



US00D910577S

(12) **United States Design Patent** (10) **Patent No.:** **US D910,577 S**
Ogawa et al. (45) **Date of Patent:** **** Feb. 16, 2021**

(54) **TERMINAL BLOCK**

13/14; F21V 17/12; F21V 17/14; F21V 19/0025; F21V 21/00; F21V 29/10; F21V 29/505; F21V 29/83; F21V 3/00; F21V 3/02; F21V 5/10; F21V

(71) Applicant: **OMRON Corporation**, Kyoto (JP)

(Continued)

(72) Inventors: **Tadahiko Ogawa**, Moriyama (JP); **Aiki Kora**, Kyoto (JP)

(56)

References Cited

(73) Assignee: **OMRON Corporation**, Kyoto (JP)

U.S. PATENT DOCUMENTS

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

D344,715 S * 3/1994 Hsiao D13/159
D372,224 S * 7/1996 Larned 200/43.19

(21) Appl. No.: **29/690,279**

(Continued)

(22) Filed: **May 7, 2019**

Primary Examiner — Susan Bennett Hattan

(30) **Foreign Application Priority Data**

Assistant Examiner — Landon Thomas Cassell

Dec. 17, 2018 (JP) 2018-027489

(74) *Attorney, Agent, or Firm* — Capitol City TechLaw

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

(57)

CLAIM

(52) **U.S. Cl.**

The ornamental design for a terminal block, as shown and described.

USPC **D13/147**; D13/159

(58) **Field of Classification Search**

DESCRIPTION

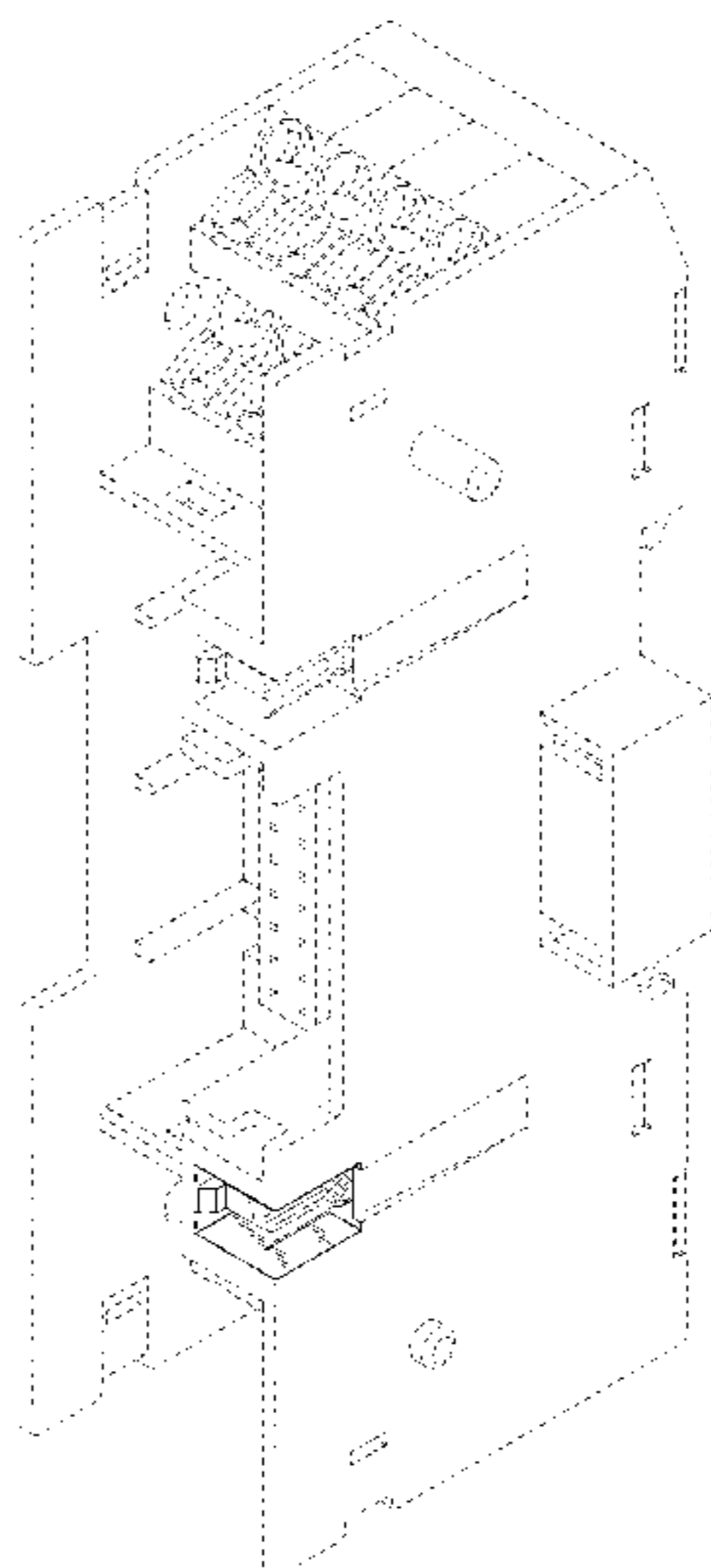
USPC D13/101, 133, 147, 151, 158, 159, 160, D13/161, 162, 175; D14/349, 356, 432, D14/435; D9/414, 725, 723, 727

