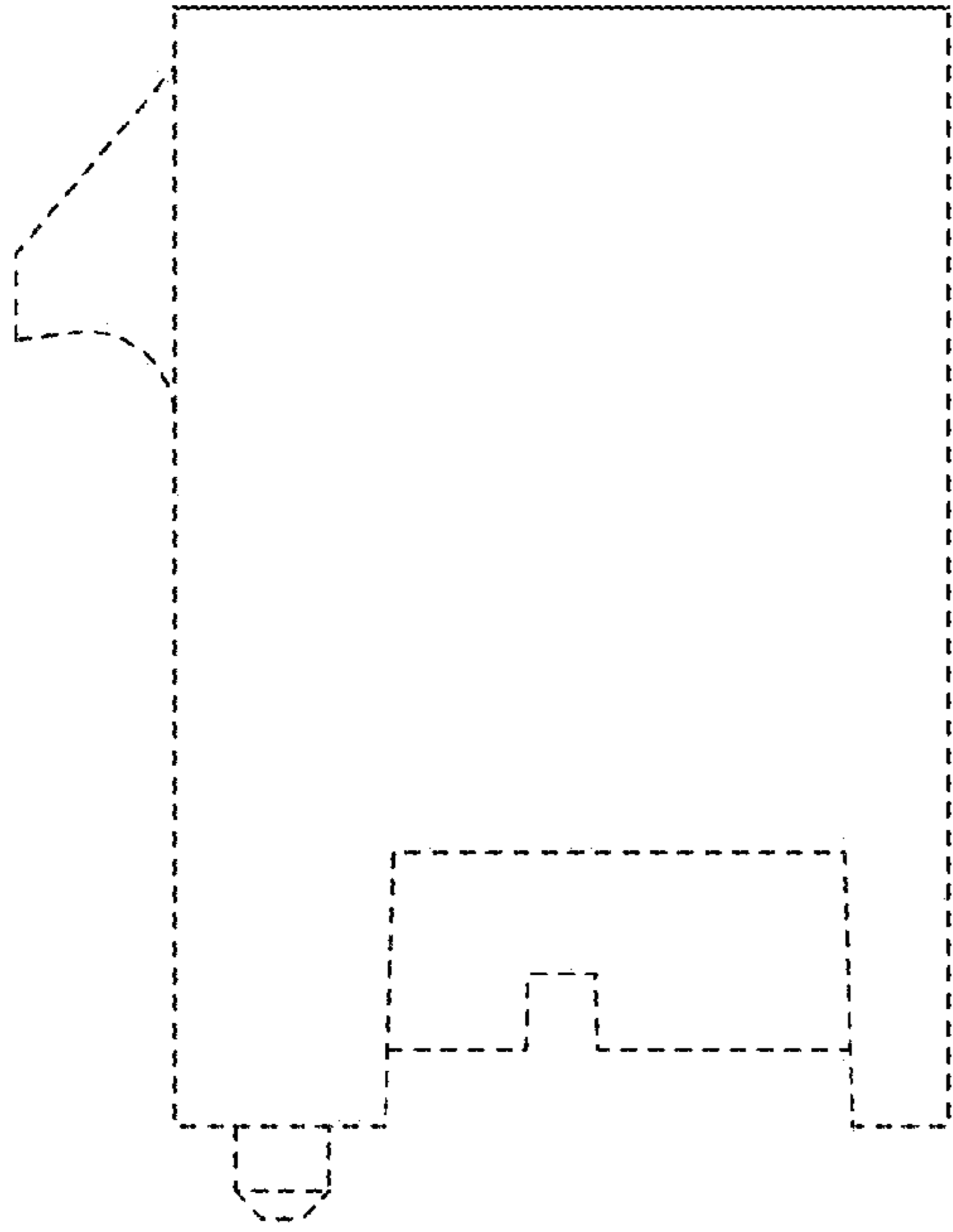


FIG. 37

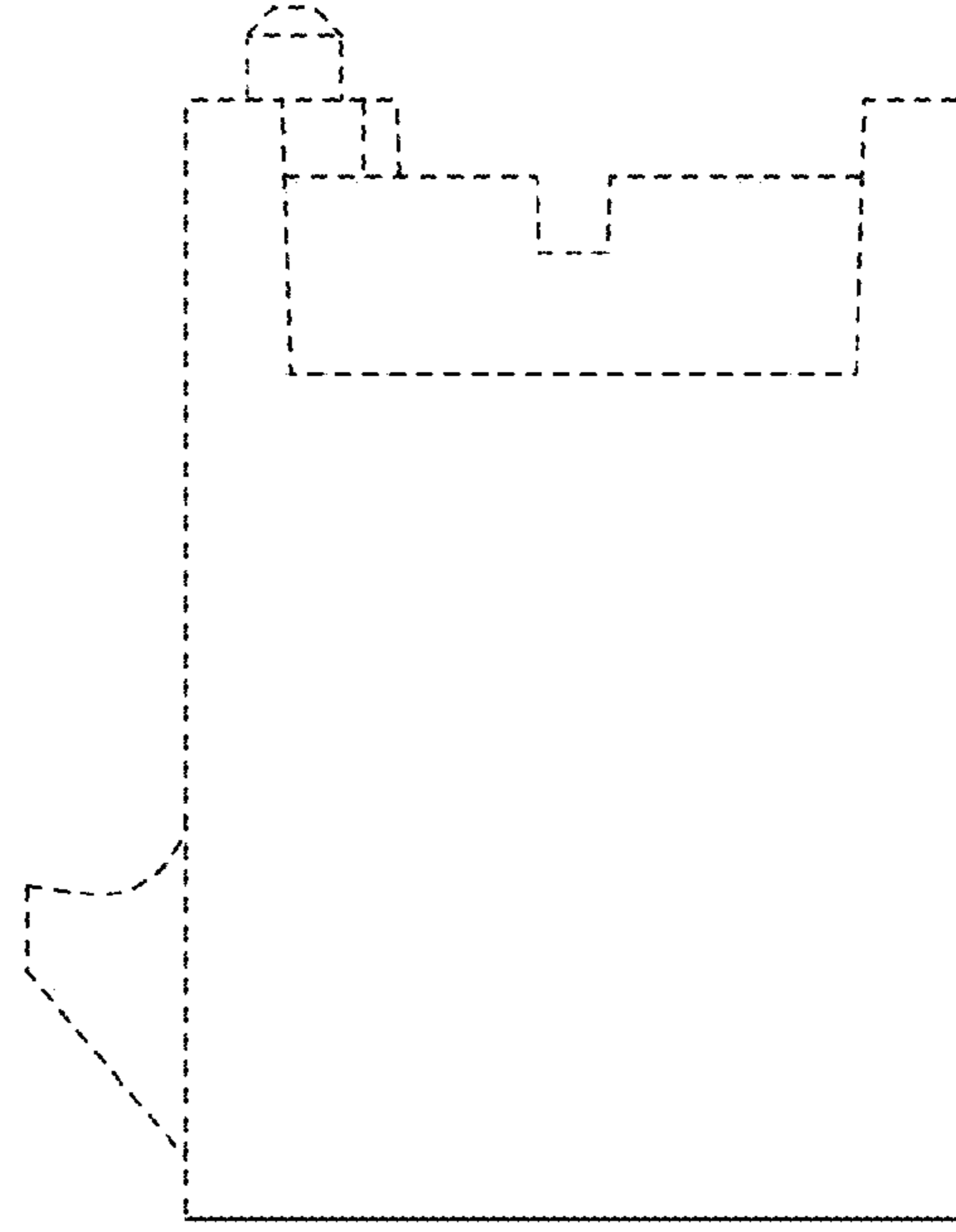


FIG. 38

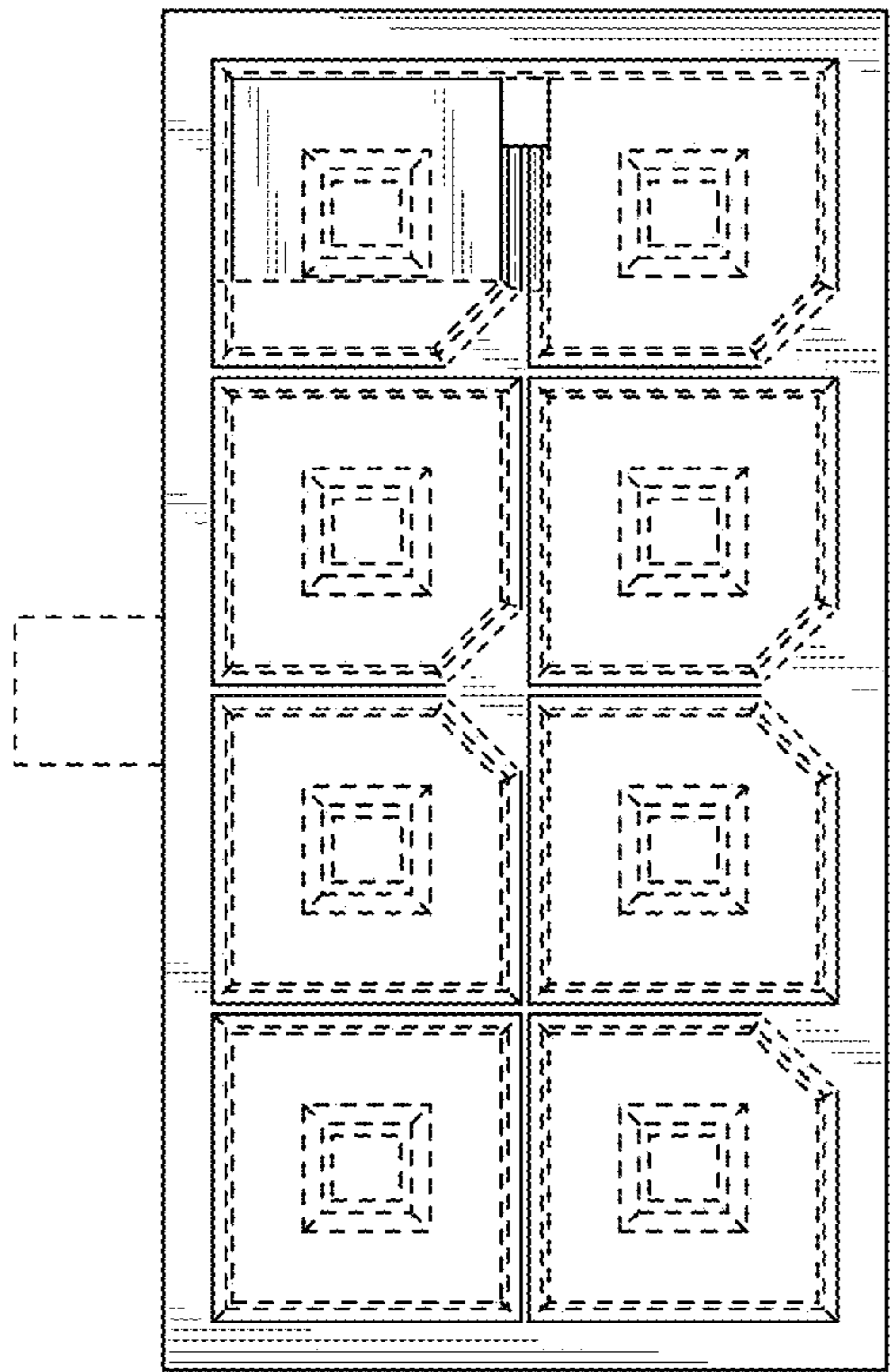


FIG. 35

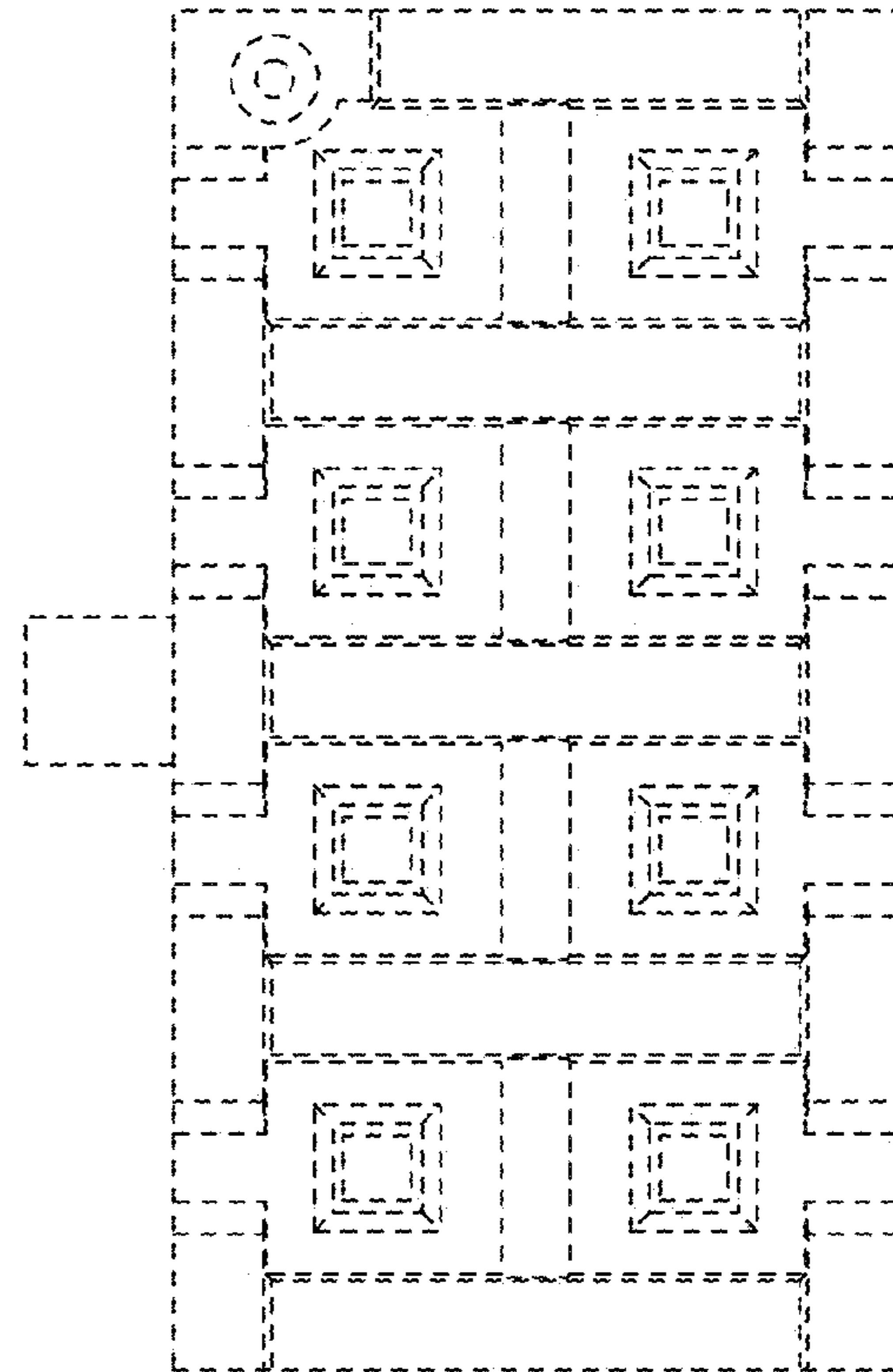


FIG. 36

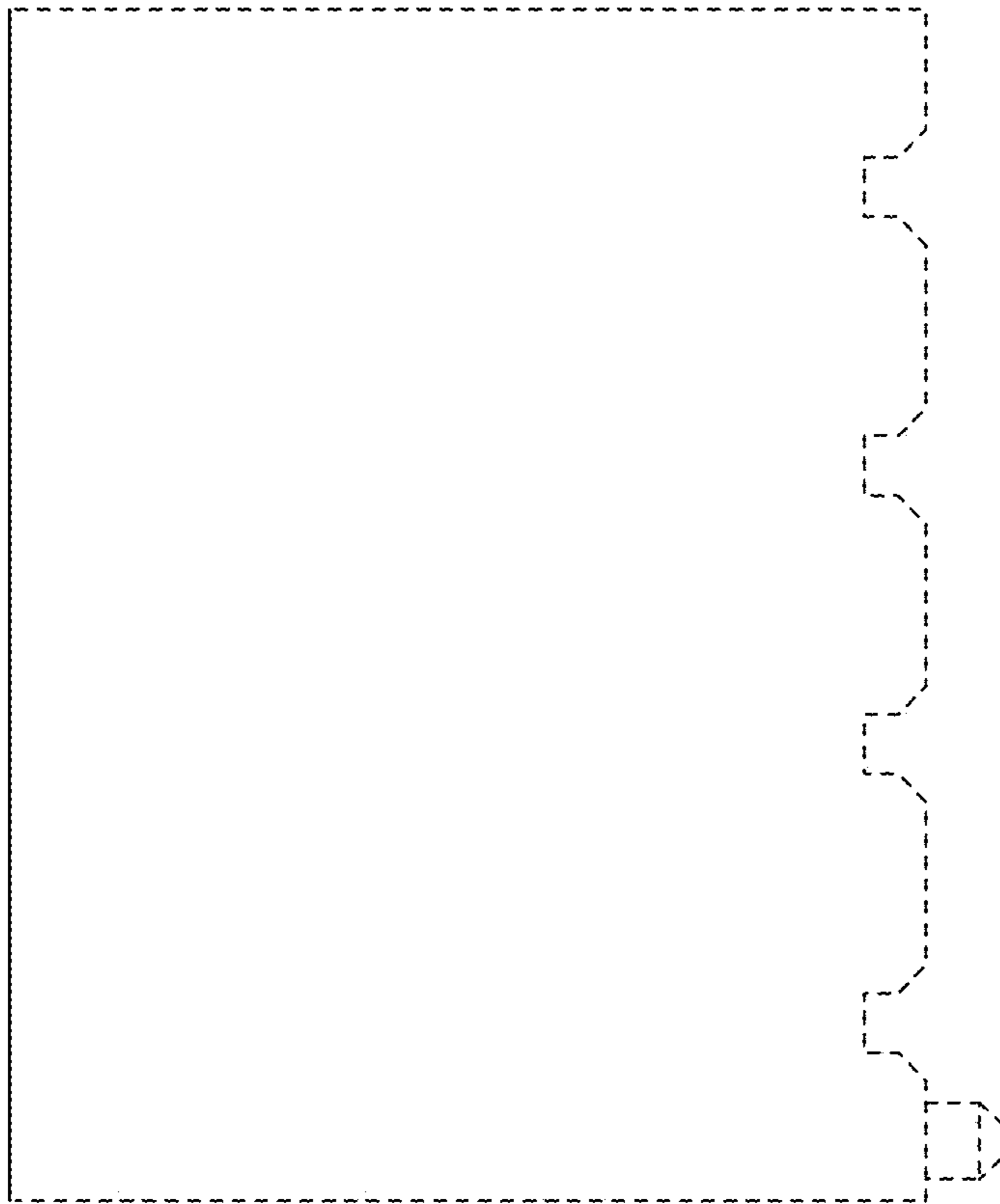


FIG. 40

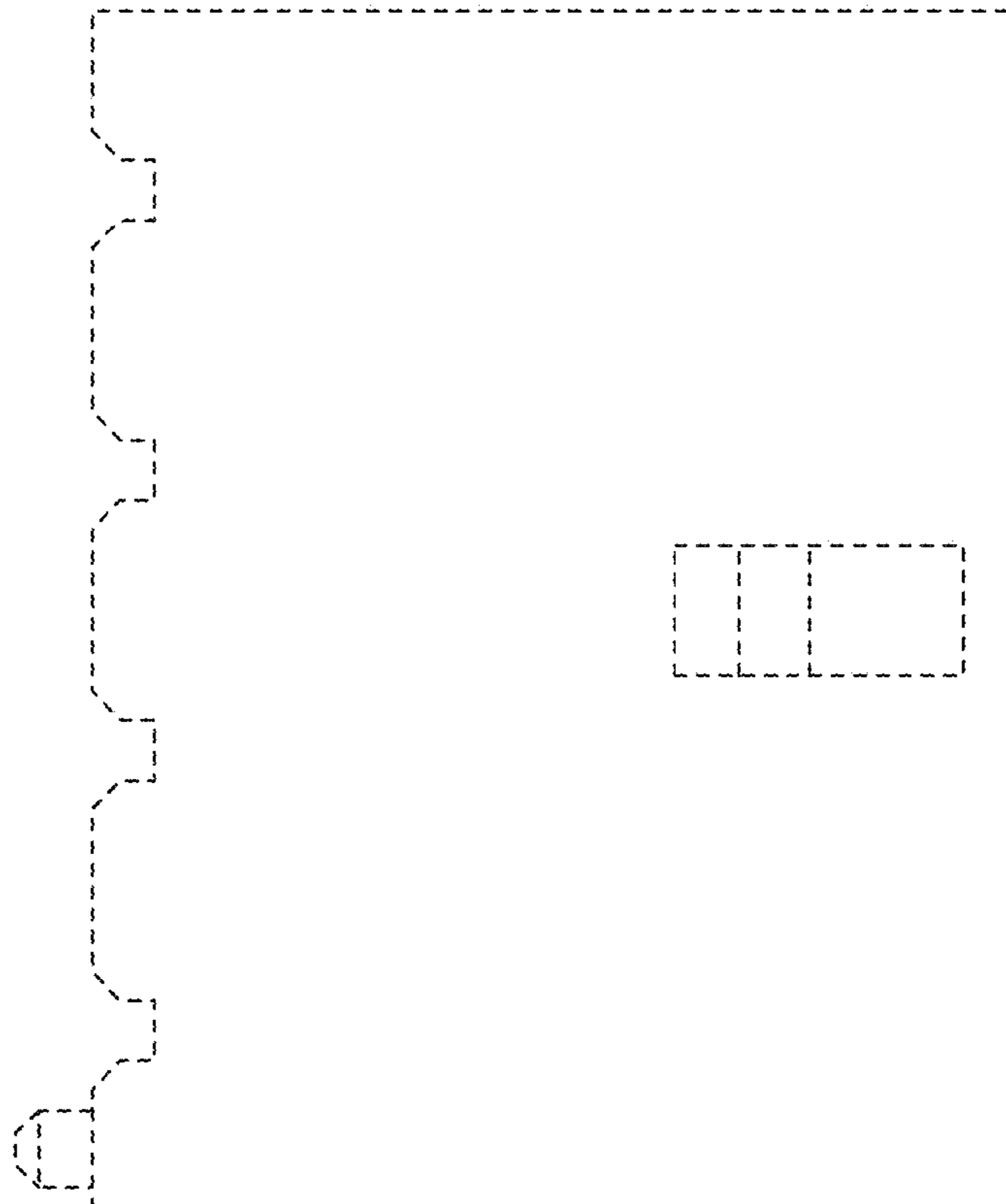


FIG. 39

FIG. 41

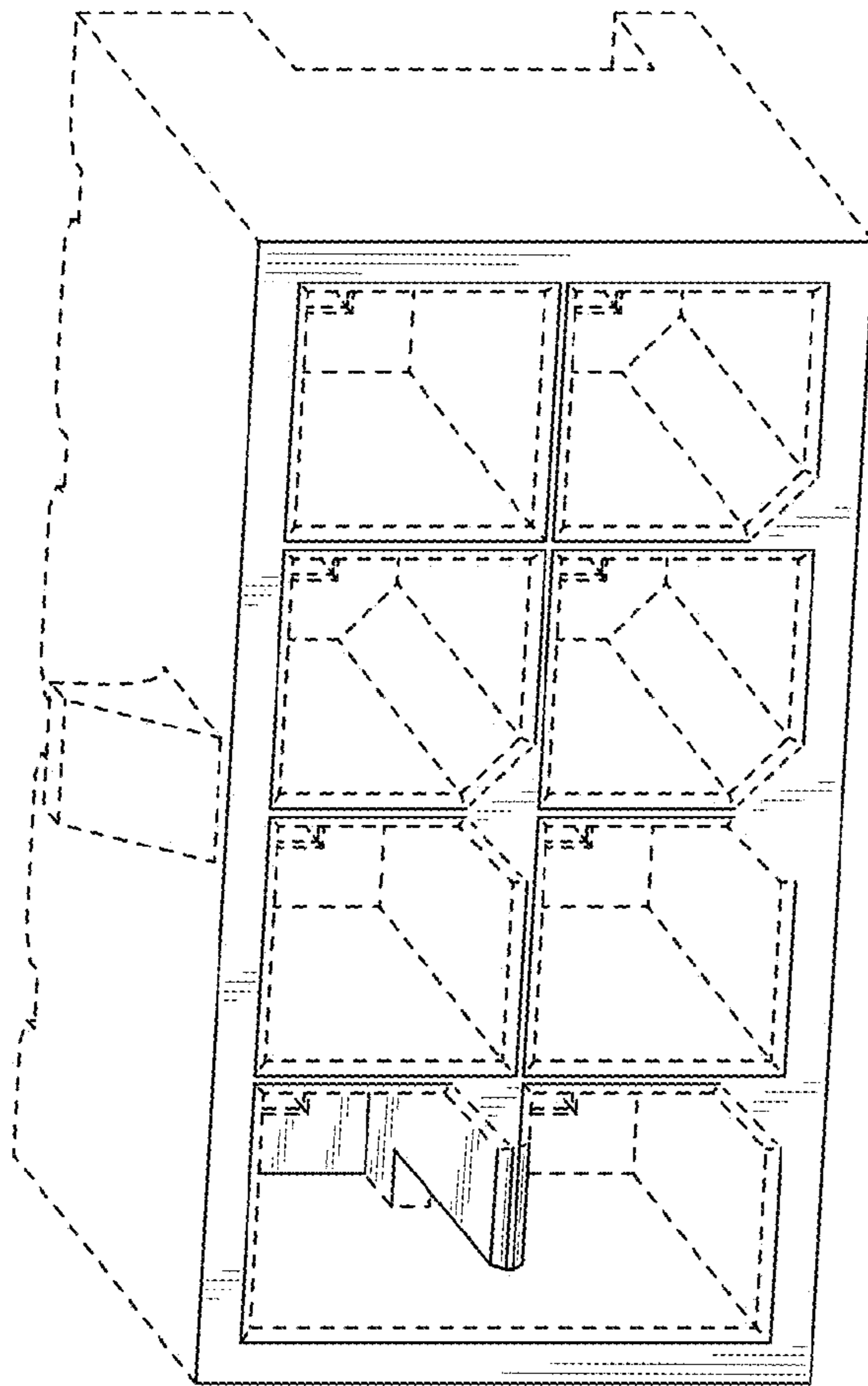
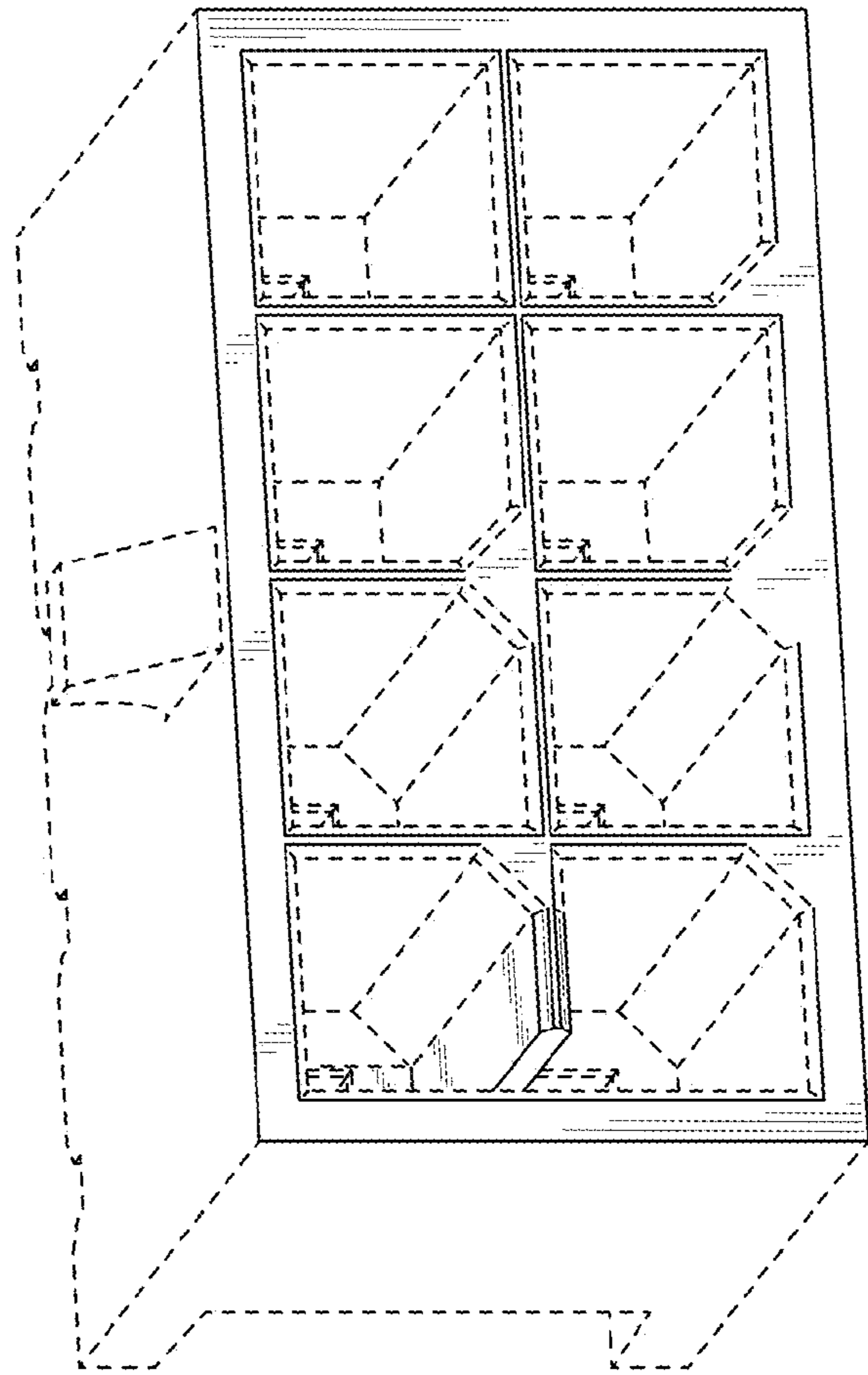


FIG. 42



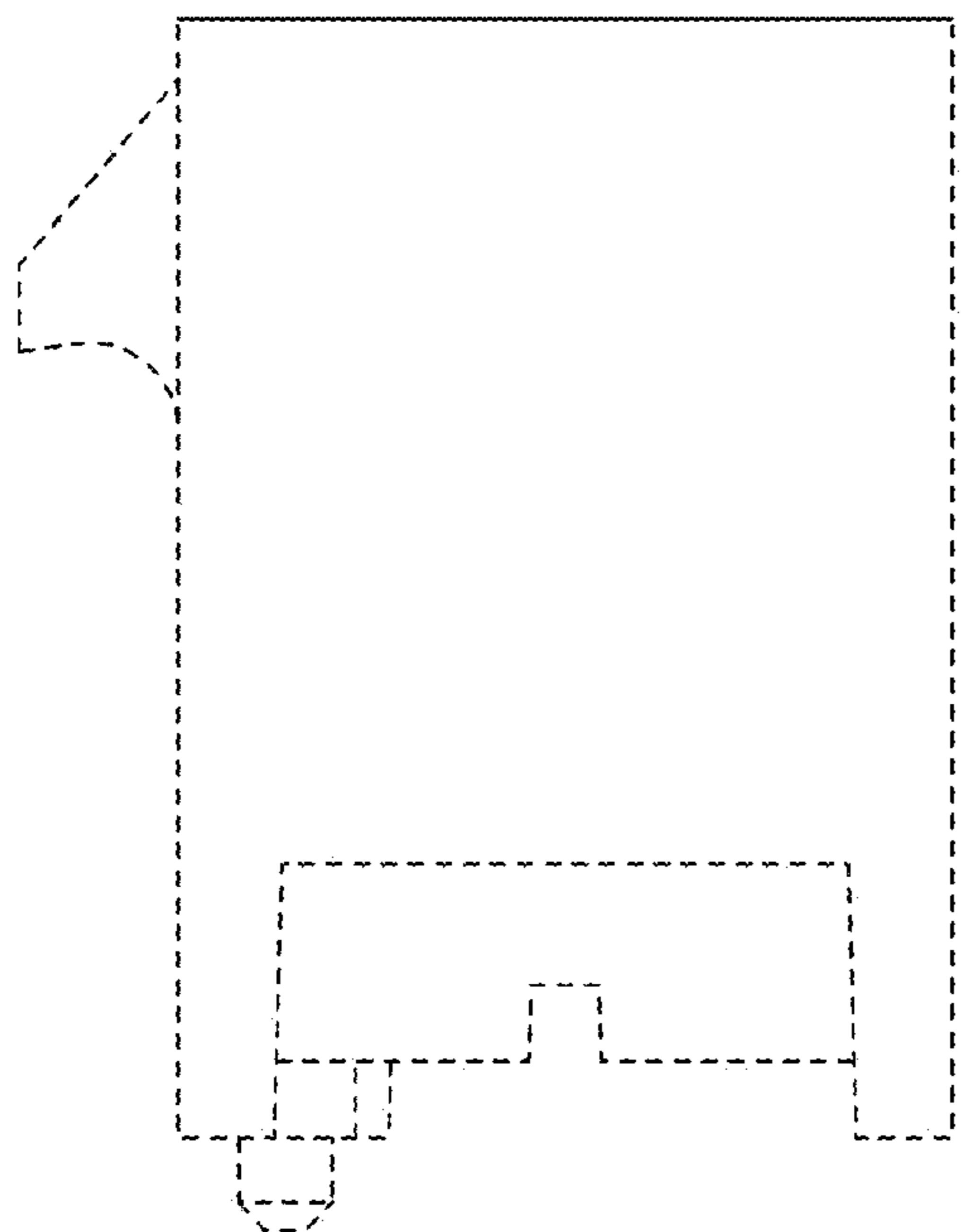


FIG. 45

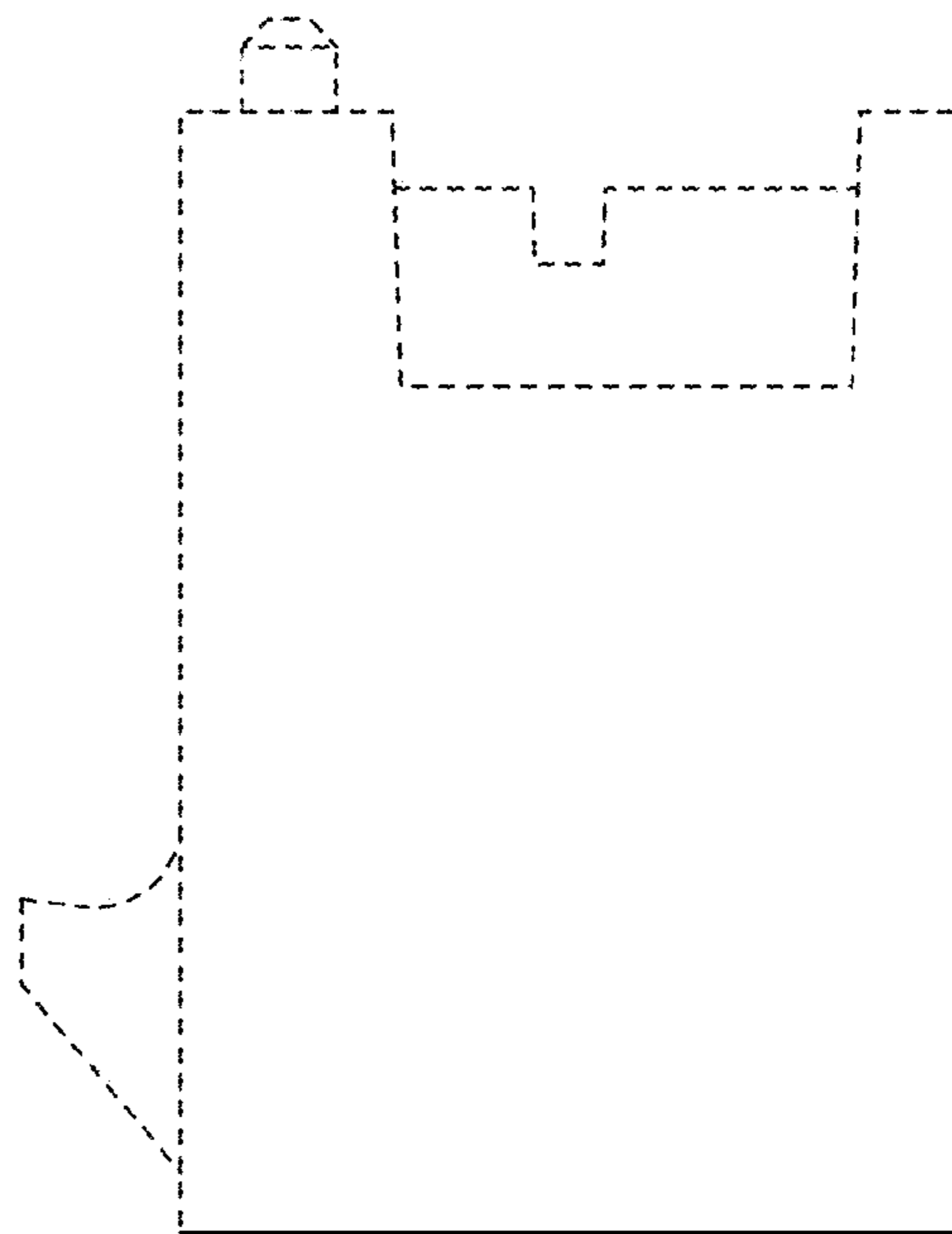


FIG. 46

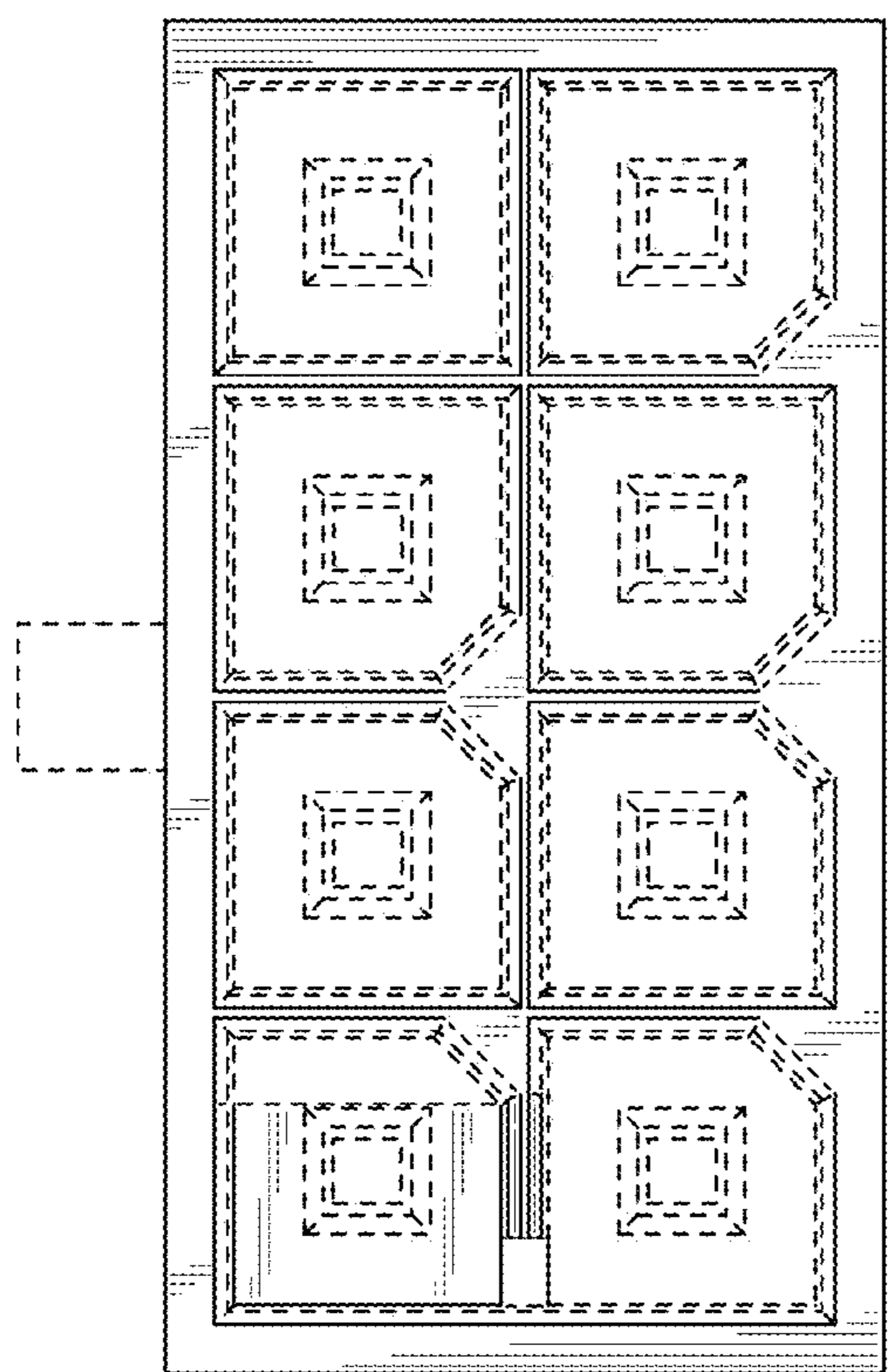


FIG. 43

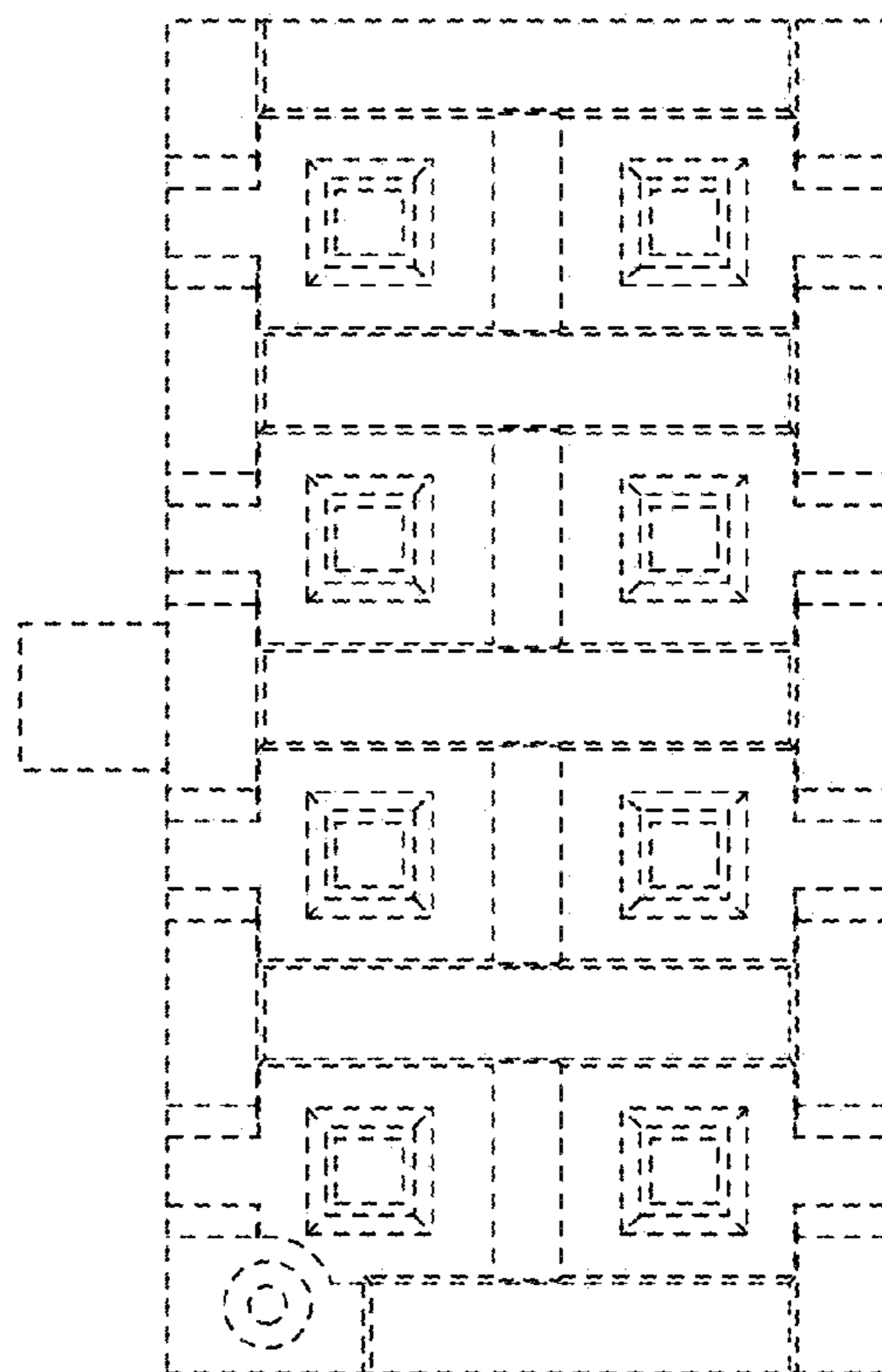


FIG. 44

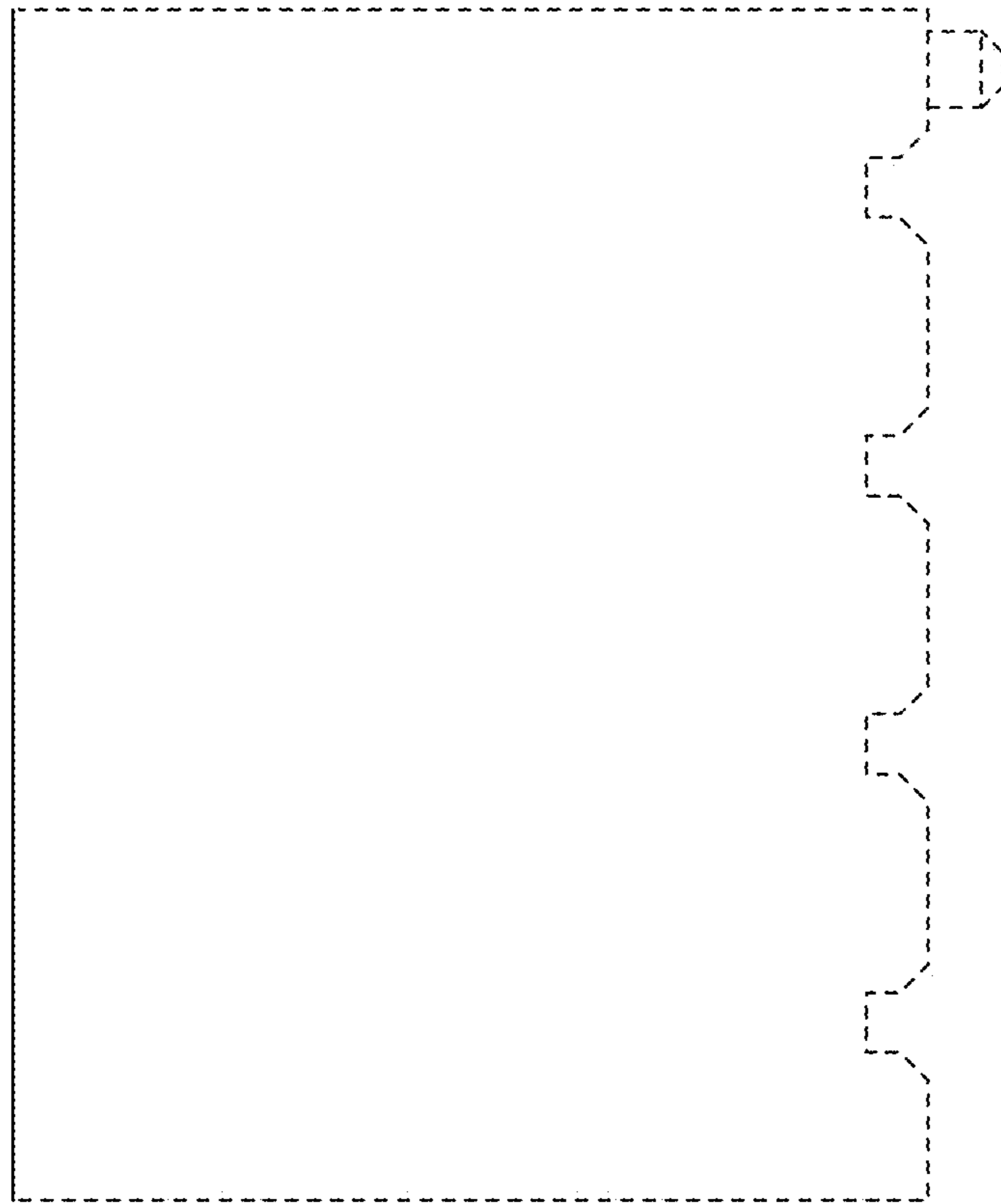


FIG. 47

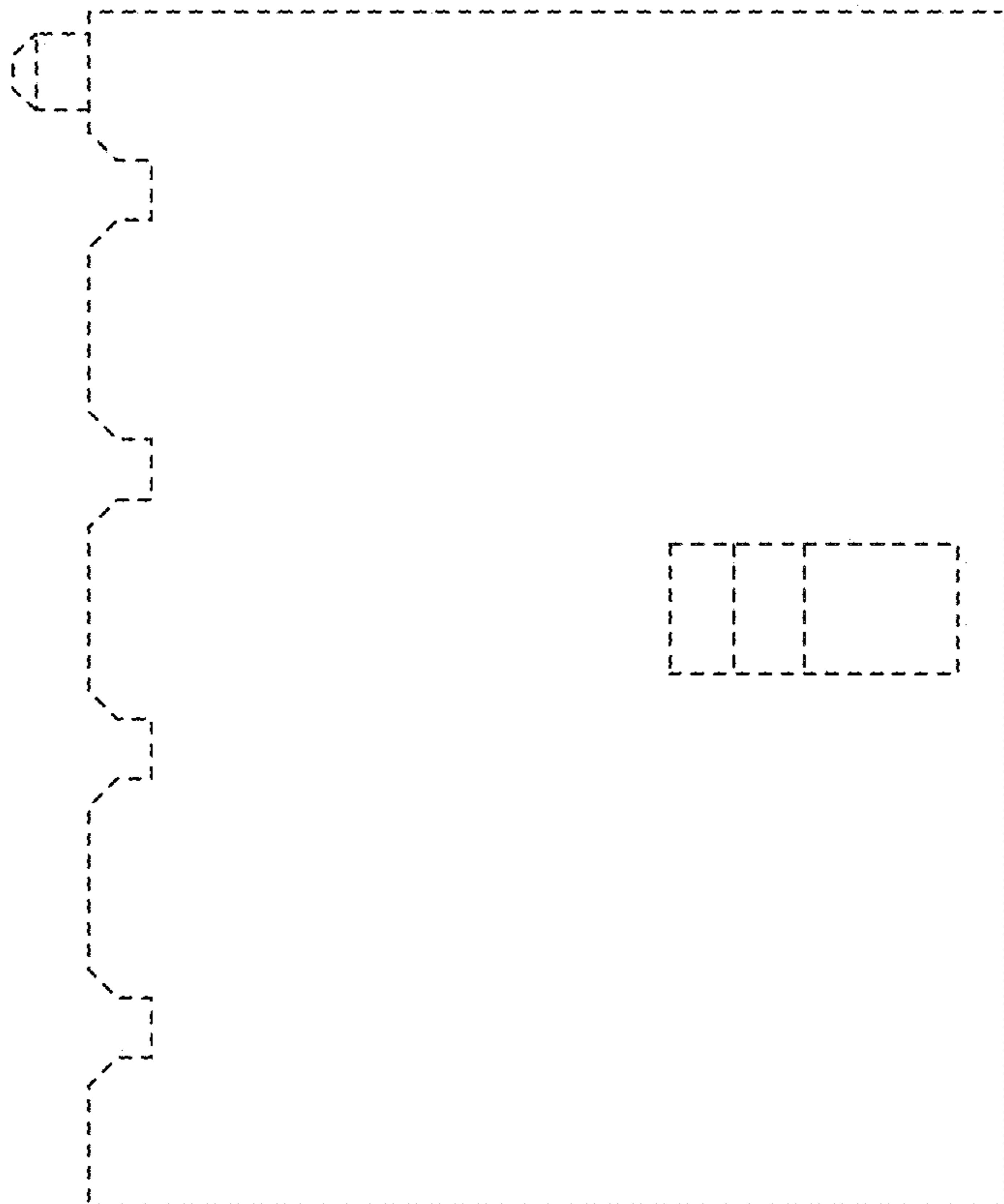


FIG. 48

FIG. 49

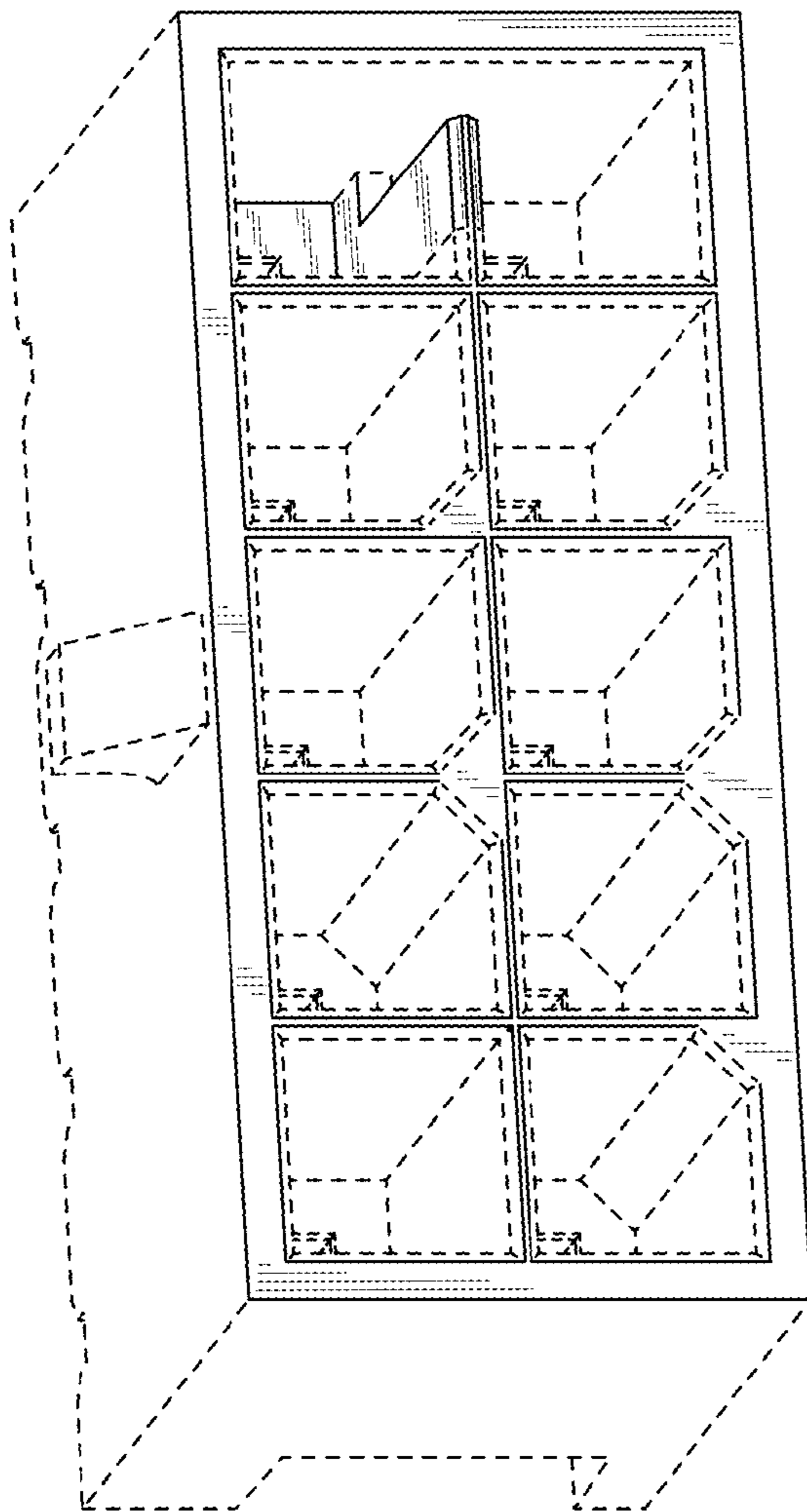
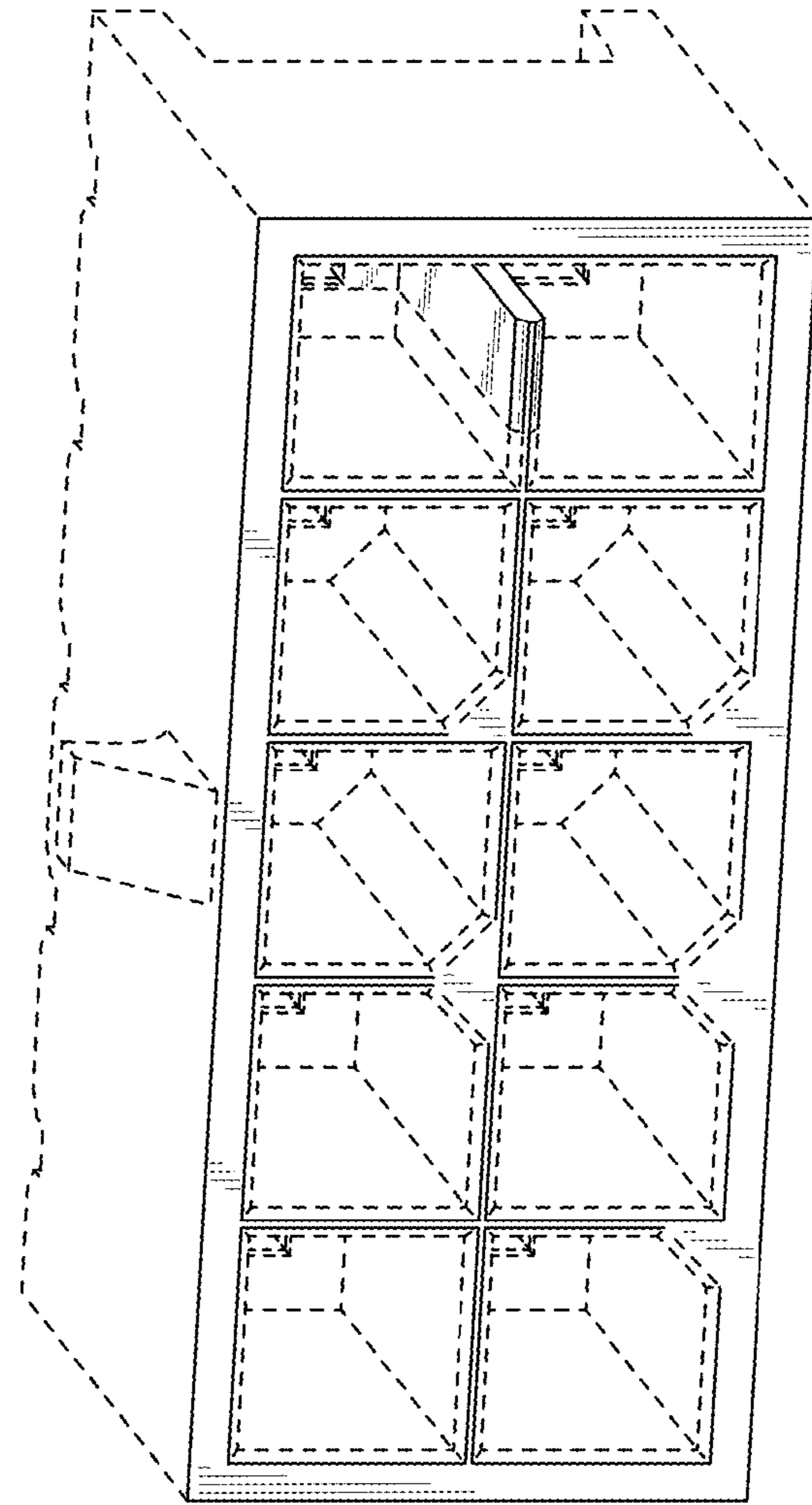


FIG. 50



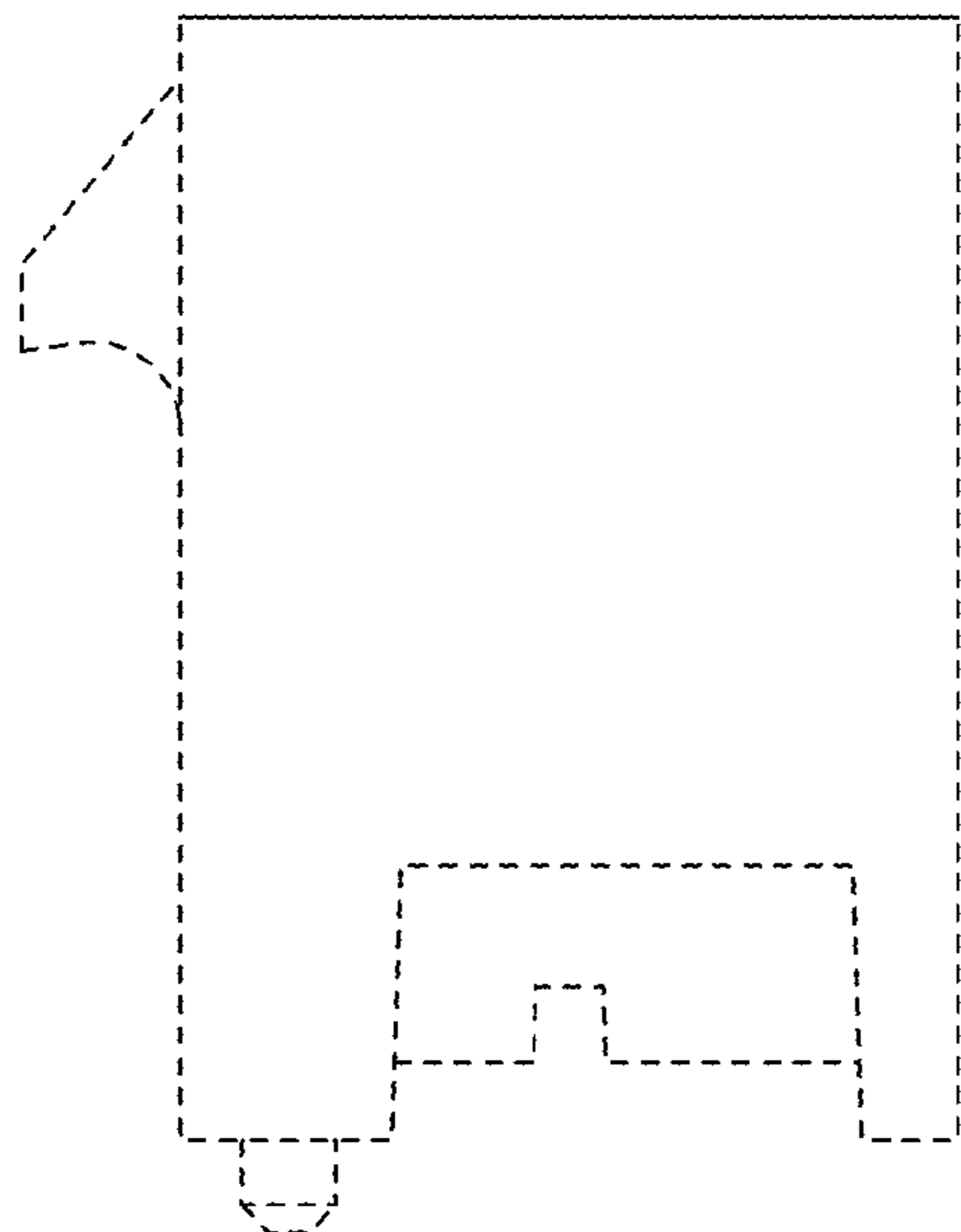


FIG. 53

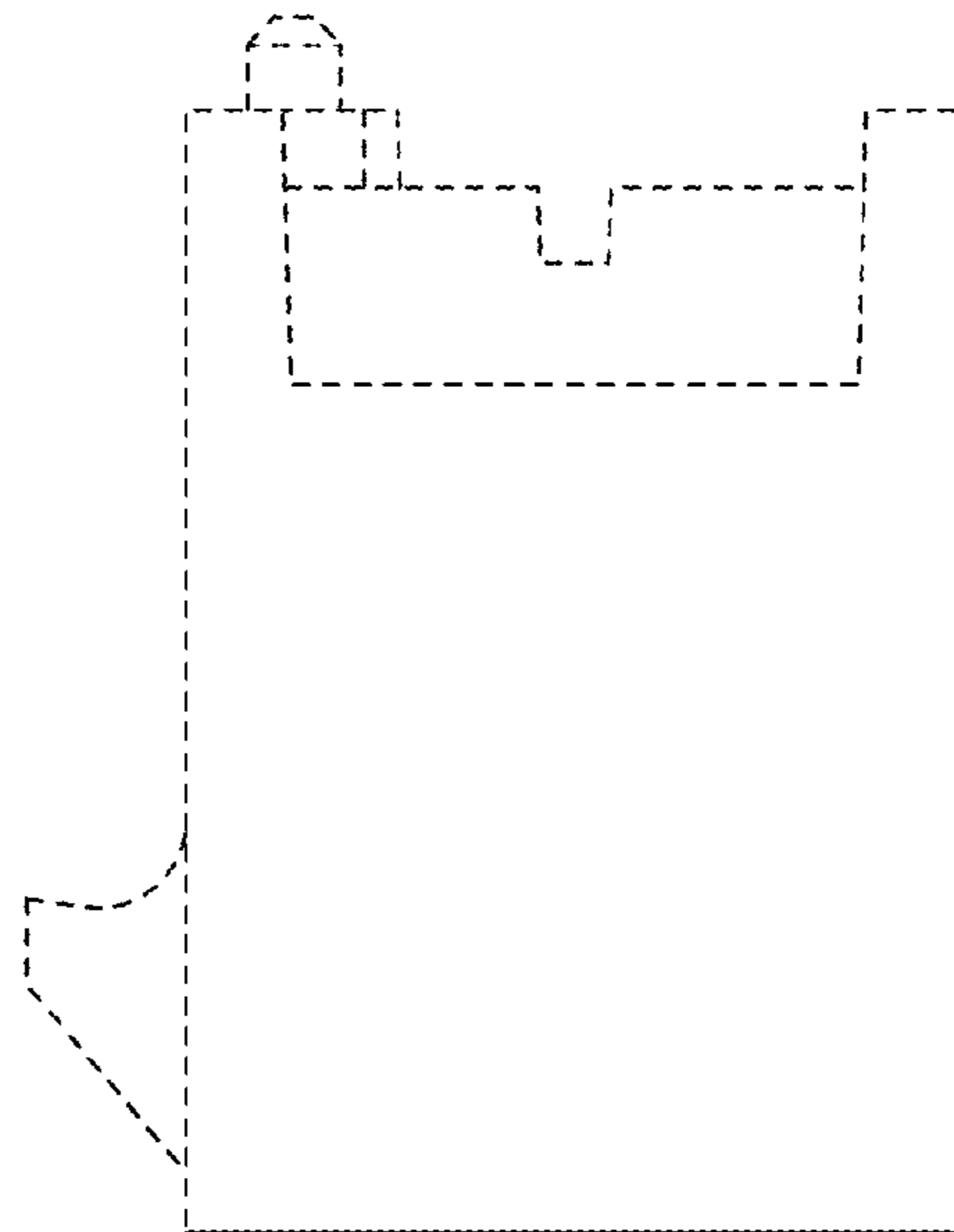


FIG. 54

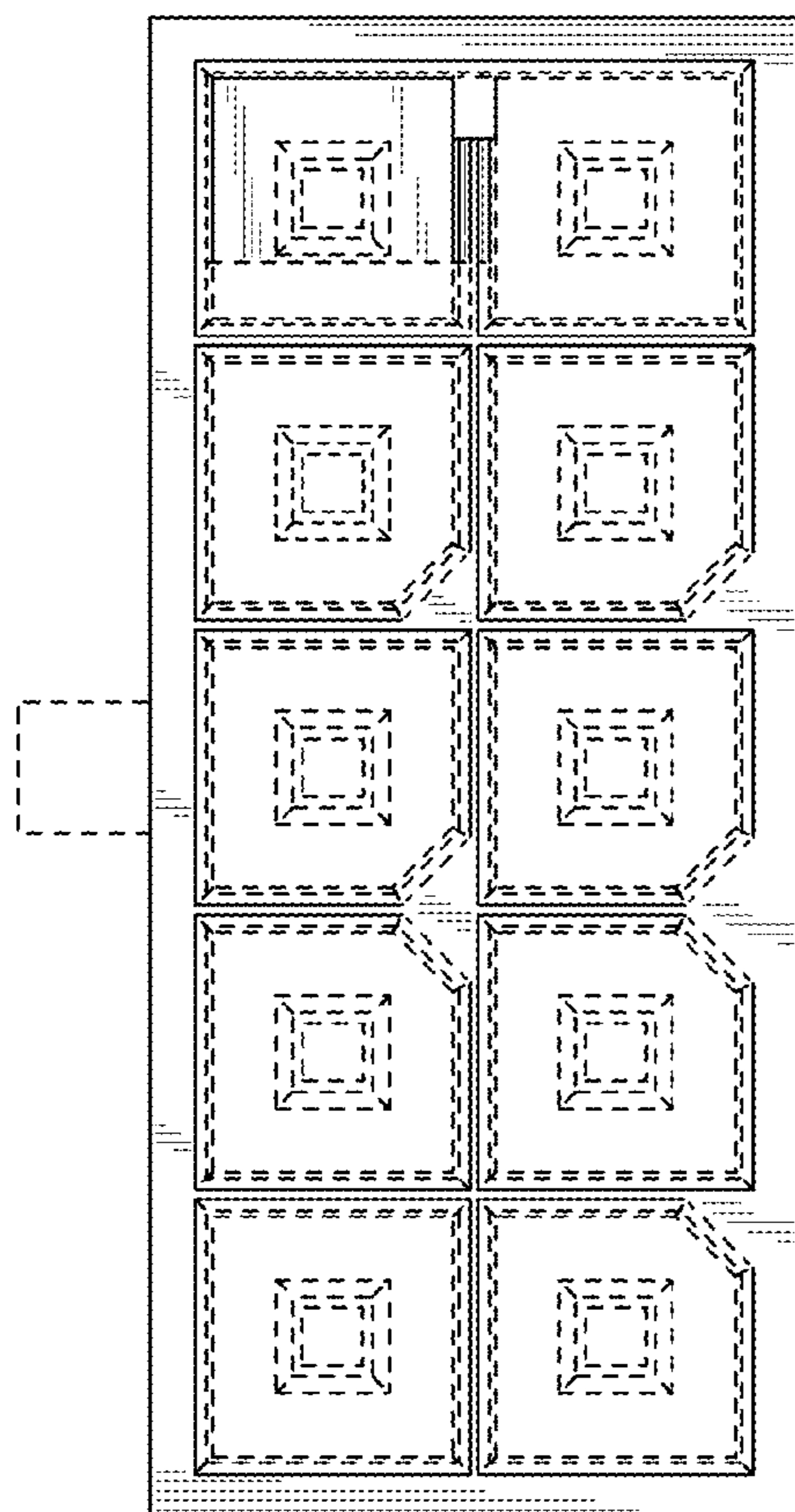


FIG. 51

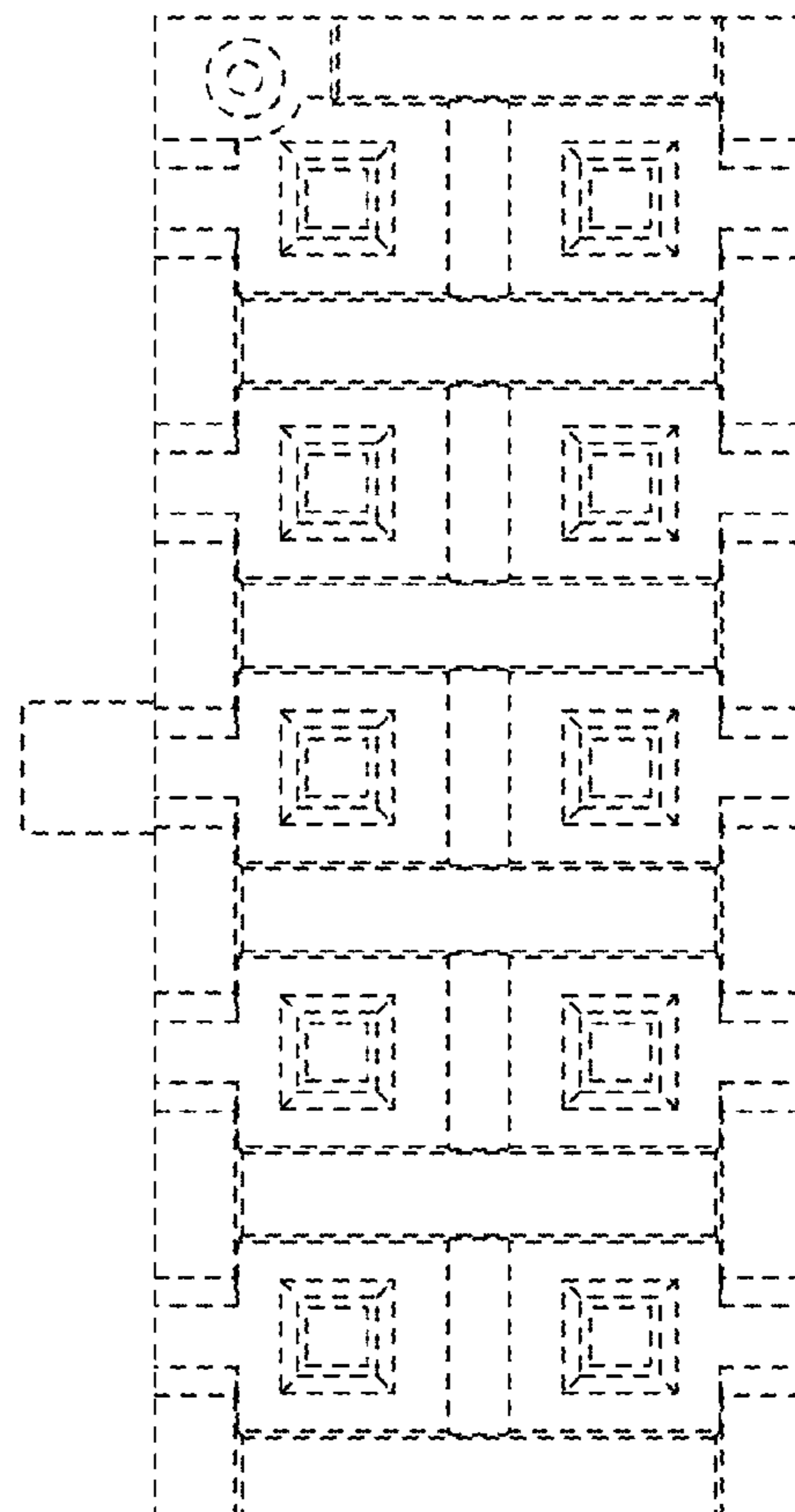


FIG. 52

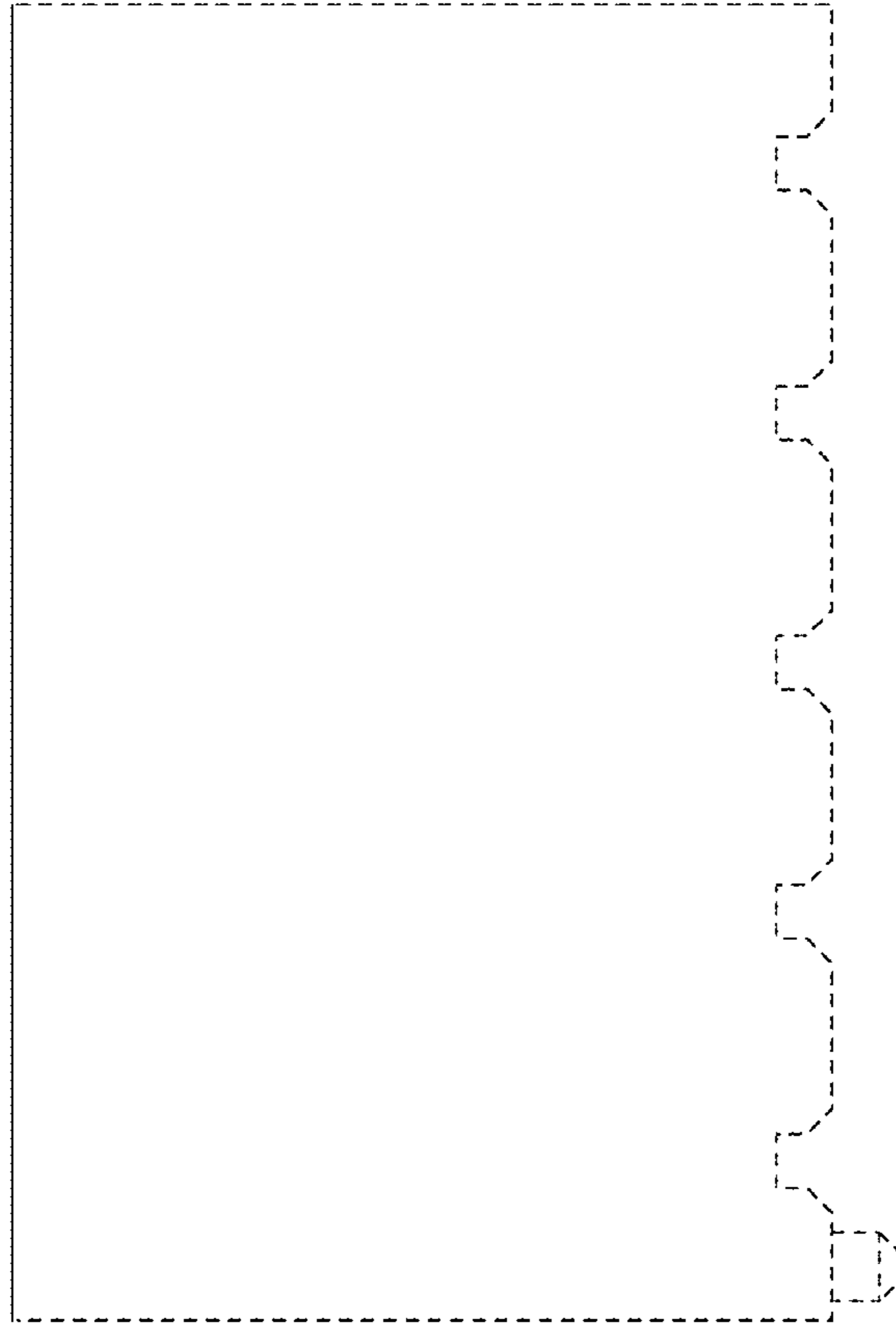


FIG. 56

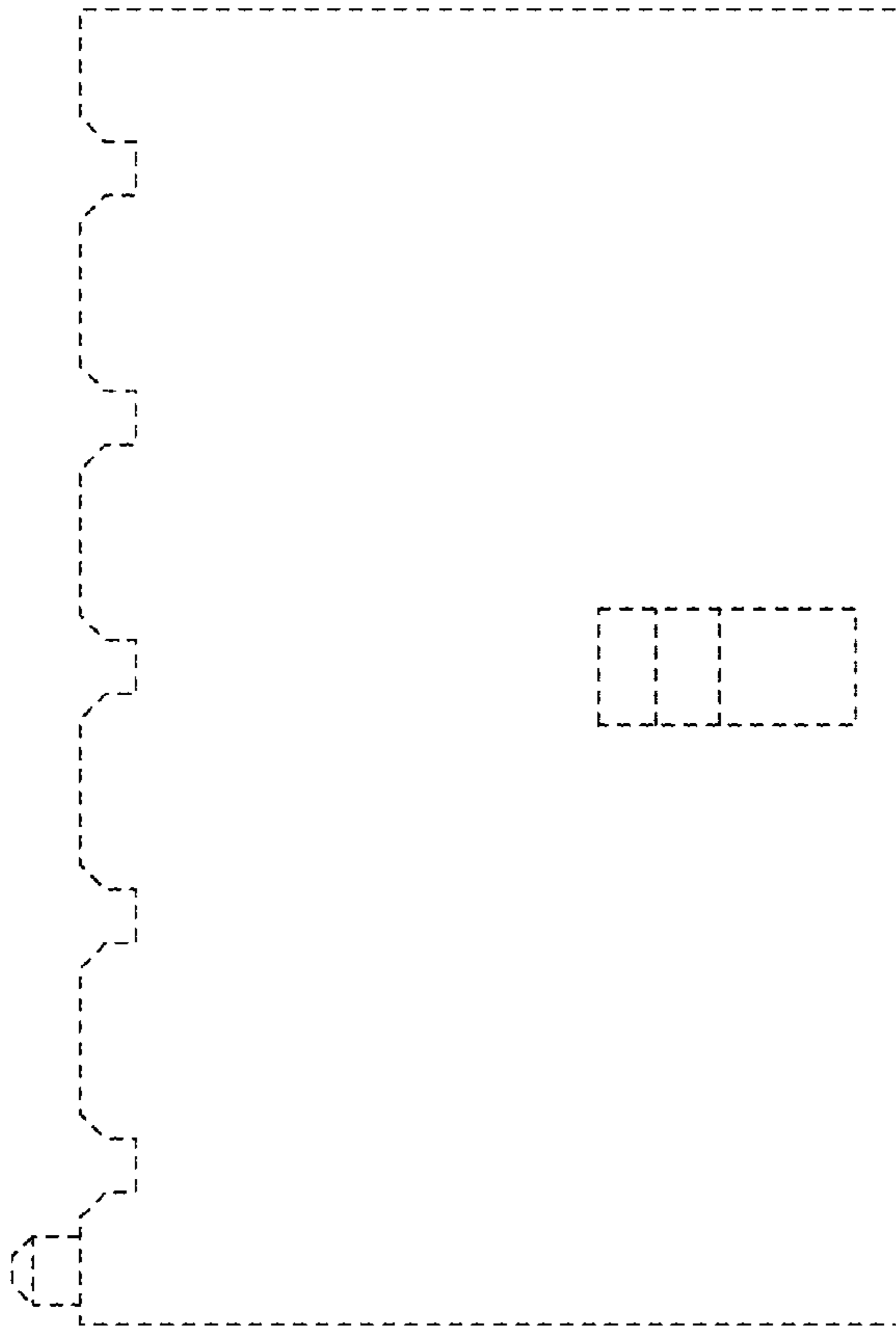


FIG. 55

FIG. 57

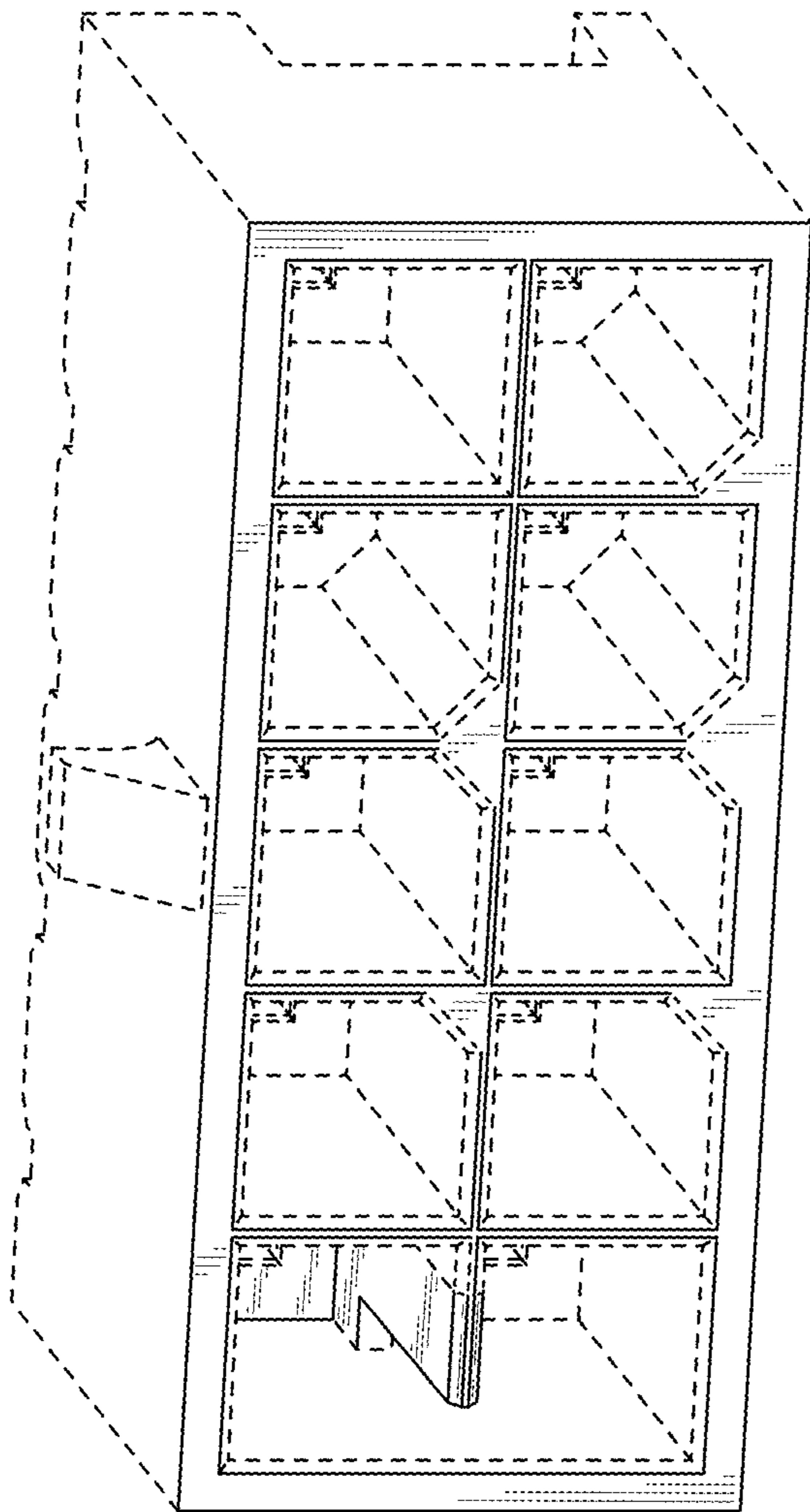
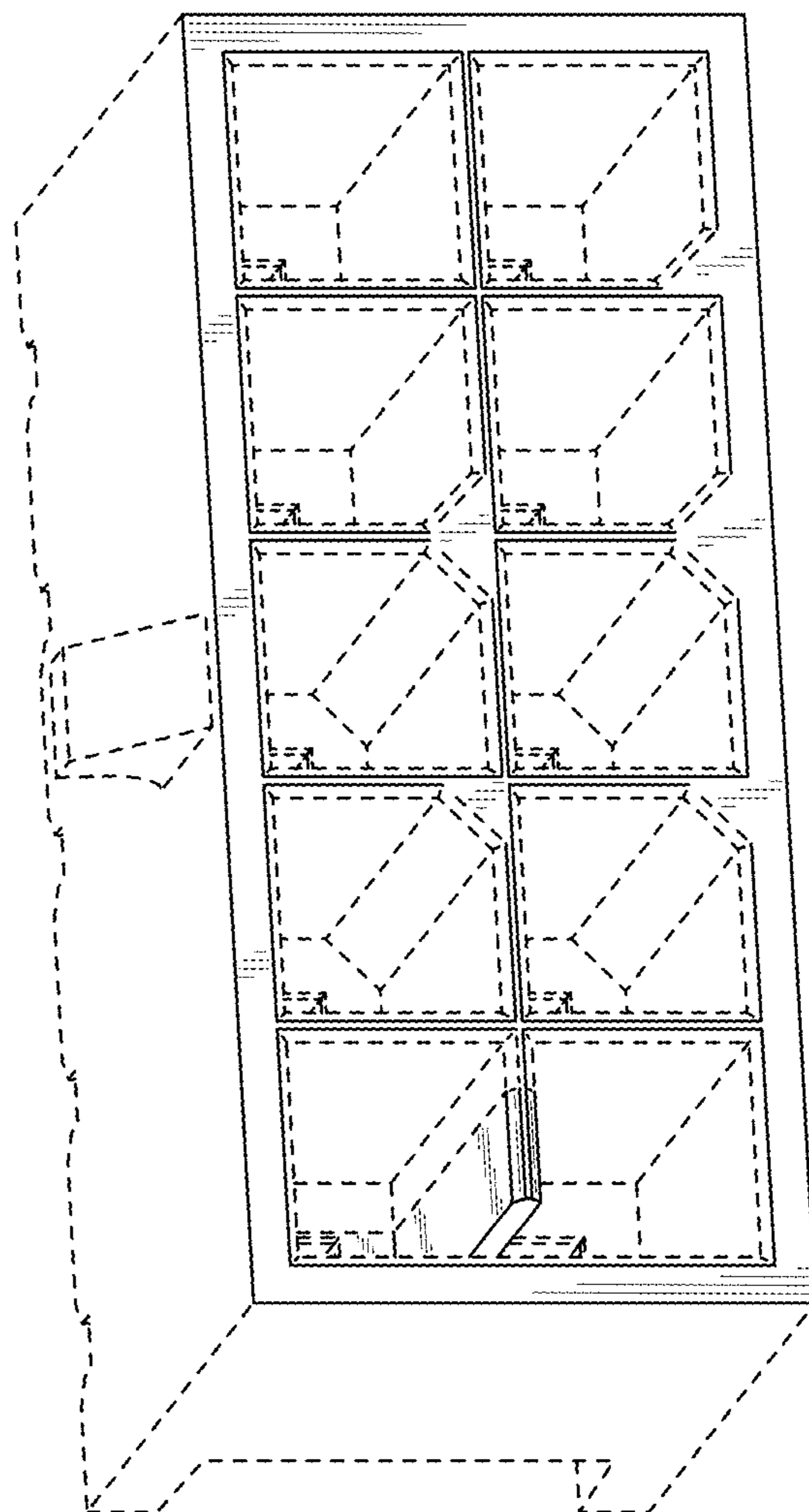