FIG. 1 is a front, top, and right side perspective view of a terminal block showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof;
FIG. 7 is a bottom view thereof;
FIG. 8 is a front, top, and right side perspective view wherein a clip thereof is removed;
FIG. 9 is a front view wherein the clip thereof is removed; and,
FIG. 10 is a right side view wherein the clip thereof is removed.

CPC H01L 2924/0002; H01L 2924/00; H01L 25/0753; H01L 33/62; H01L 2924/00014; H01L 2924/181; H01L 21/561; H01L 21/563; H01L 21/565; H01L 2224/13099; H01L 22/14; H01L 23/3121; H01L 23/552; H01L 2924/00012; H01L 2023/4031; H01L 2023/405; H01L 2023/4062; H01L 2023/4081; H01L 2023/4087; H01L 21/31144; H01L 21/4814; H01L 21/4853; H01L 21/6715; H01L 21/6835; H01L 21/68721; H01L 21/68728; H01L 2224/48137; H01L 2224/97; H01L 22/30; H01L 22/34; H01L 23/3128; H01L 23/4006; H01L 23/66; H01L 24/03; H01L 24/009; H01L 24/13; H01L 24/17; H01L 2924/15311; H01L 2924/1815; H01L 2924/19105; G01S 13/08; F21V 23/06; F21V 23/02; F21V

The dashed broken lines in the figures show portions of the terminal block that form no part of the claimed design. The dot-dashed broken lines shown in FIGS. 1, 2, 8, and 9 represent boundaries that form no part of the claimed design.