FIG. 58



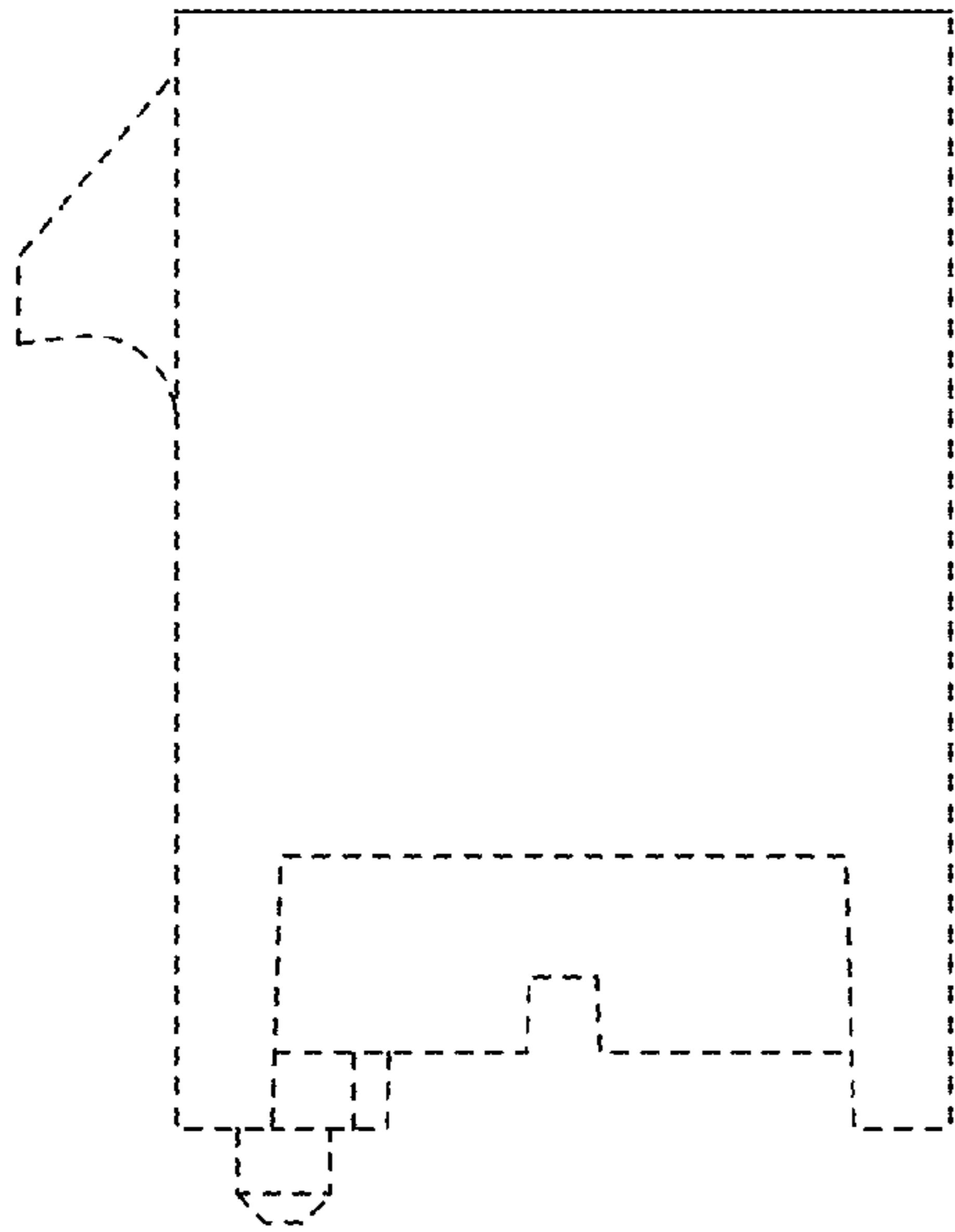


FIG. 61

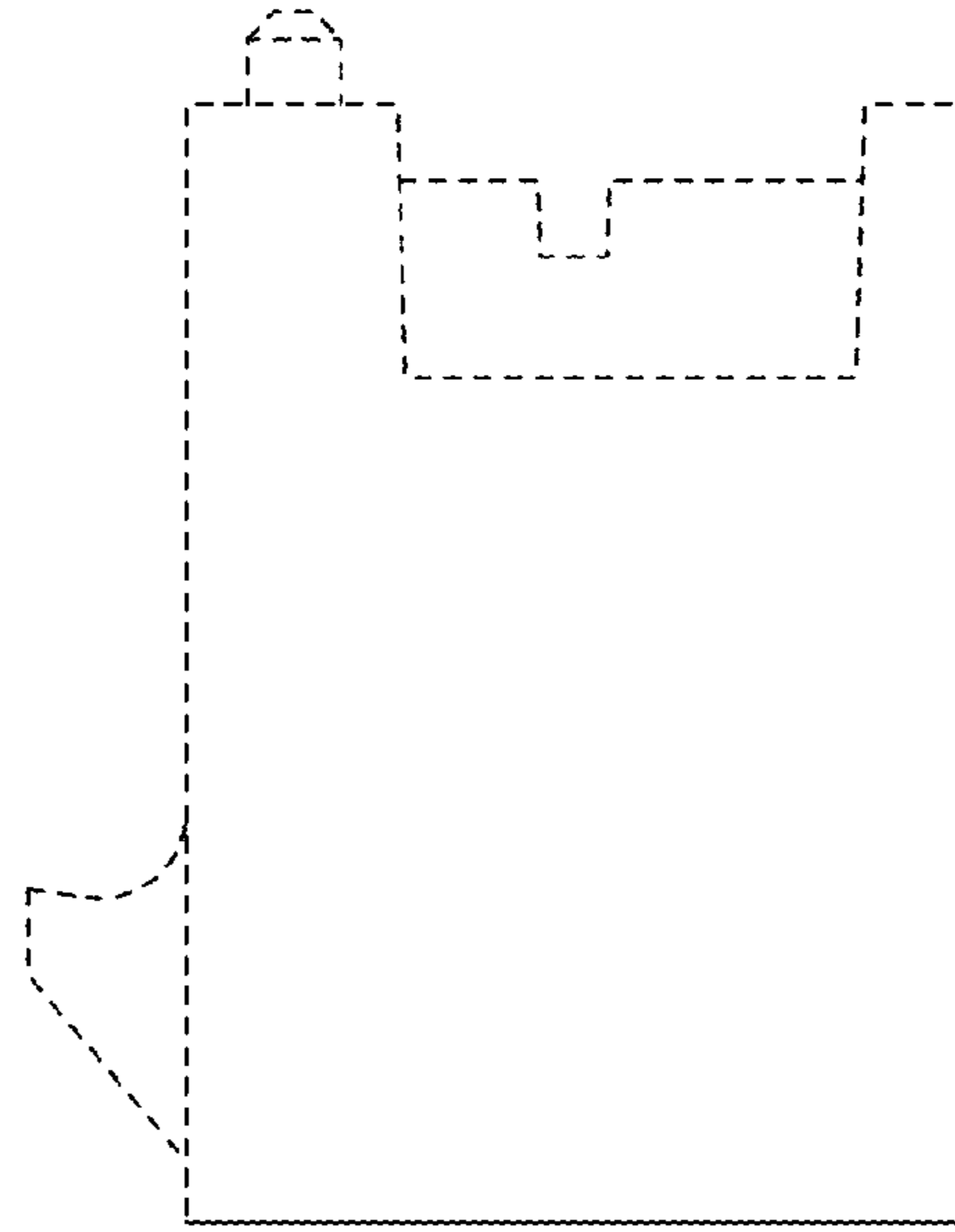


FIG. 62

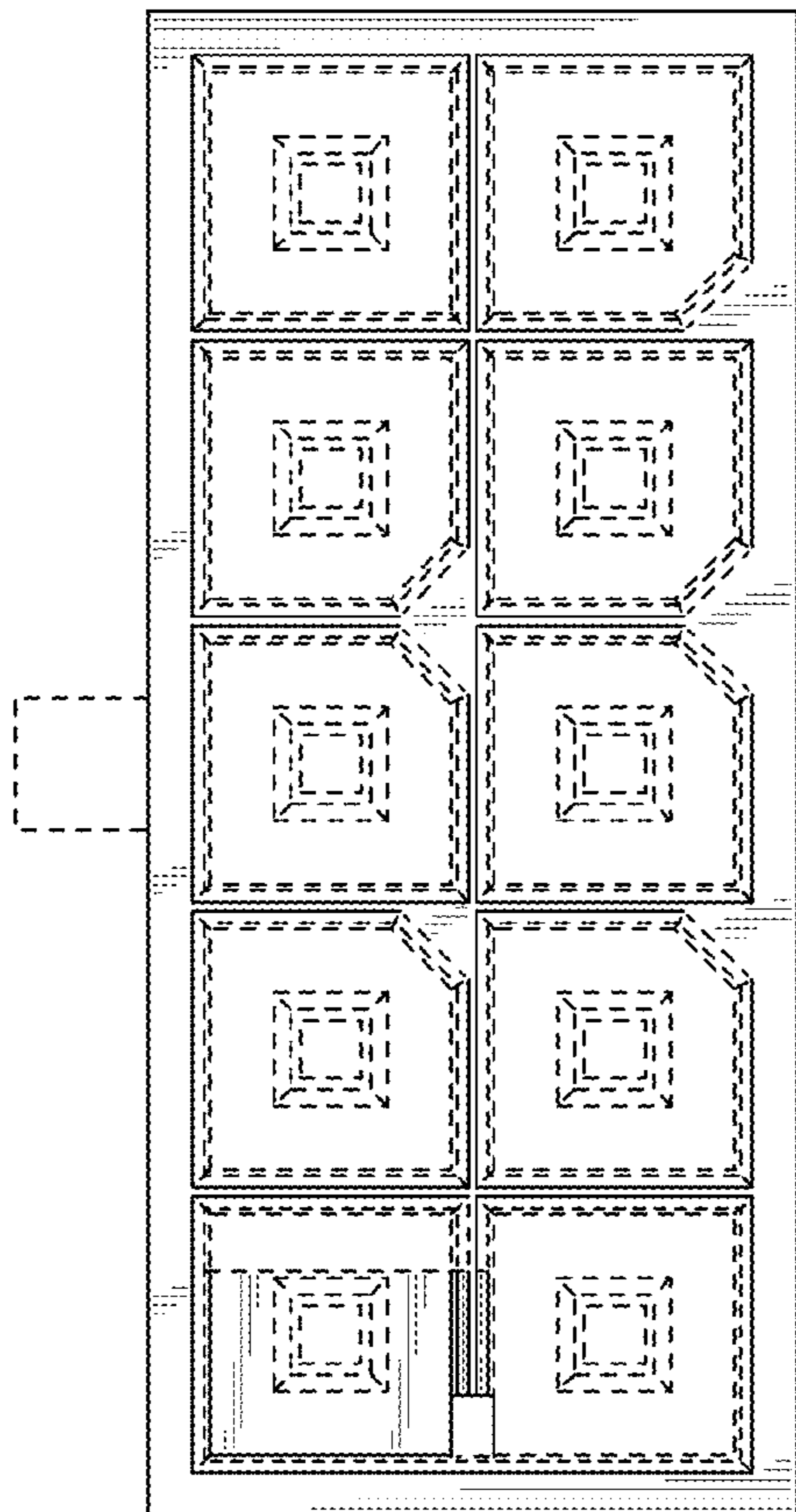


FIG. 59

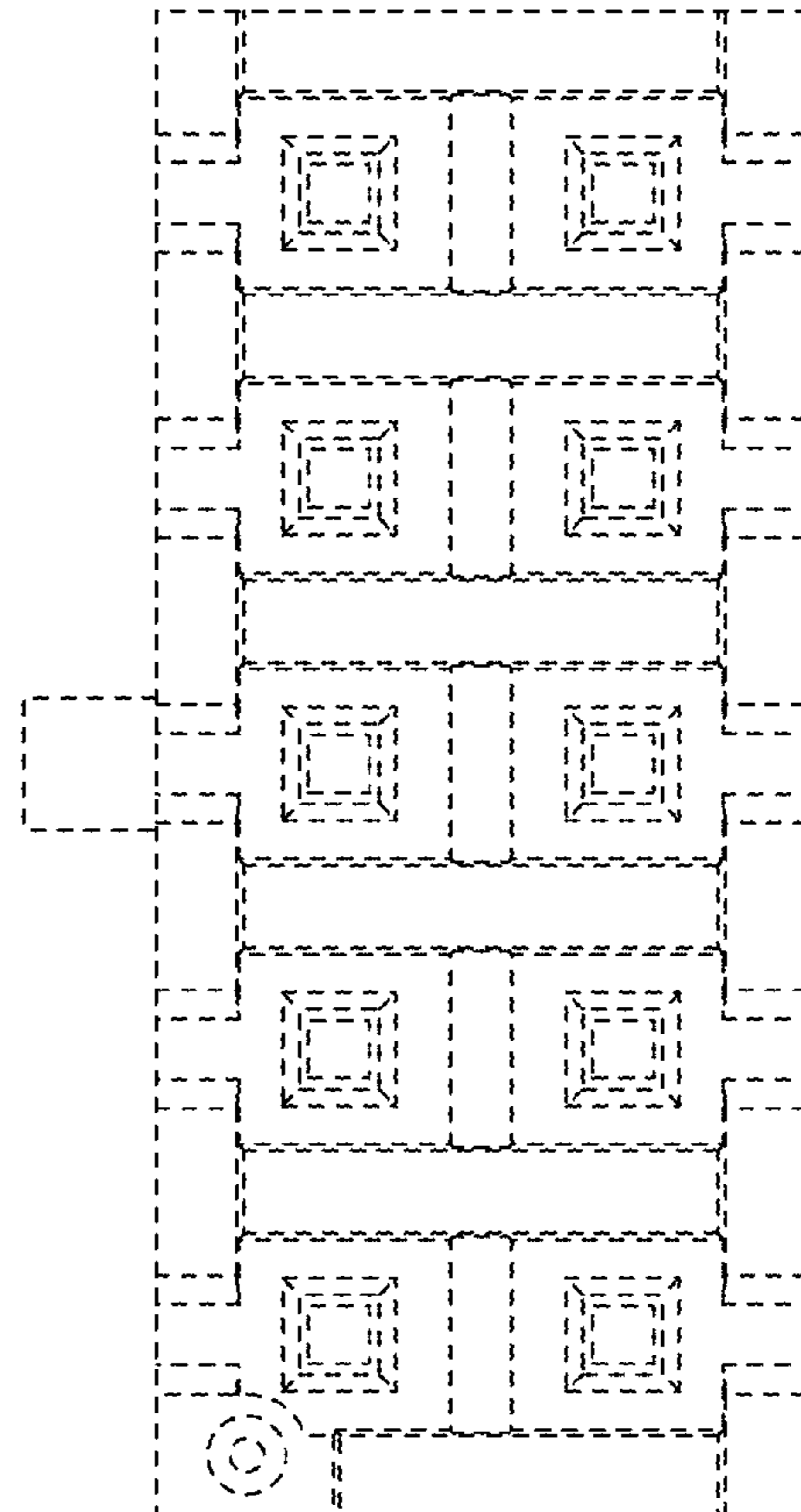


FIG. 60

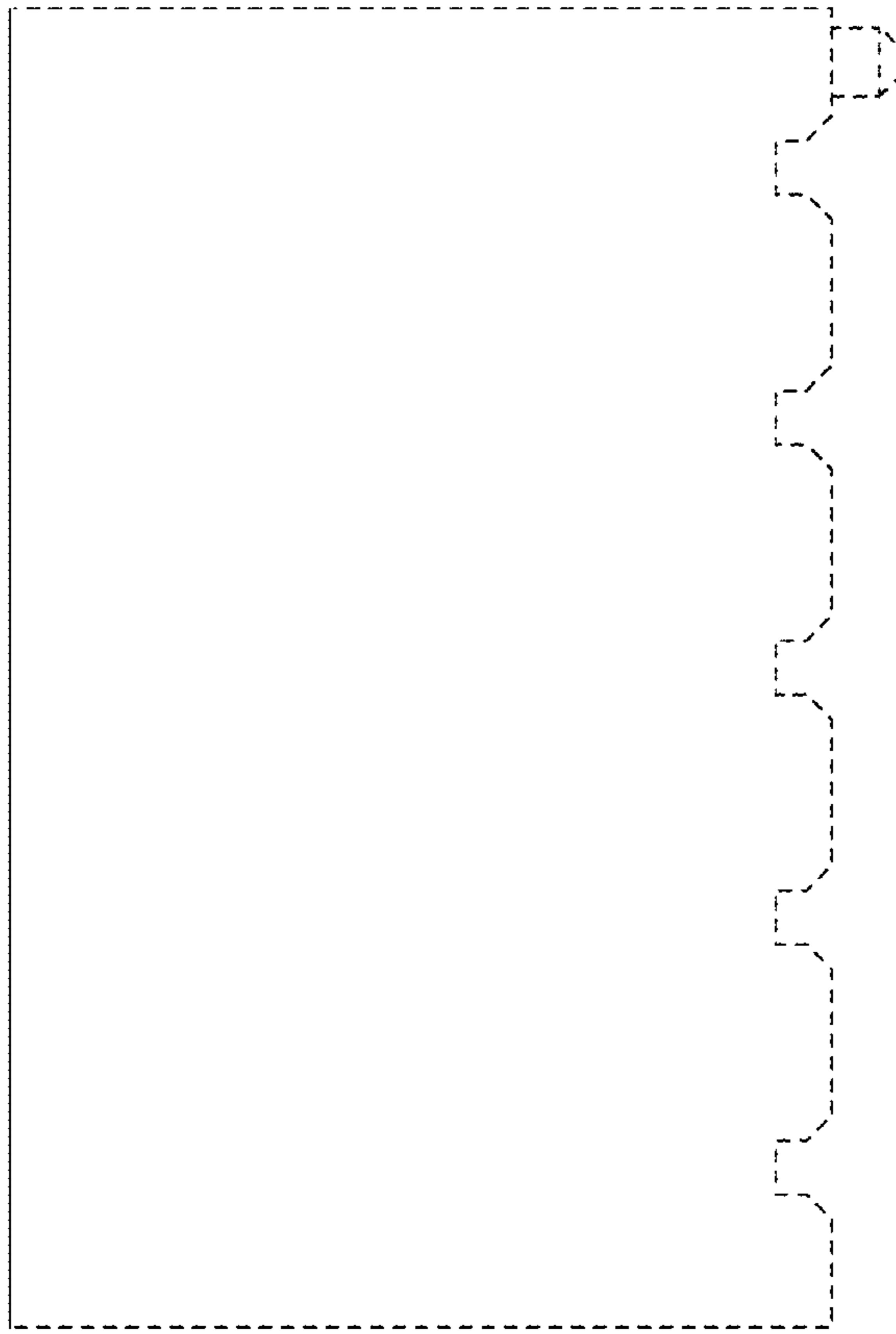


FIG. 64

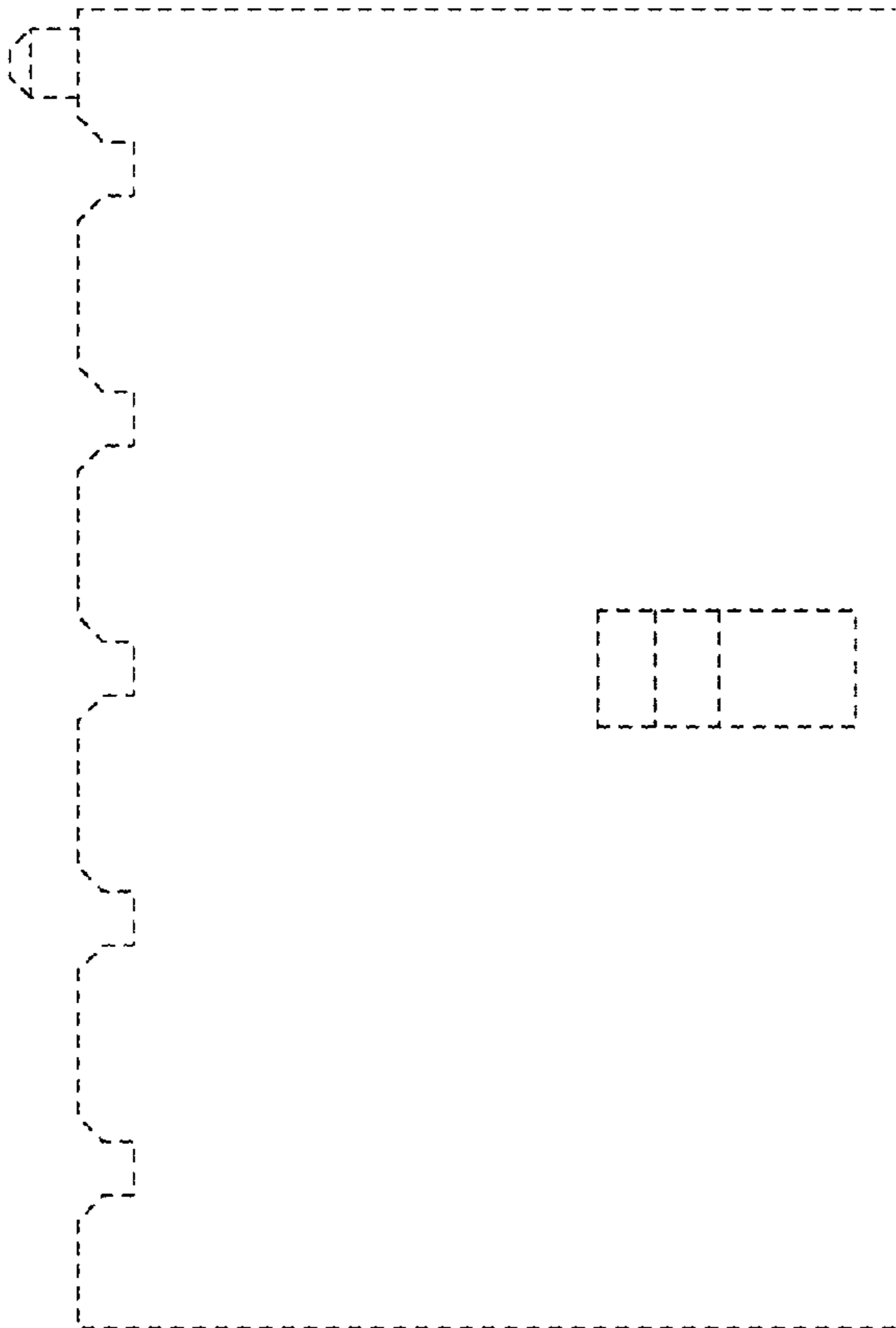


FIG. 63

FIG. 65

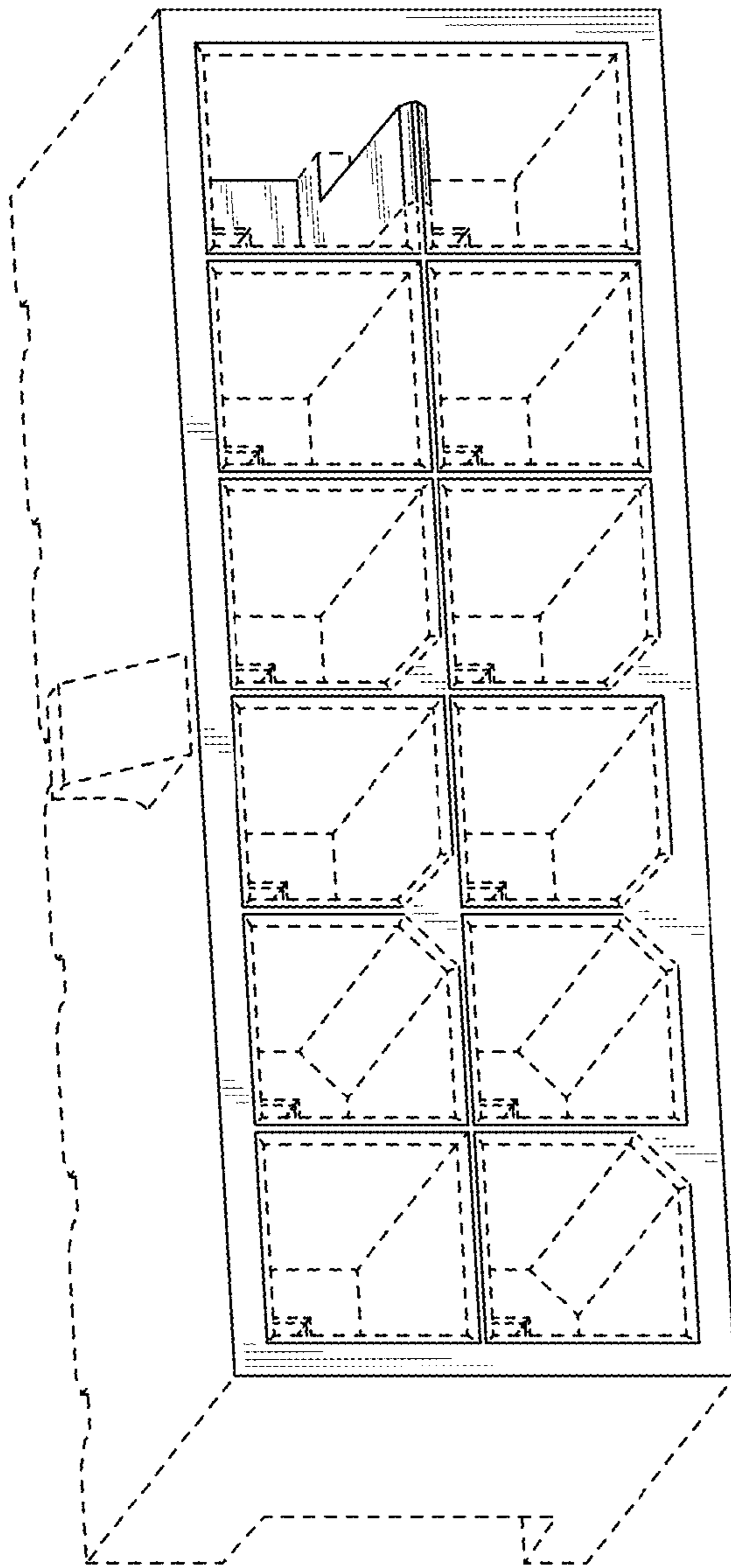


FIG. 66

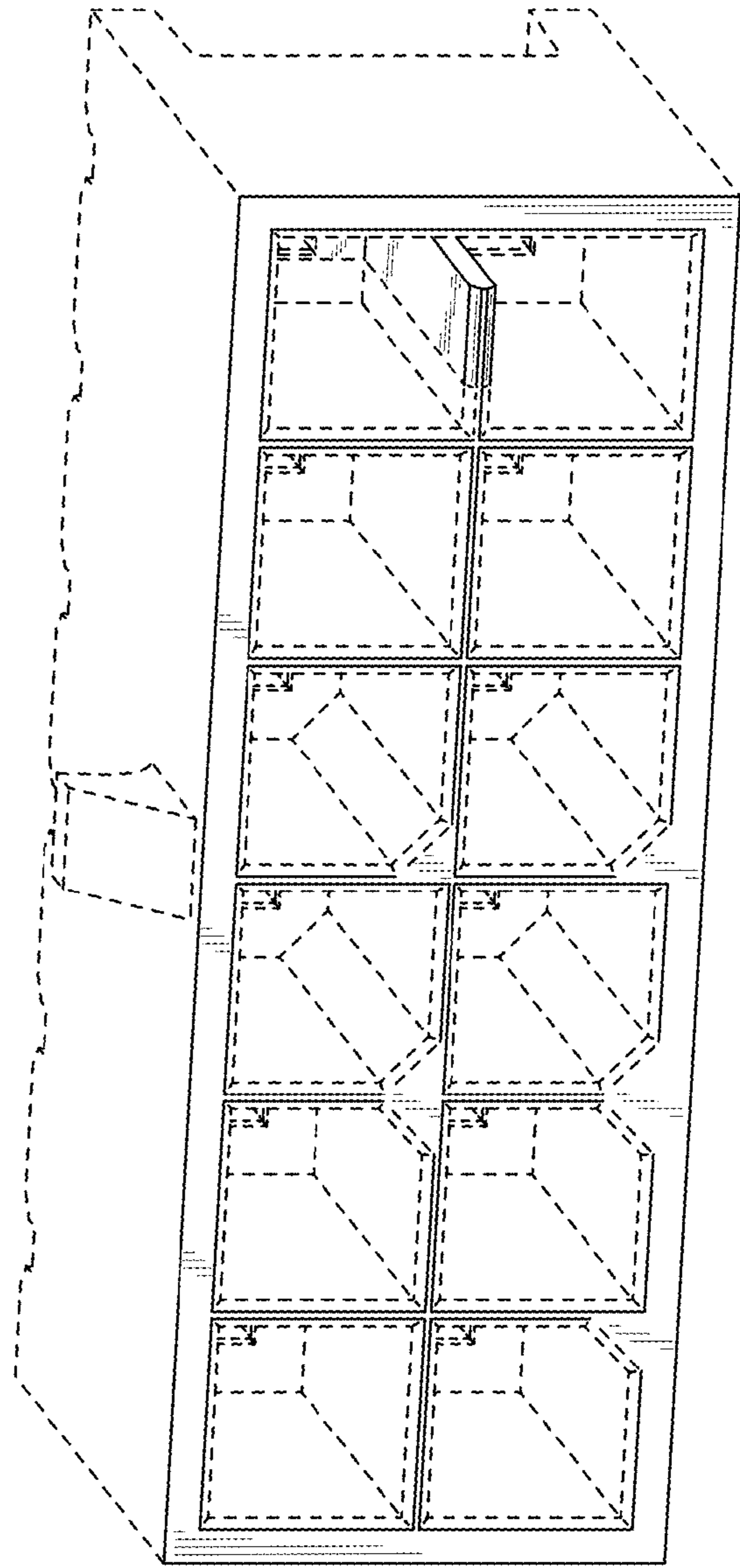


FIG. 67

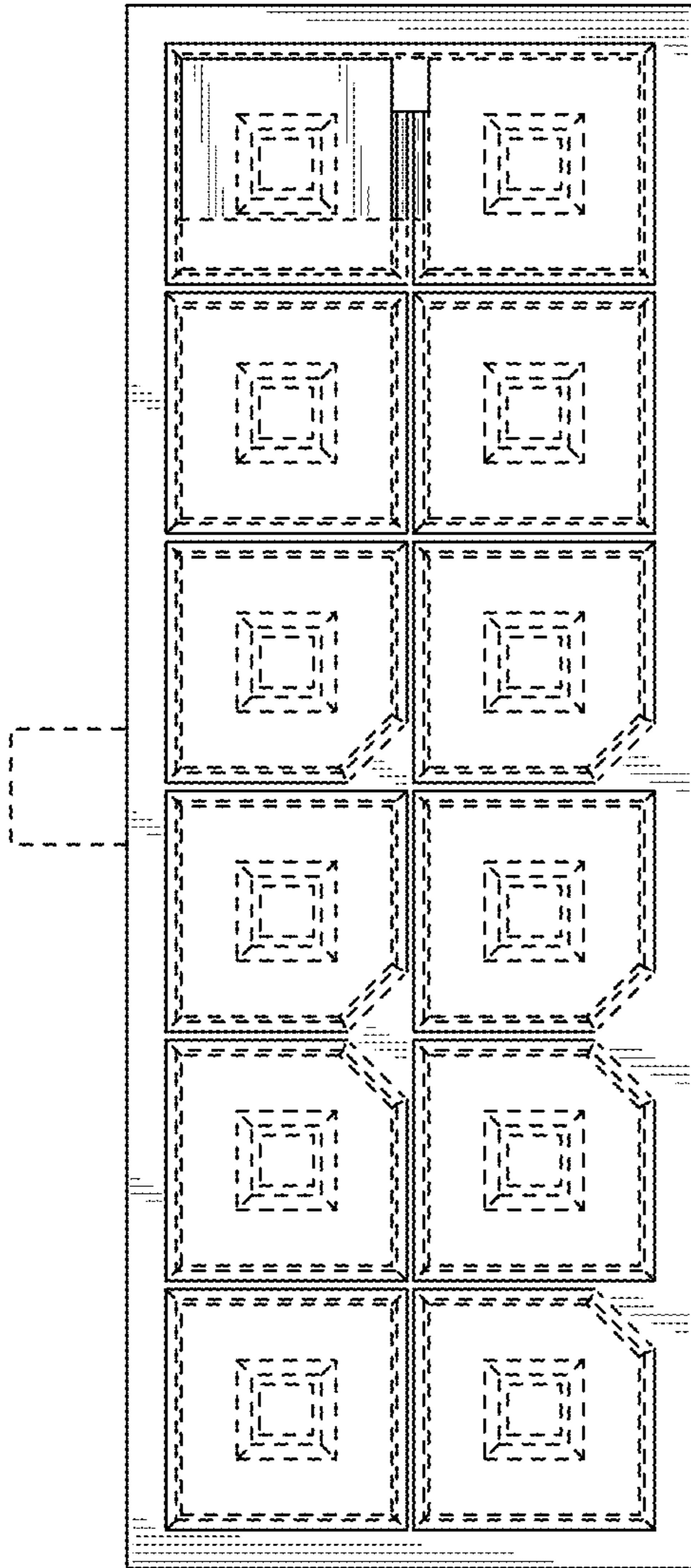
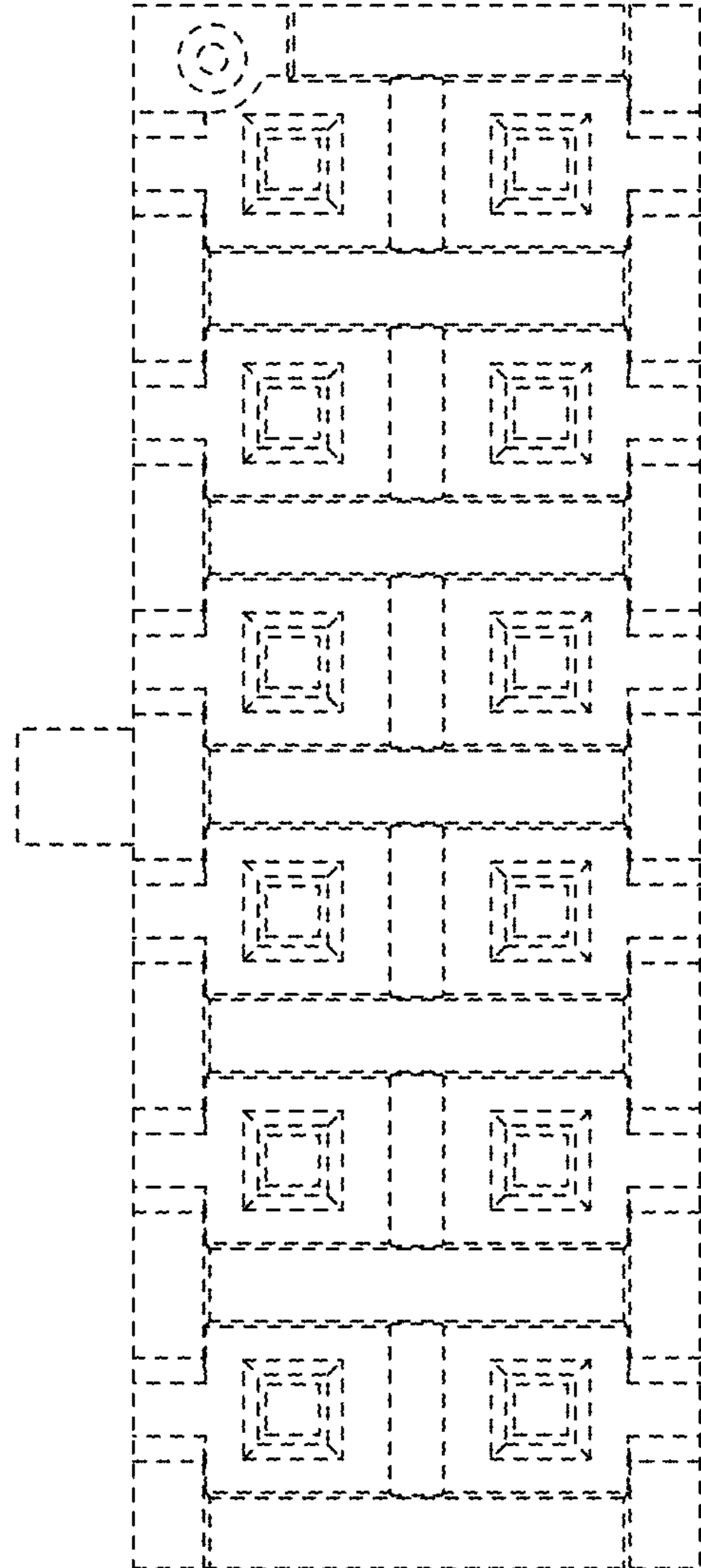