1 Claim, 10 Drawing Sheets



(58) Field of Classification Search

CPC 7/00; F21V 7/06; F21V 9/00; F21V 9/30;
F21V 9/32; F21V 9/38; F21V 17/002;
F21V 17/06; F21V 19/004; F21V
19/0045; F21V 21/002; F21V 21/0832;
F21V 21/096; F21V 23/001; F21V
29/503; F21V 29/74; F21V 31/005; F21V
3/062; H01R 12/716; H01R 24/76; H01R
12/57; H01R 13/11; H01R 13/111; H01R
13/2442; H01R 2103/00; H01R 2107/00;
H01R 12/7005; H01R 12/7076; H01R
12/714; H01R 12/79; H01R 13/2464;
H01R 13/41; H01R 13/432; H01R
13/447; H01R 13/506; H01R 13/514;
H01R 2201/20; H01R 2201/26; H01R
24/60; H01R 25/1622; H01R 27/02;
H01R 43/26; H01R 12/52; H01R 12/58;
H01R 12/61; H01R 13/04; H01R 13/112;
H01R 13/14; H01R 13/245; H01R
13/2492; H01R 13/405; H01R 13/42;
H01R 13/502; H01R 13/518; H01R
13/5205; H01R 13/5213; H01R 13/6275;
H01R 13/629; H01R 13/6335; H01R
13/635; H01R 13/639; H01R 13/6582;
H01R 13/6587; H01R 13/665; H01R
13/717; H01R 13/743; H01R 224/22;
H01R 24/38; H01R 24/525; H01R
25/006; H01R 25/164; H01R 31/065;
H01R 43/0256; H01R 43/20; H01R 4/02;
H01R 4/185; H01R 12/585; H01R 12/62;
H01R 12/707; H01R 12/71; H01R
12/724; H01R 12/737; H01R 12/774;
H01R 12/775; H01R 12/778; H01R
12/78; H01R 12/82; H01R 12/85; H01R
12/87; H01R 13/057; H01R 13/10; H01R
13/113; H01R 13/187; H01R 13/193;
H01R 13/20; H01R 13/22; H01R
13/2478; H01R 13/26; H01R 13/40;
H01R 13/436; H01R 13/4361; H01R
13/44; H01R 13/443; H01R 13/4538;
H01R 13/465; H01R 13/50; H01R
13/516; H01R 13/5202; H01R 13/5219;
H01R 13/5227; H01R 13/62; H01R
13/6205; H01R 13/622; H01R 13/627;
H01R 13/6271; H01R 13/6272; H01R
13/6273; H01R 13/631; H01R 13/6315;
H01R 13/641; H01R 13/6461; H01R
13/6471; H01R 13/6473; H01R 13/6585;
H01R 13/66; H01R 13/6658; H01R
13/6675; H01R 13/70; H01R 13/703;
H01R 13/7032; H01R 13/7037; H01R
13/73; H01R 13/745; H01R 13/748;
H01R 2101/00; H01R 2105/00; H01R
2201/02; H01R 2201/06; H01R 24/20;
H01R 24/28; H01R 24/62; H01R 24/66;
H01R 24/86; H01R 25/145; H01R 29/00;
H01R 31/06; H01R 33/09; H01R 33/18;
H01R 33/7671; H01R 33/7685; H01R
33/88; H01R 33/90; H01R 33/94; H01R
33/945; H01R 33/975; H01R 35/04;
H01R 43/005; H01R 43/16; H01R
43/205; H01R 43/24; H01R 4/028; H01R
4/06; H01R 4/28; H01R 4/48; H01R
4/4818; H01R 48/646; H01R 9/0518;
H01R 9/0527; H01R 9/18; H01R 9/22;