FIG. 68



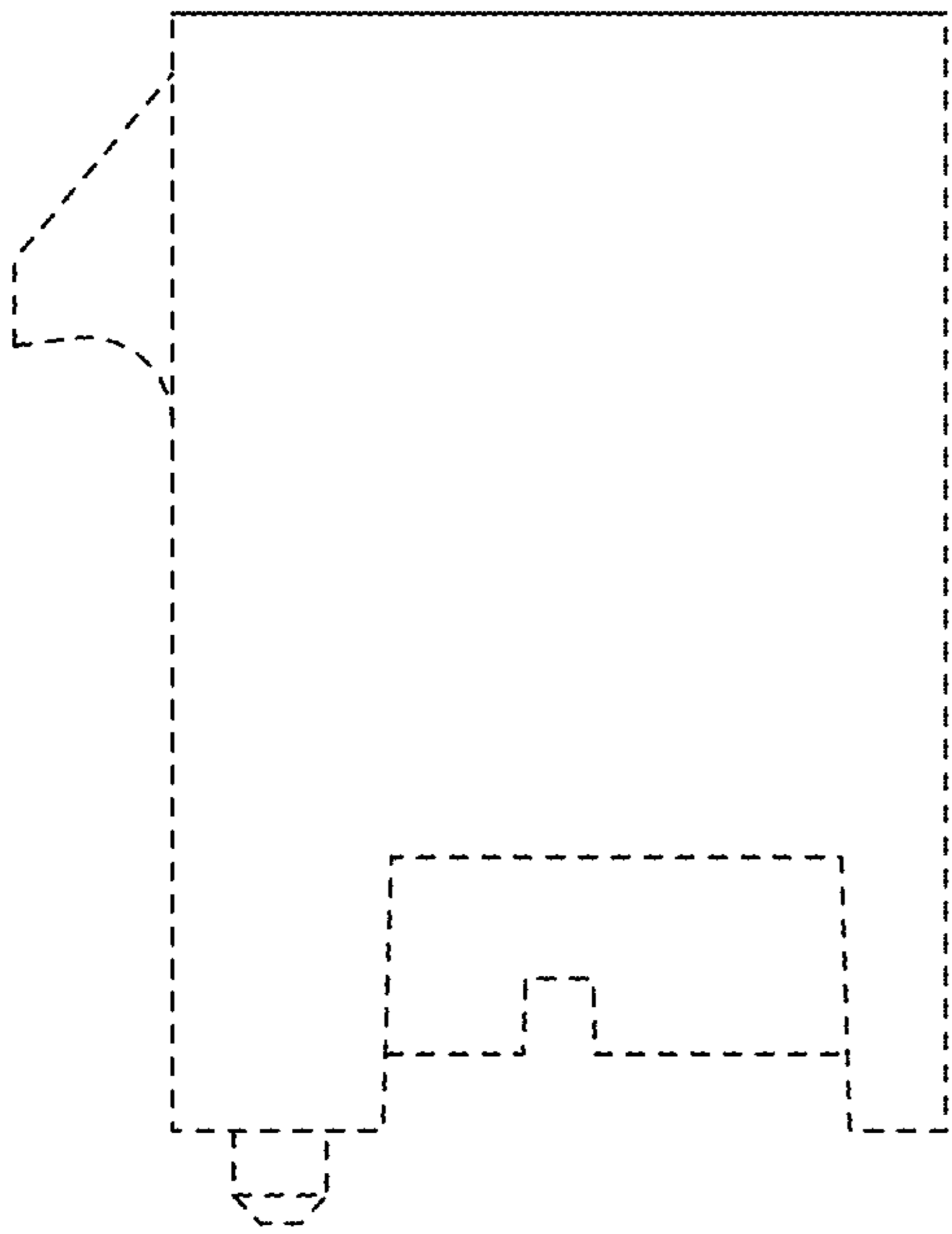


FIG. 69

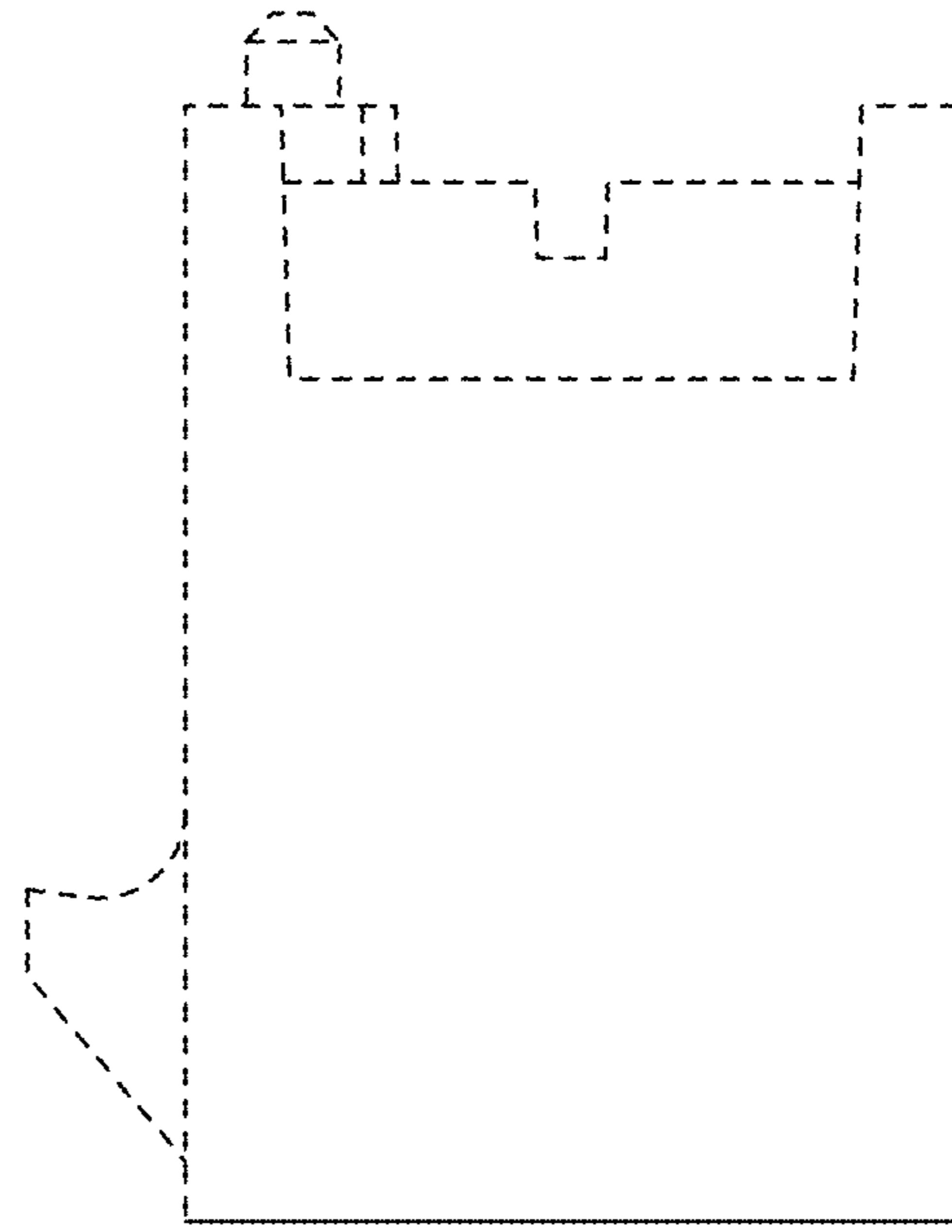


FIG. 70

FIG. 71

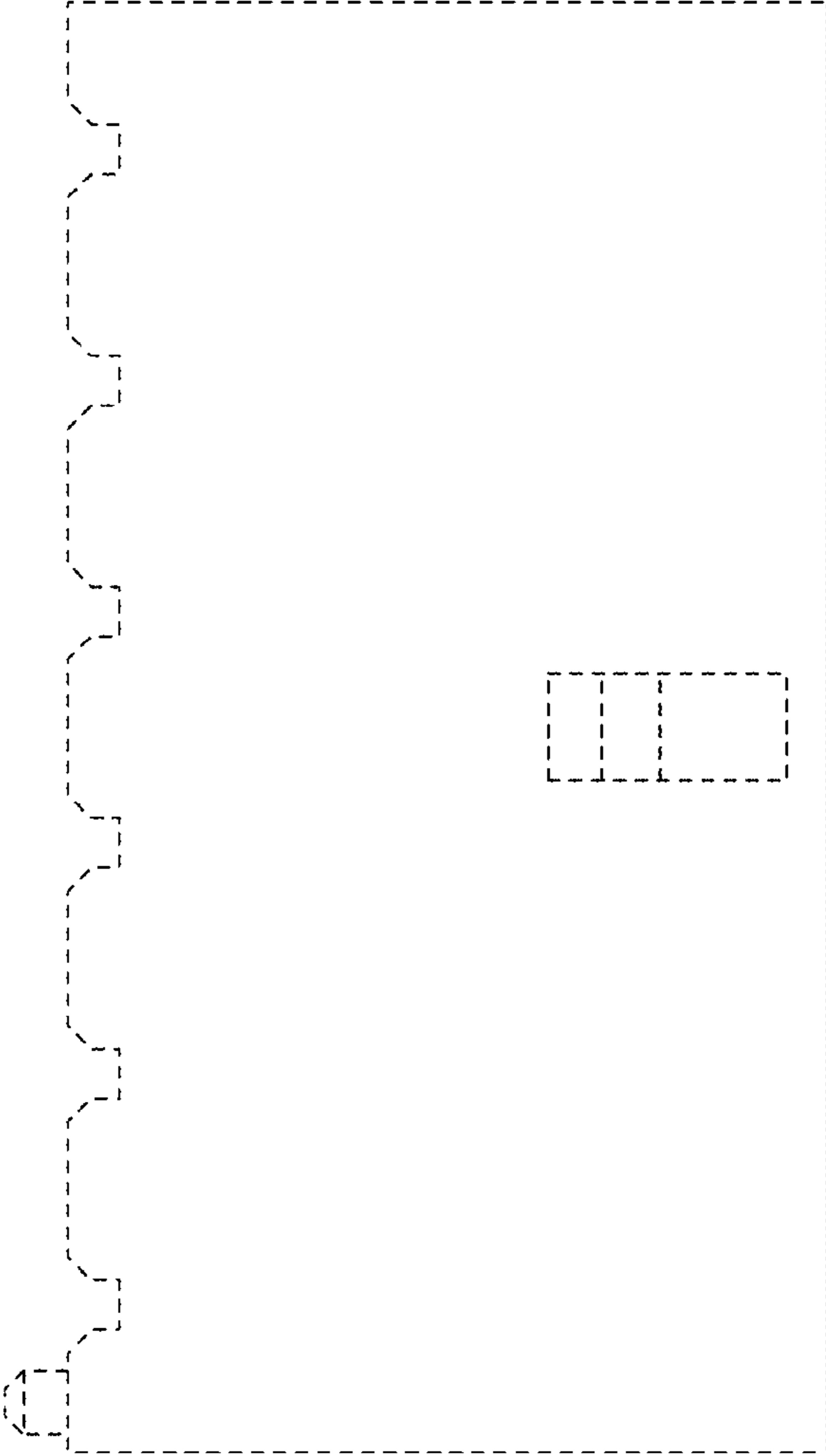


FIG. 72

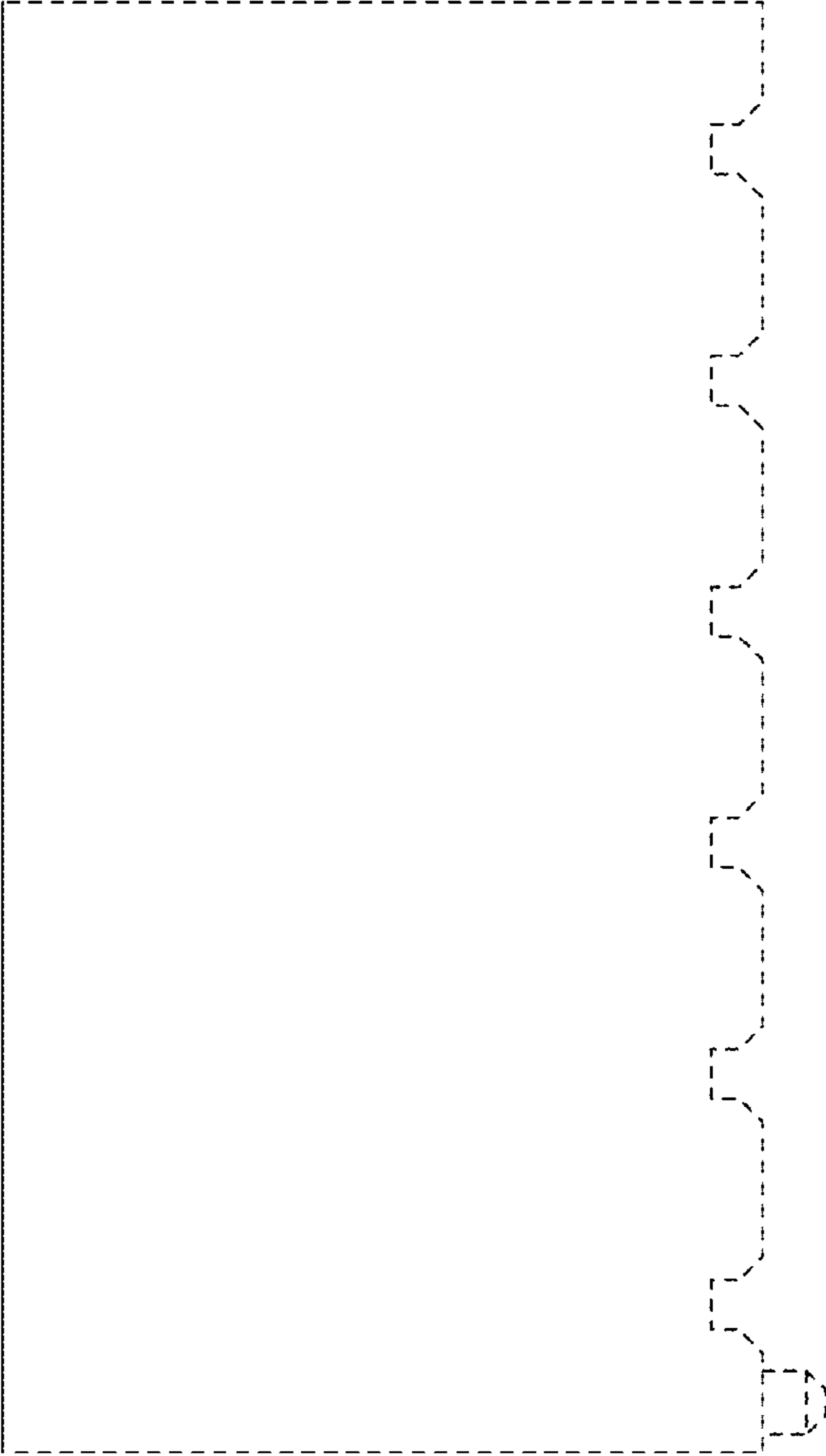


FIG. 73

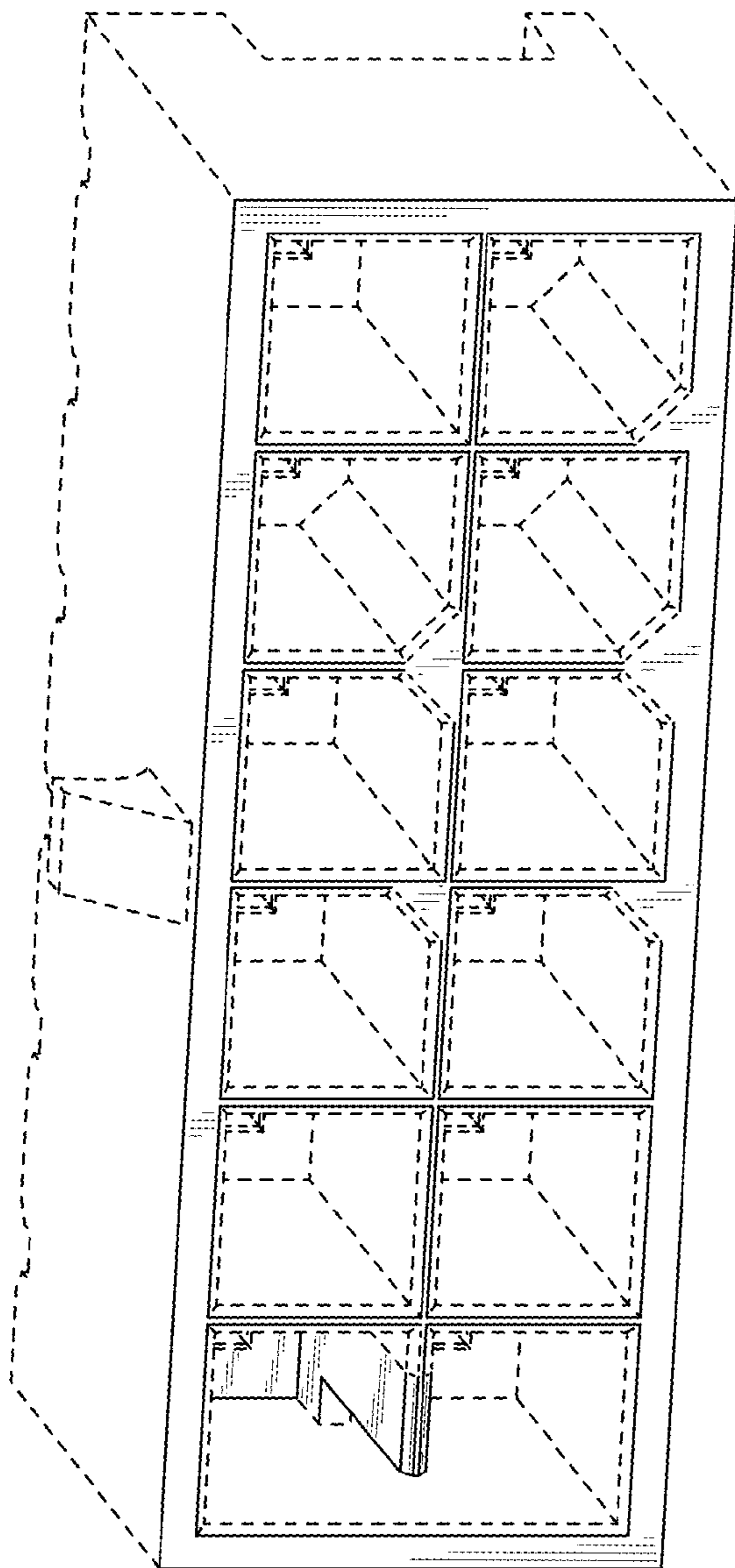


FIG. 74

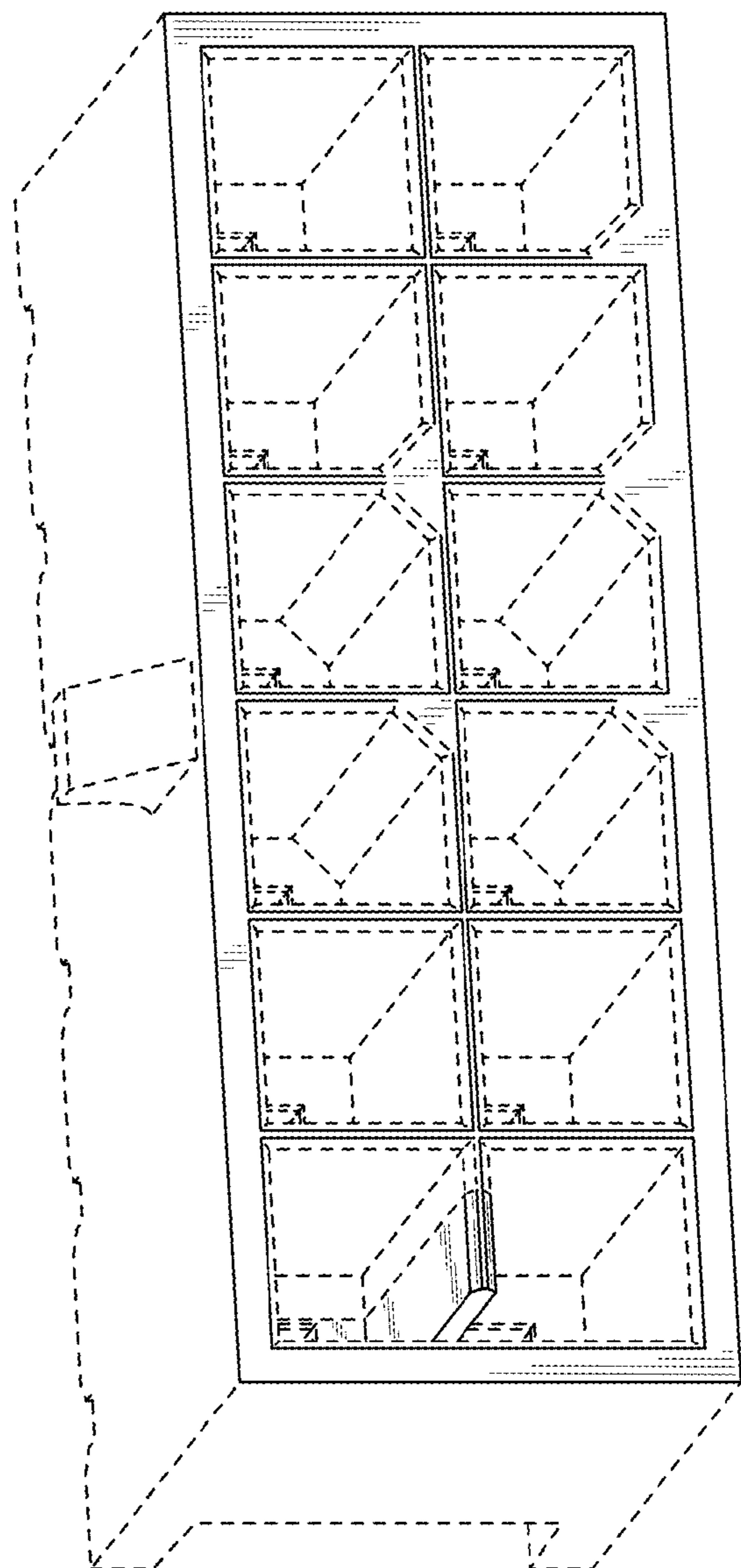


FIG. 75

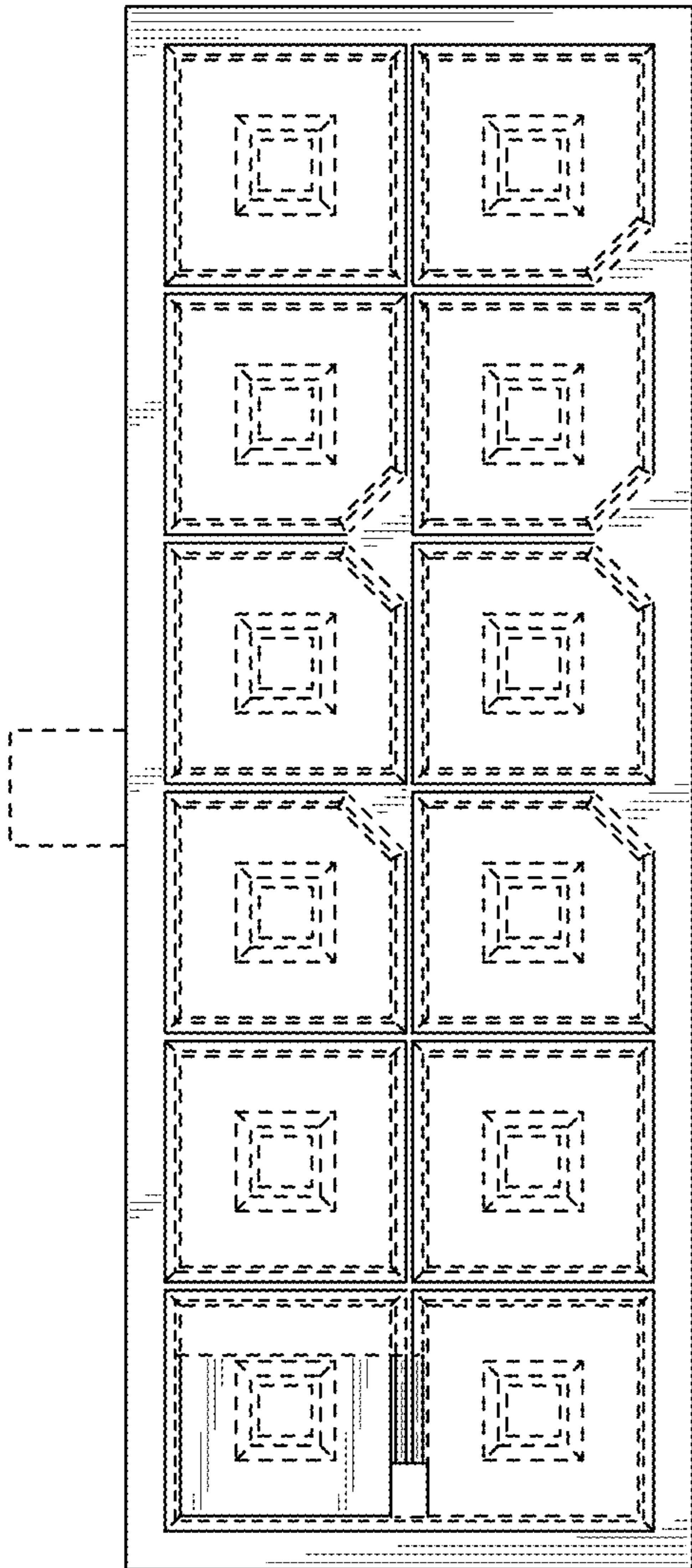


FIG. 76

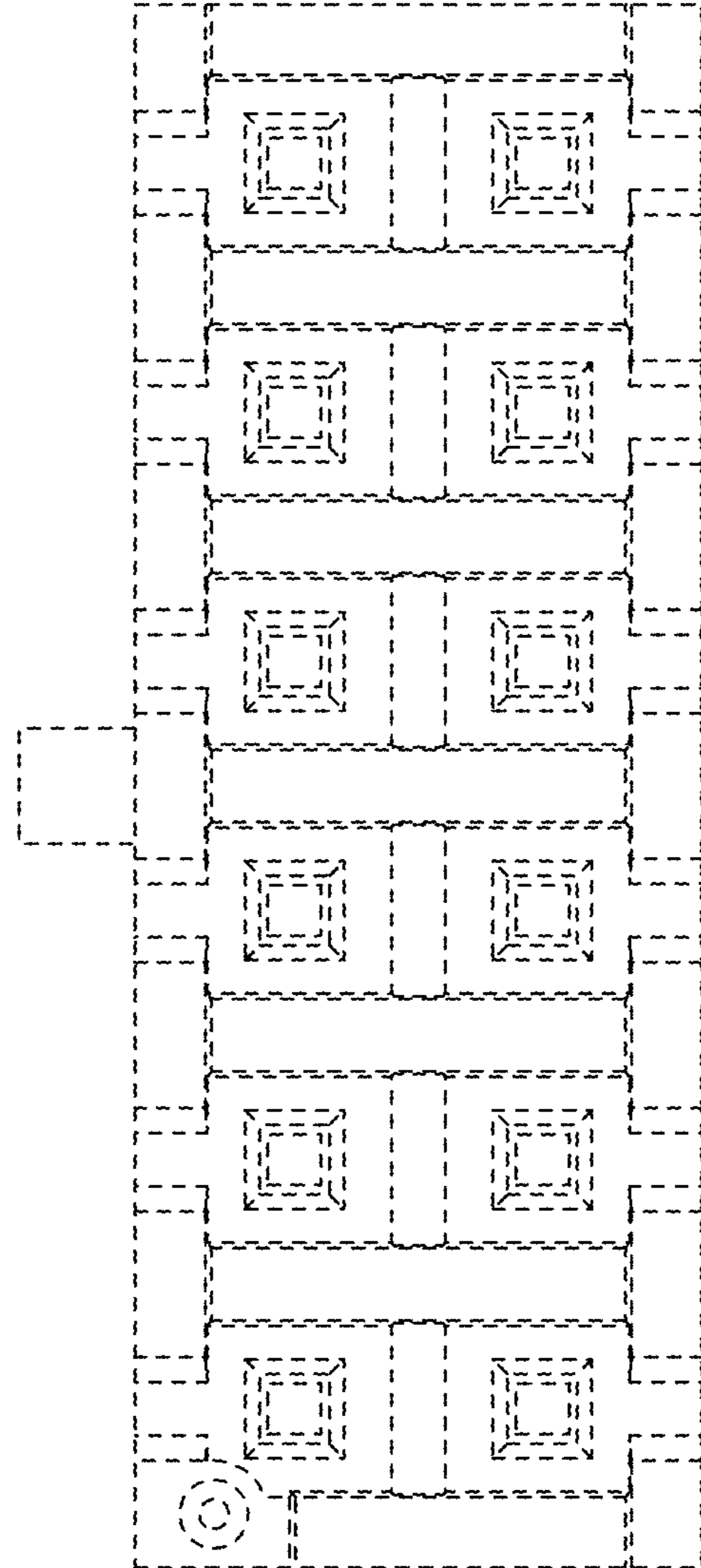


FIG. 77

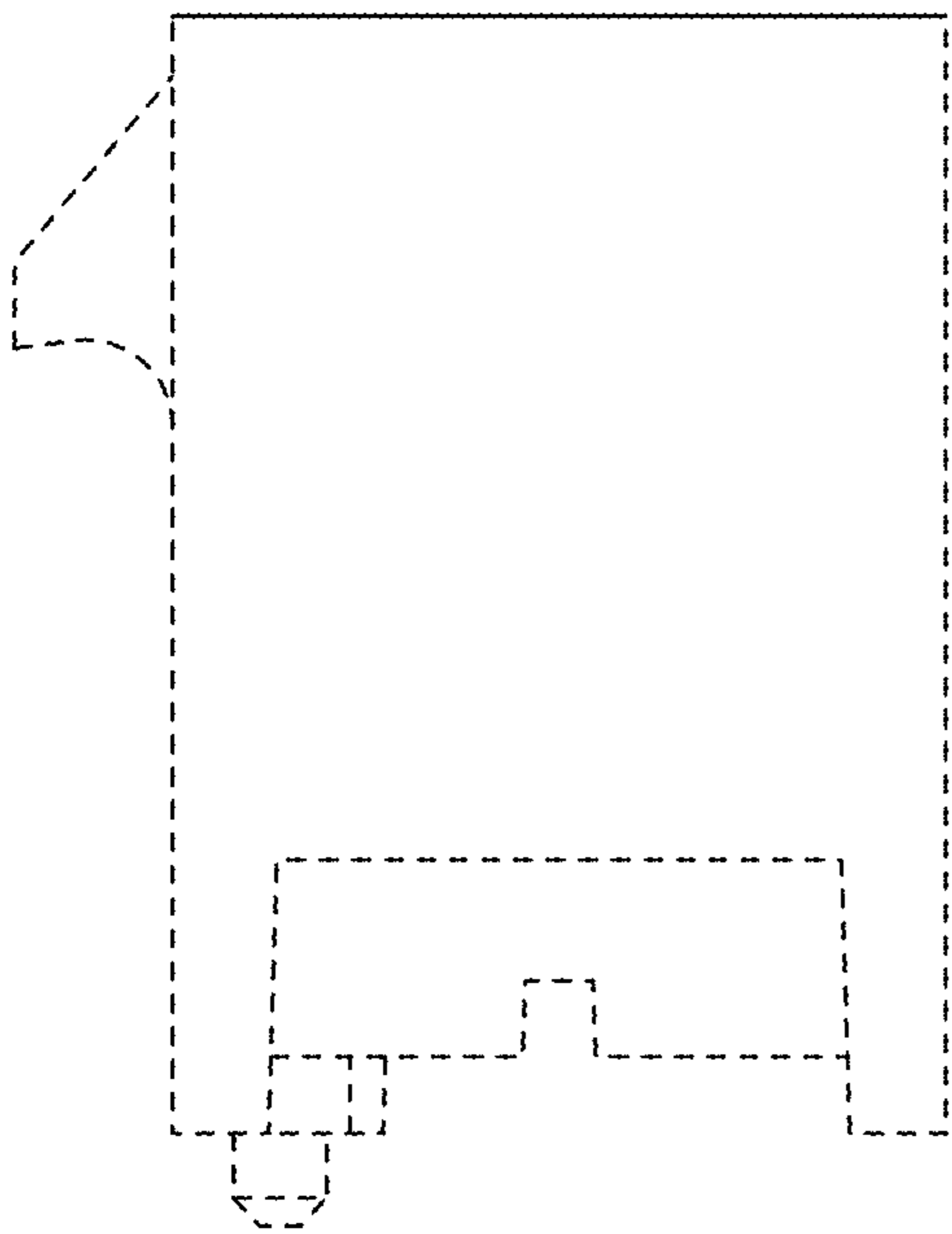


FIG. 78

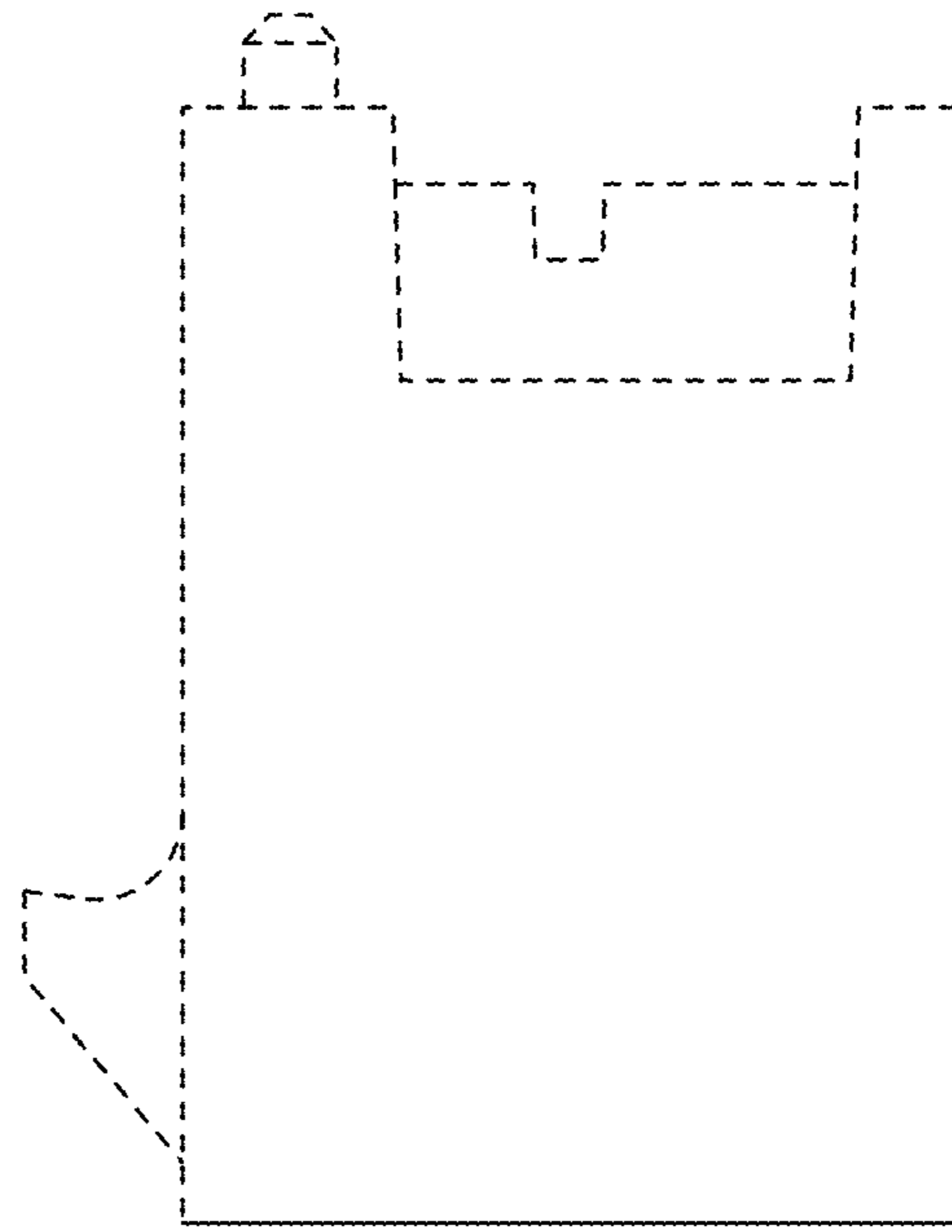


FIG. 79

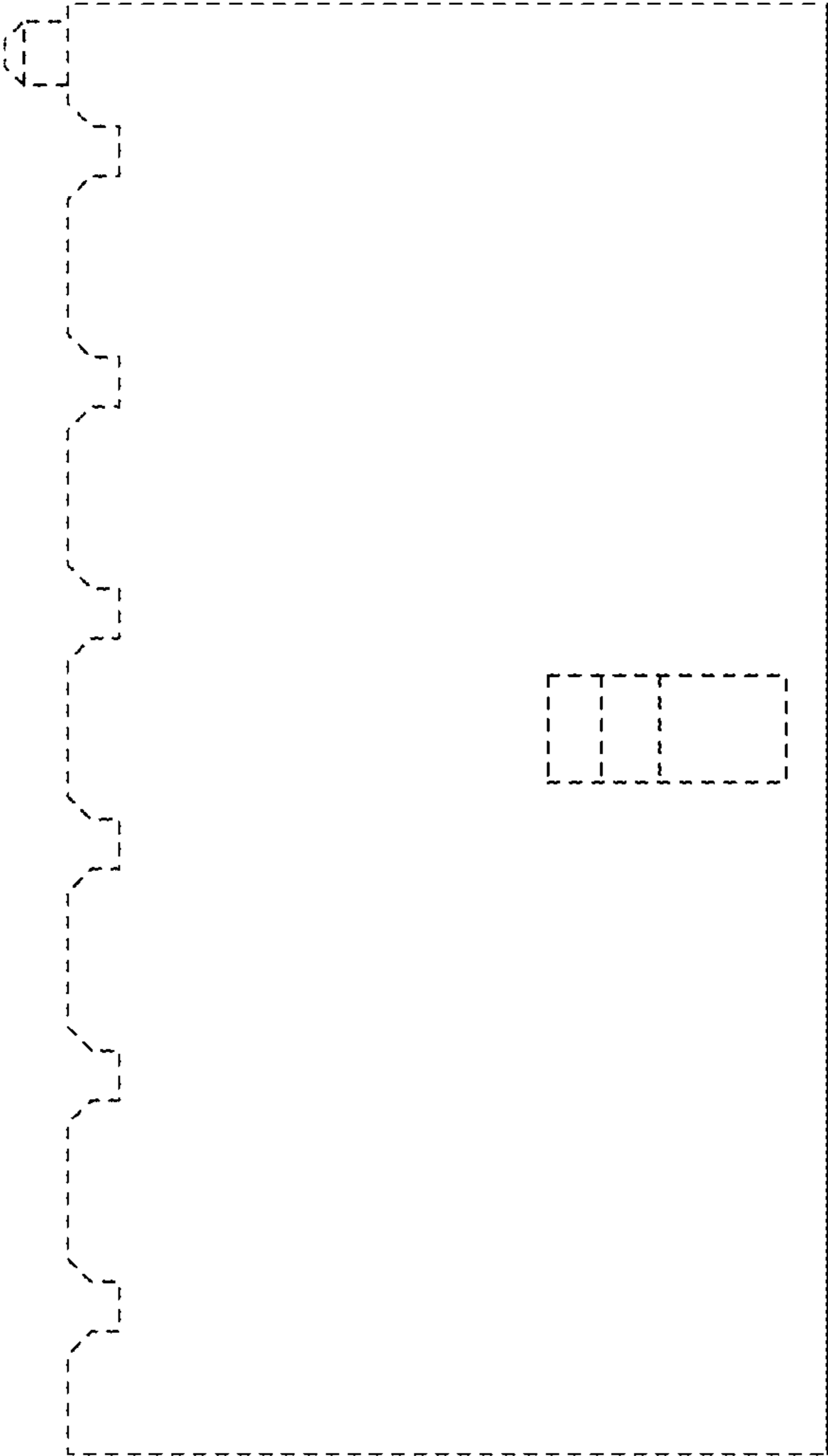


FIG. 80

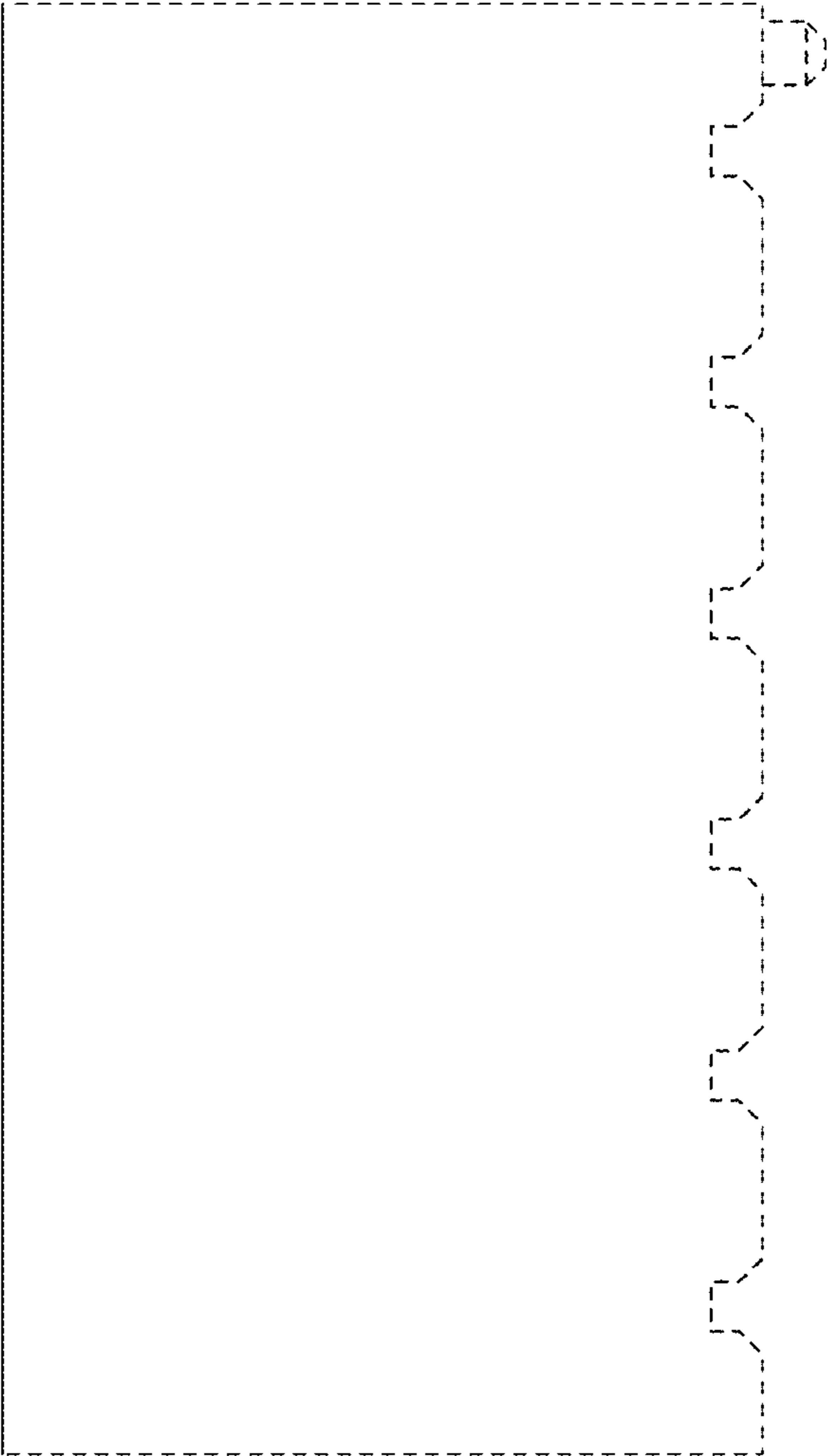


FIG. 81

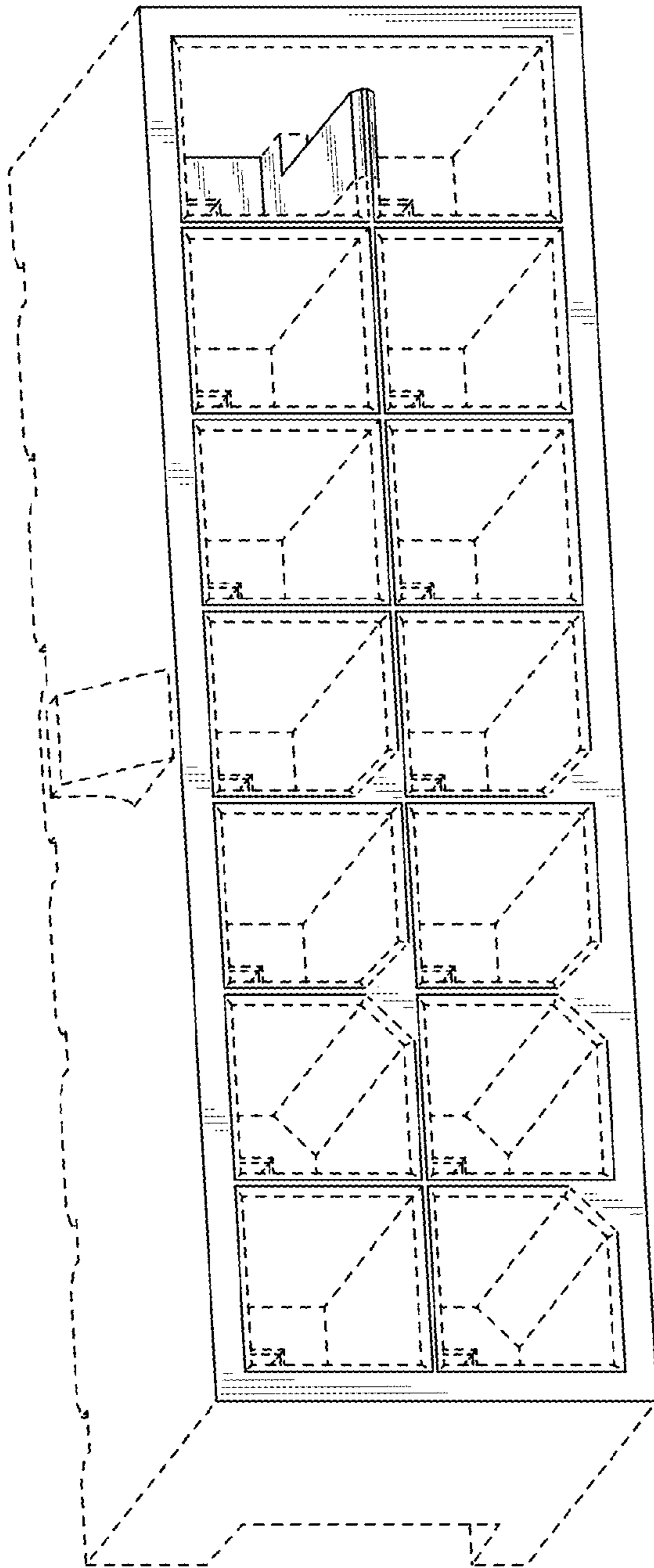


FIG. 82

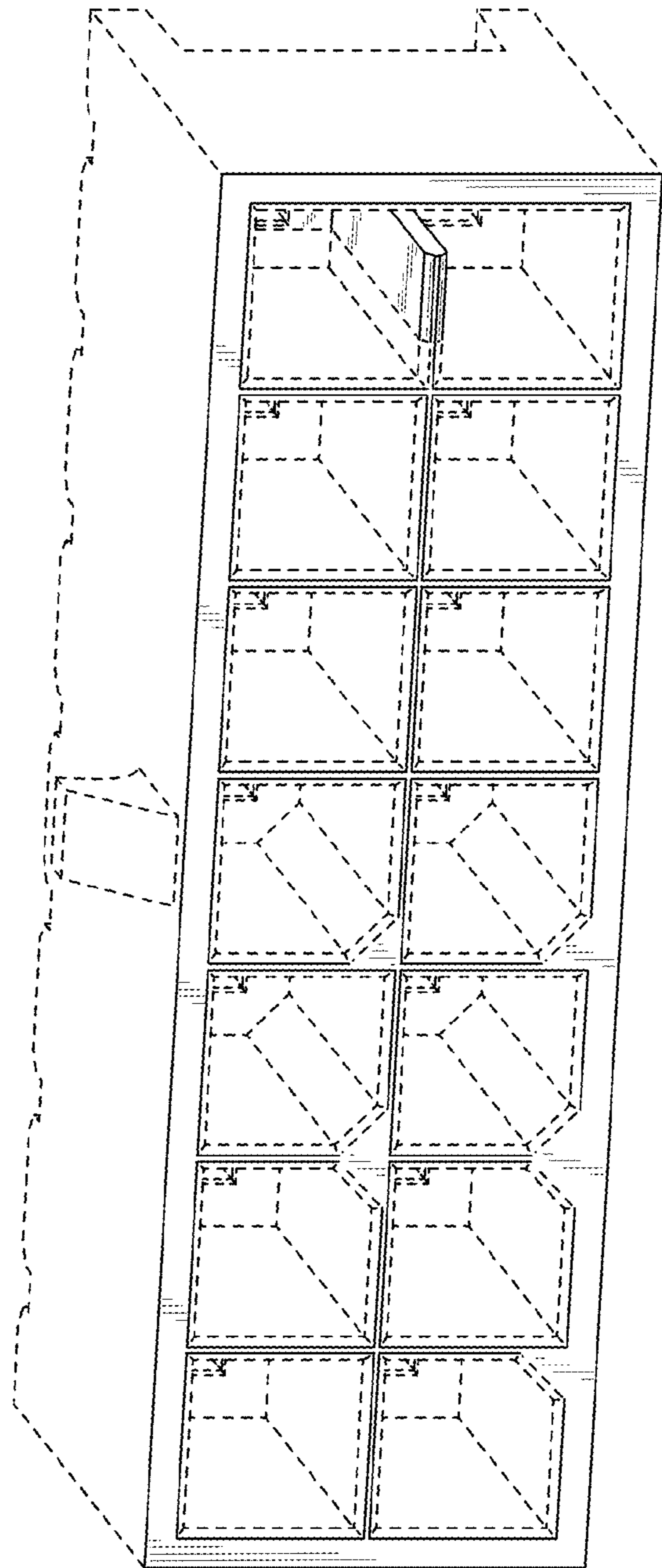


FIG. 83

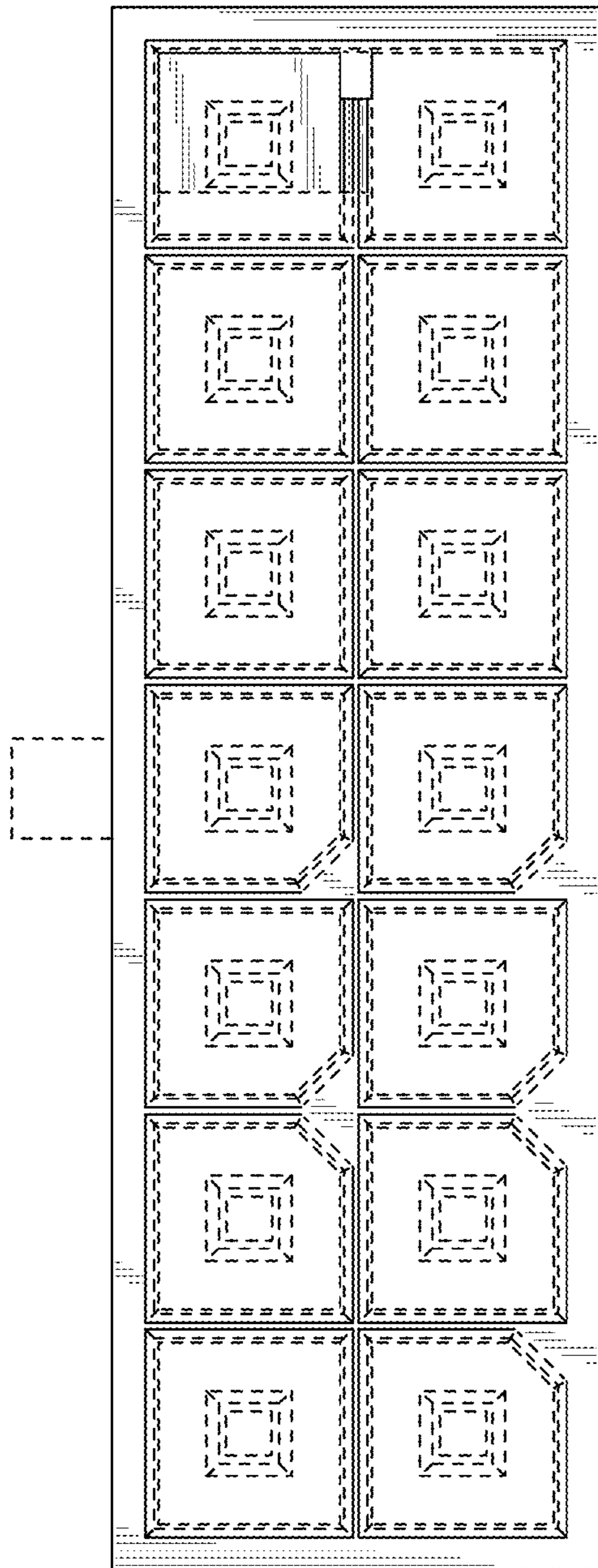


FIG. 84

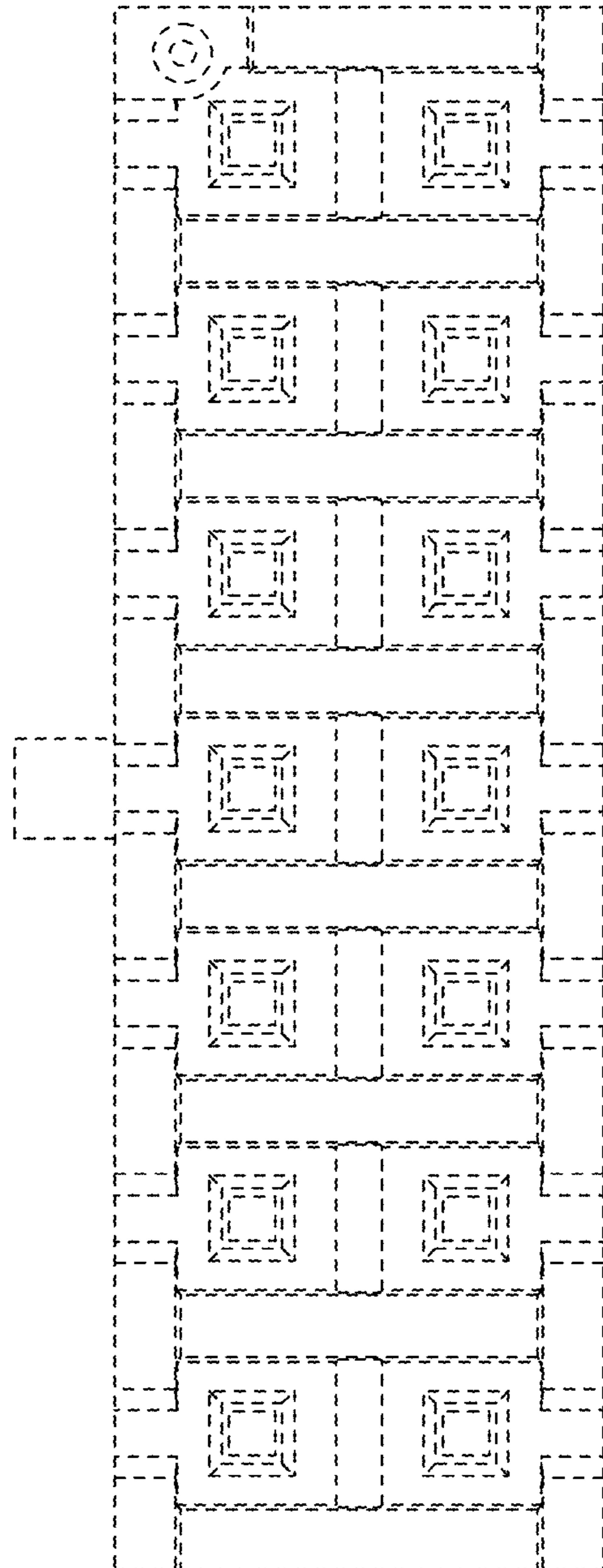


FIG. 85

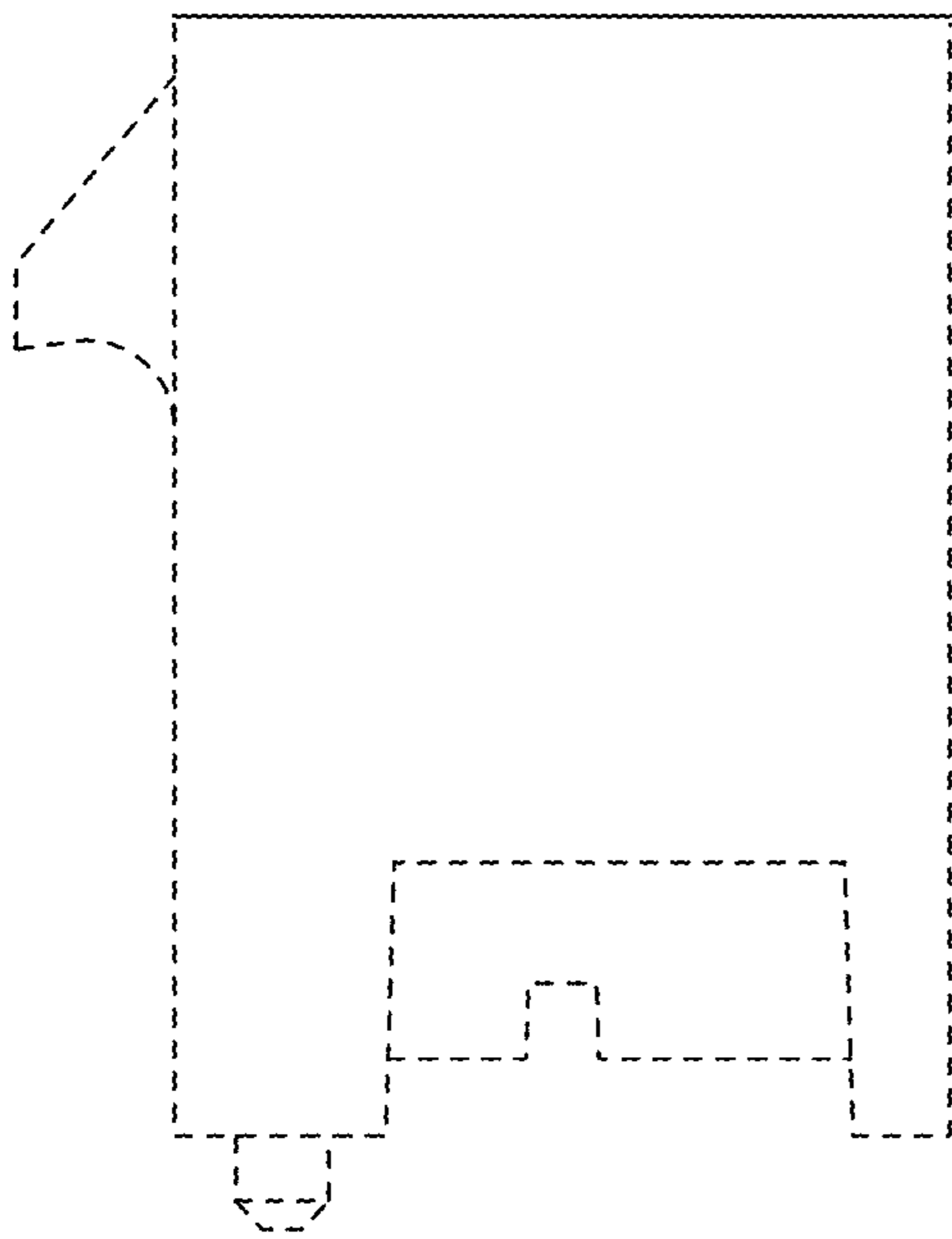


FIG. 86

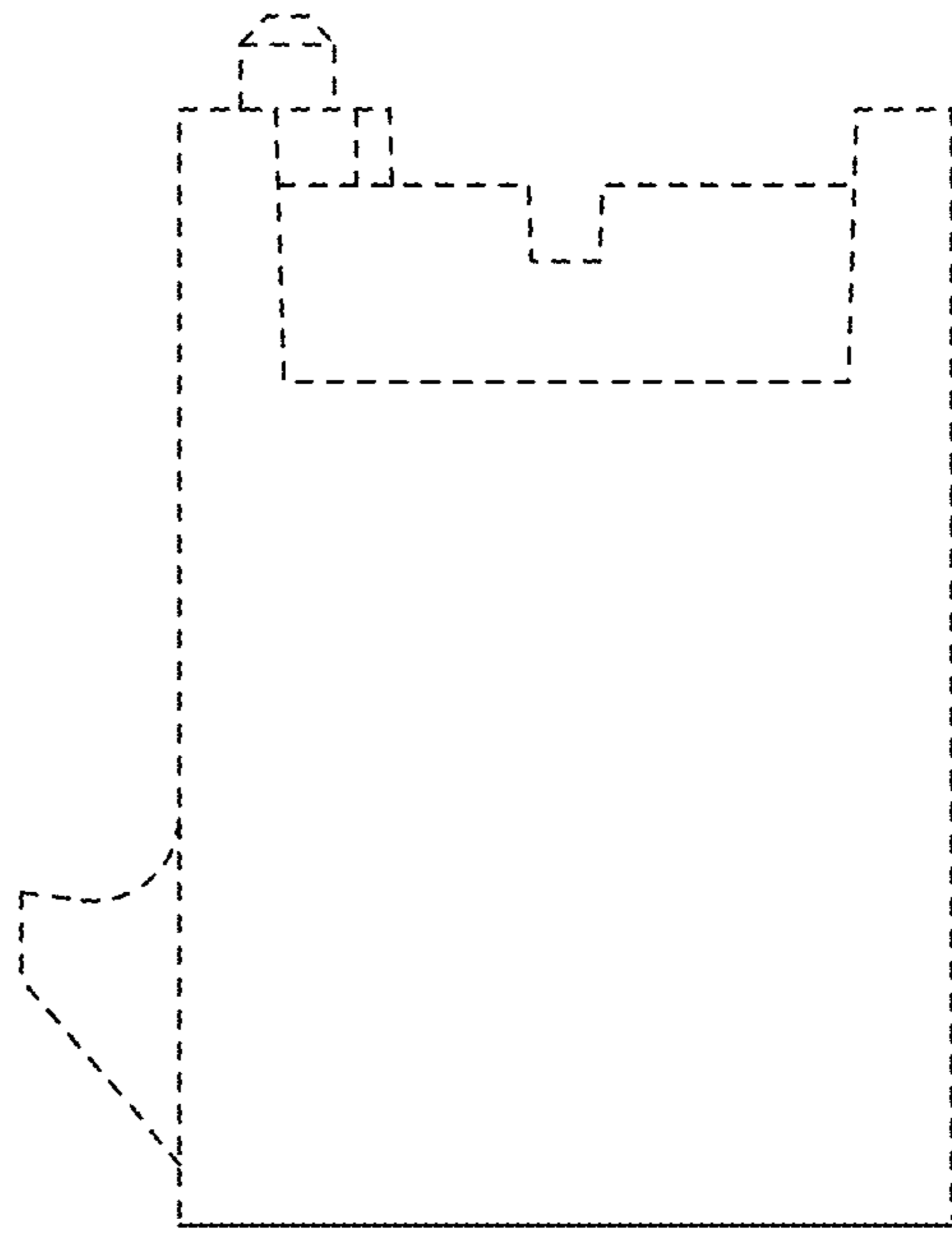


FIG. 87

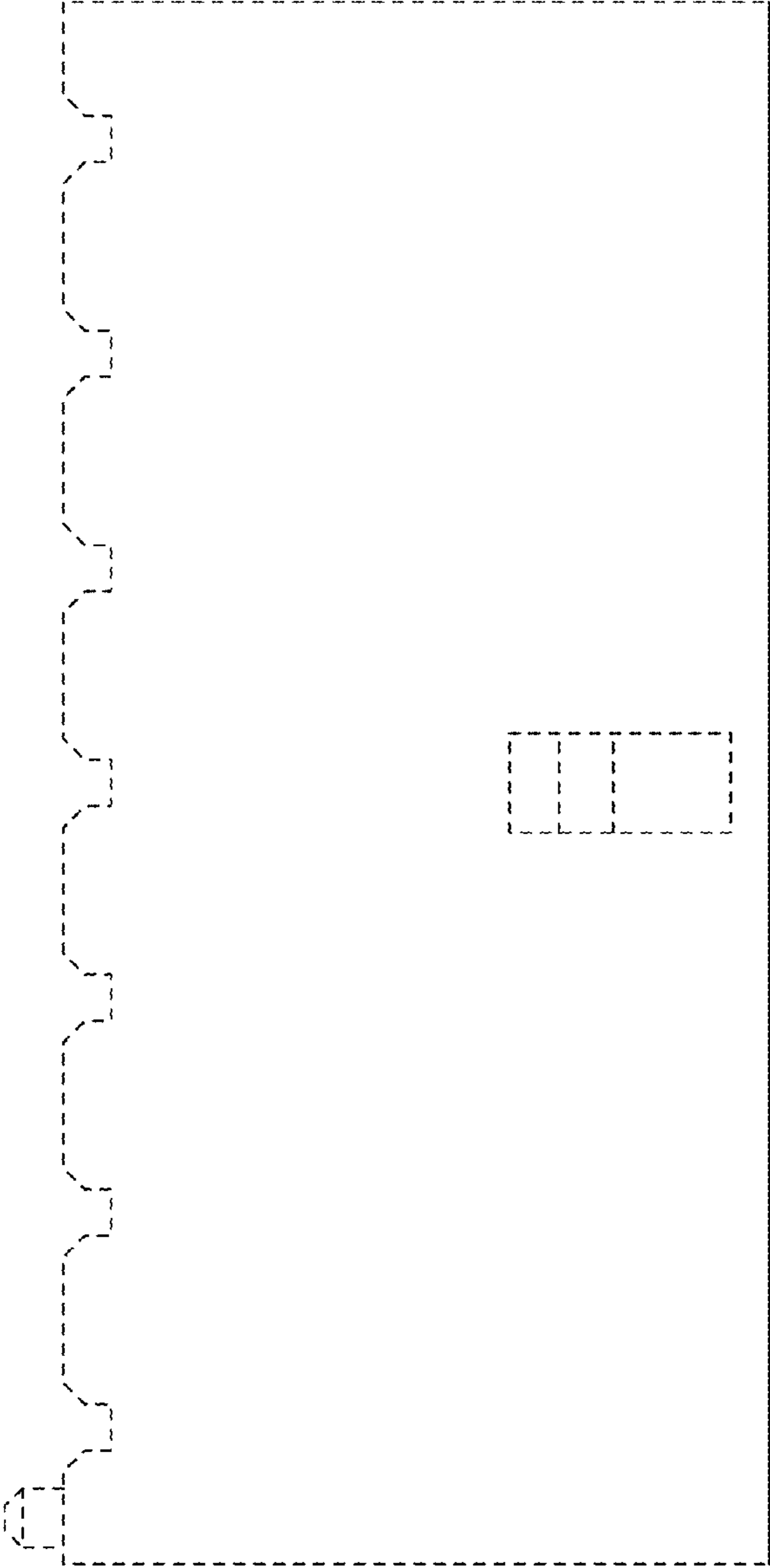


FIG. 88

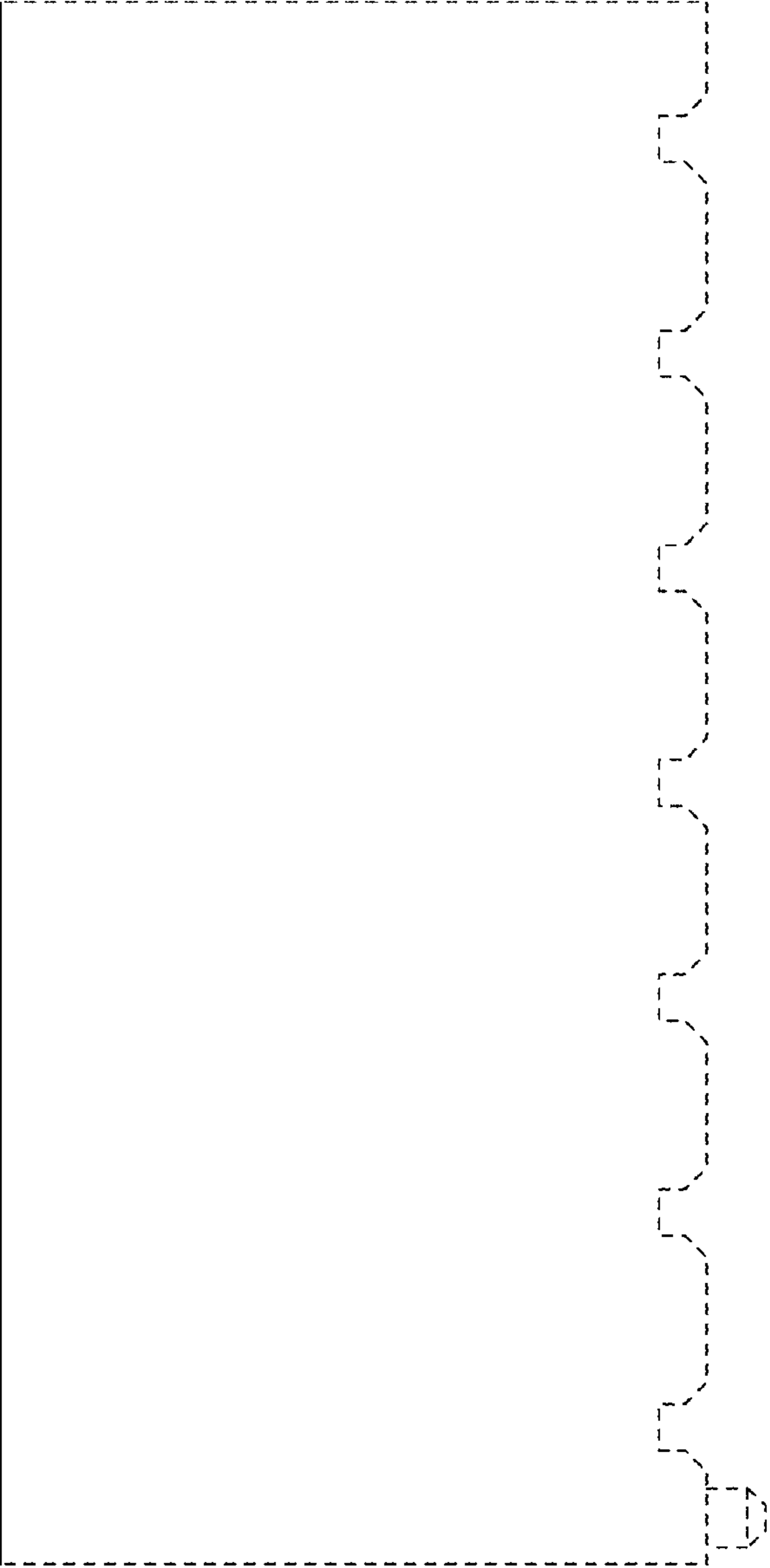


FIG. 89

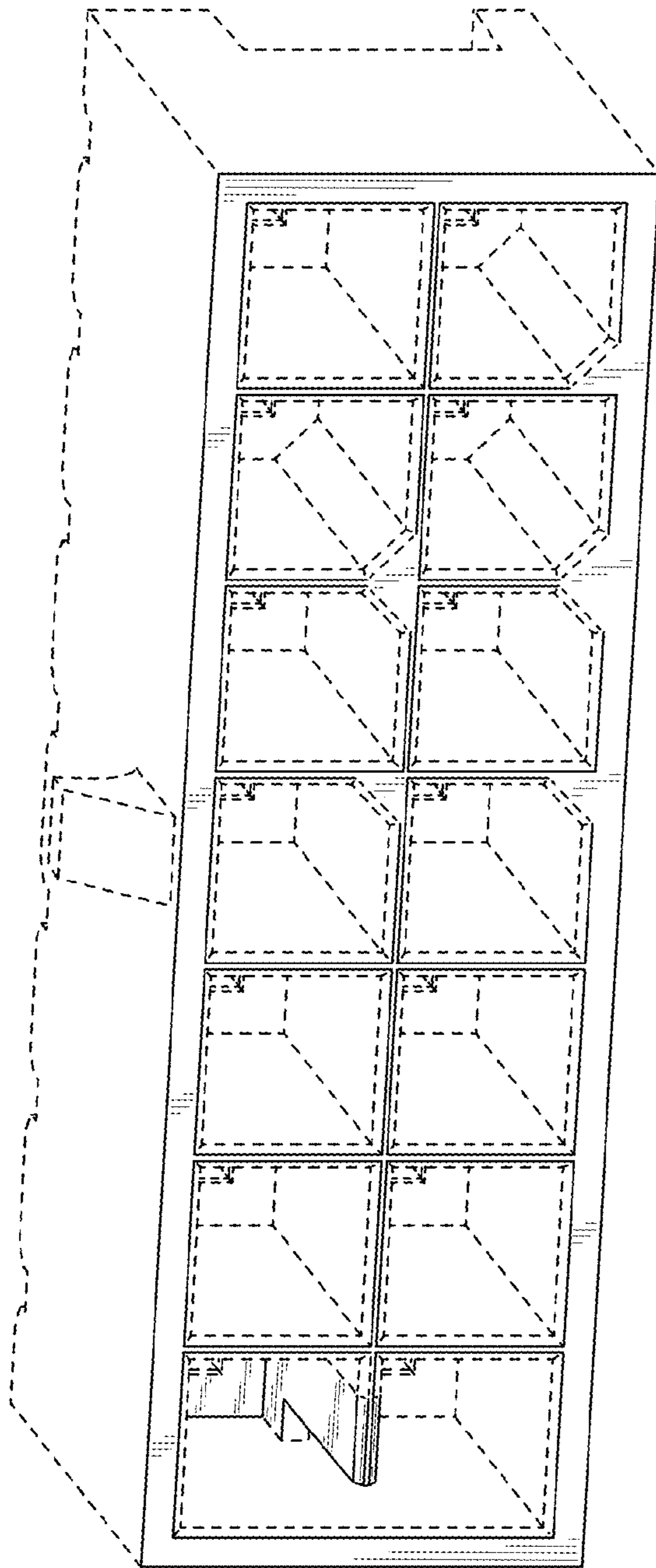


FIG. 90

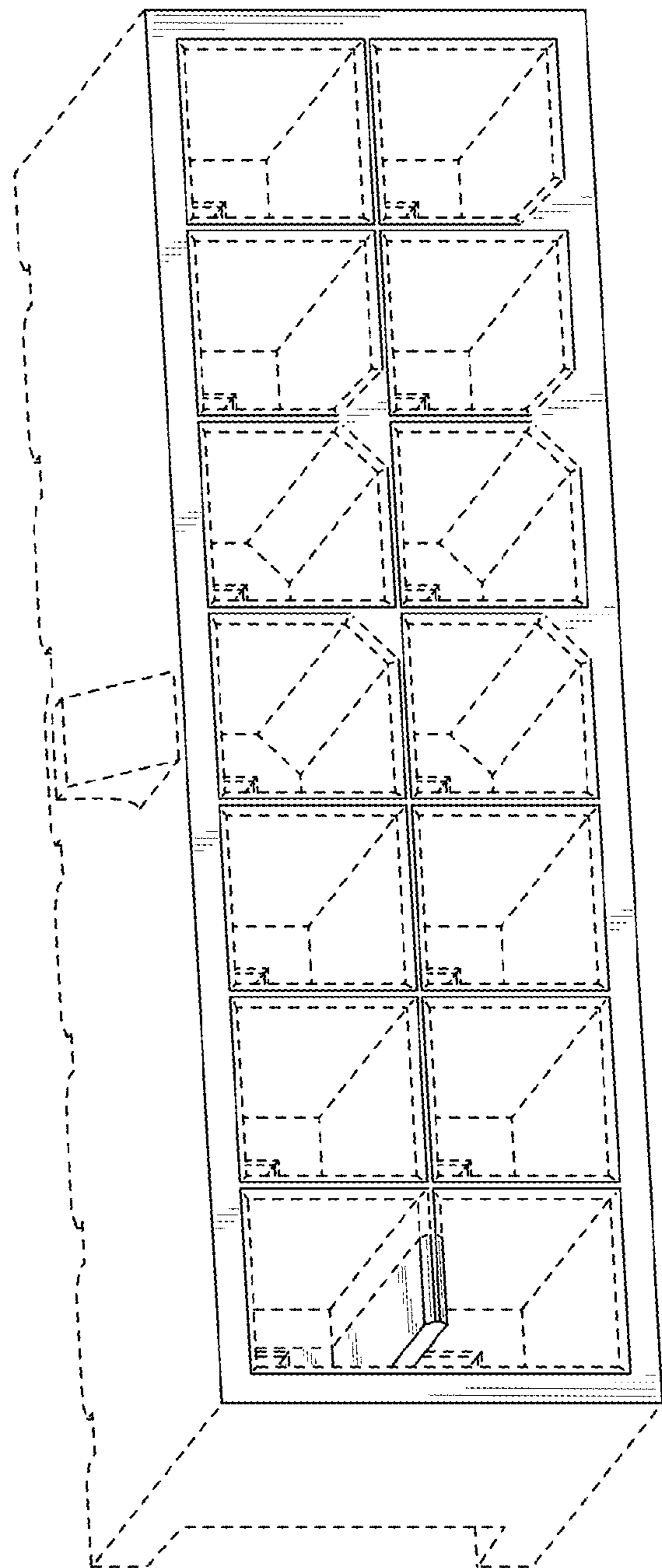


FIG. 91

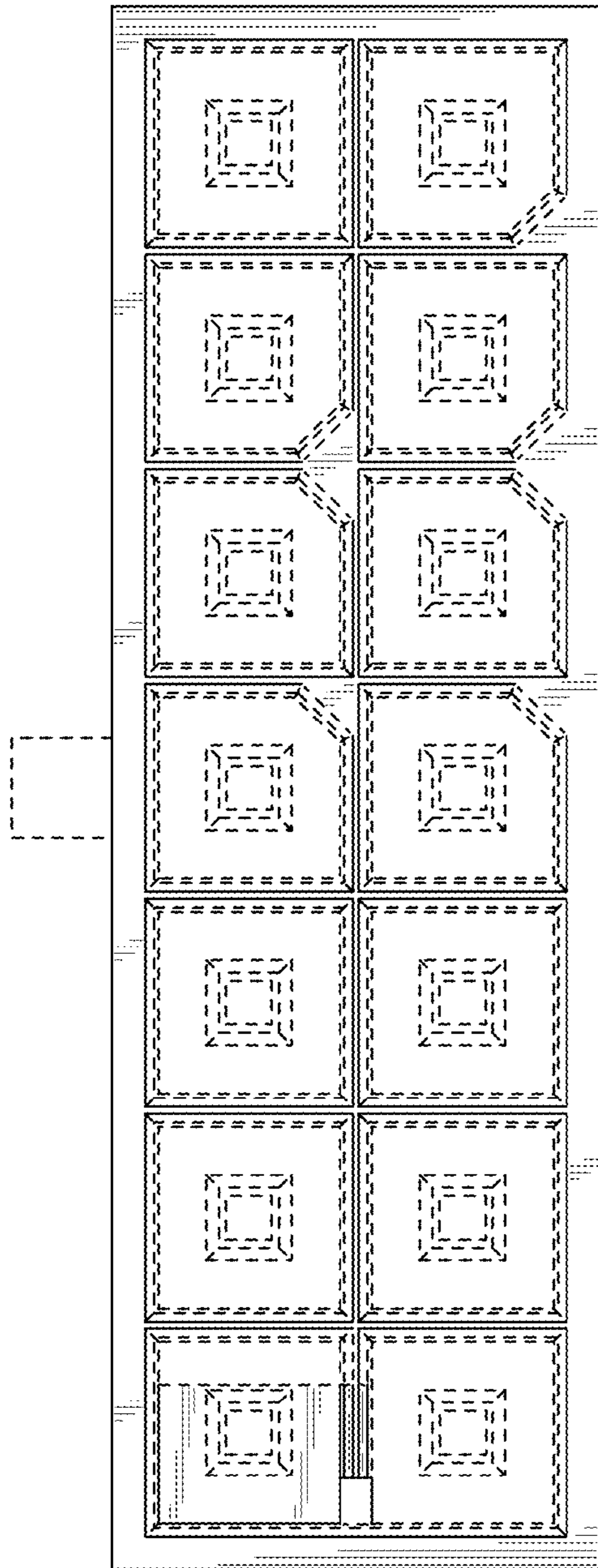


FIG. 92

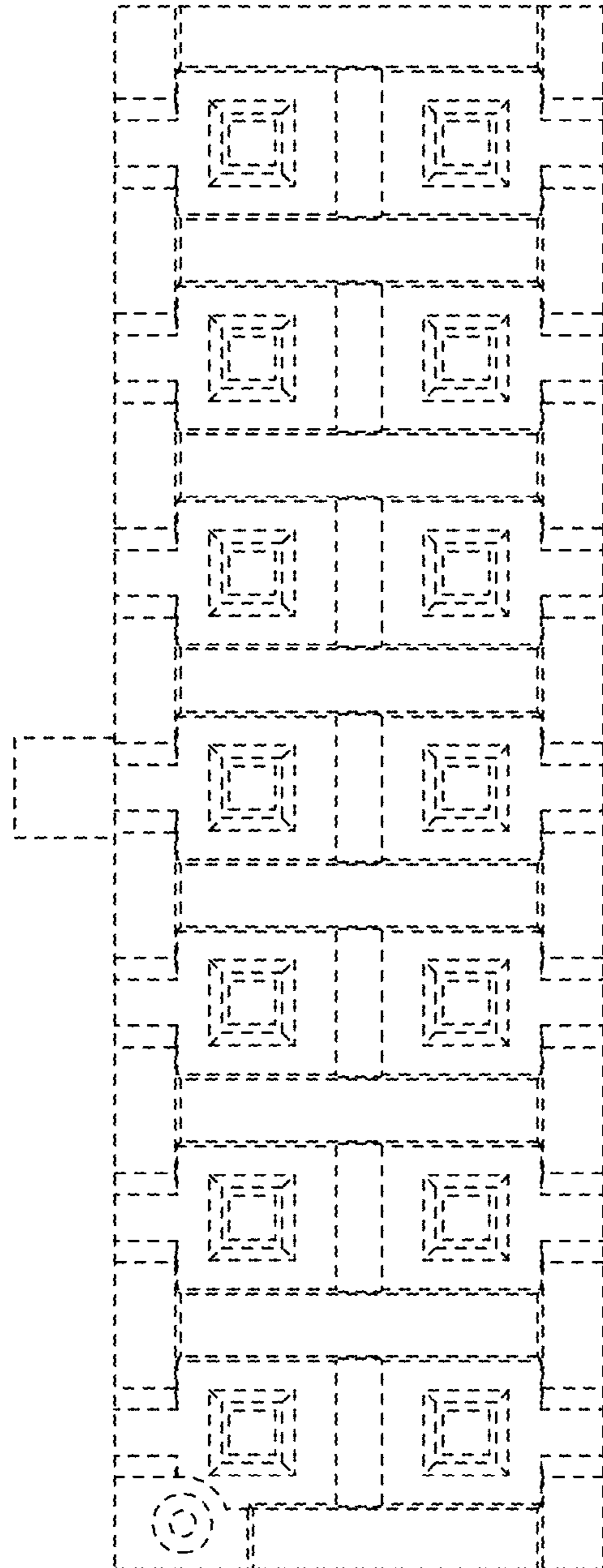


FIG. 93

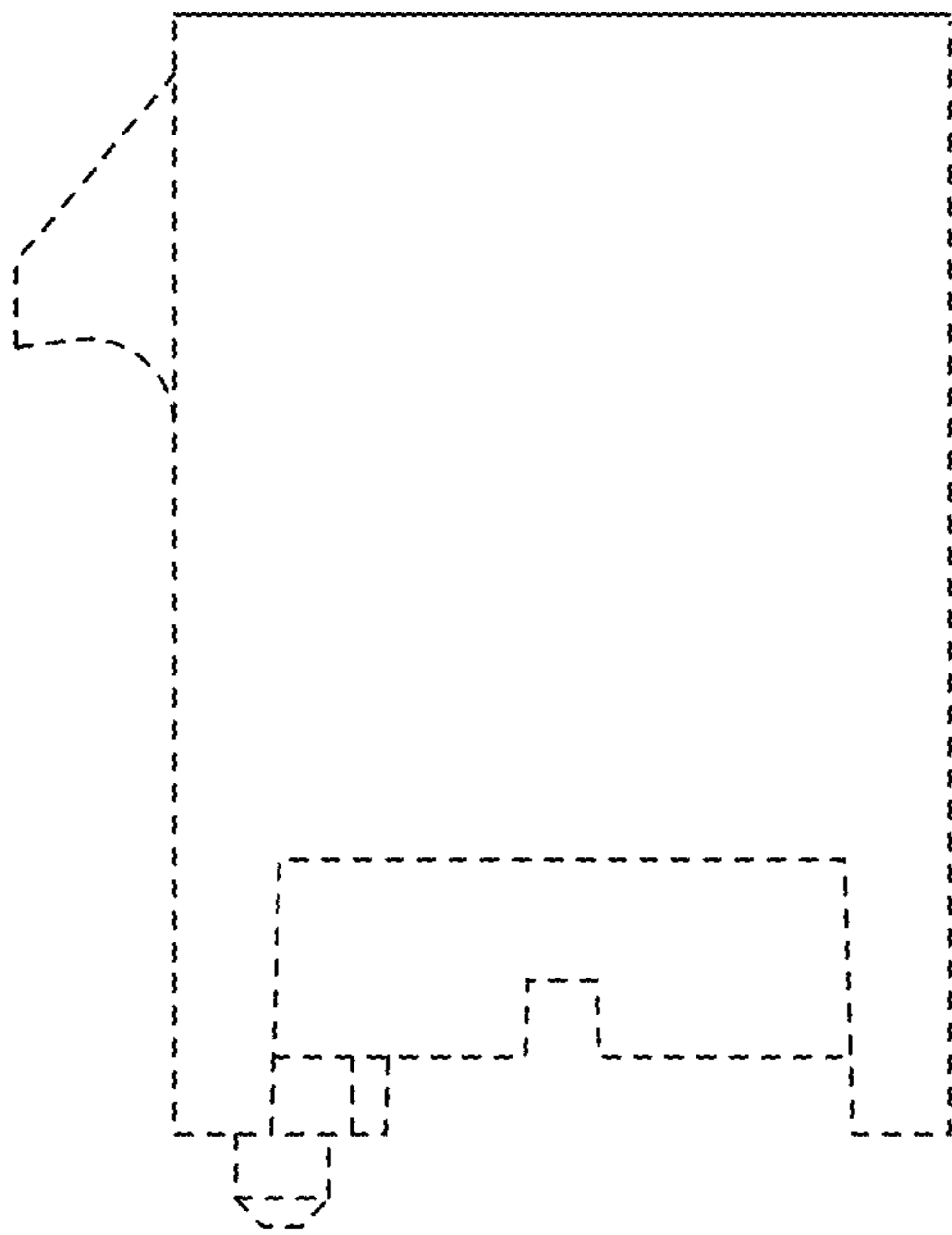


FIG. 94

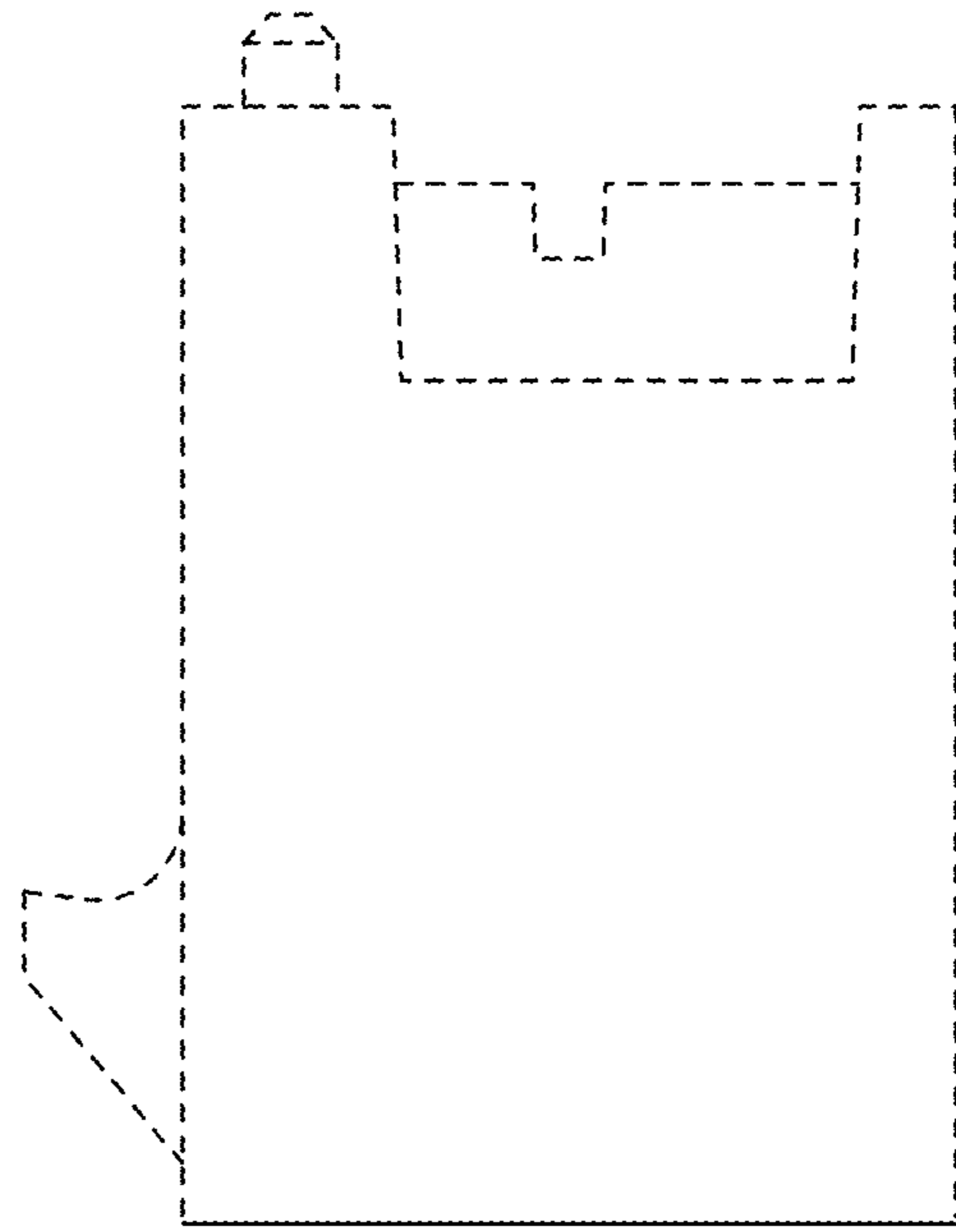


FIG. 95

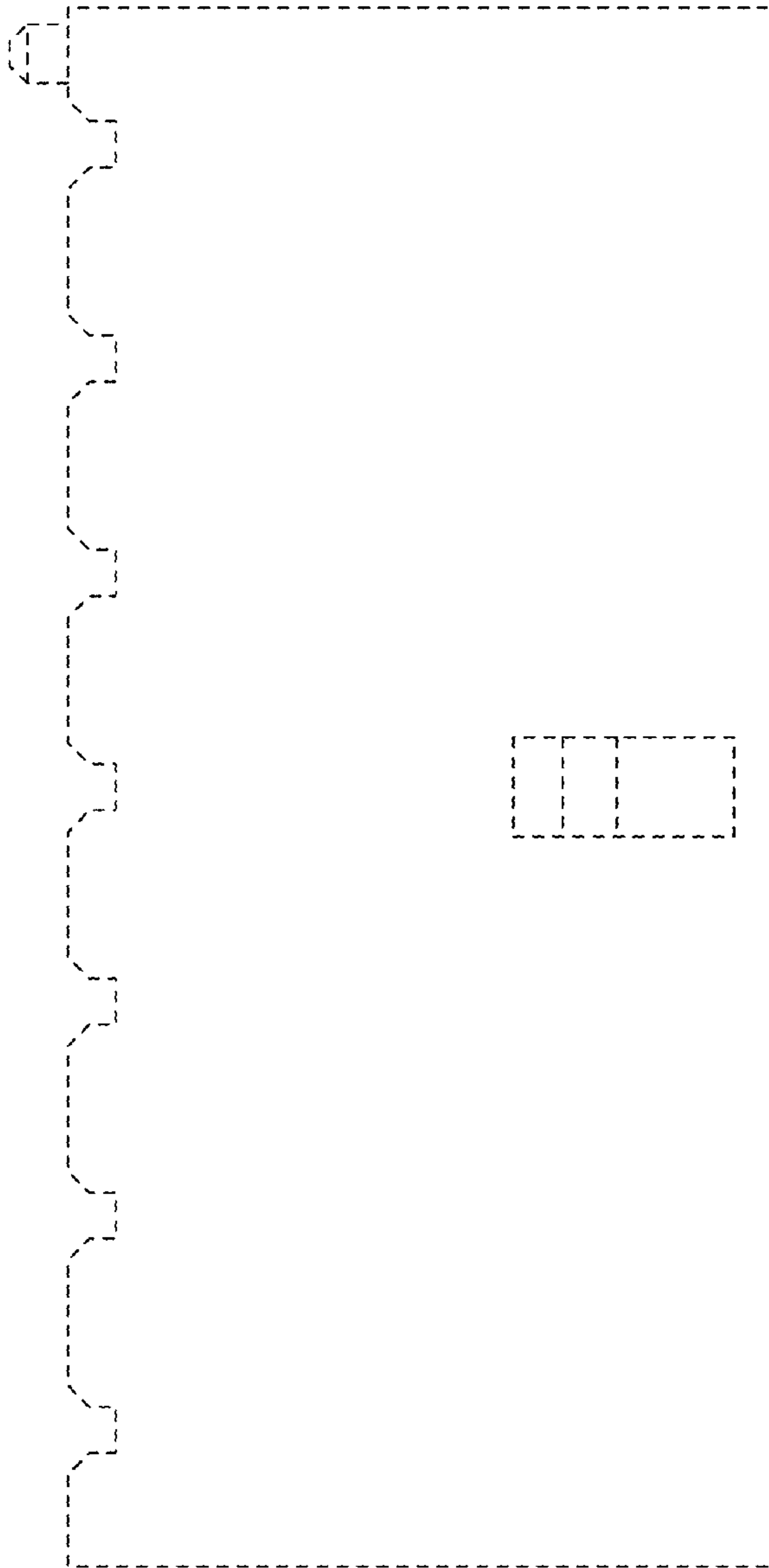


FIG. 96

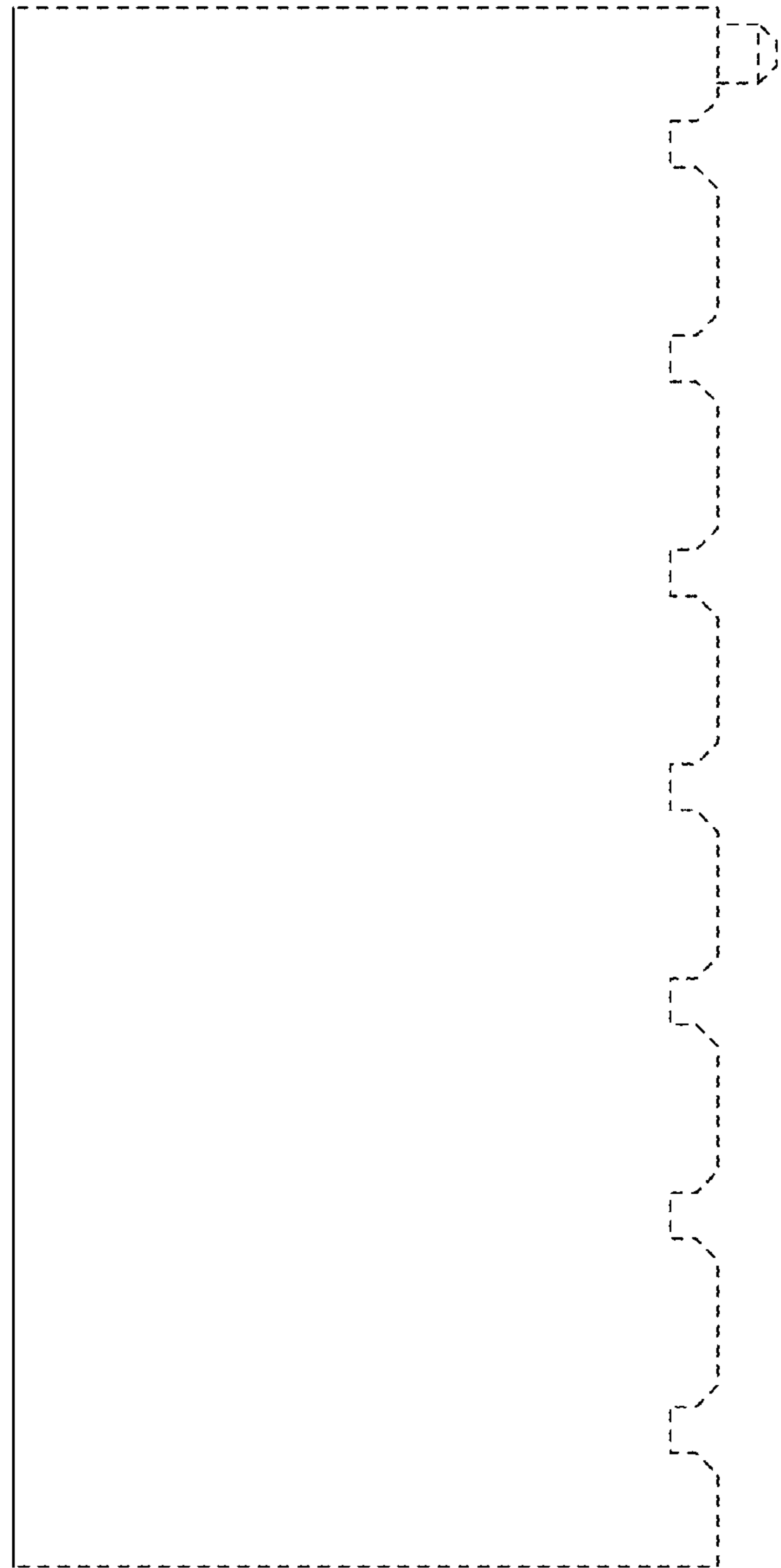


FIG. 97

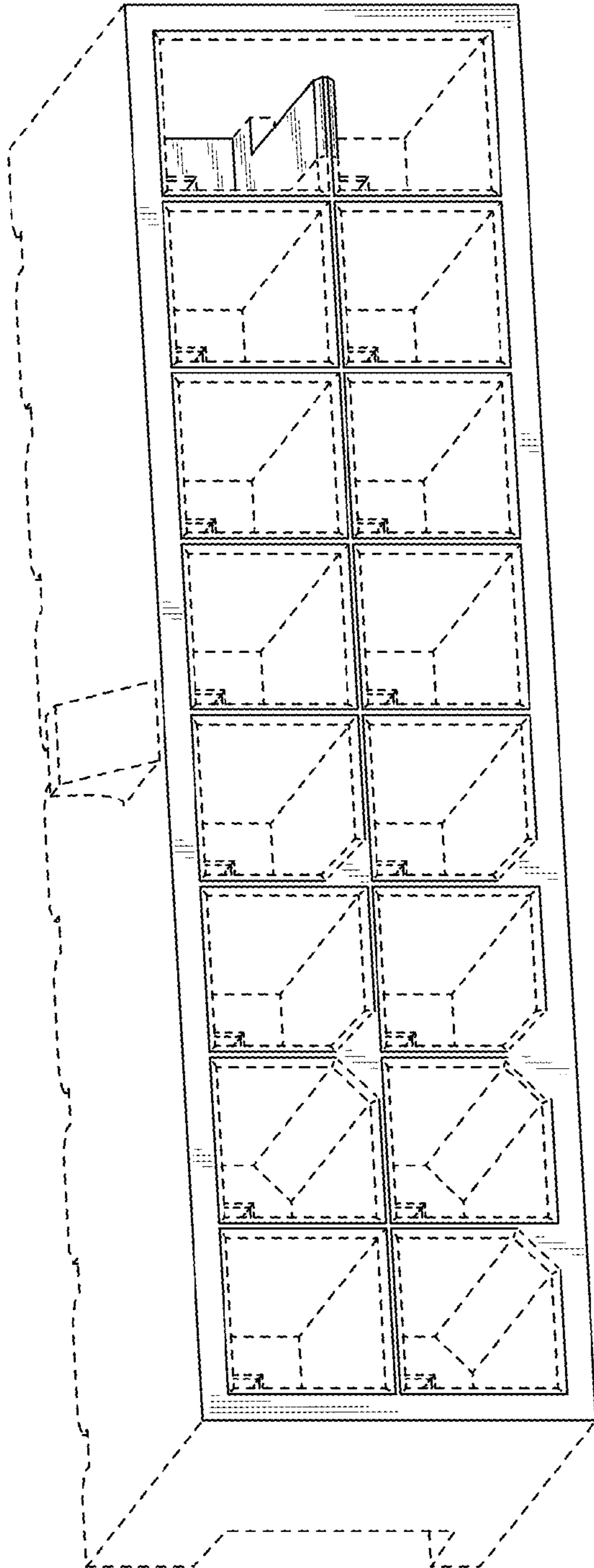
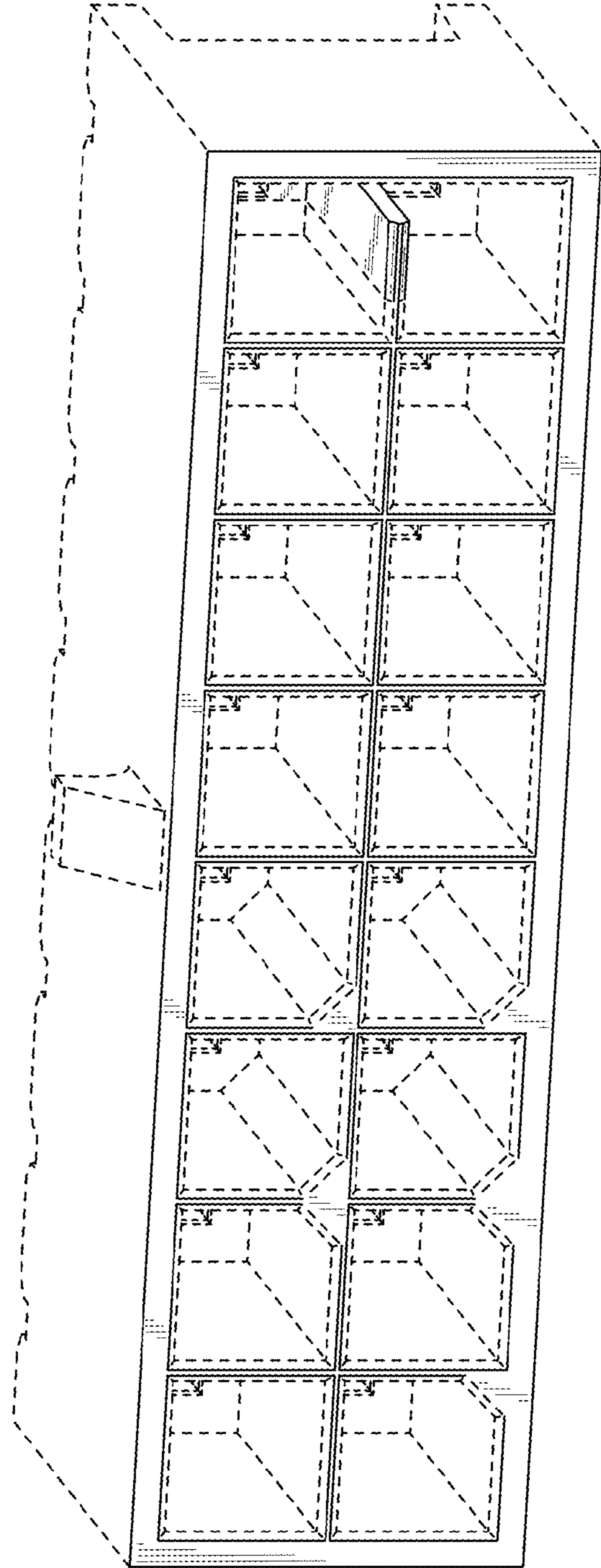