H01R 9/2458; H01R 9/2675; H02J
7/0045; H02J 1/00; H02J 1/082; H02J
50/10; H02J 50/40; H02J 50/90; H02J
7/0013; H02J 7/0021; H02J 7/0047; H02J
7/0063; H04L 67/12; H04L 9/3213; H04L
12/12; H04L 12/2816; H04L 63/0838;
H04L 69/162; H04L 9/0643; H04L
9/0863; H04L 9/0872; H04L 9/32; H04L
9/3228; H04L 12/1407; H04L 12/2801;
H04L 12/40013; H04L 12/40045; H04L
12/66; H04L 2012/40234; H04L
2012/4026; H04L 43/0805; H04L
43/0817; H04L 63/08; H04L 63/0853;
H04L 67/02; H04L 67/10; H04L 67/125;
H04L 67/16; H04L 67/26; H04L 69/16;
H04L 41/12; H04L 49/354; H05K 1/181;
H05K 2201/10159; H05K 1/0203; H05K
1/11; H05K 2201/066; H05K 2201/094;
H05K 2201/09409; H05K 2201/09445;
H05K 2201/09827; H05K 2201/09863;
H05K 1/0243; H05K 1/115; H05K 1/117;
H05K 1/119; H05K 1/144; H05K 1/184;
H05K 1/189; H05K 2201/041; H05K
2201/044; H05K 2201/10106; H05K
2201/10121; H05K 2201/10128; H05K
2201/10189; H05K 2201/10303; H05K
2201/10325; H05K 2201/10371; H05K
2201/10393; H05K 2201/10424; H05K
2201/10515; H05K 2201/10537; H05K
2201/10545; H05K 2201/10704; H05K
2201/10719; H05K 2201/10734; H05K
2201/10901; H05K 3/00; H05K 3/3436;
H05K 7/1069; H05K 7/1084; H05K
7/1469; H05K 1/0216; H05K 3/341;
G01R 1/025; G01R 1/0458; G01R
1/0466; G01R 31/2863; G01R 31/68;
G01R 11/04; G01R 19/16523; G01R
1/0416; G01R 1/0433; G01R 1/06783;
G01R 1/07314; G01R 22/00; G01R
22/065; G01R 27/26; G01R 31/006;
G01R 31/1281; G01R 31/129; G01R
31/2817; G01R 31/2834; G01R 331/2856;
G01R 31/2879; G01R 31/2886; G01R
31/2891; G01R 31/2896; G01R 31/3644;
G01R 31/3835; G01R 31/385; G01R
331/3865; G01R 31/69; G06F 13/1668;
G06F 13/4068; G06F 11/0727; G06F
11/0751; G06F 11/0793; G06F 13/16;
G06F 13/20; G06F 13/40; G06F 13/4022;
G06F 13/4081; G06F 13/4086; G06F
13/4282; G06F 1/162; G06F 1/1632;
G06F 1/1654; G06F 1/1698; G06F 1/184;
G06F 1/26; G06F 1/266; G06F
2213/0042; G06F 3/0604; G06F 3/0659;
G06F 3/0673; G06F 3/1446; G06F 8/65;
G06F 9/54; H01H 2300/032; H01H
9/167; H01H 15/16; H01H 19/11; H01H
19/54; H01H 1/36; H01H 2071/088;
H01H 2207/022; H01H 2207/026; H01H
25/04; H01H 71/025; H01H 71/08; H02G
3/083; H02G 3/12; H02G 3/123; H02G
3/14; H02G 3/16; H02G 15/013; H02G
15/10; H02G 3/088; C25D 17/12; C25D
21/12; C25D 21/14; C25D 3/562; C25D

5/48; H01B 7/0045; H01B 7/368; H02H
1/0007; H02H 3/08

See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

5,645,444 A * 7/1997 Sahlberg H01R 4/2429
29/566.4
D472,878 S * 4/2003 Kitamura D13/147
D640,636 S * 6/2011 Ngo D13/154
D691,959 S * 10/2013 Kajiura D13/147
D763,200 S * 8/2016 Hirose D13/159
D766,190 S * 9/2016 Ishikawa D13/159
D897,963 S * 10/2020 Wu D13/147
D898,679 S * 10/2020 Tanaka D13/159
2004/0142592 A1 * 7/2004 Peng H01R 4/2404
439/409
2004/0229517 A1 * 11/2004 Bush H01R 13/6463
439/676
2006/0292920 A1 * 12/2006 Hashim H01R 13/6467
439/404
2012/0040539 A1 * 2/2012 Enge H01R 13/65912
439/55

* cited by examiner

Fig. 1

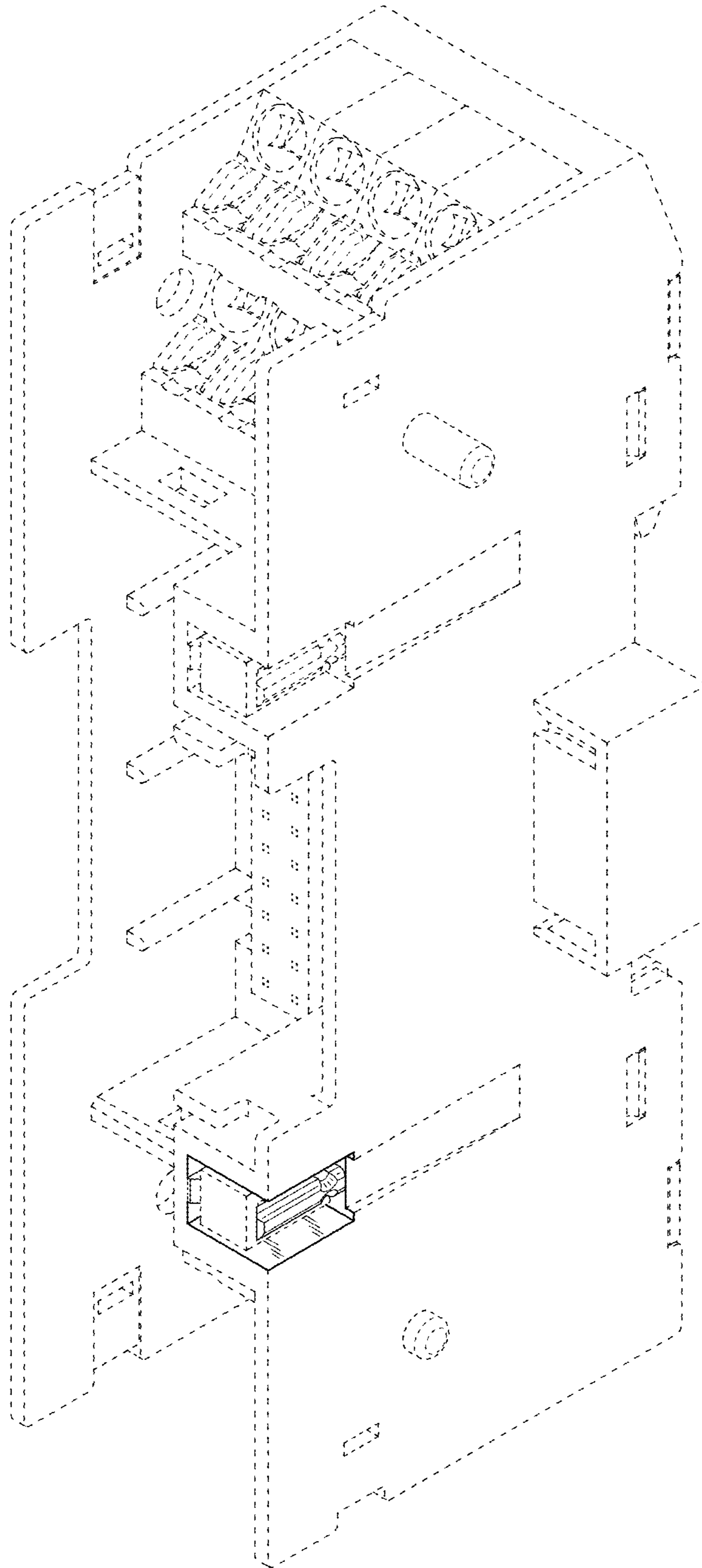


Fig. 2