FIG. 98



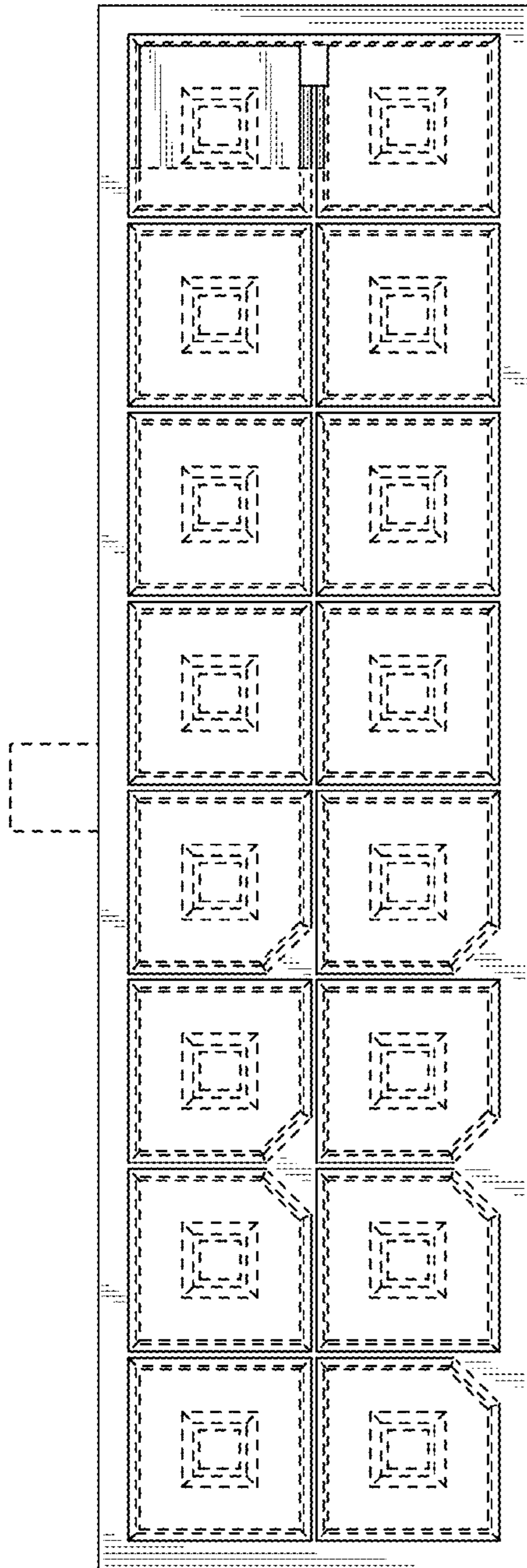


FIG. 99

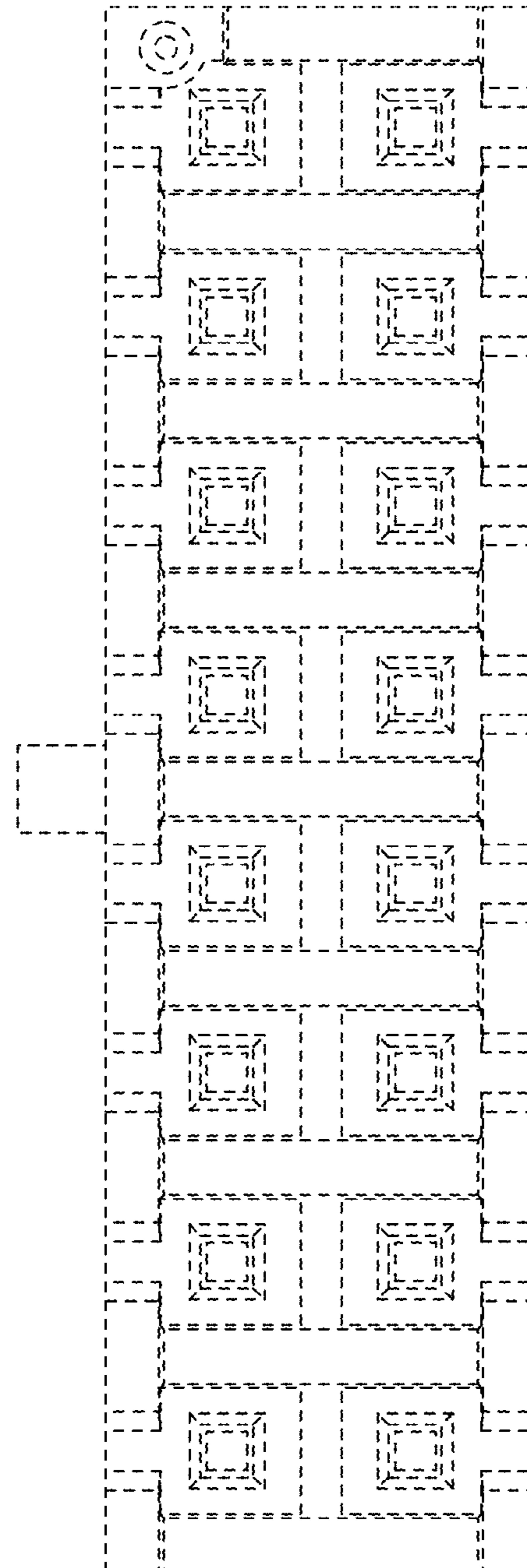


FIG. 100

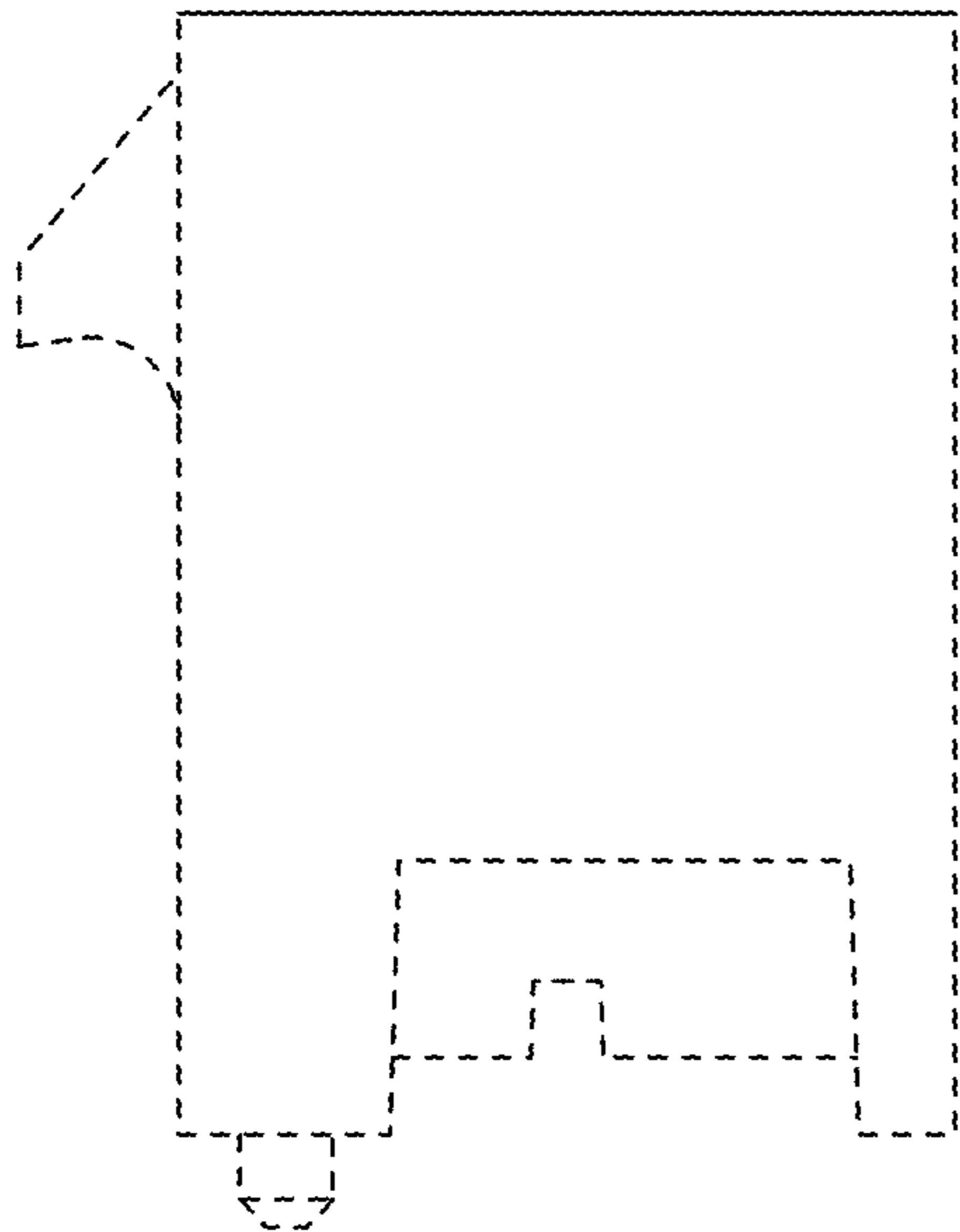


FIG. 101

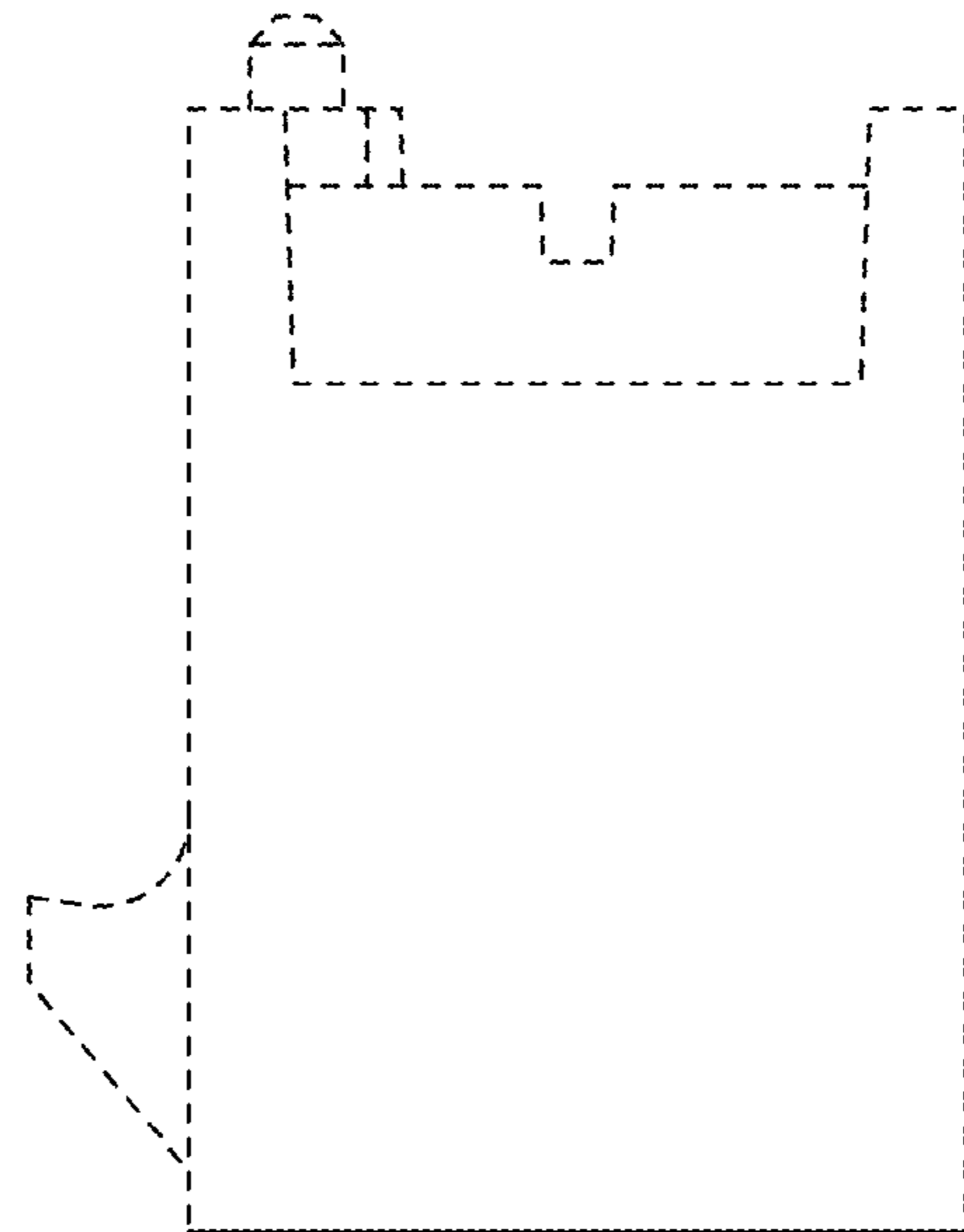


FIG. 102

FIG. 103

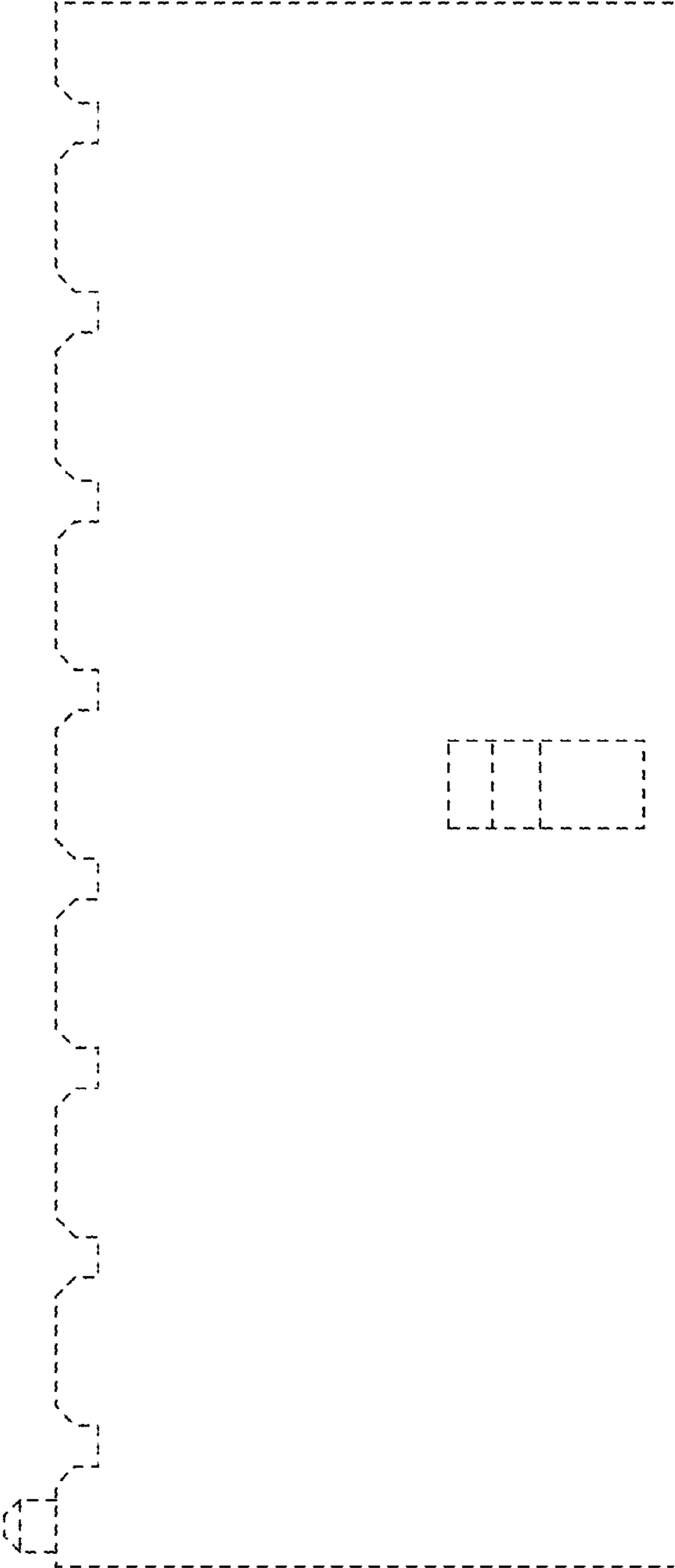


FIG. 104

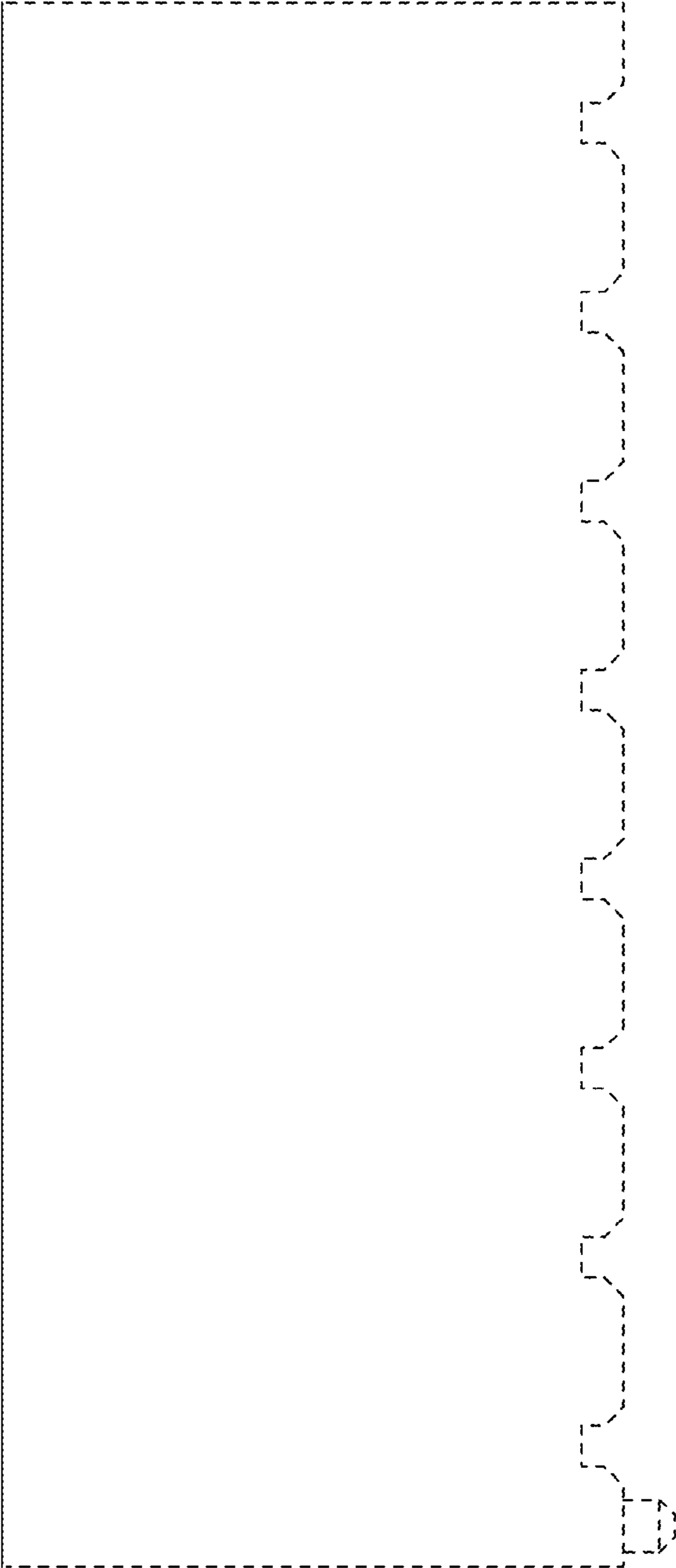


FIG. 105

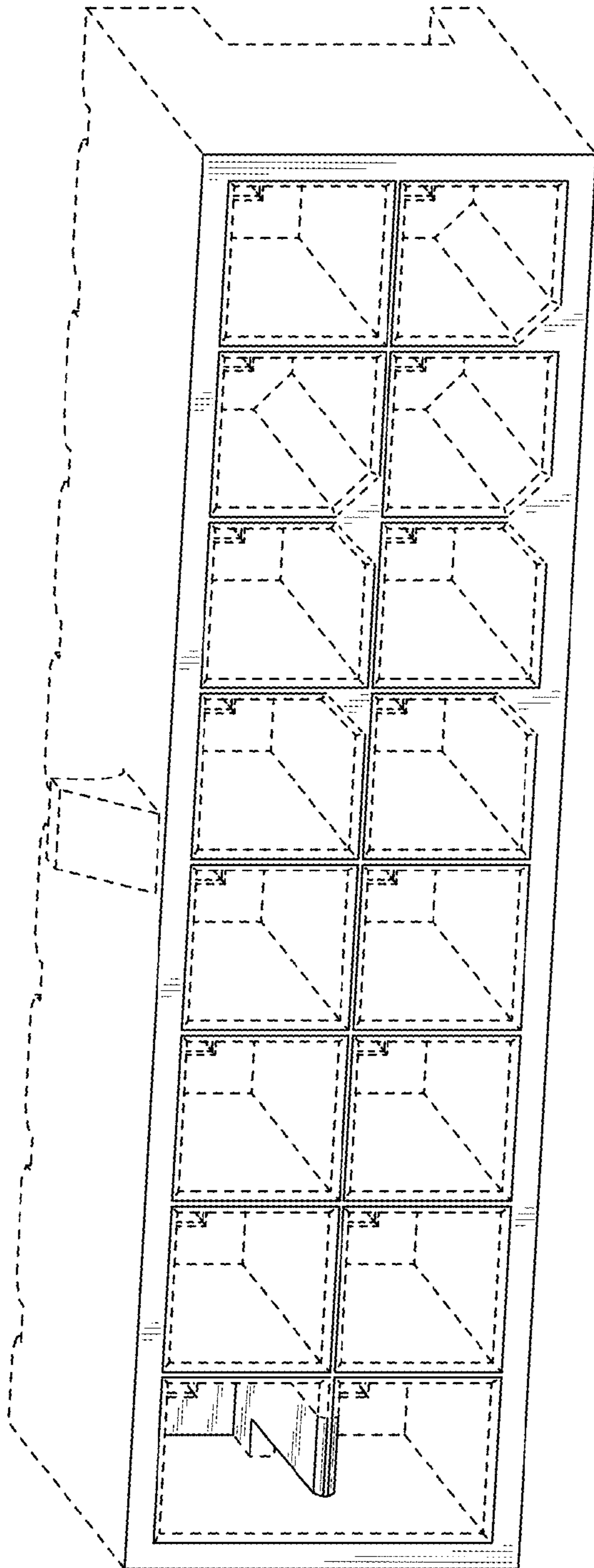
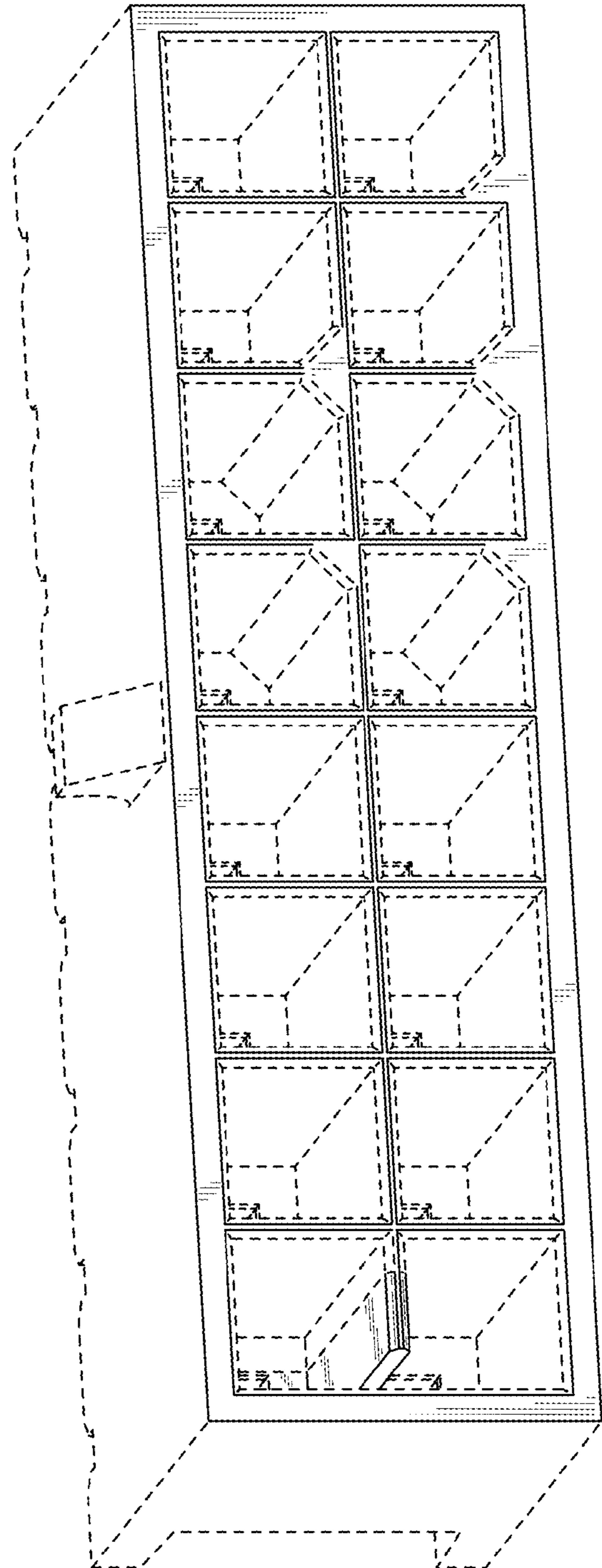


FIG. 106



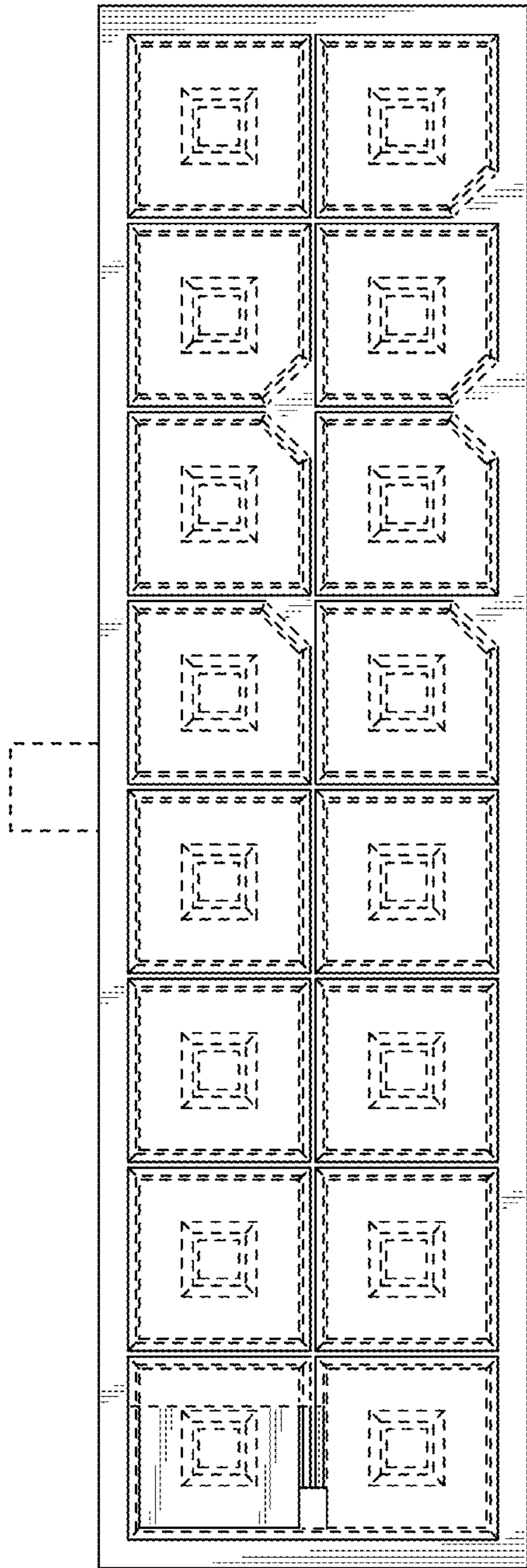


FIG. 107

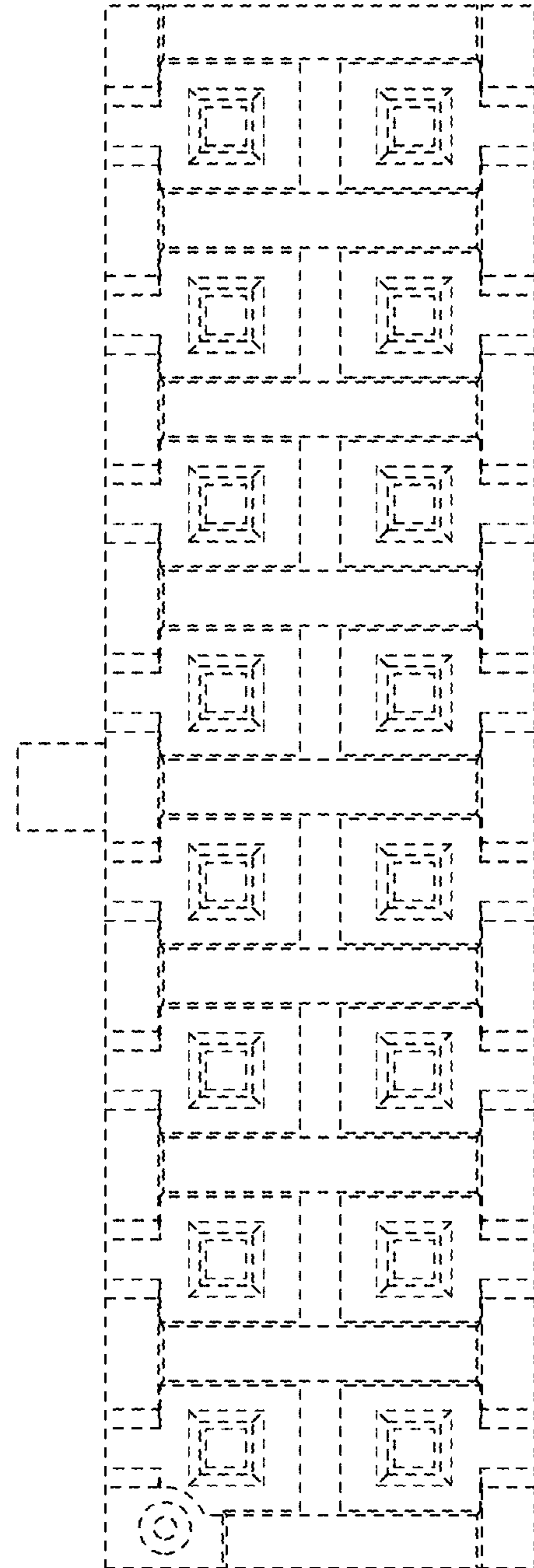


FIG. 108

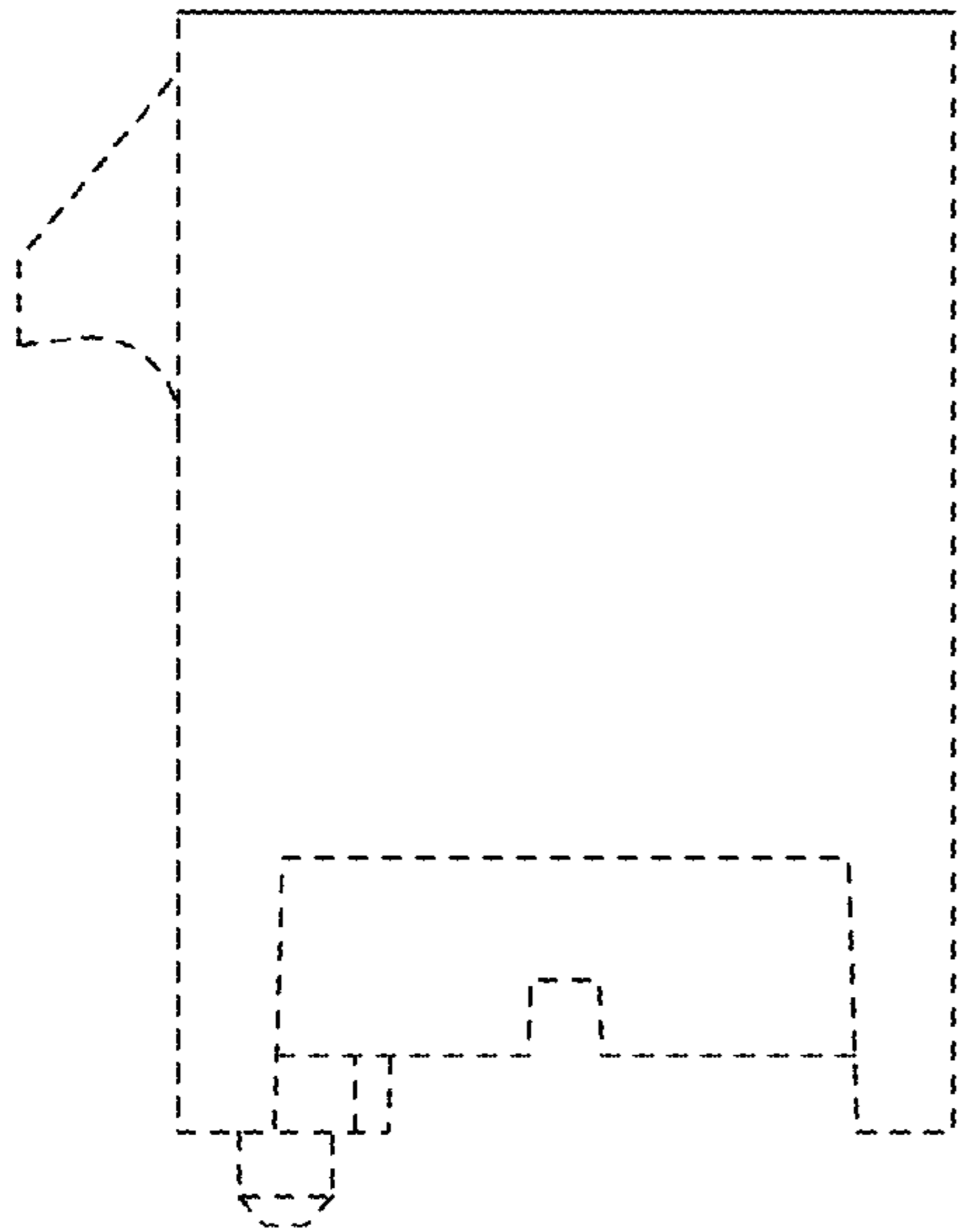


FIG. 109

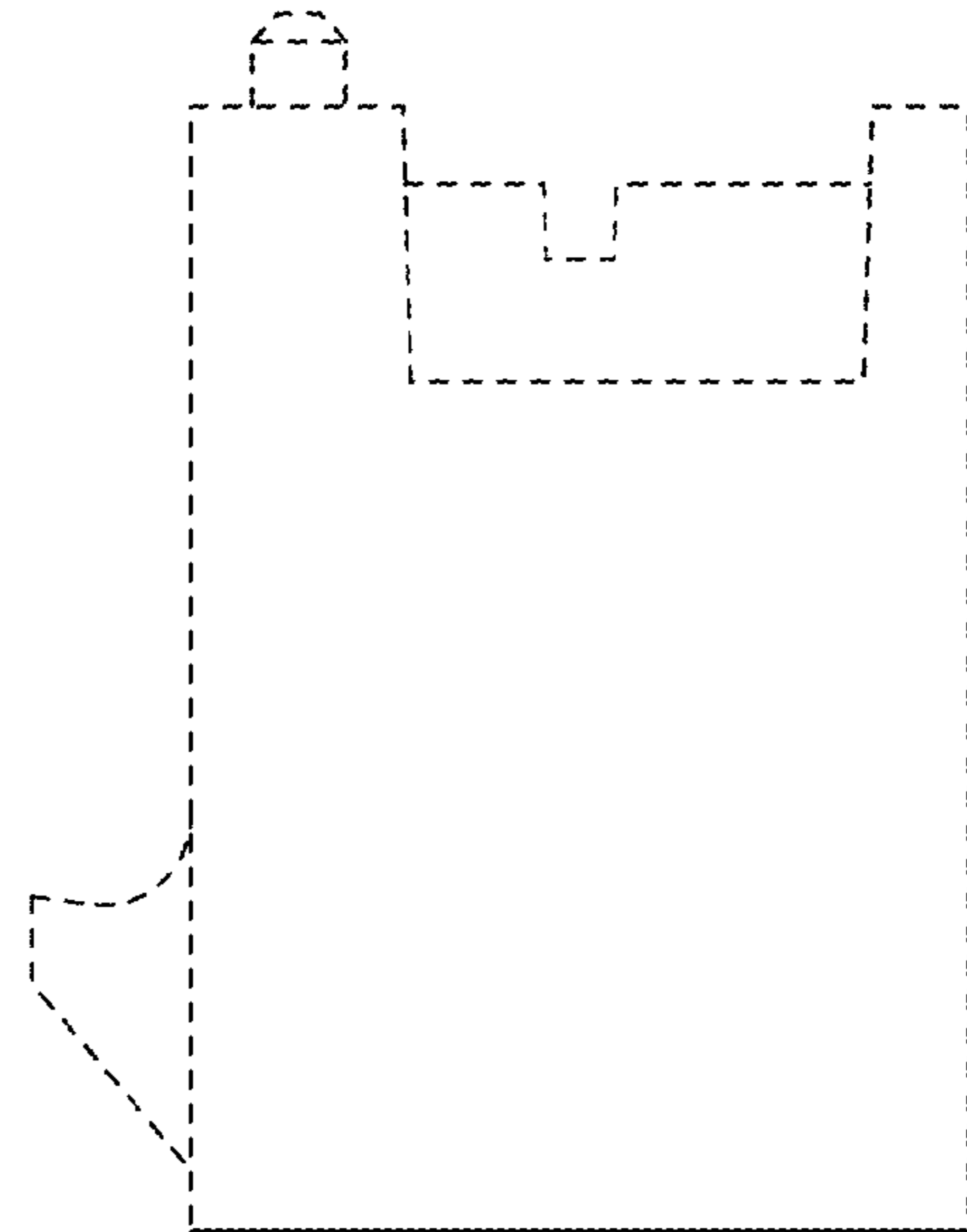


FIG. 110

FIG. 111

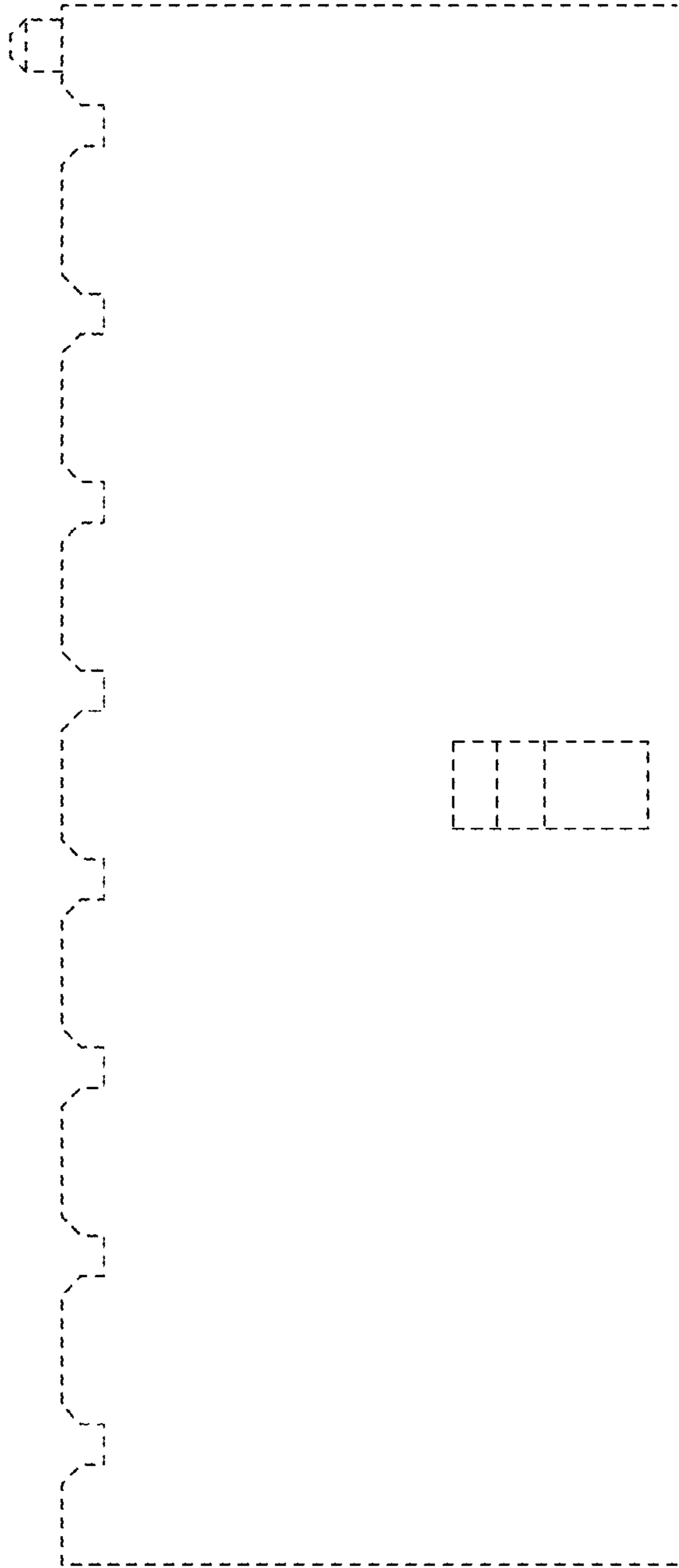


FIG. 112

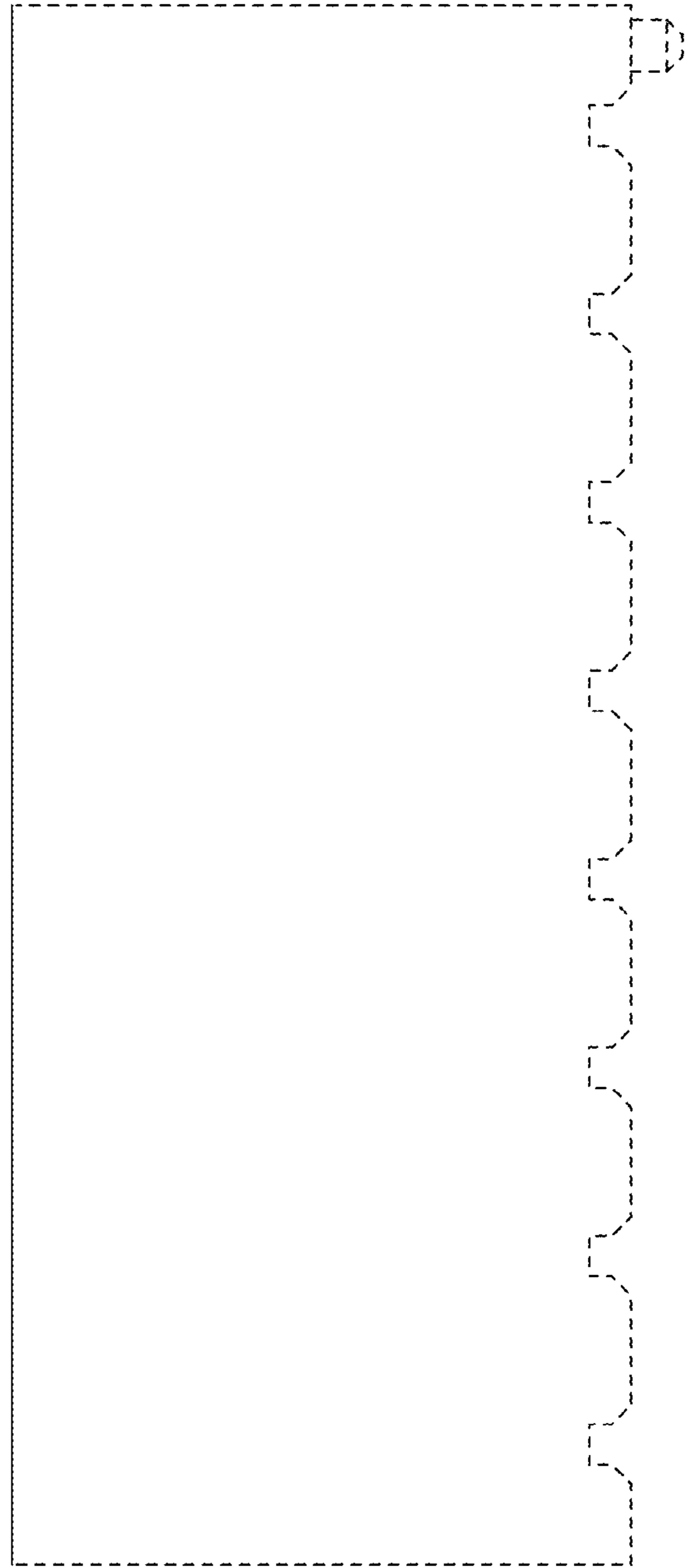


FIG. 113

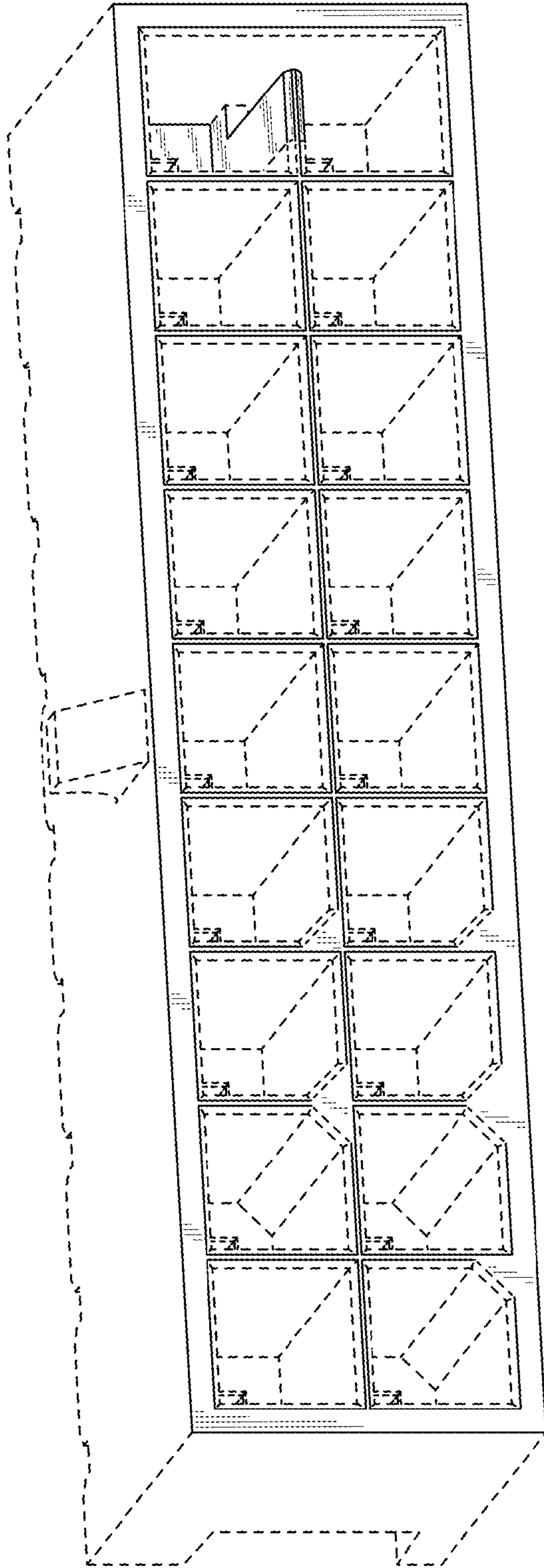
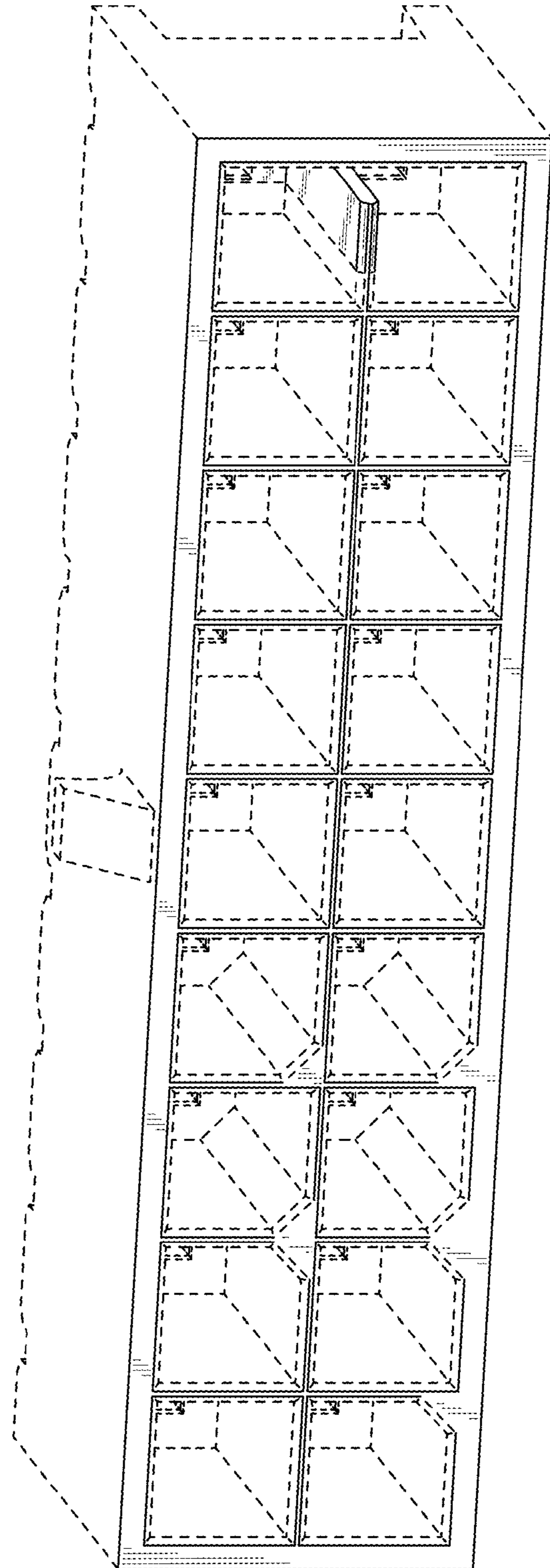


FIG. 114



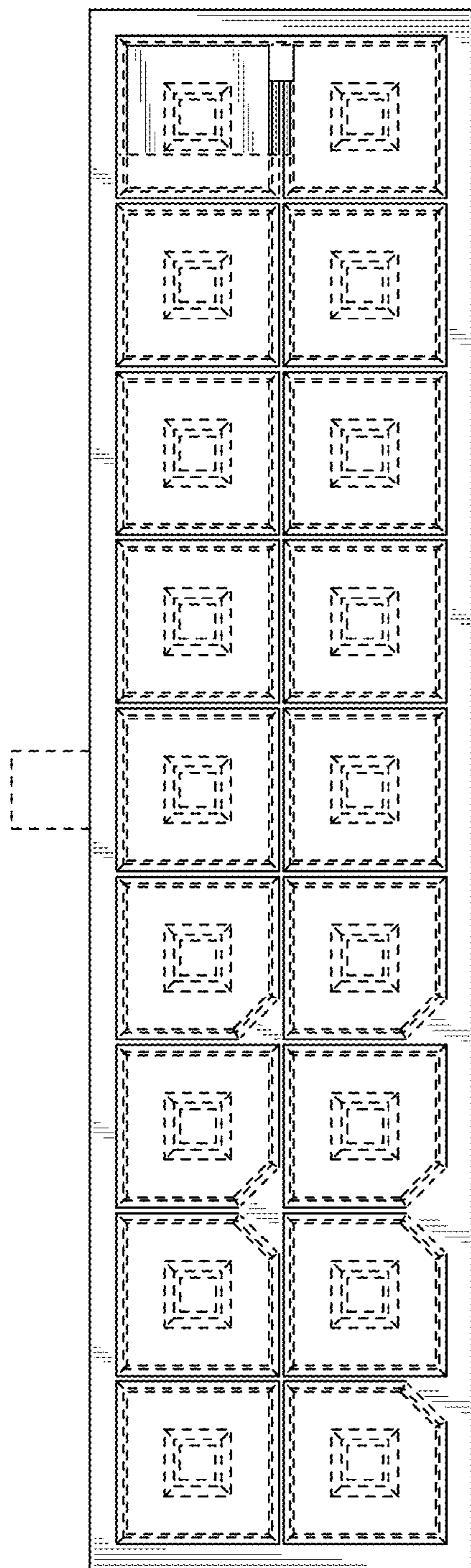


FIG. 115

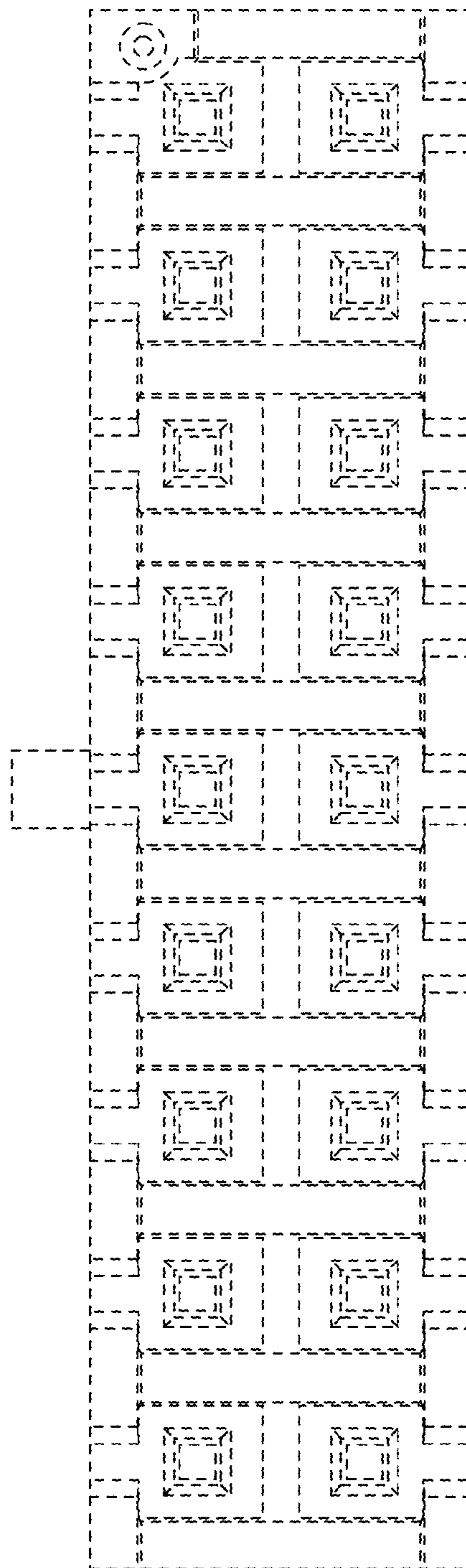


FIG. 116

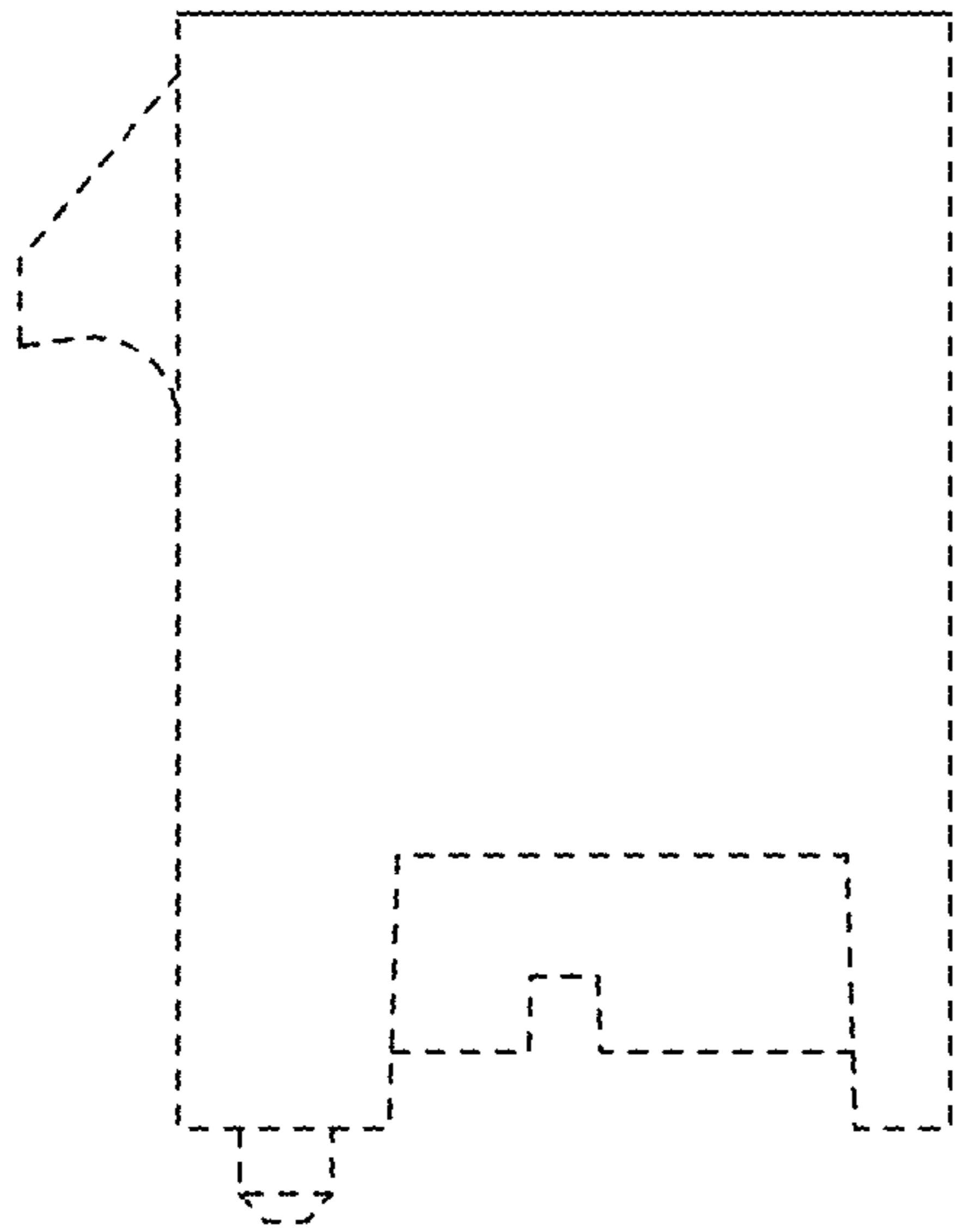


FIG. 117

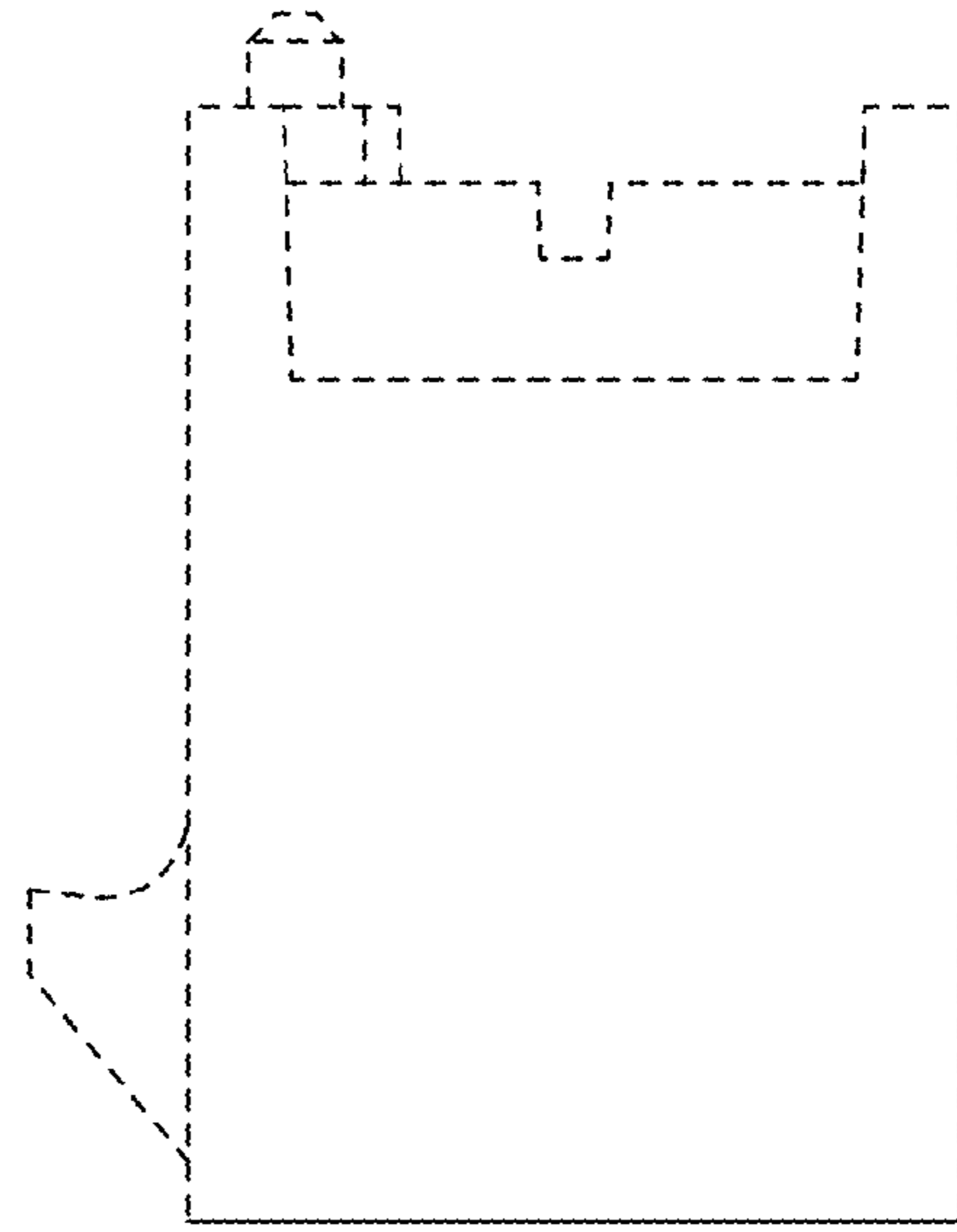


FIG. 118

FIG. 119

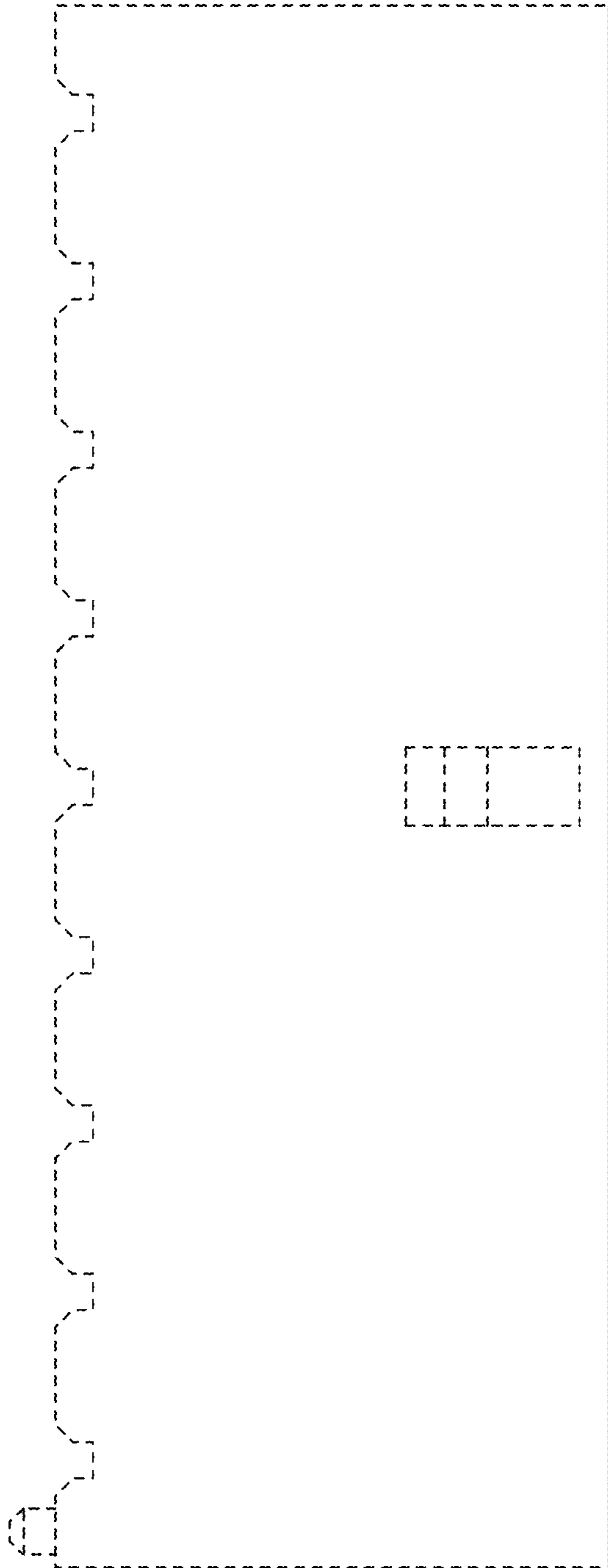


FIG. 120

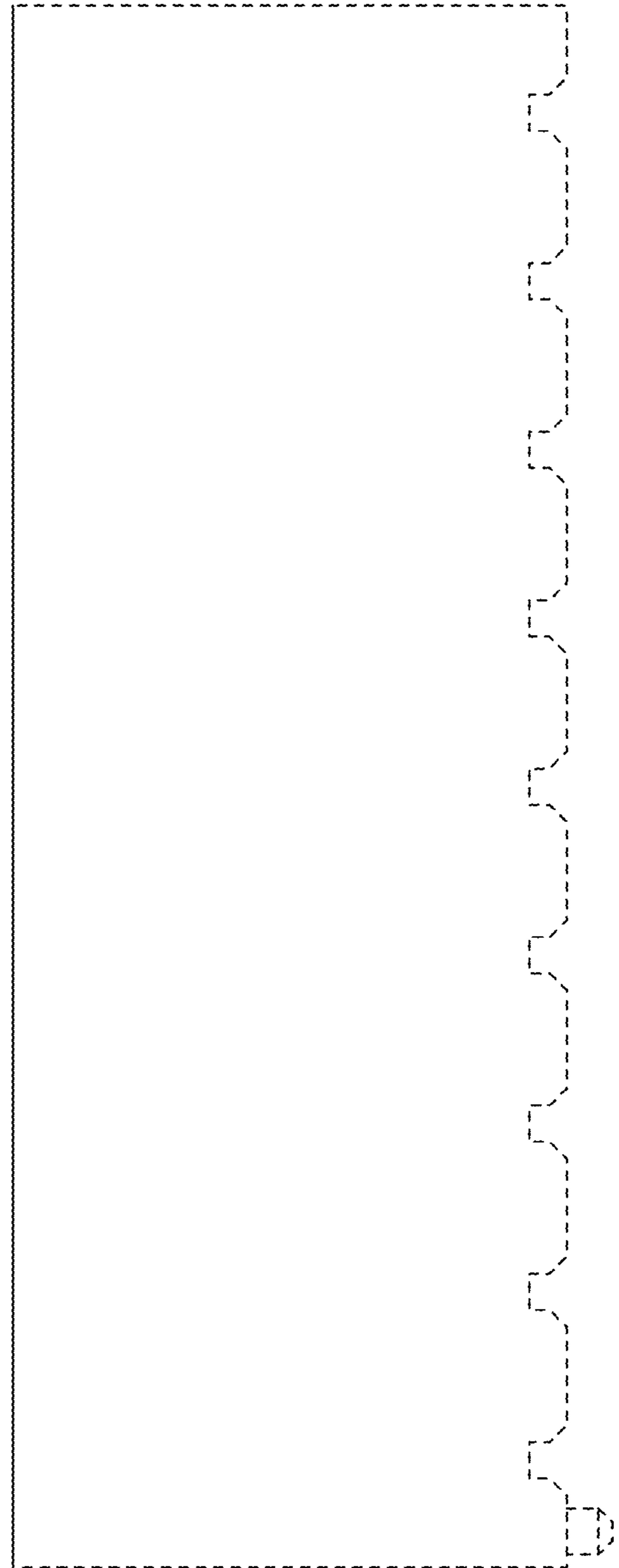


FIG. 121

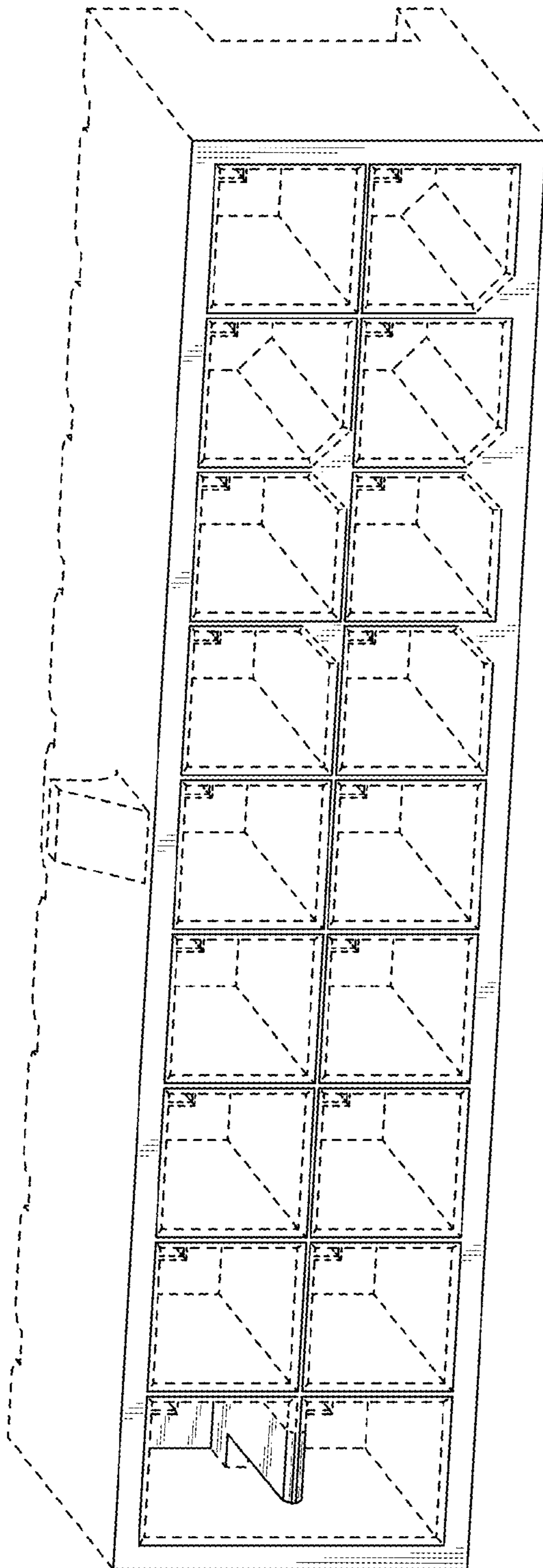
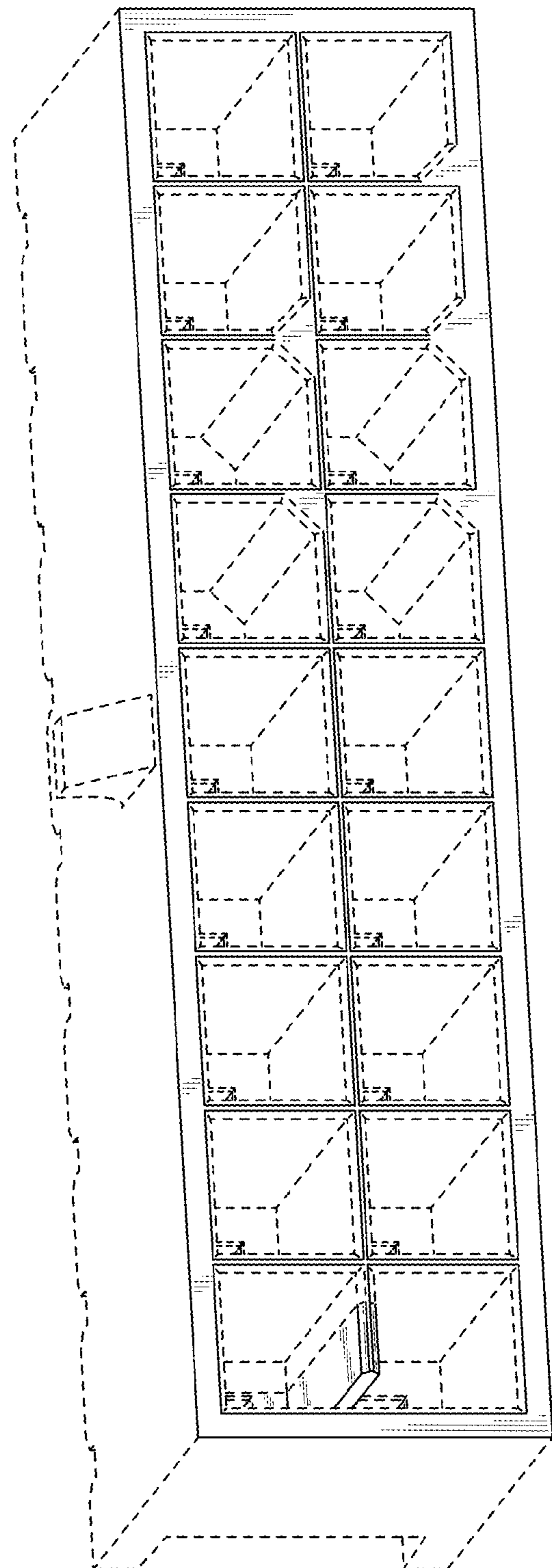


FIG. 122



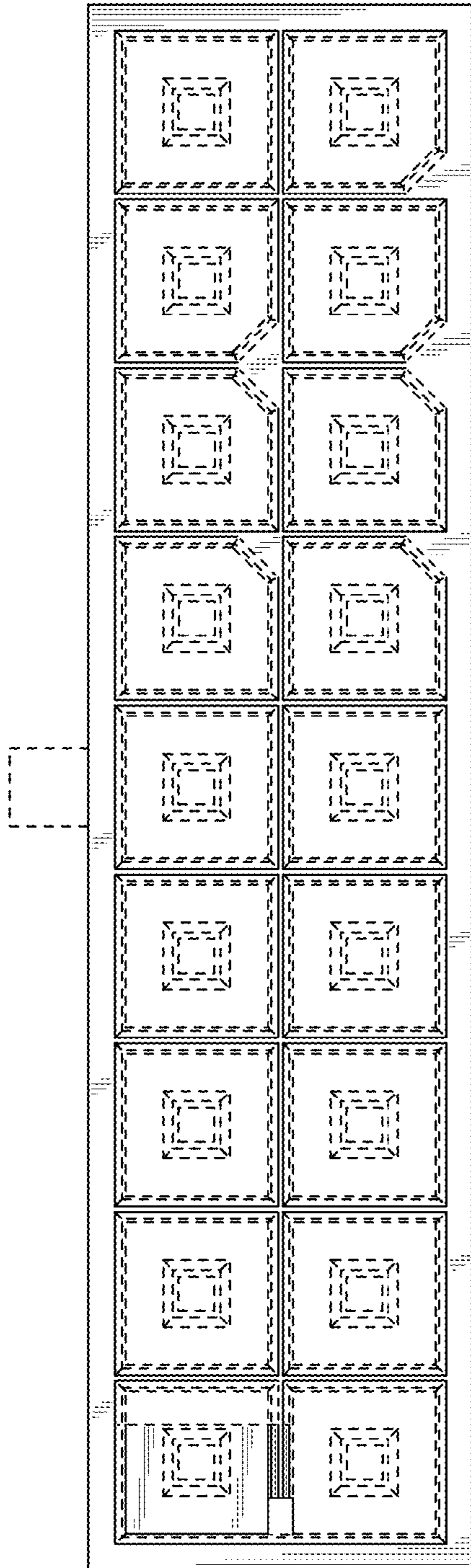


FIG. 123

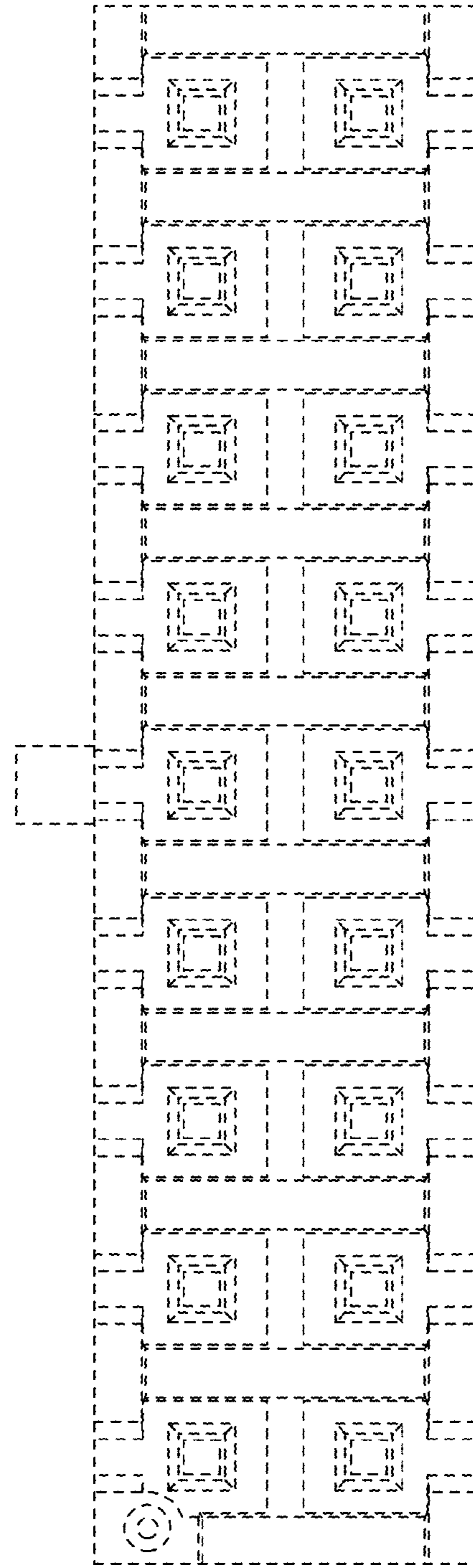


FIG. 124

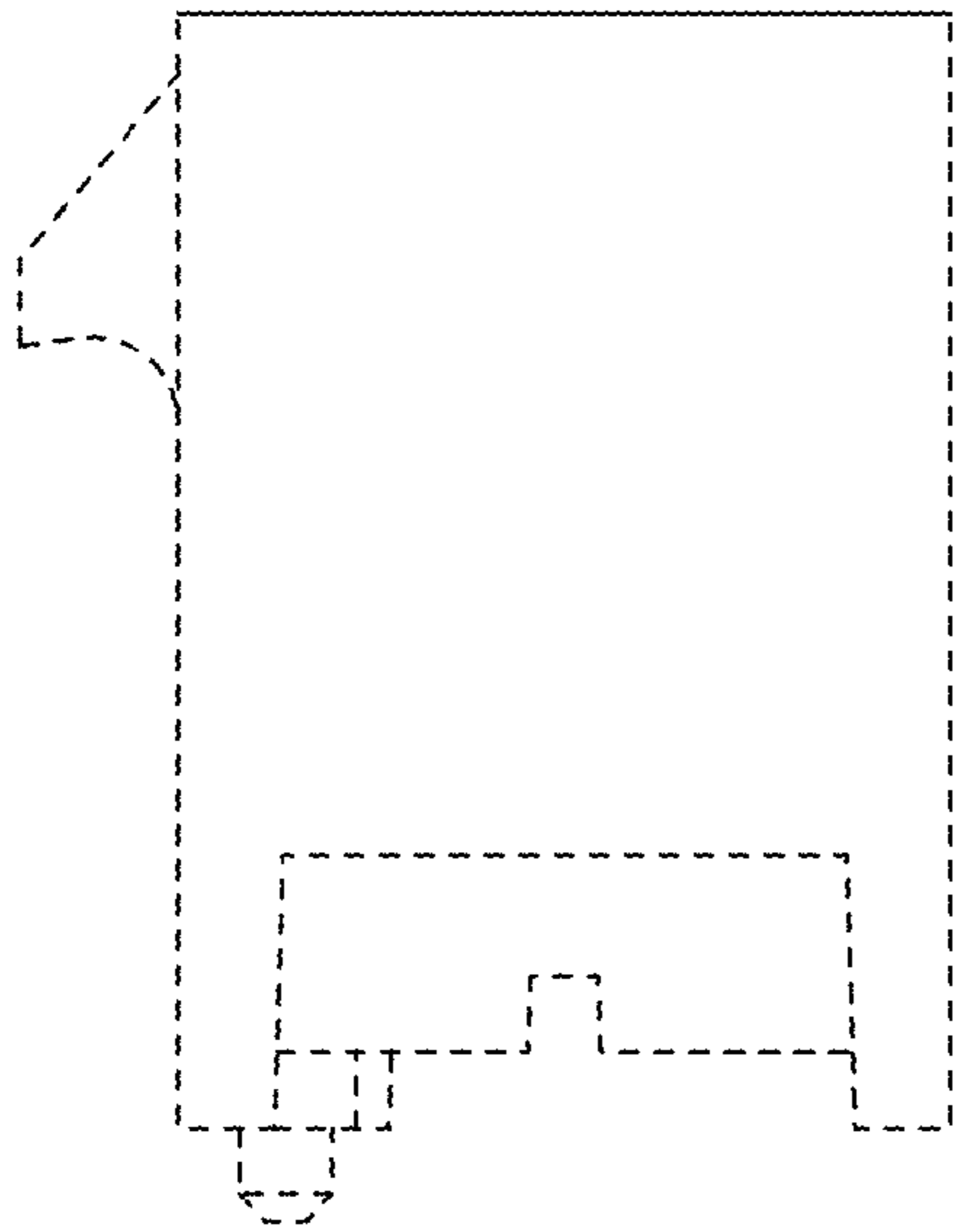


FIG. 125

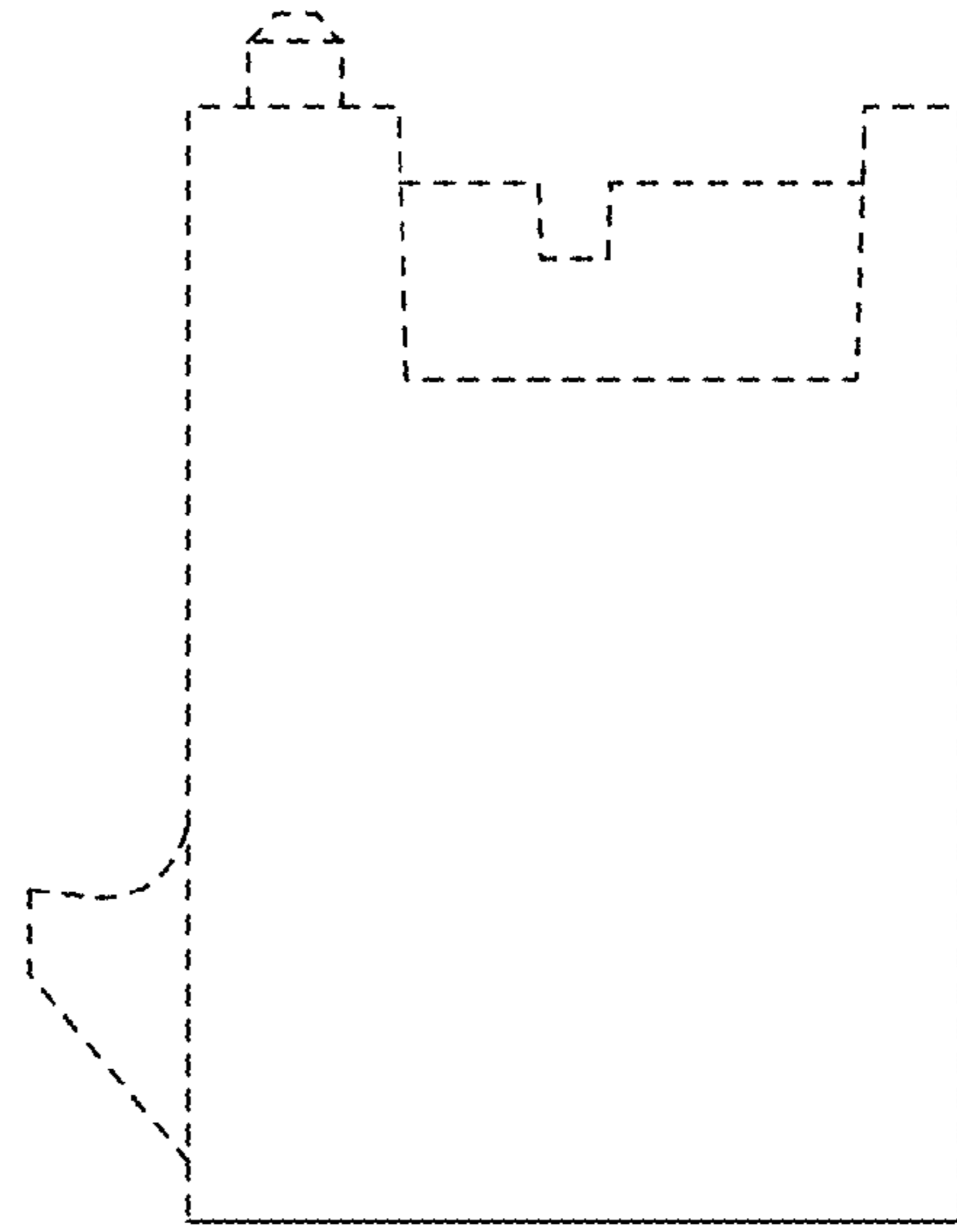


FIG. 126

FIG. 127

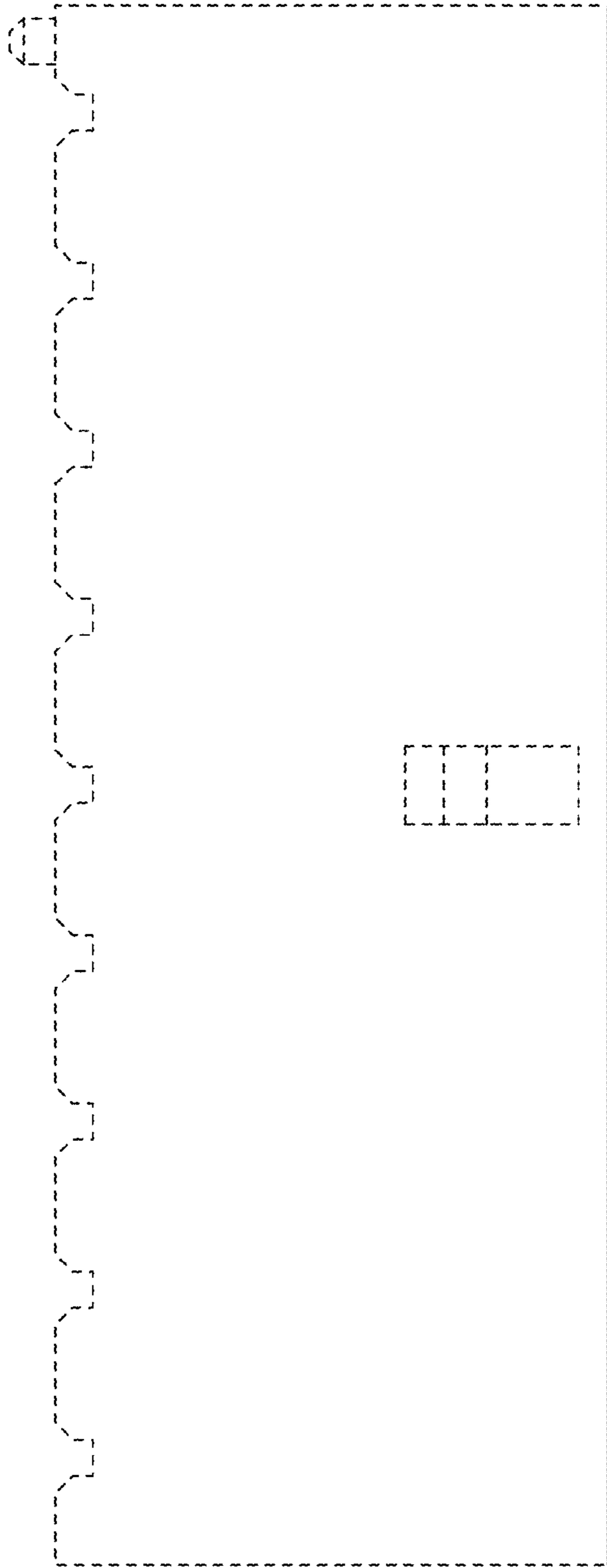


FIG. 128

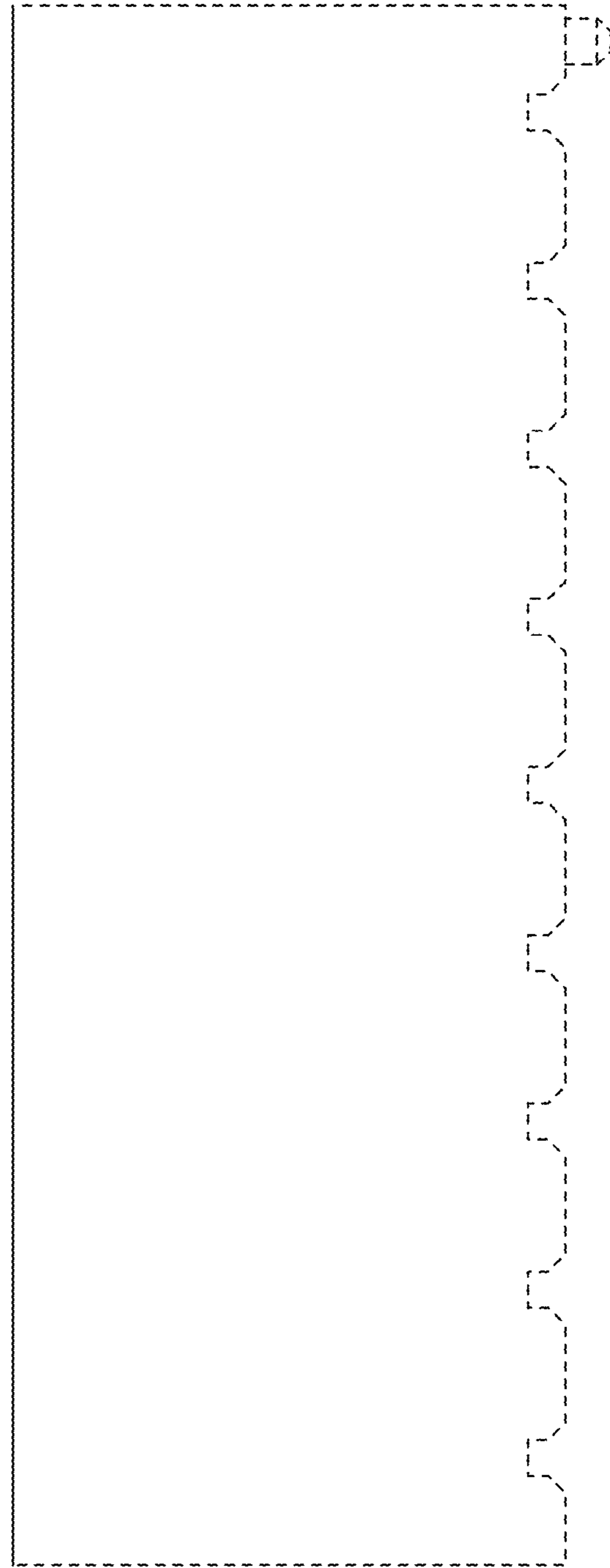


FIG. 129

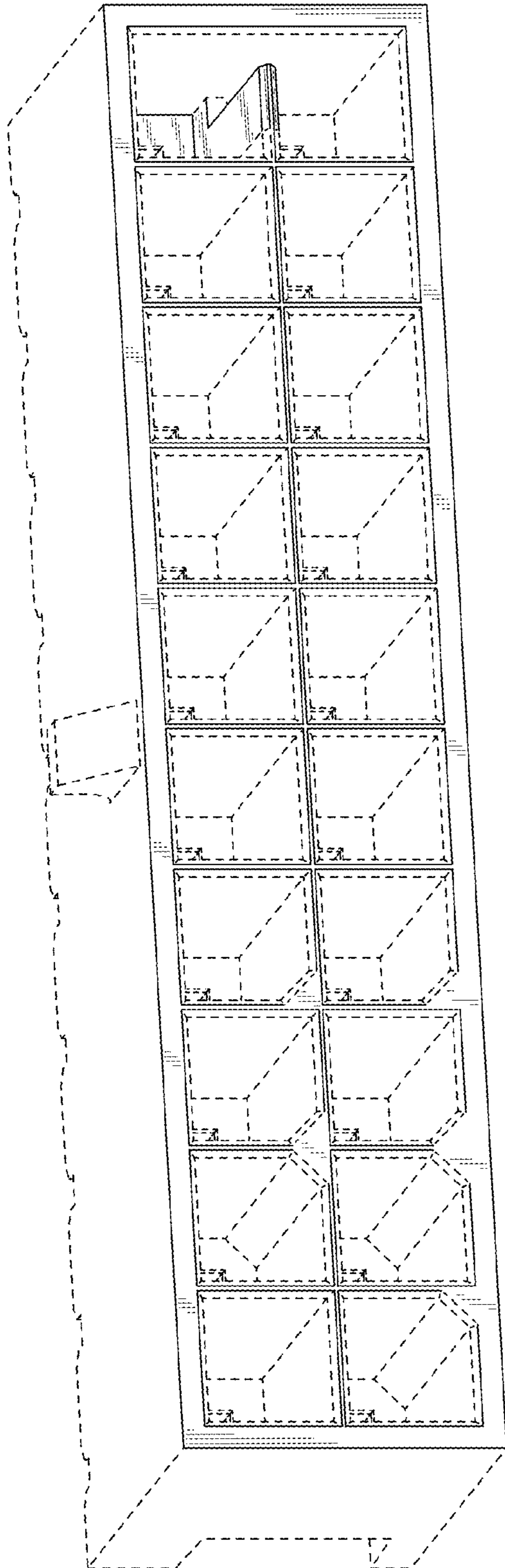
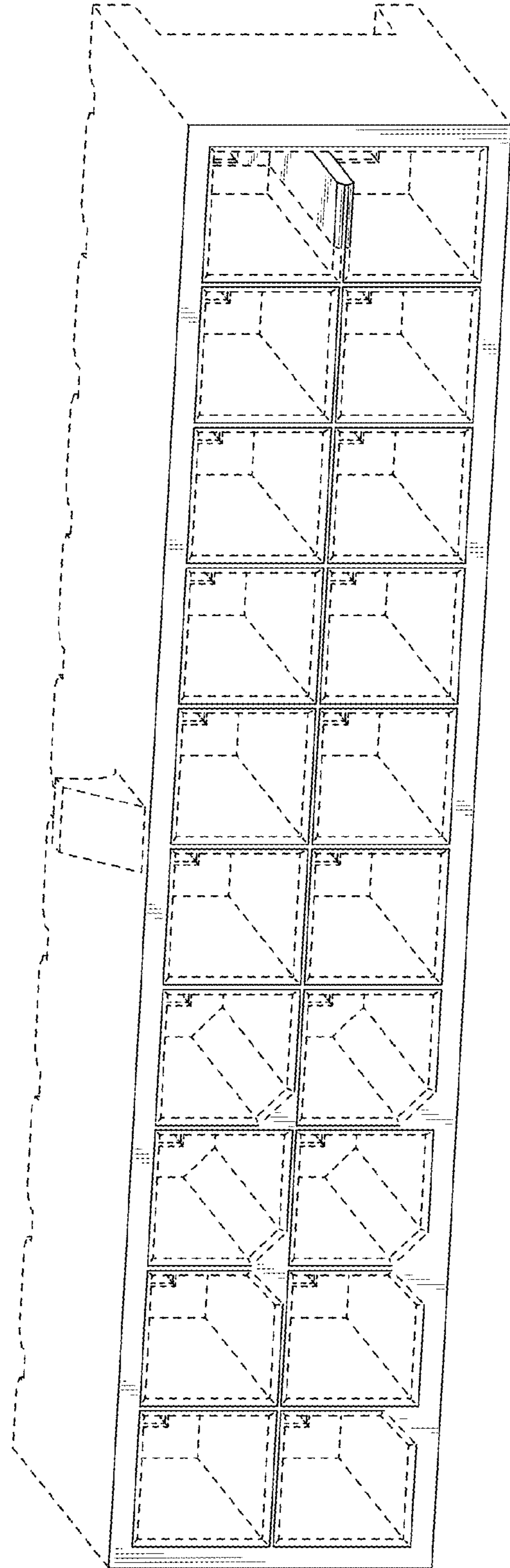


FIG. 130



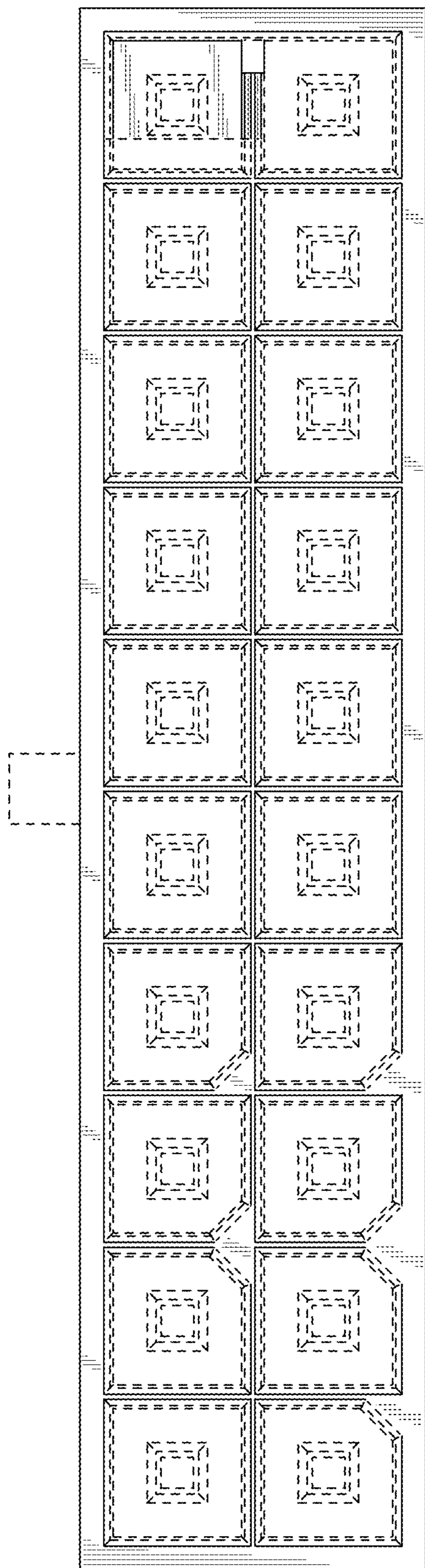


FIG. 131

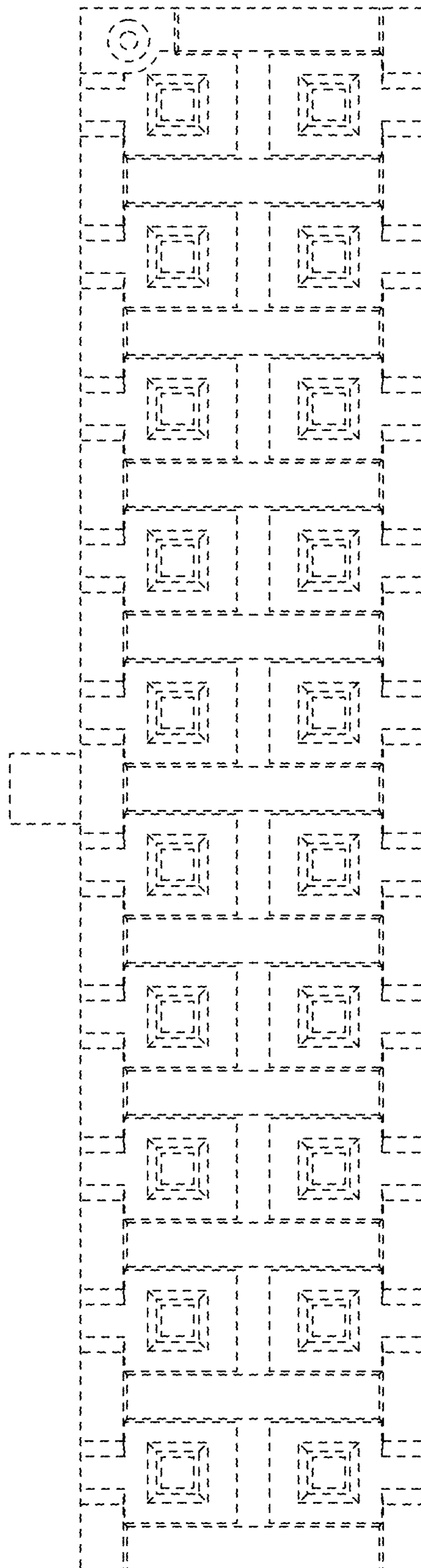


FIG. 132

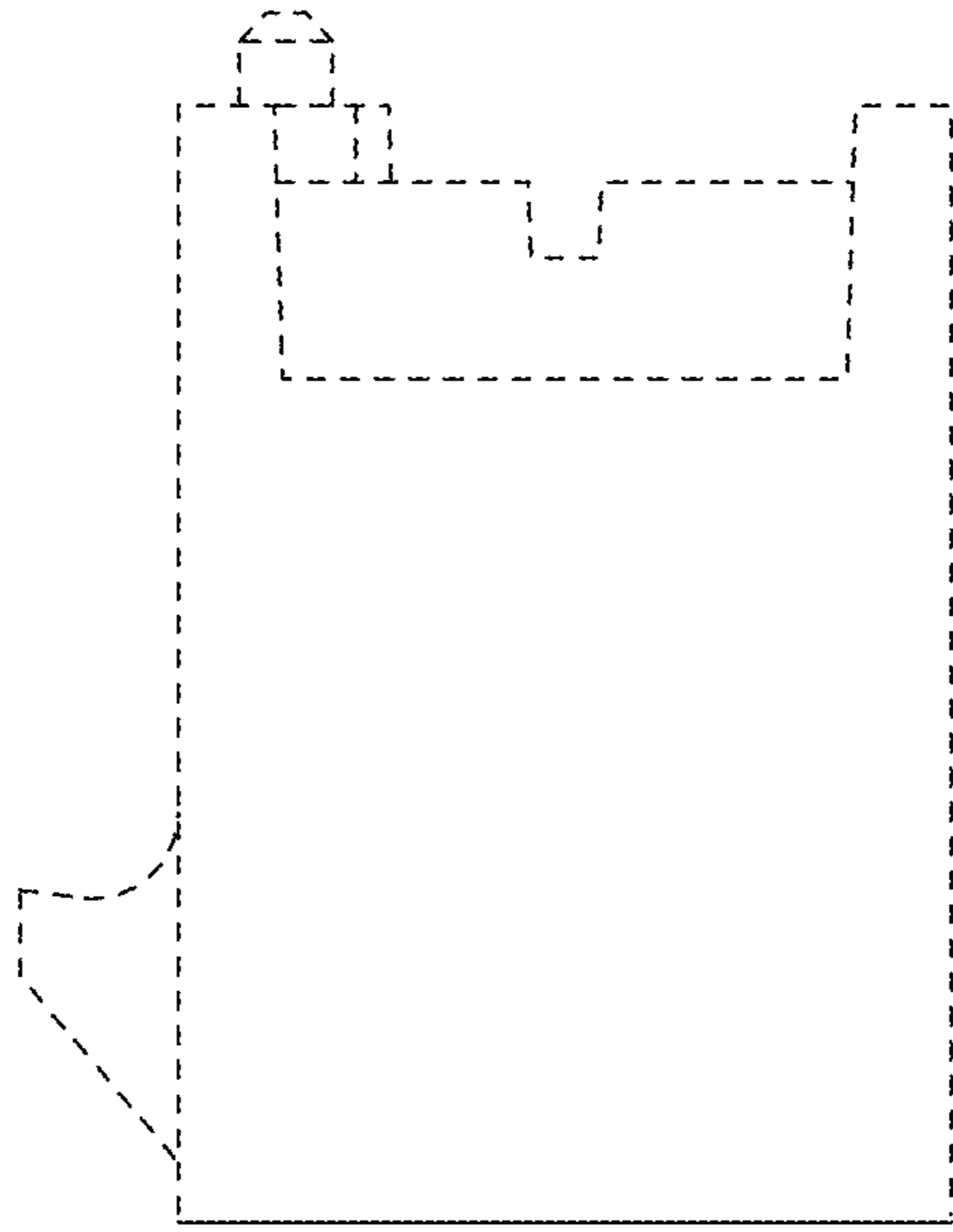


FIG. 134

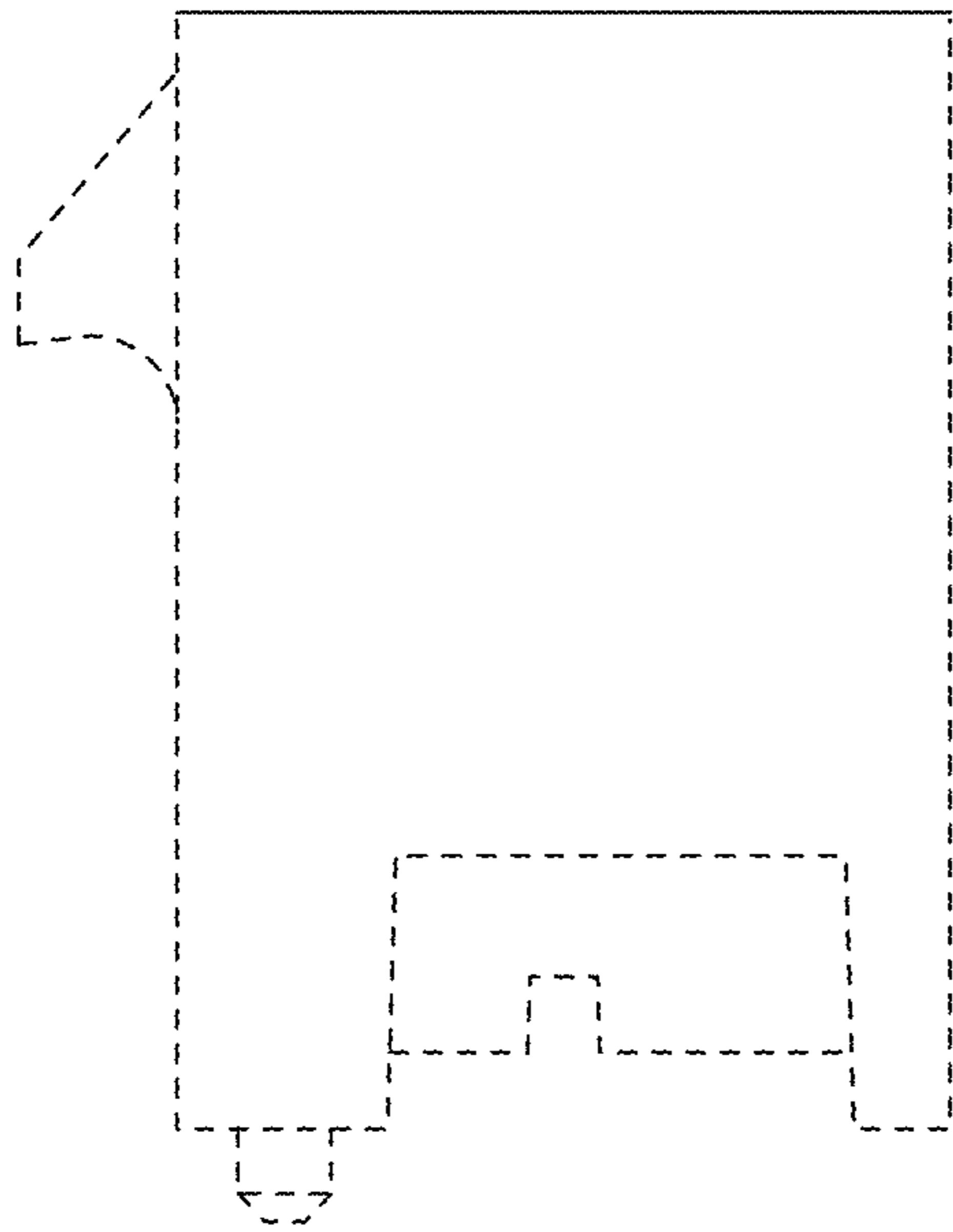


FIG. 133

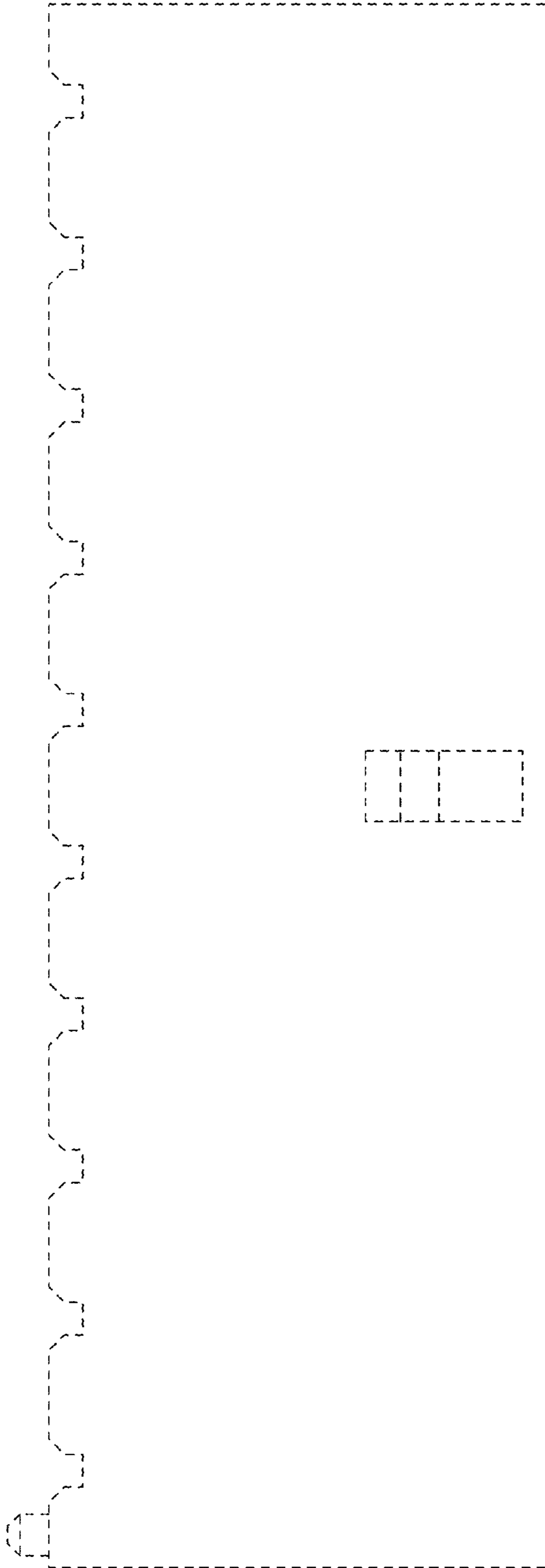


FIG. 135

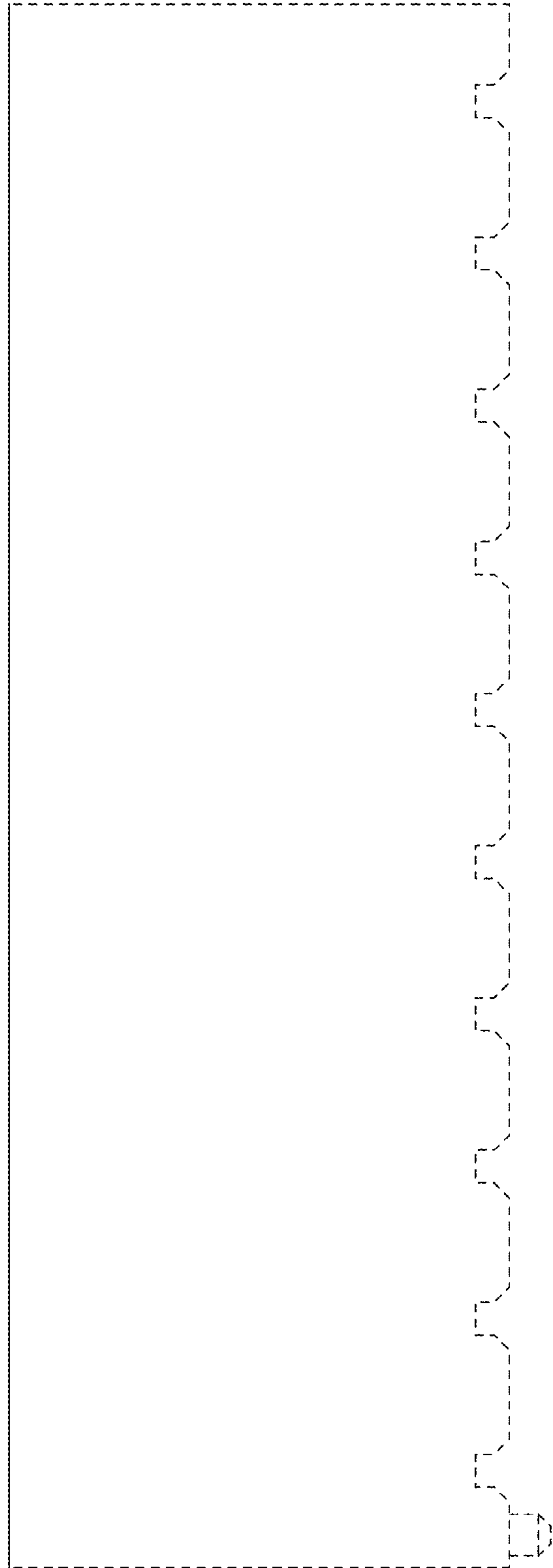


FIG. 136

FIG. 137

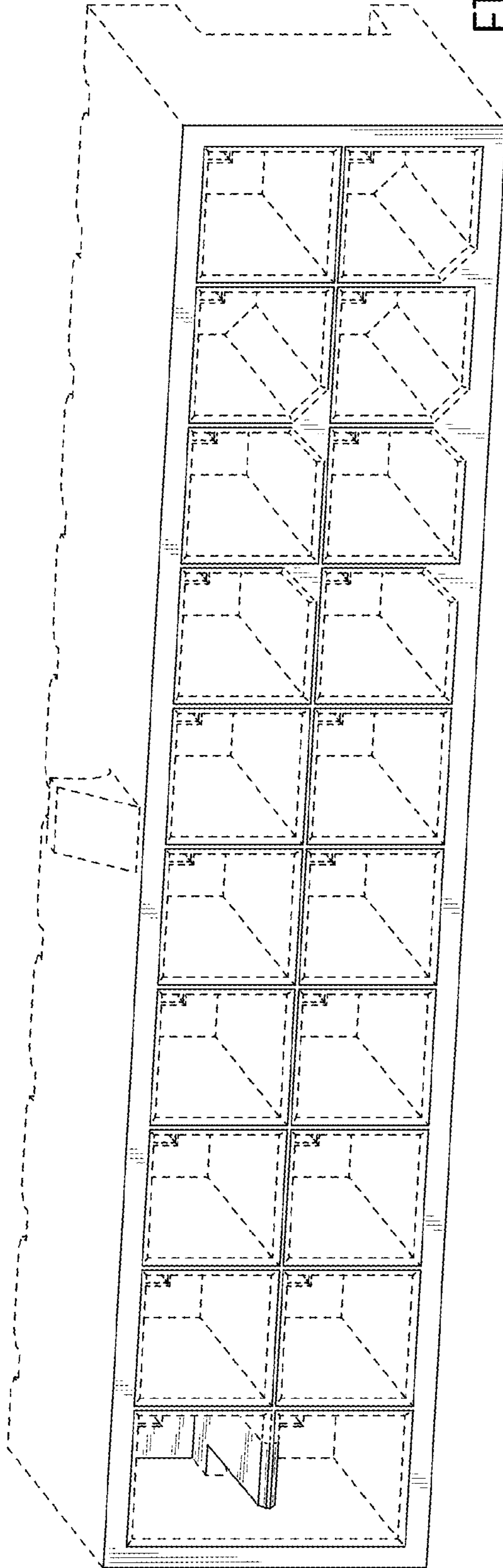
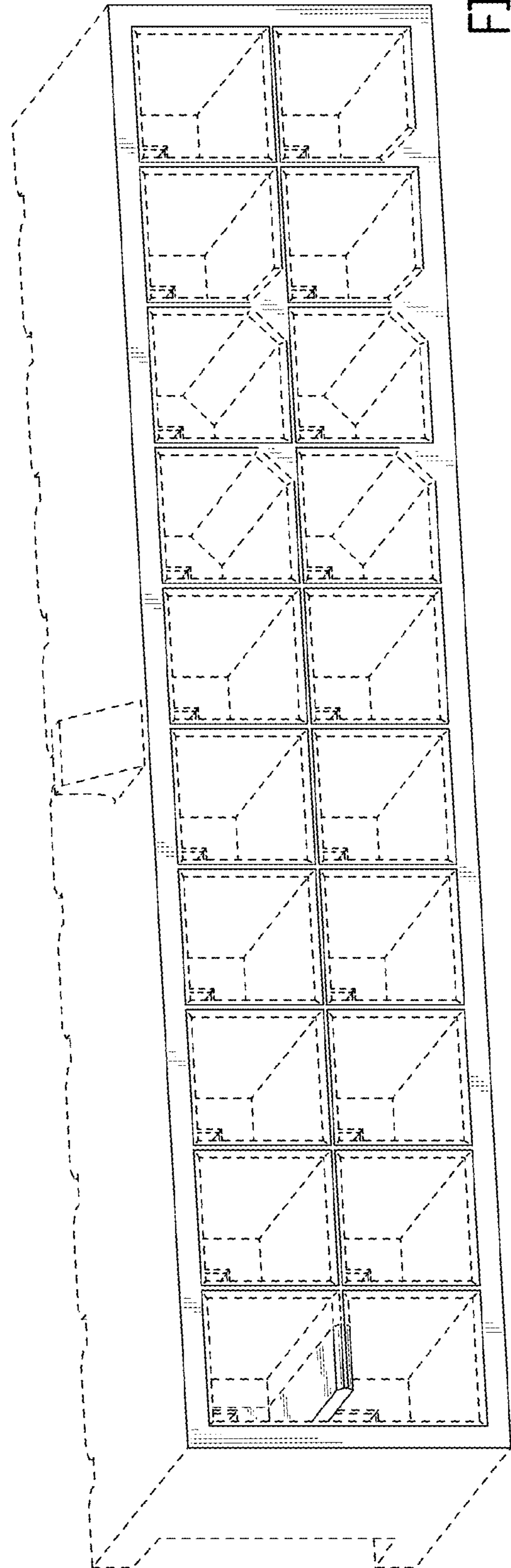


FIG. 138



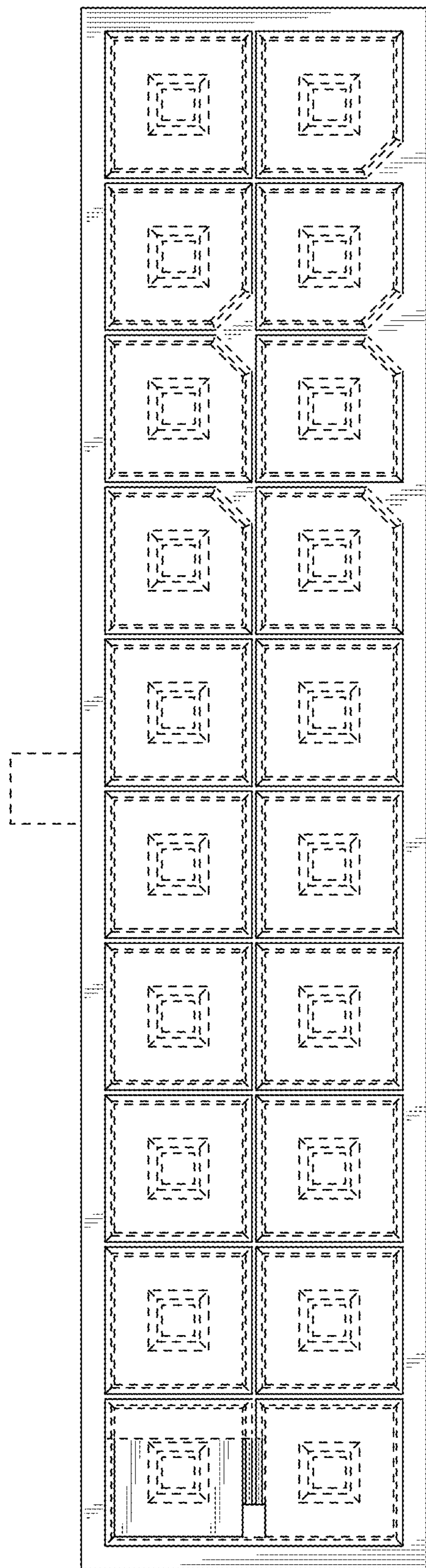


FIG. 139

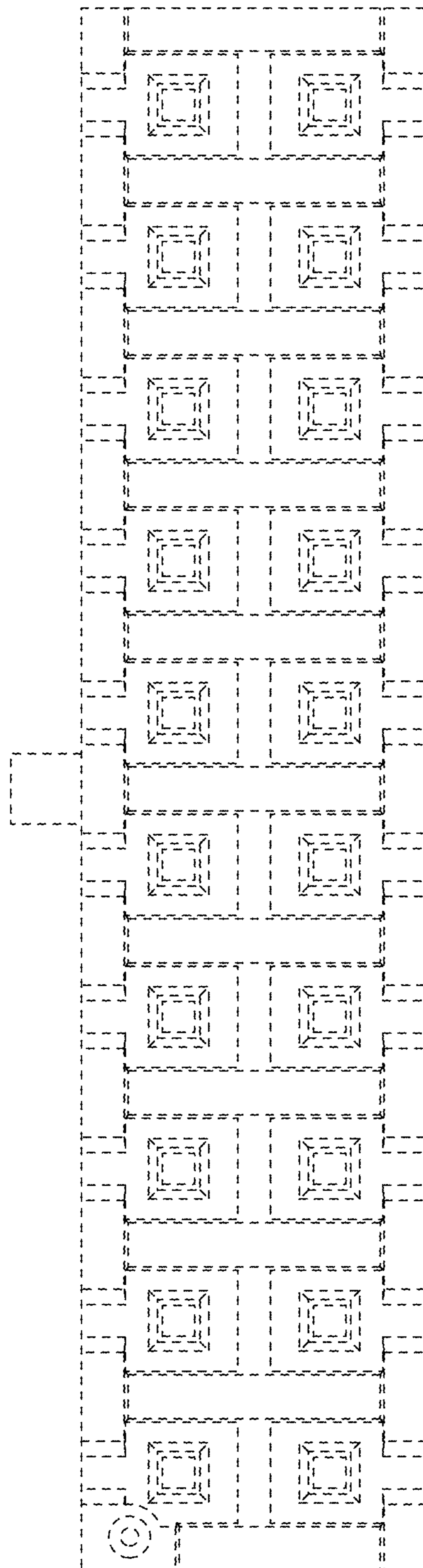


FIG. 140

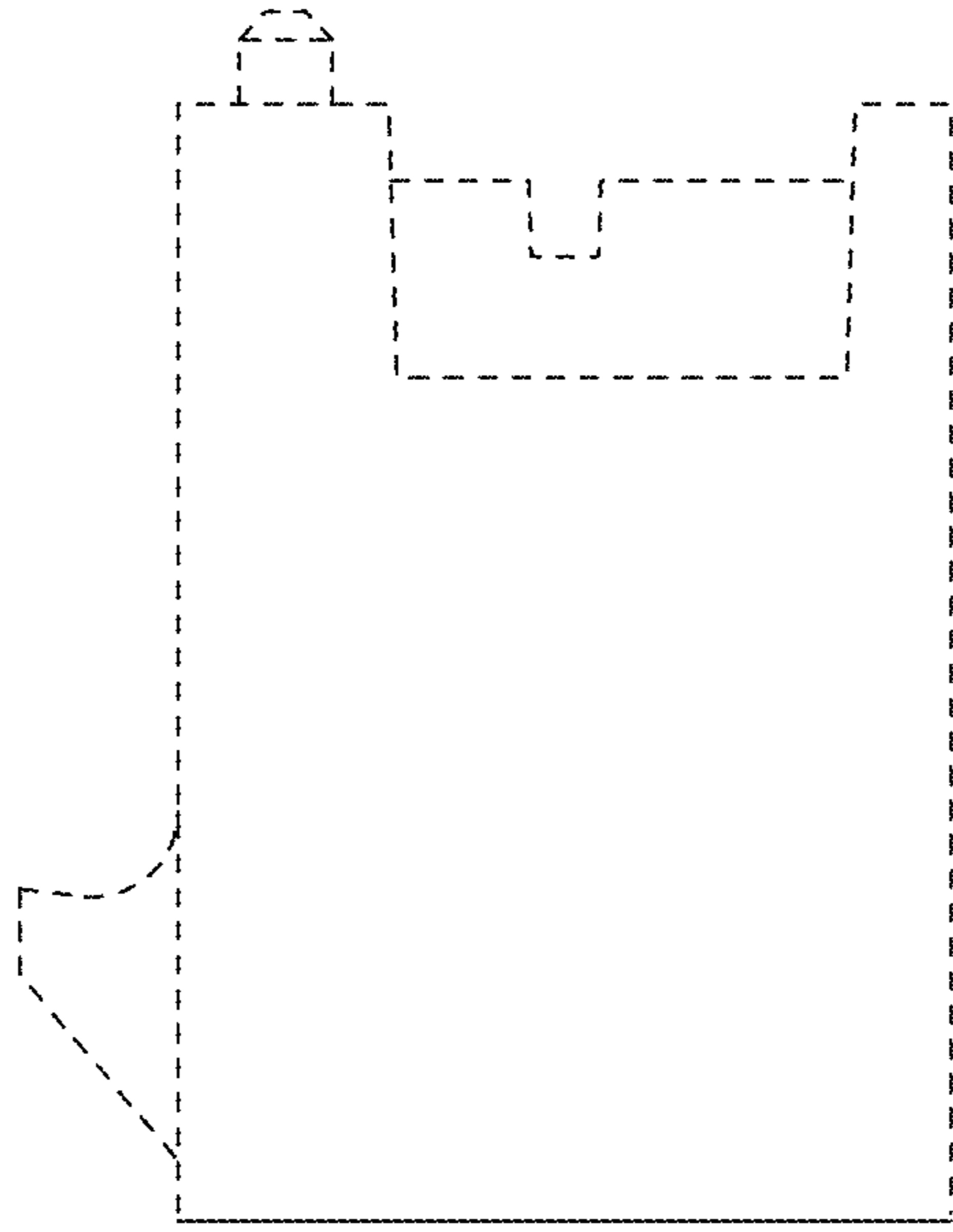


FIG. 142

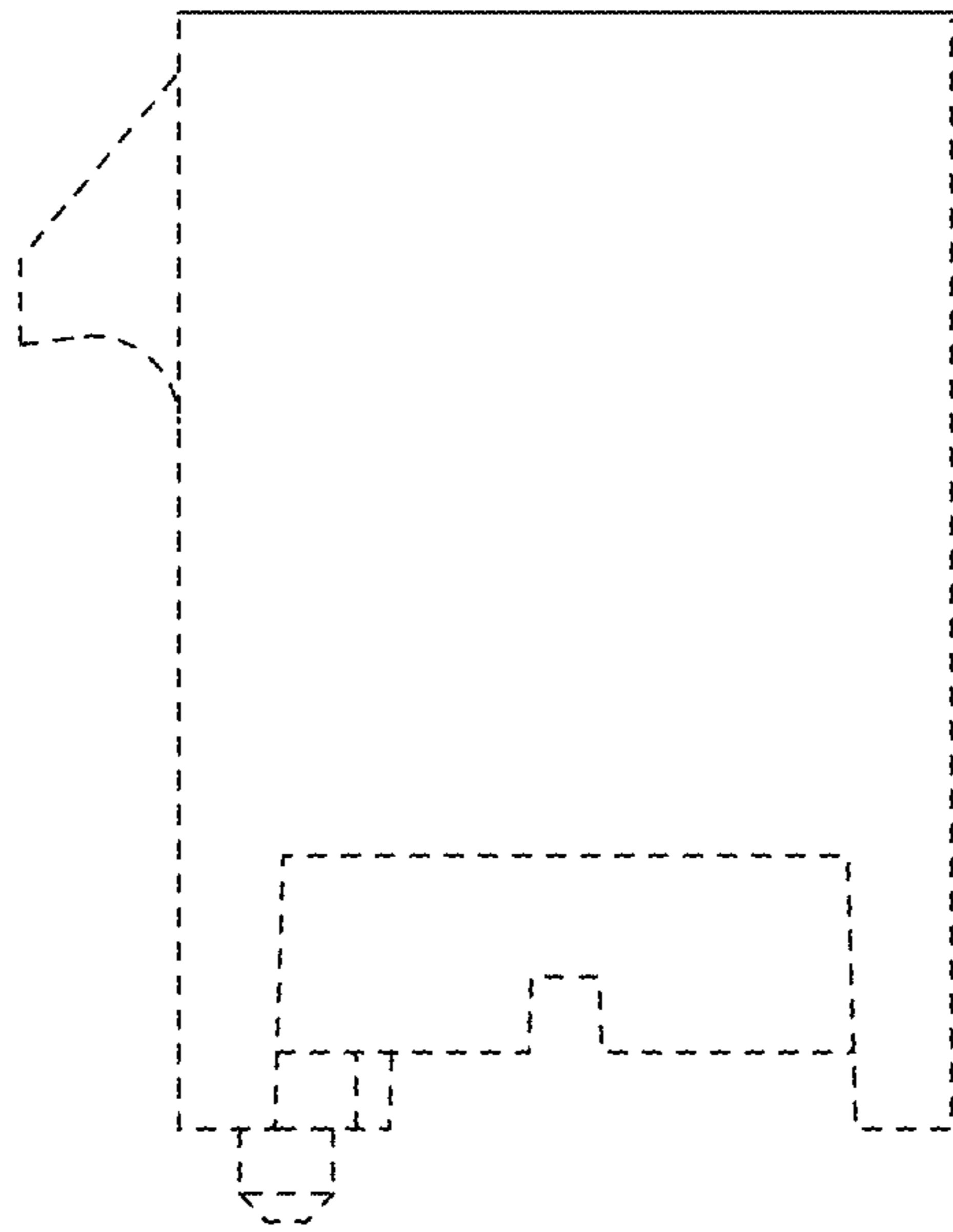


FIG. 141

FIG. 143

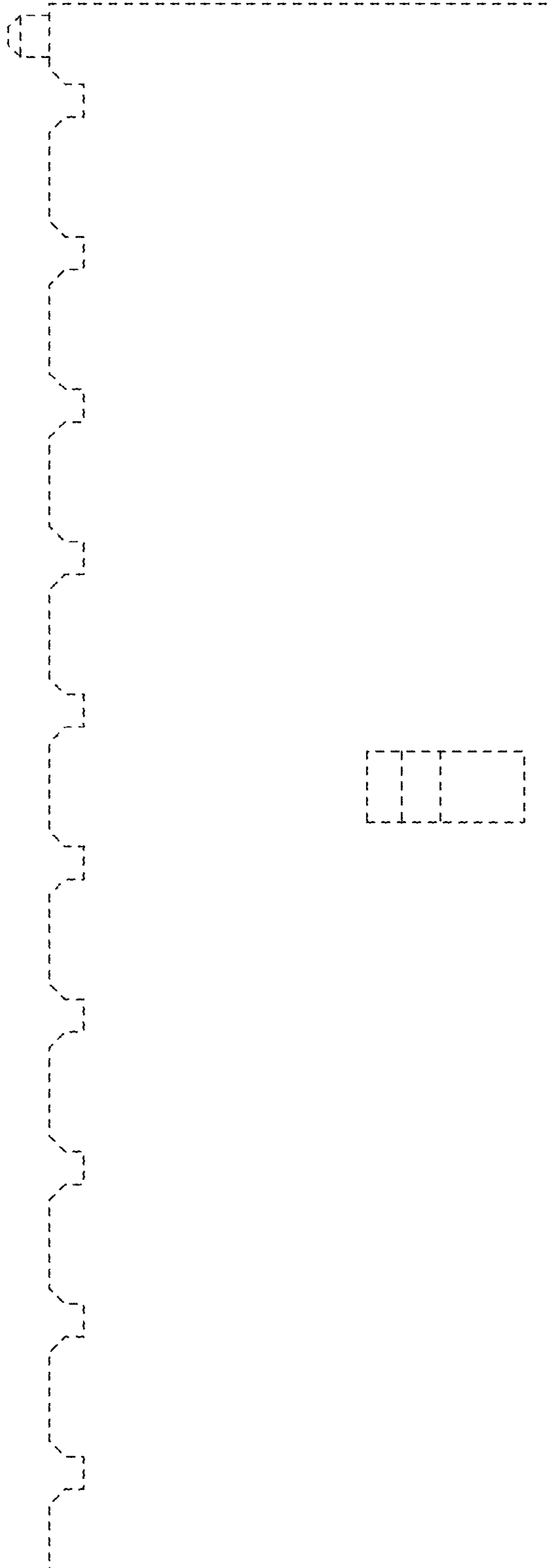
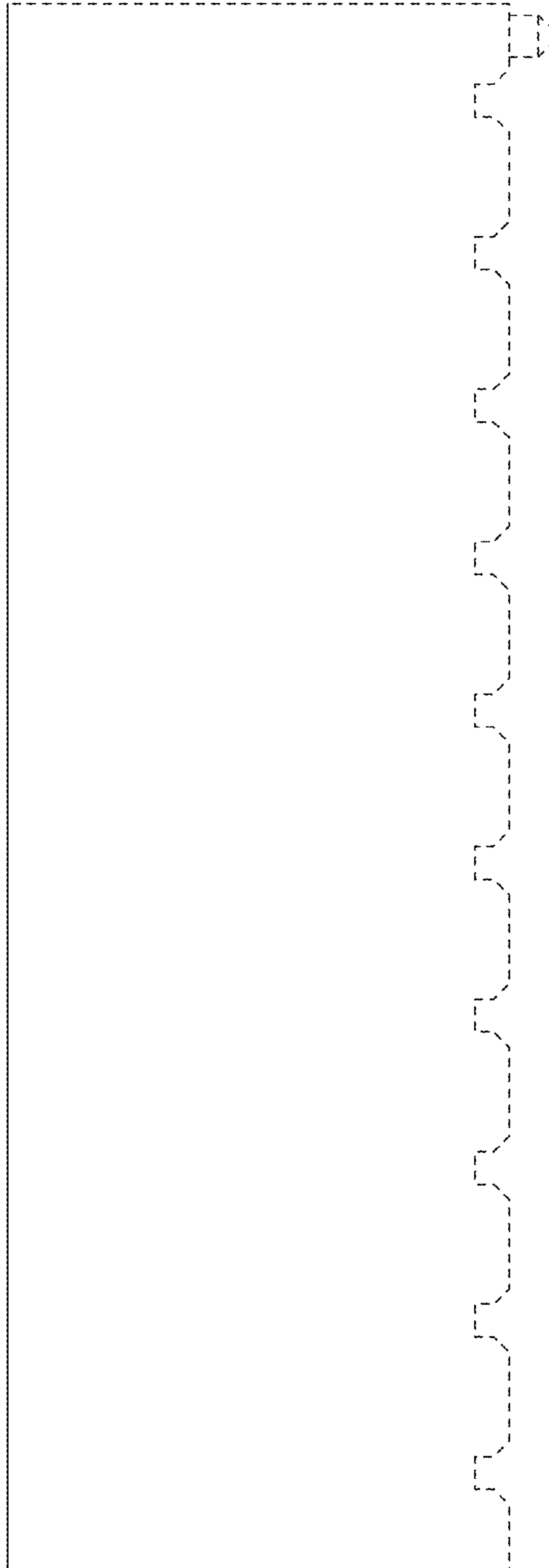


FIG. 144



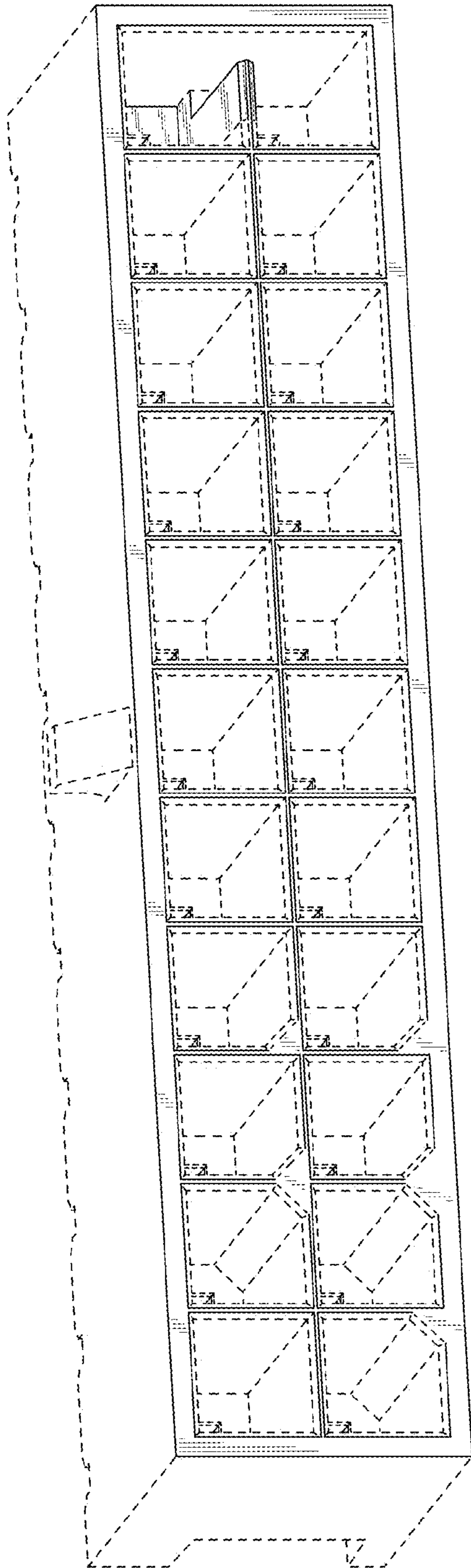


FIG. 145

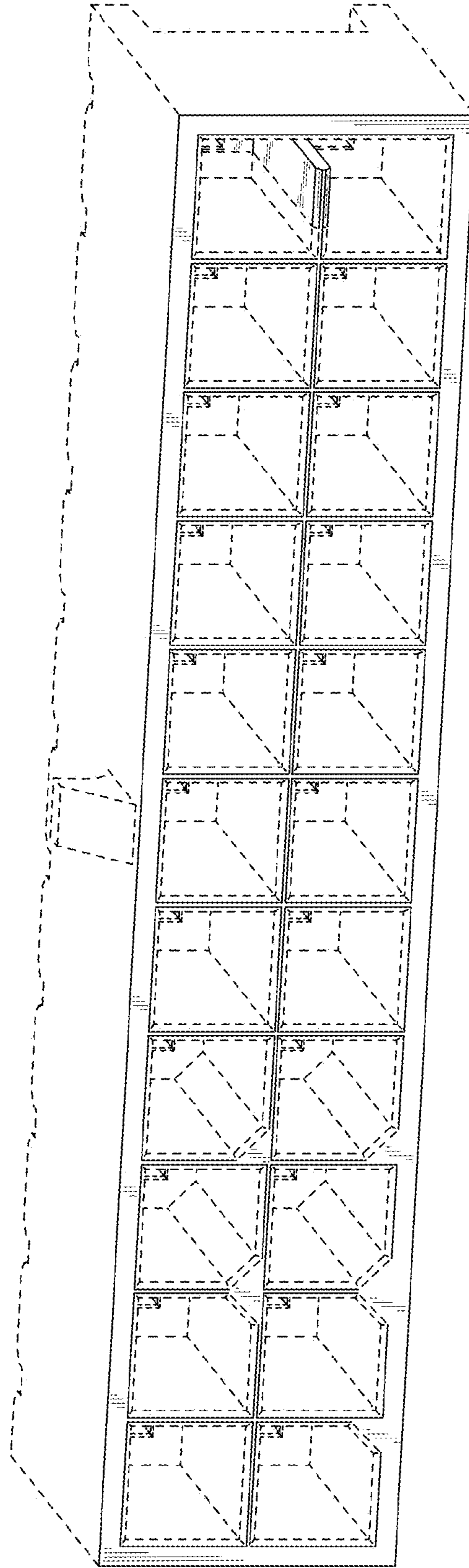


FIG. 146

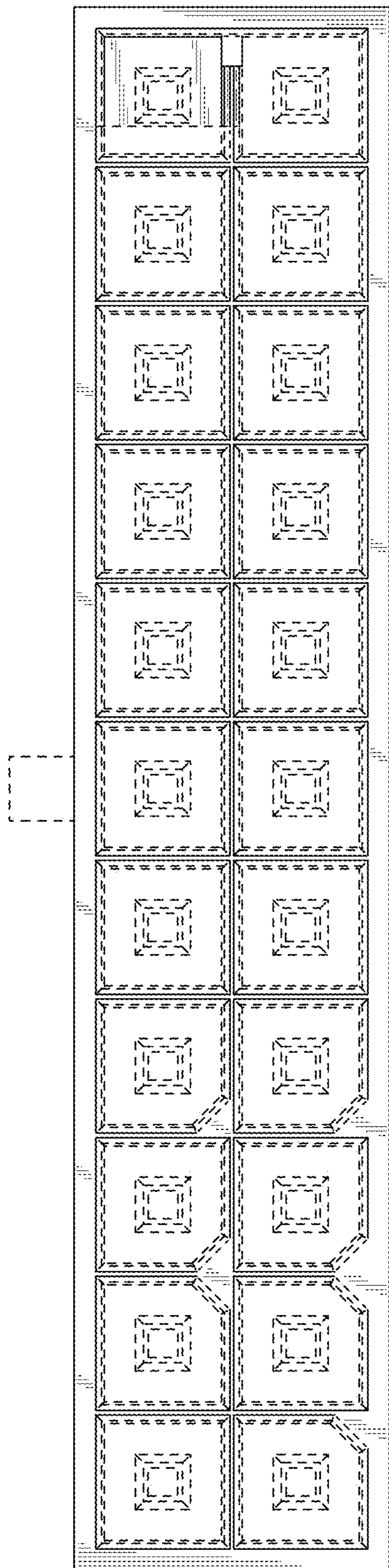


FIG. 147

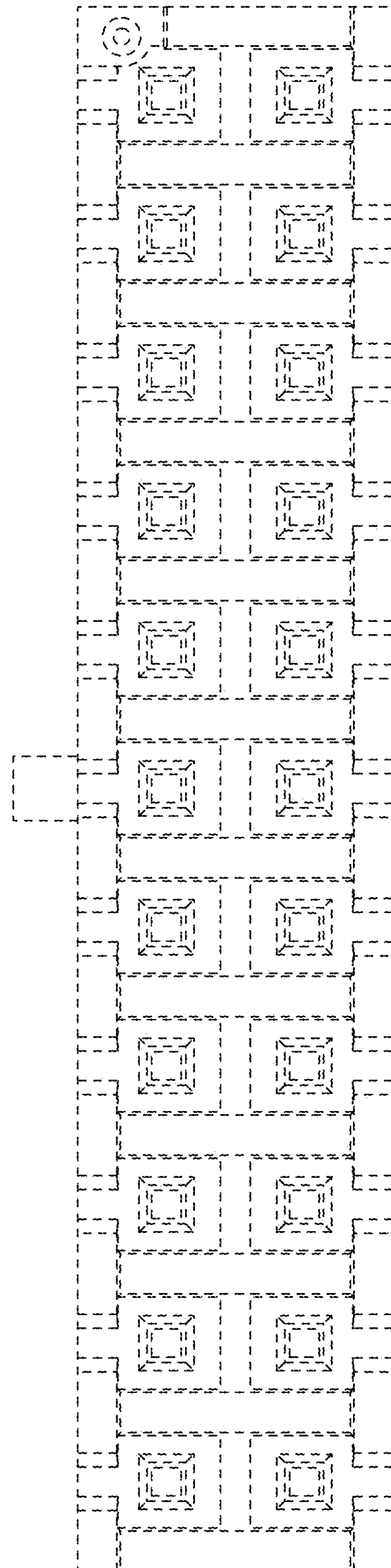


FIG. 148

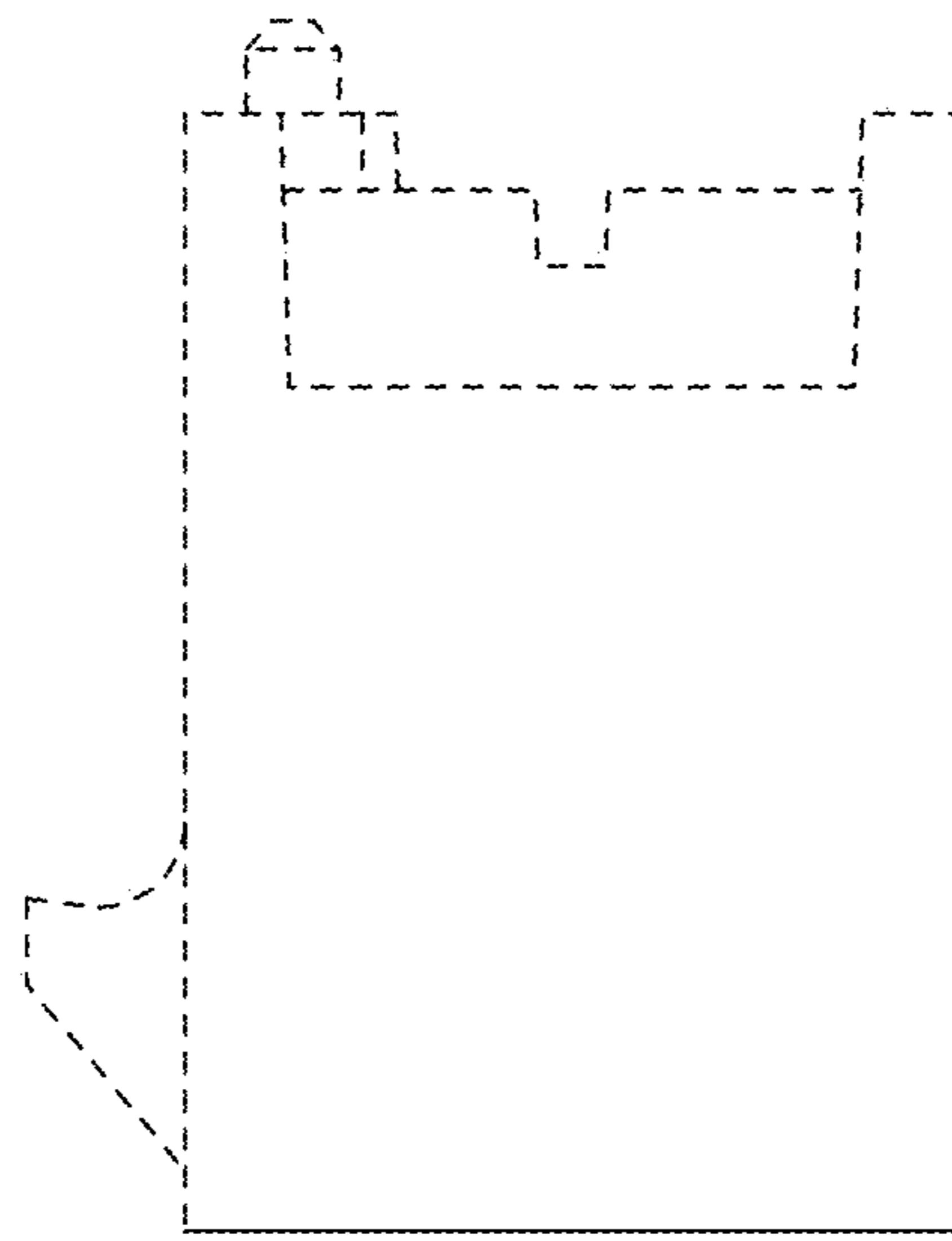


FIG. 149

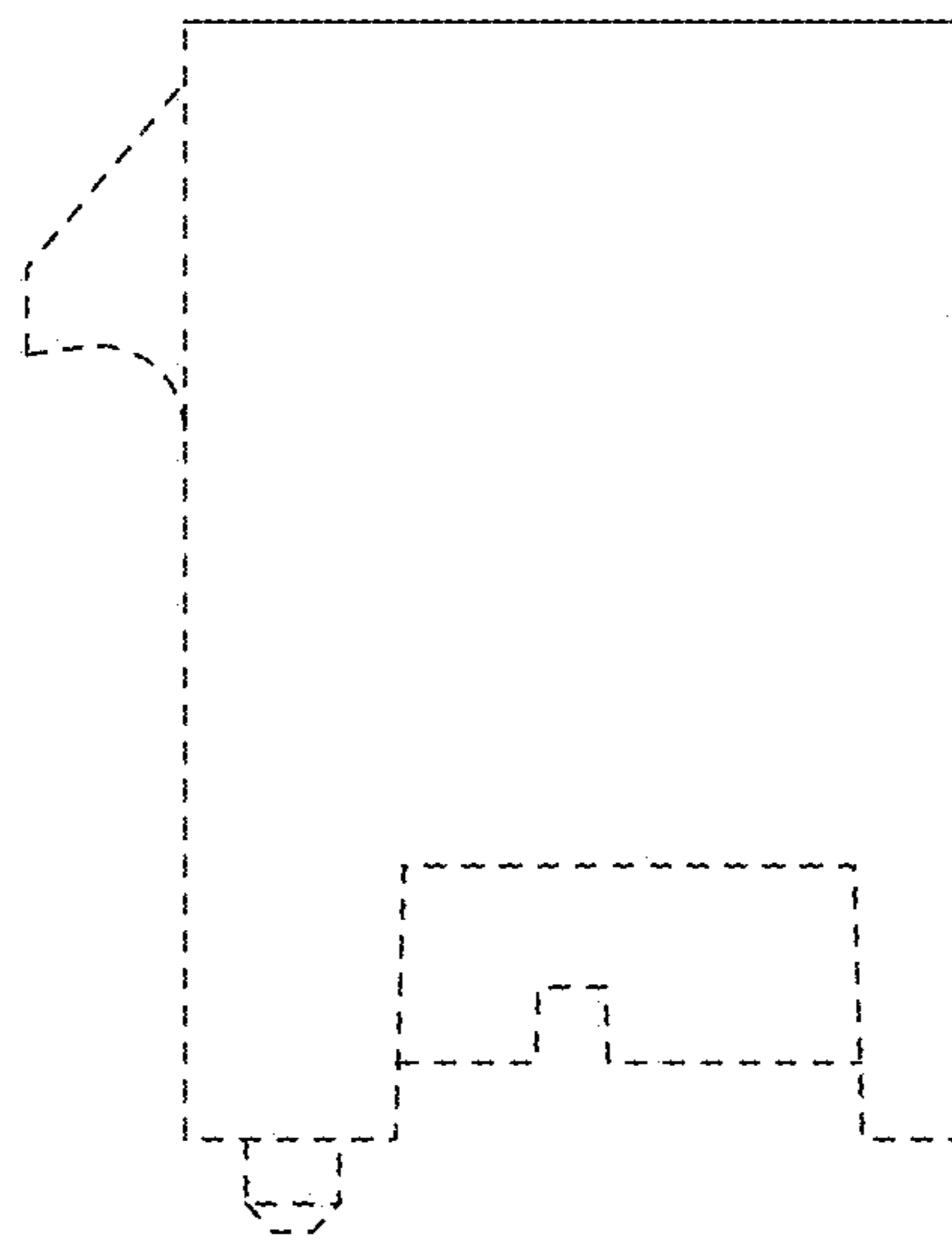


FIG. 150

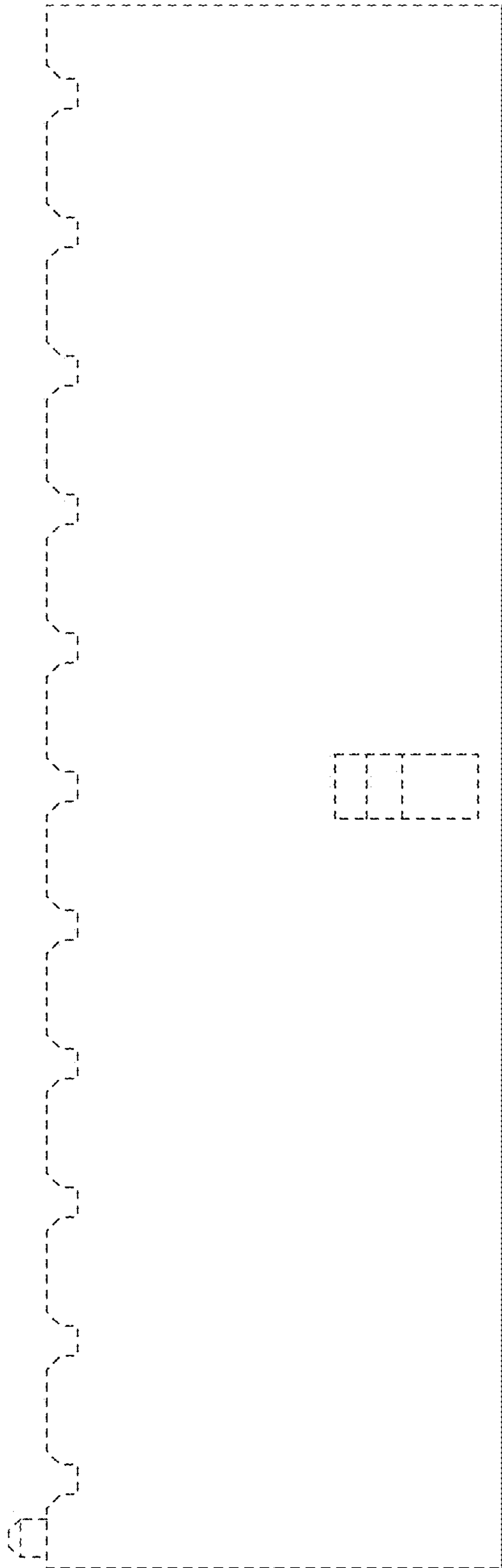


FIG. 151

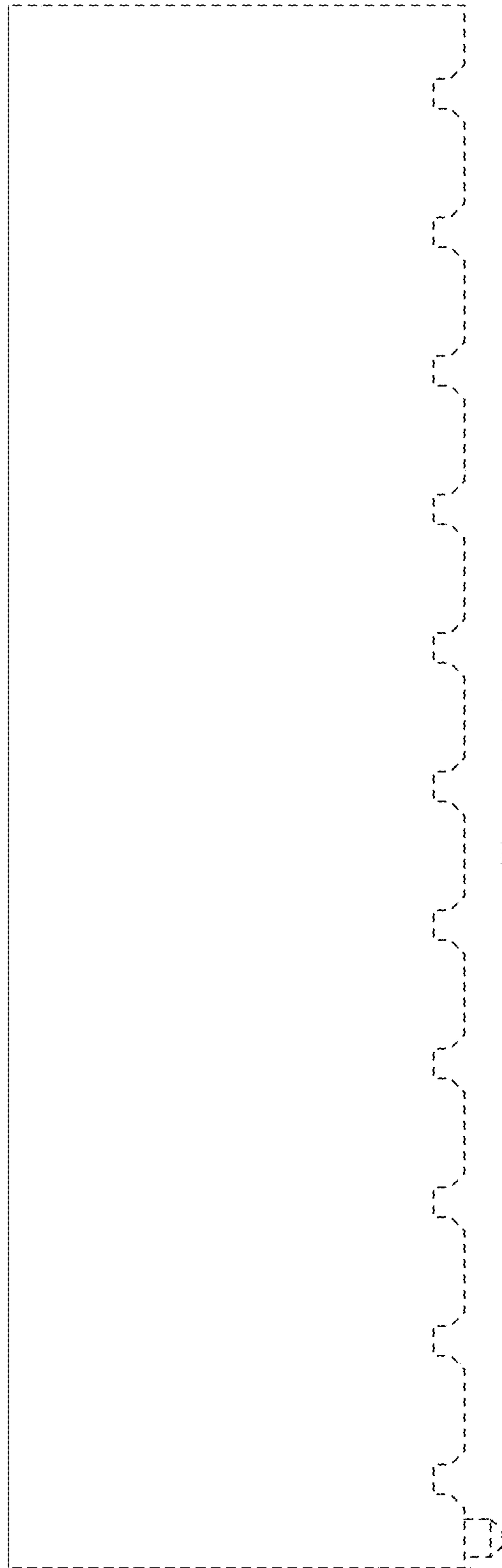


FIG. 152

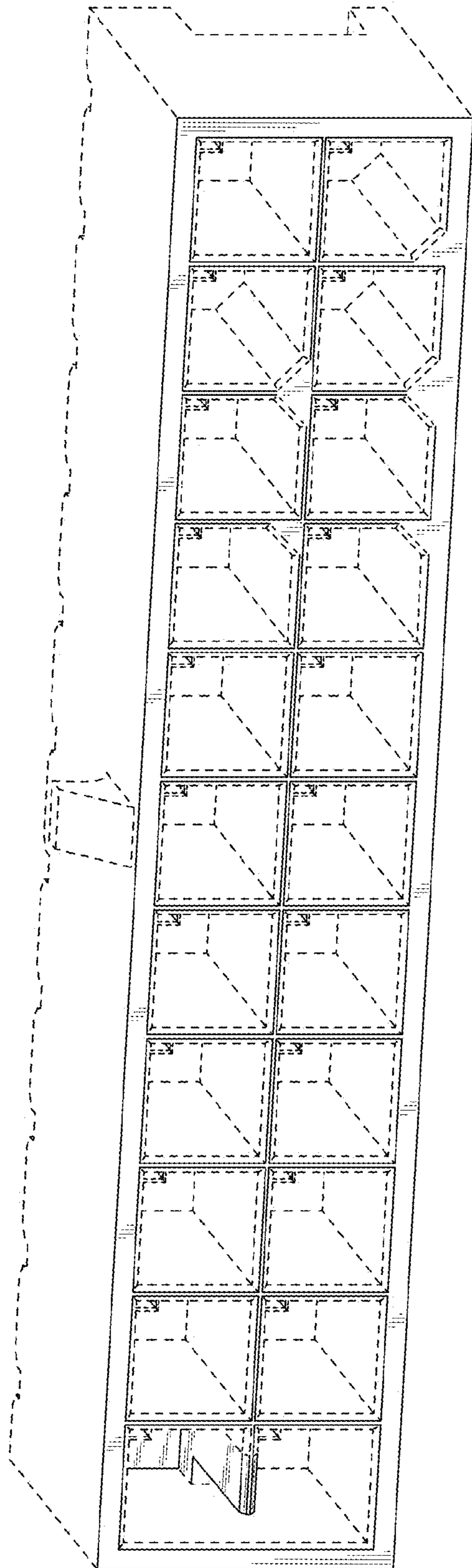


FIG. 153

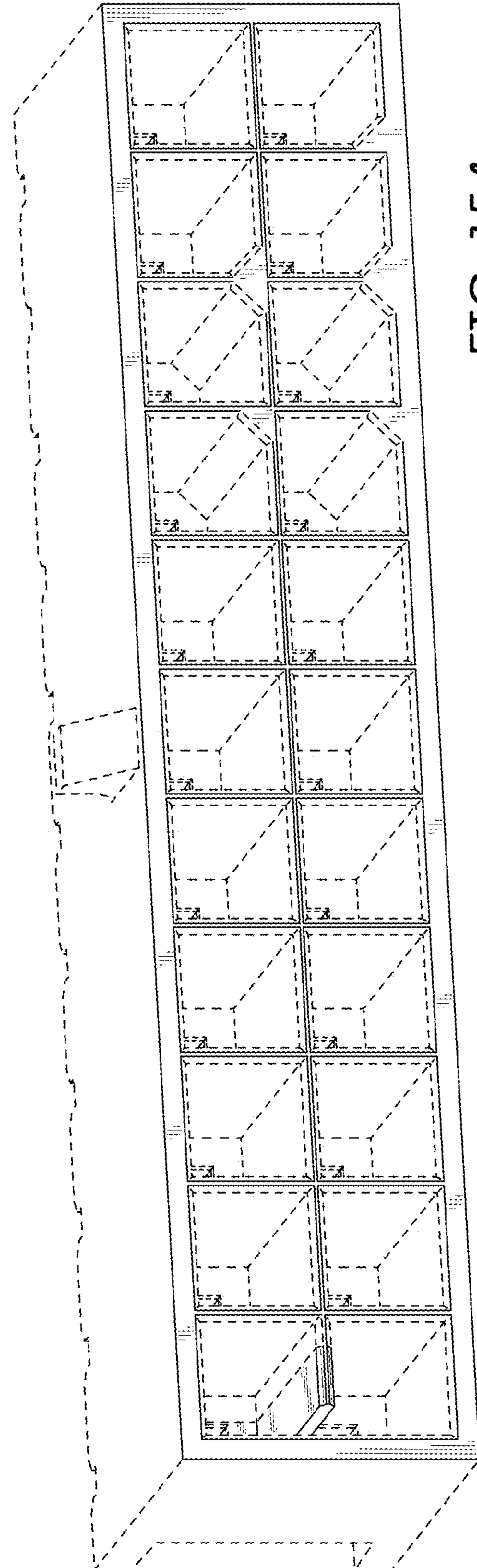


FIG. 154

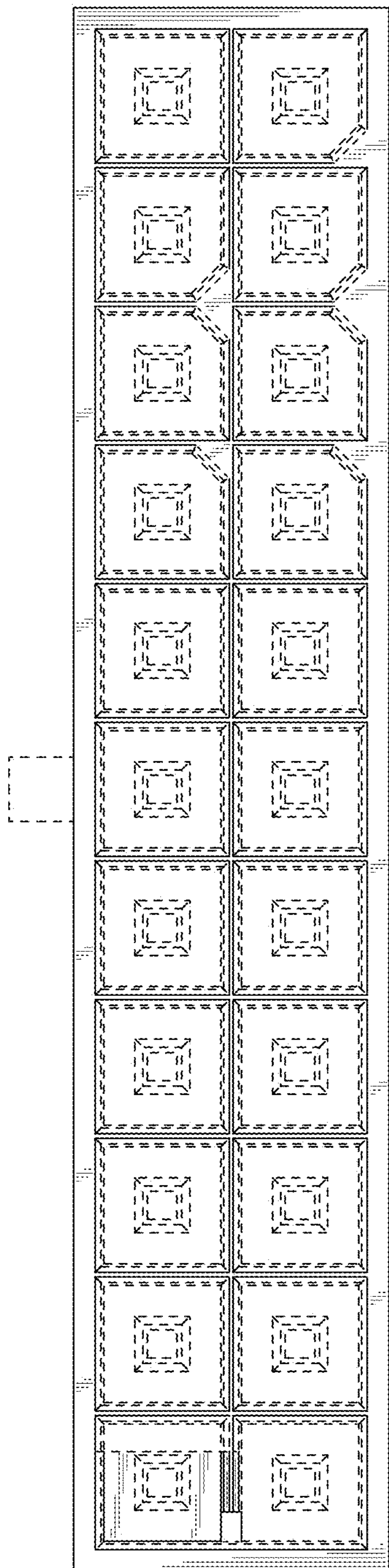


FIG. 155

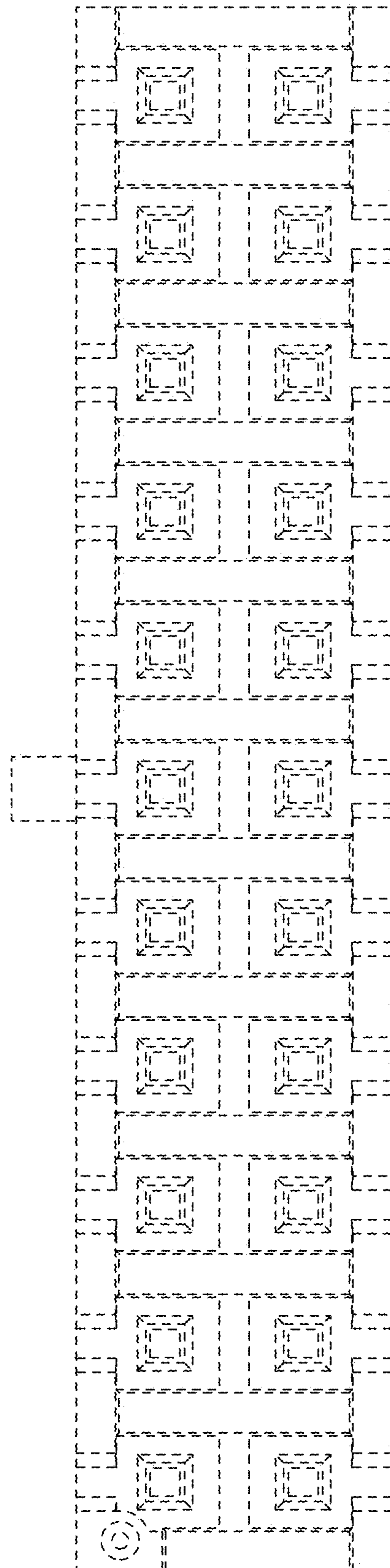


FIG. 156

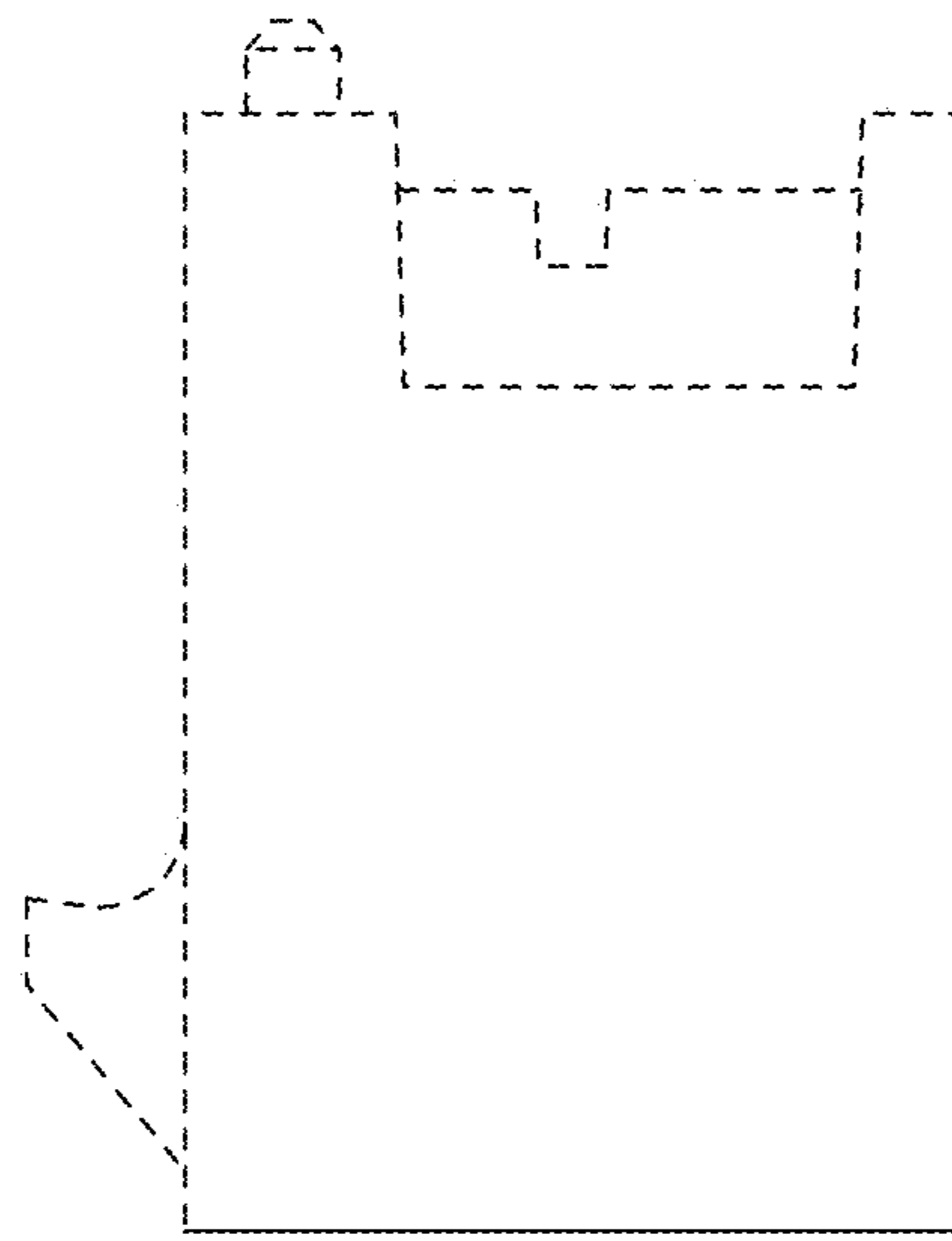


FIG. 157

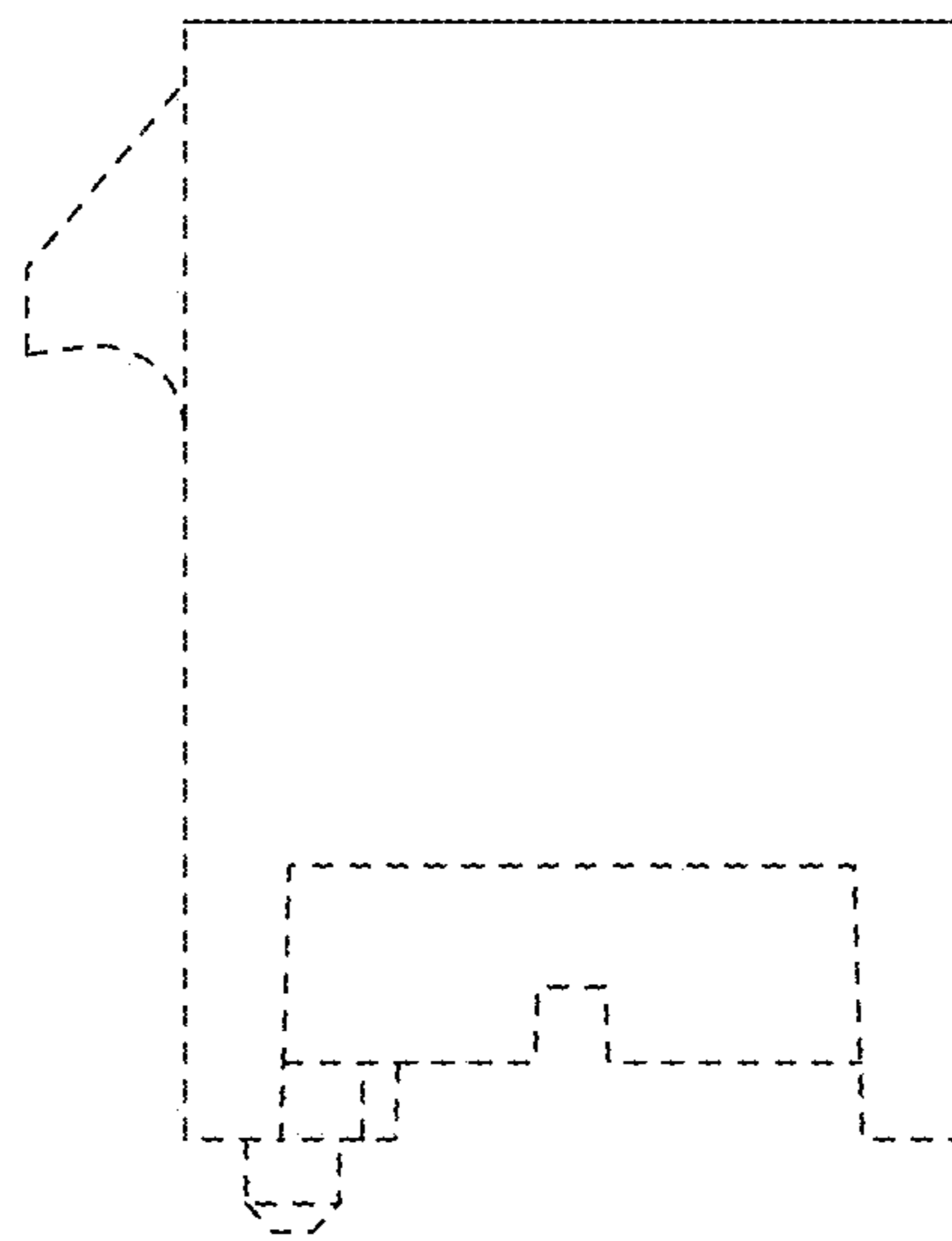


FIG. 158

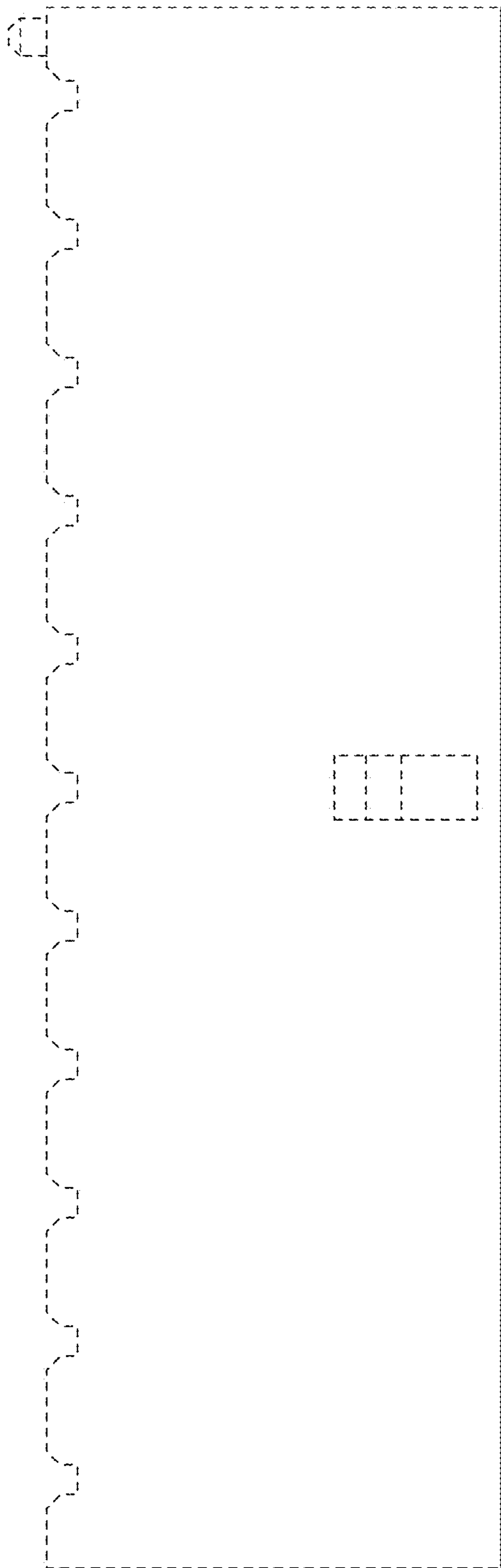


FIG. 159

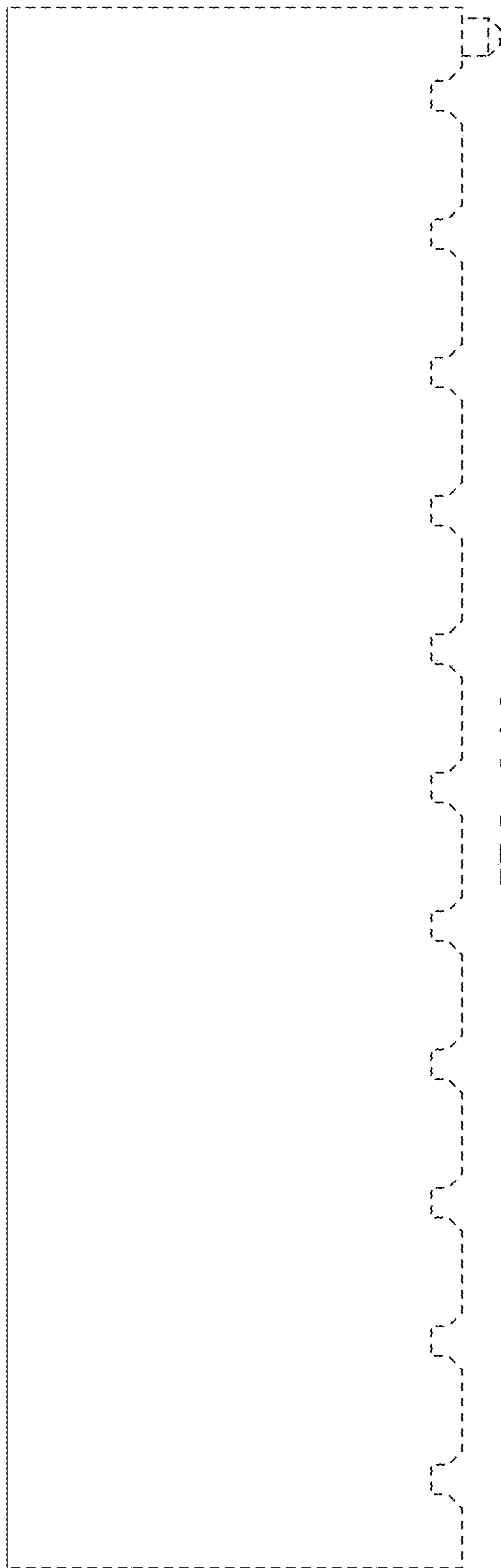


FIG. 160

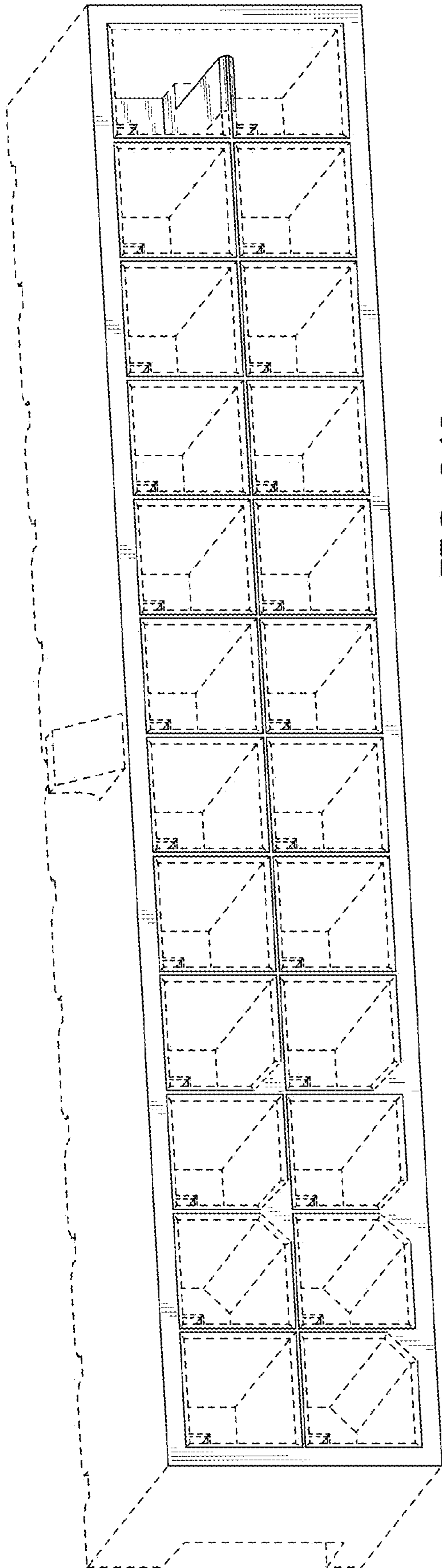


FIG. 161

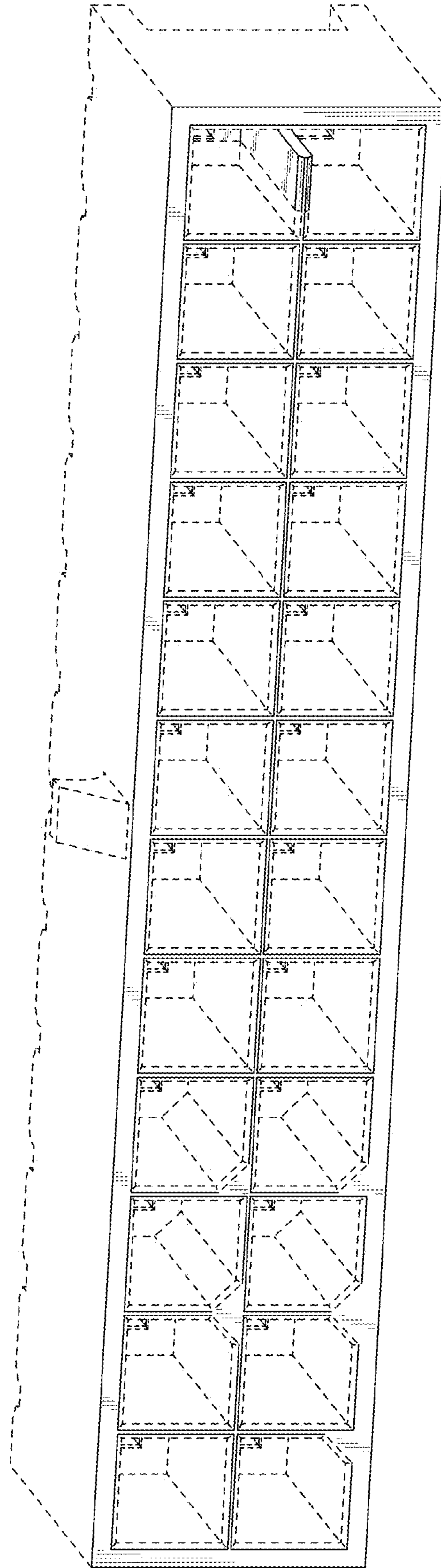


FIG. 162

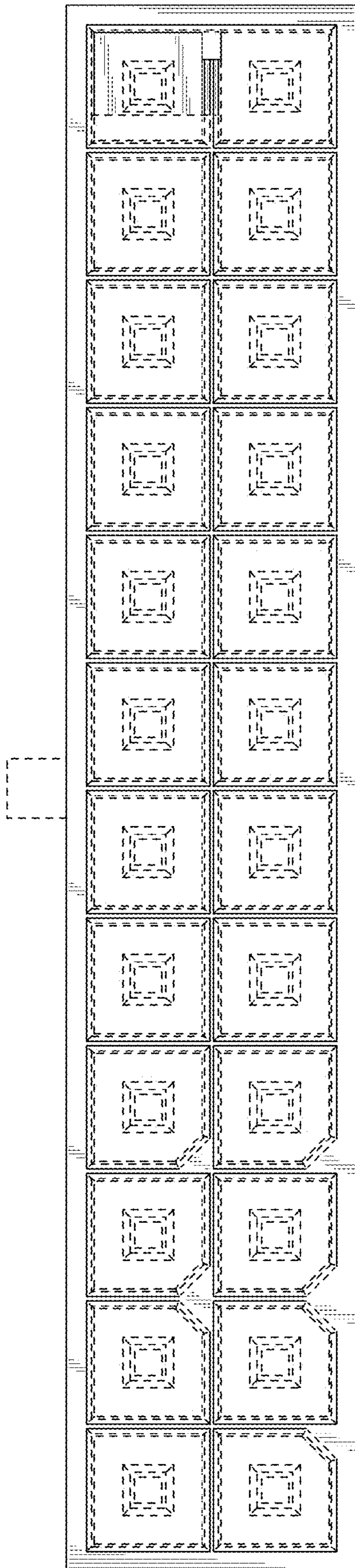


FIG. 163

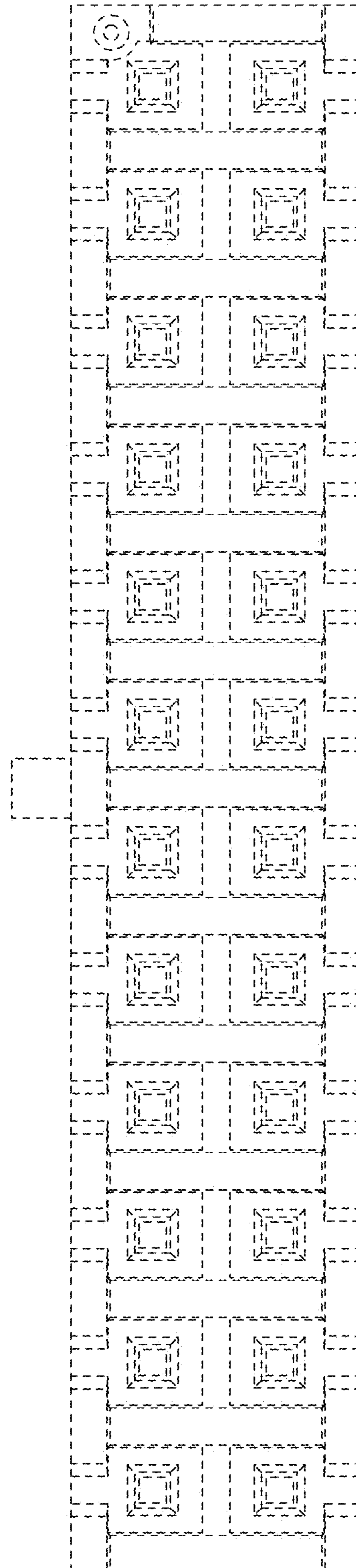


FIG. 164

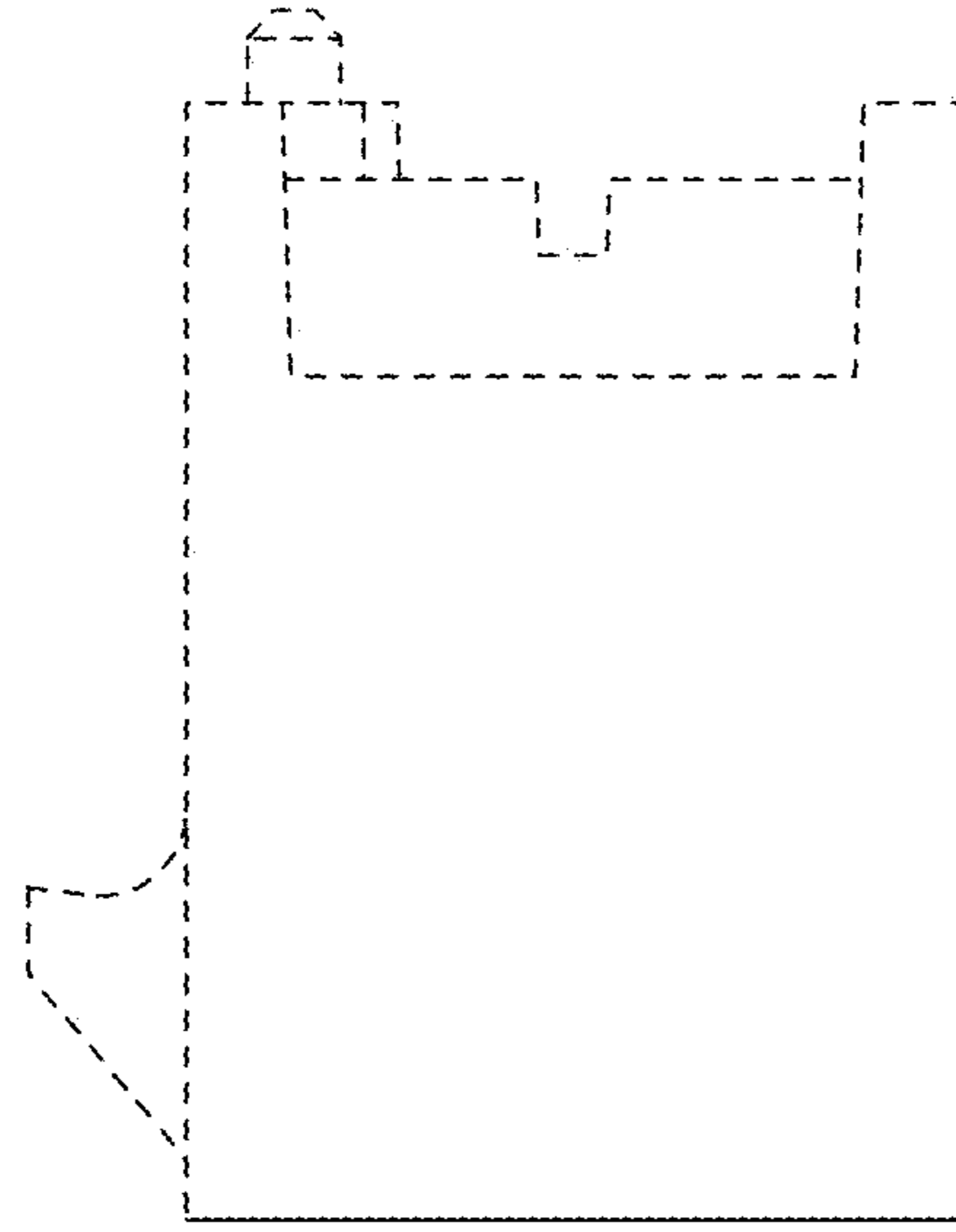


FIG. 166

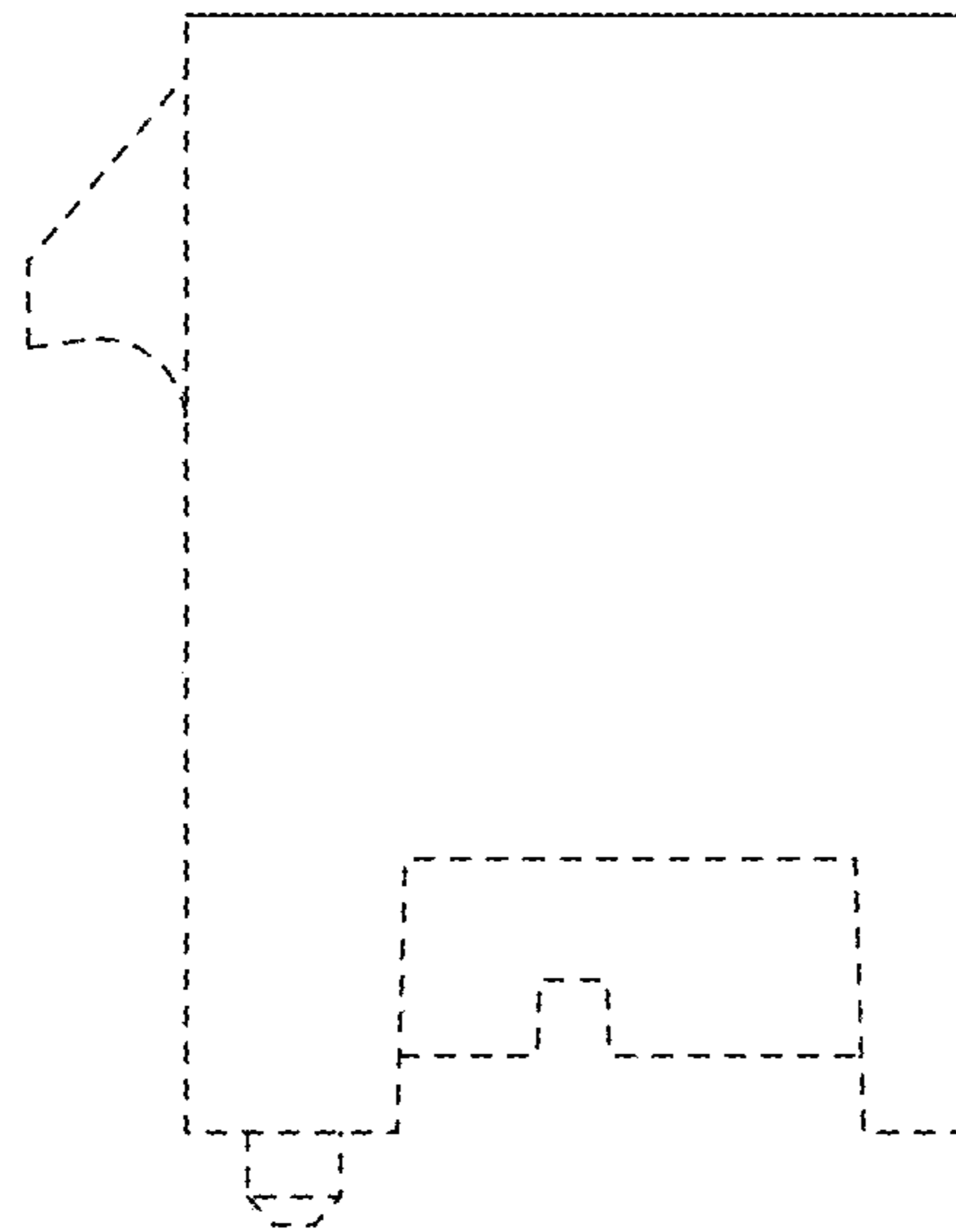


FIG. 165

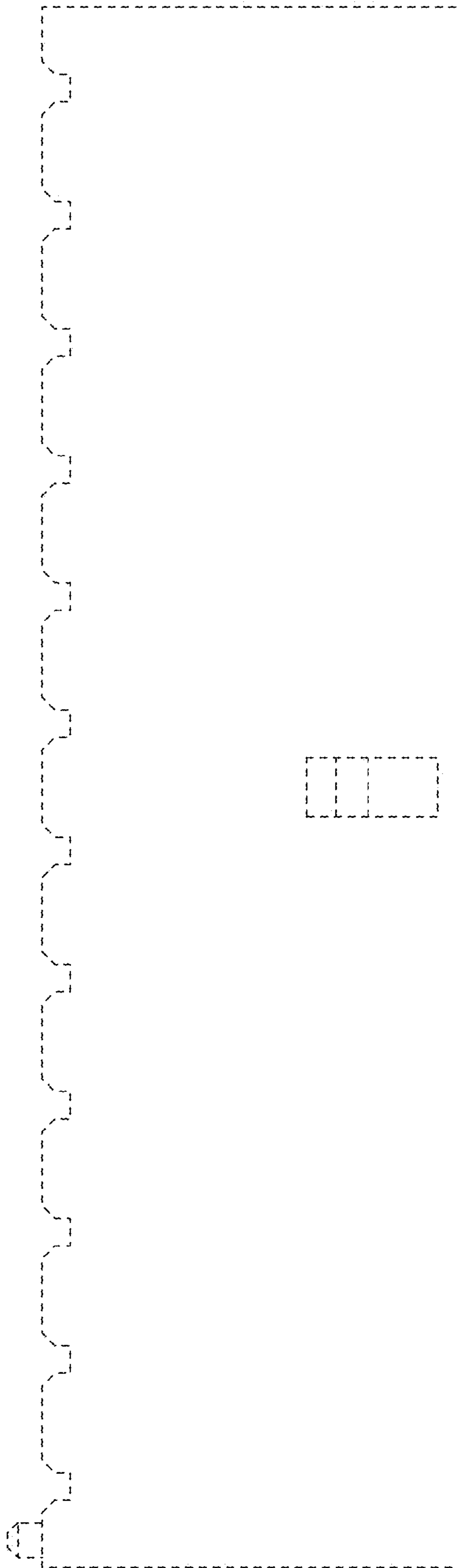


FIG. 167

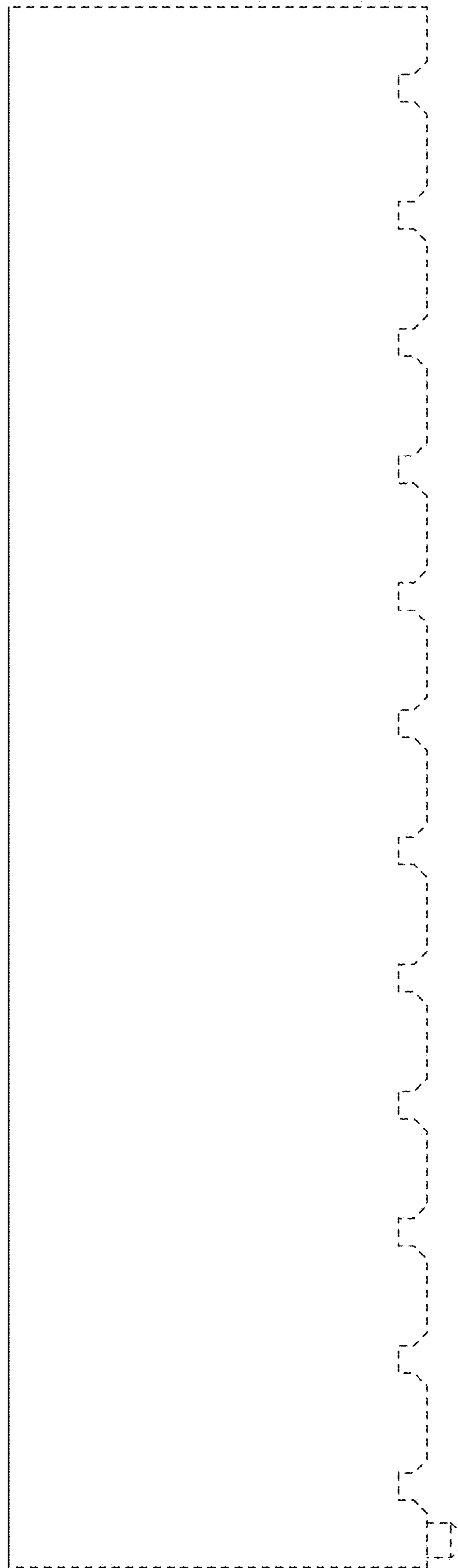


FIG. 168

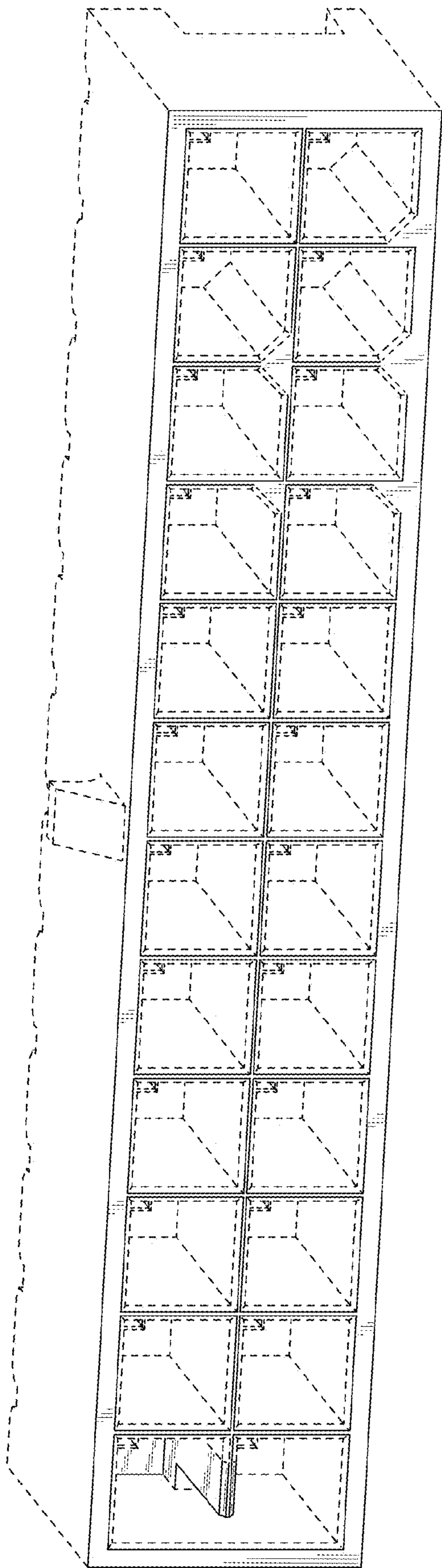


FIG. 169

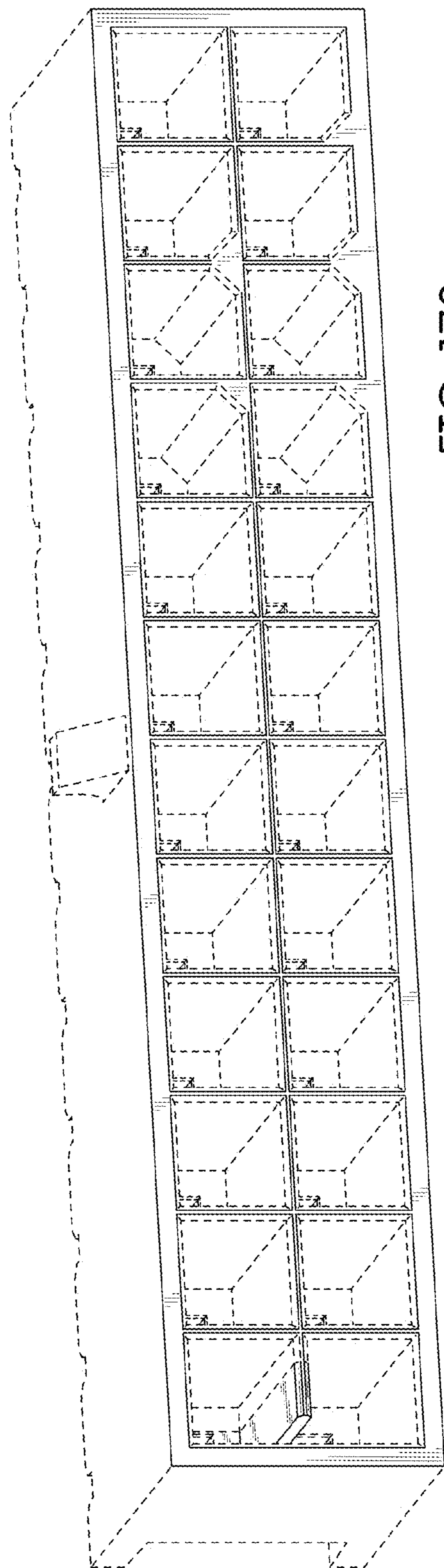


FIG. 170

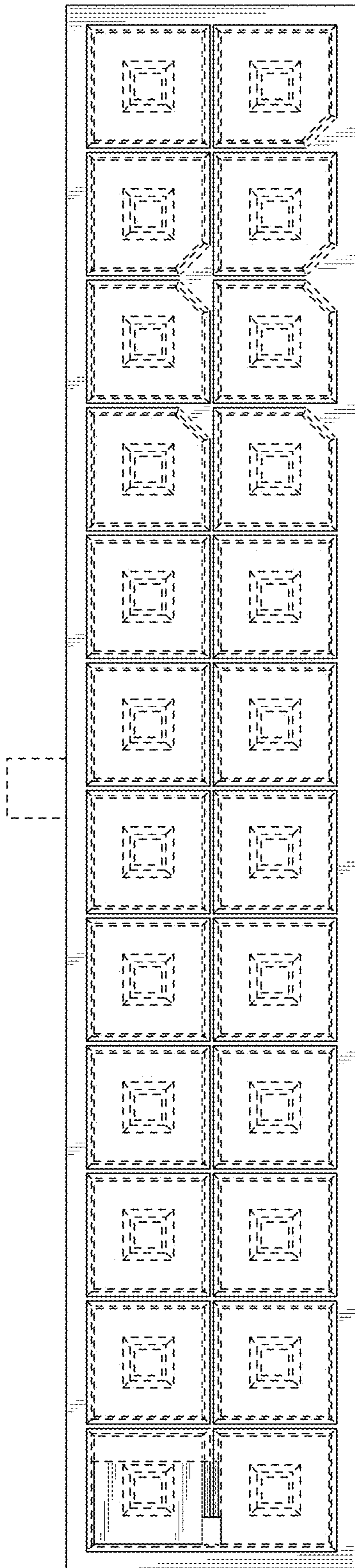


FIG. 171

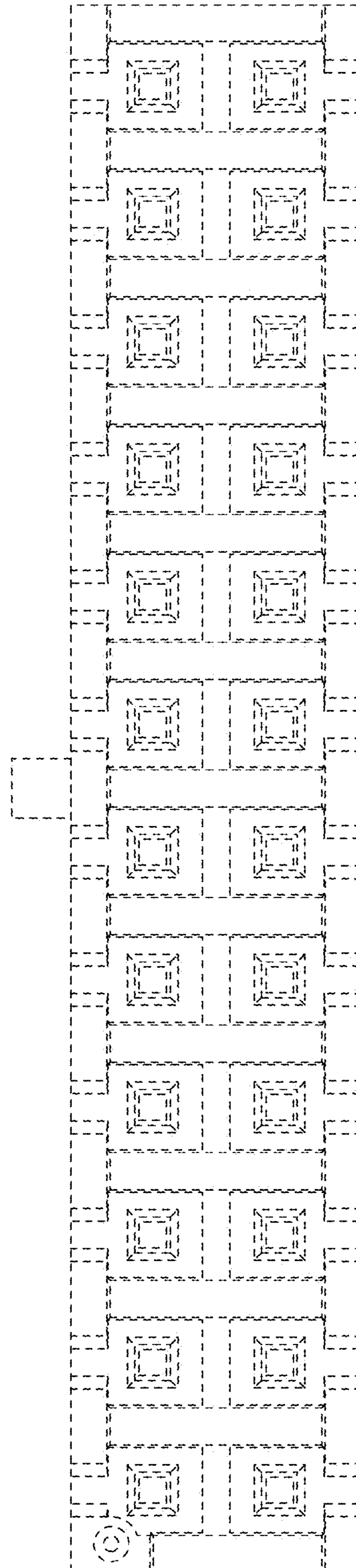


FIG. 172

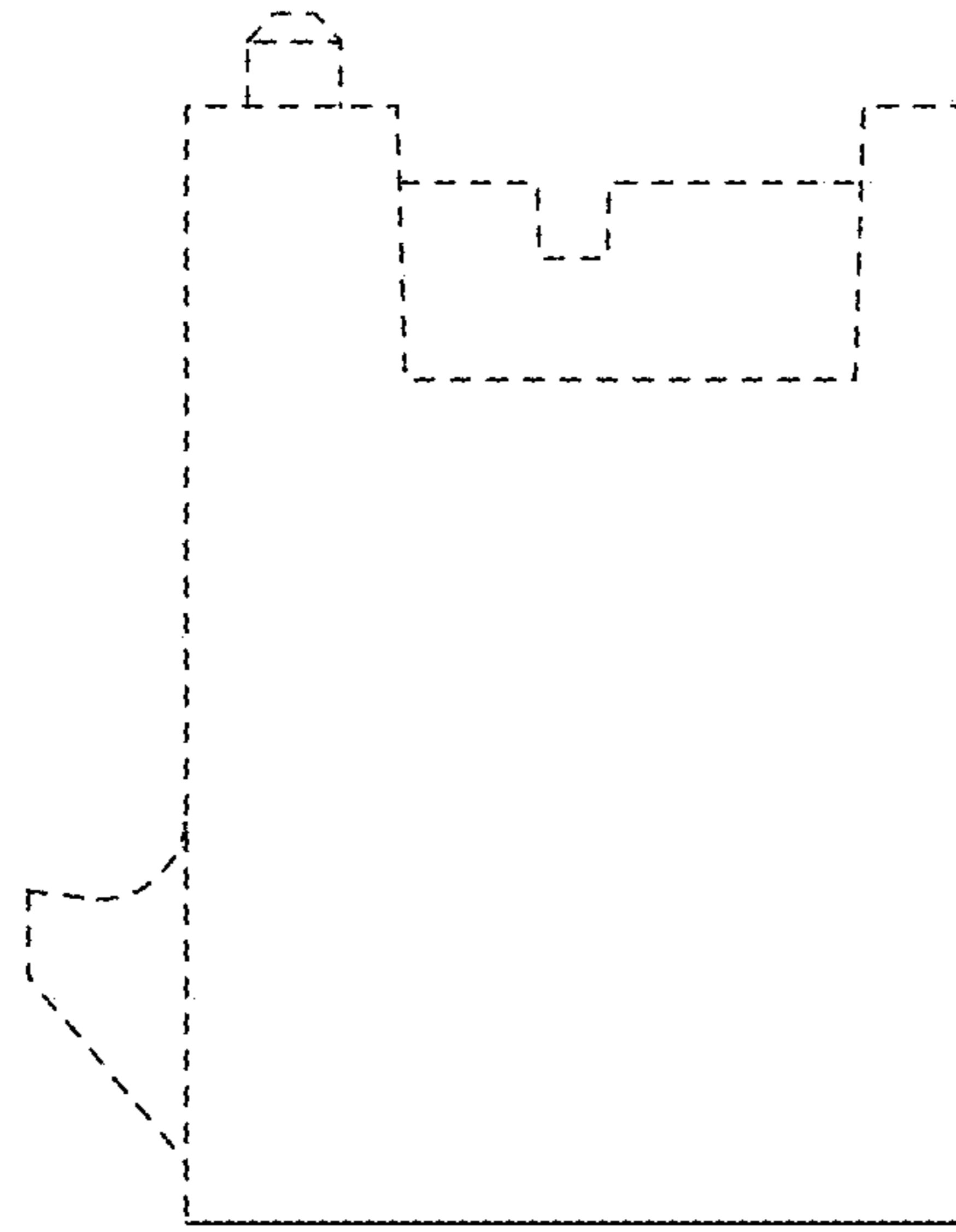


FIG. 174

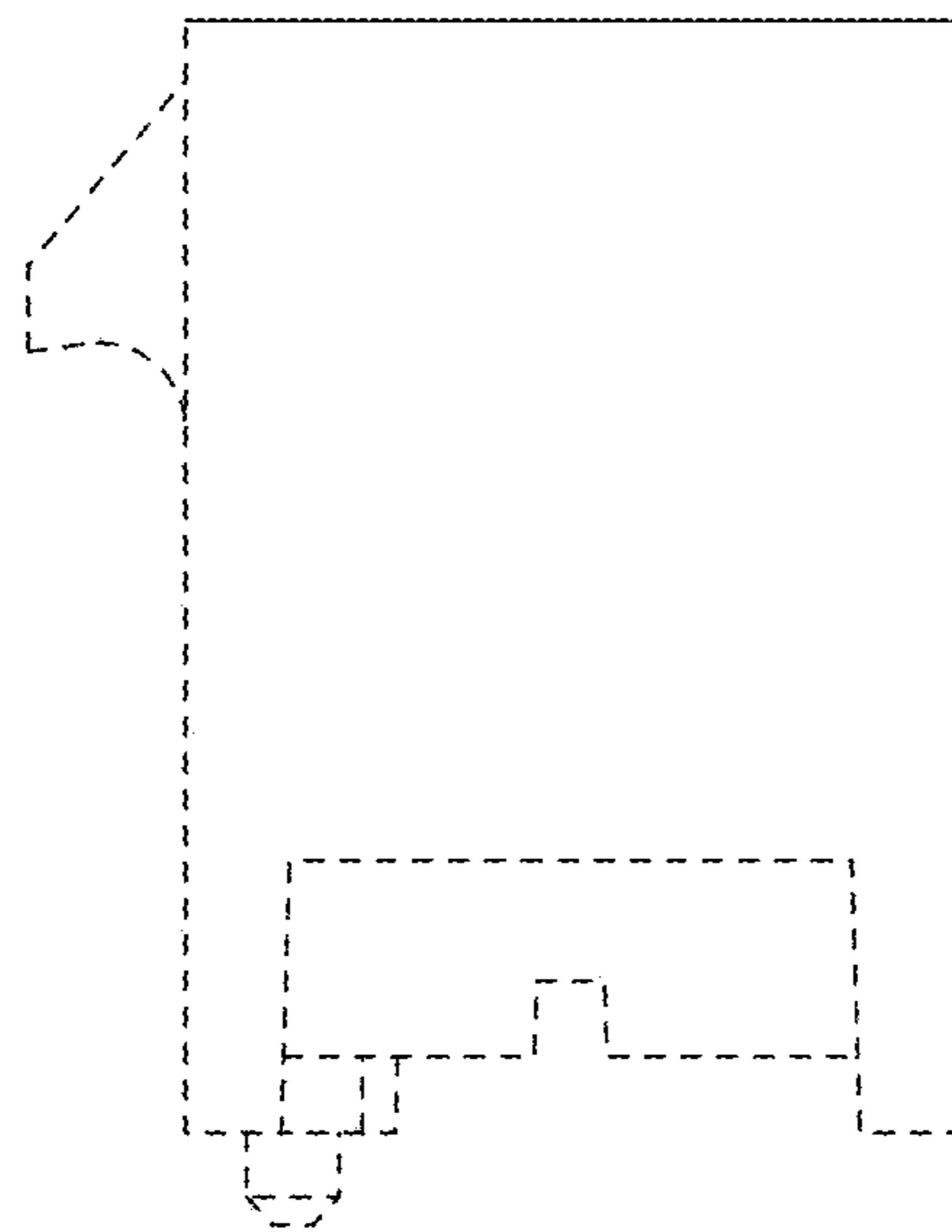


FIG. 173

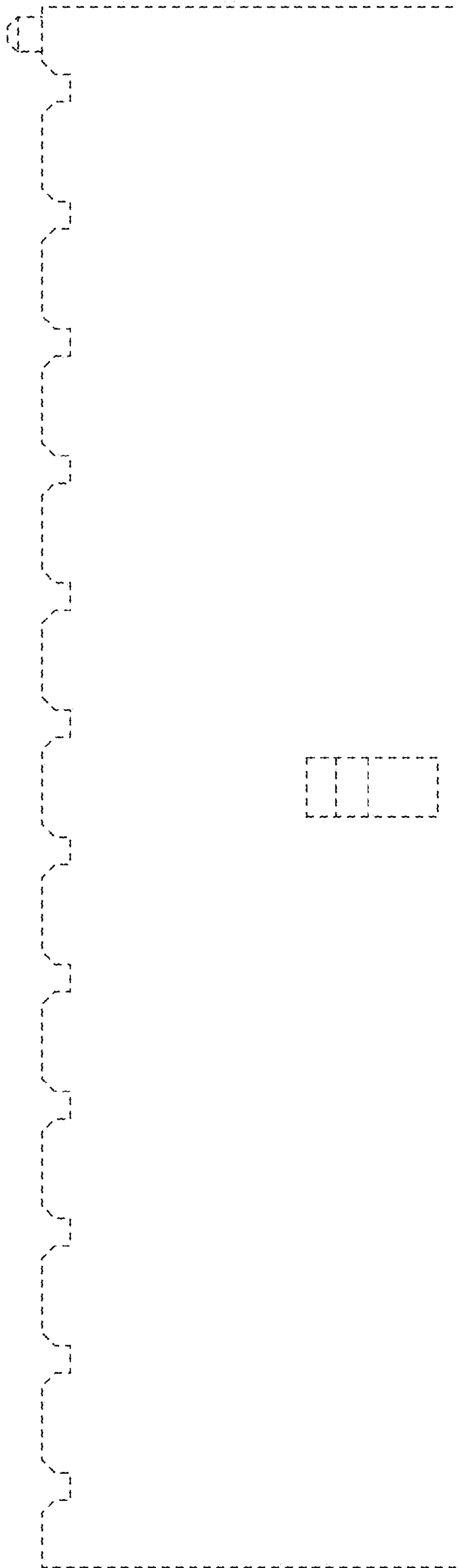


FIG. 175

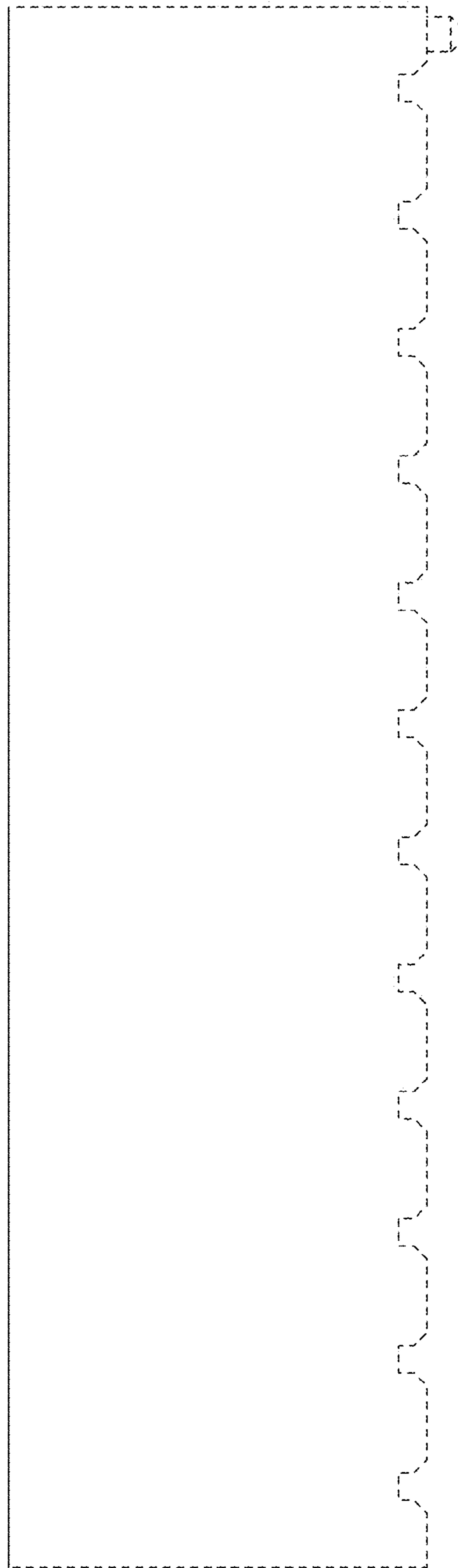


FIG. 176