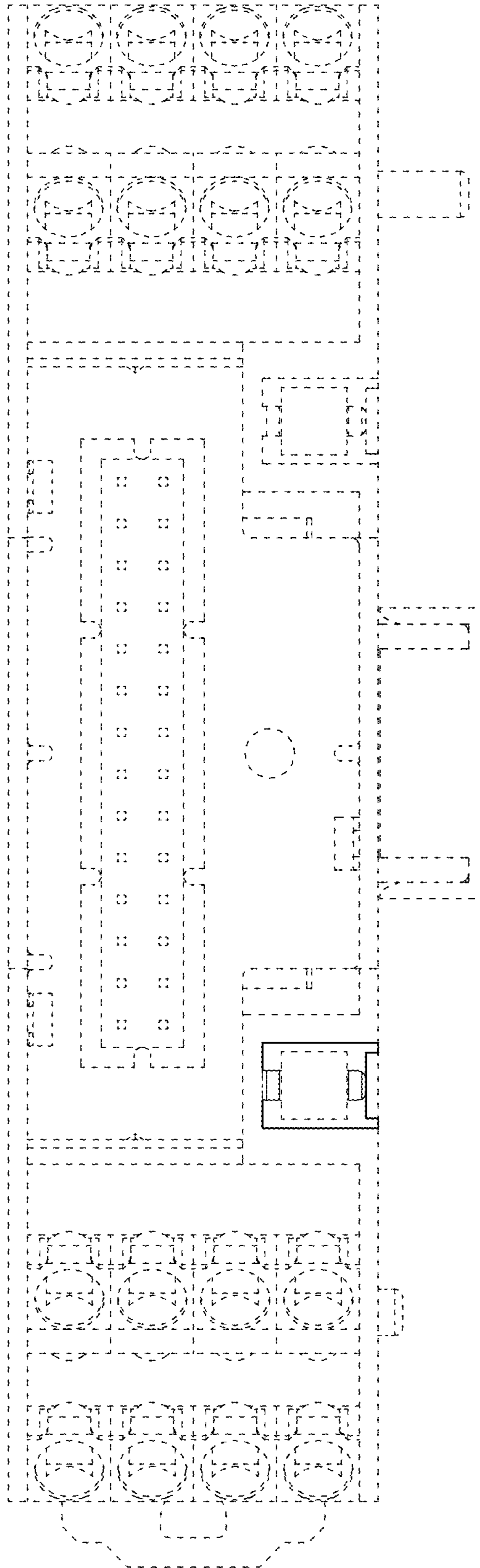


Fig. 3

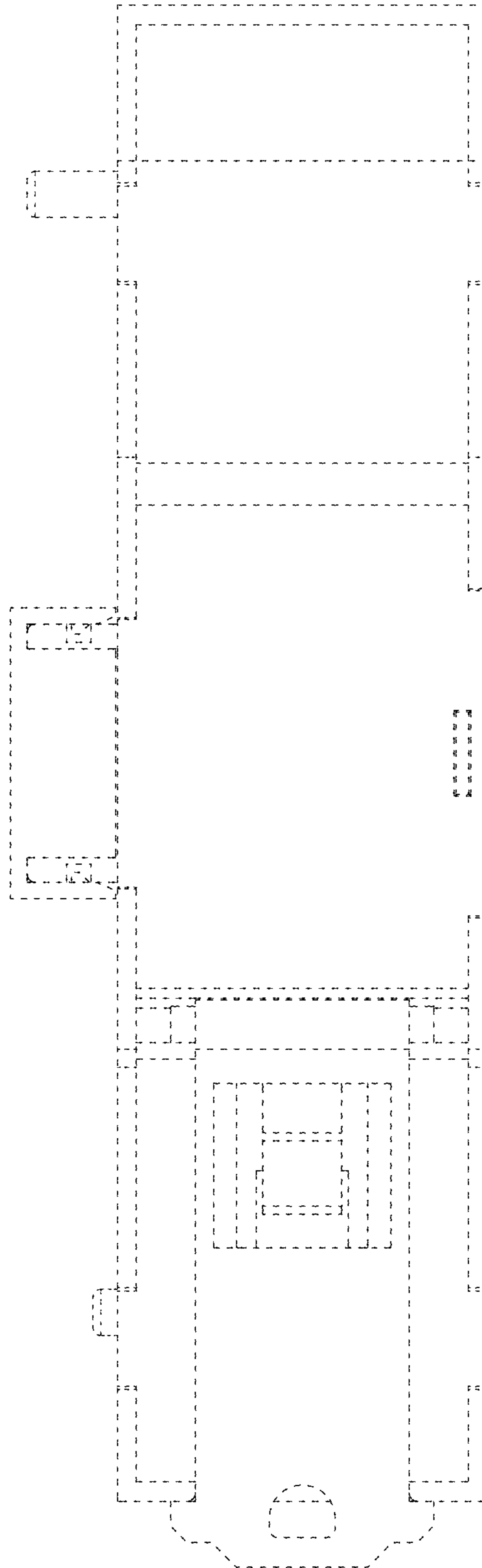


Fig. 4

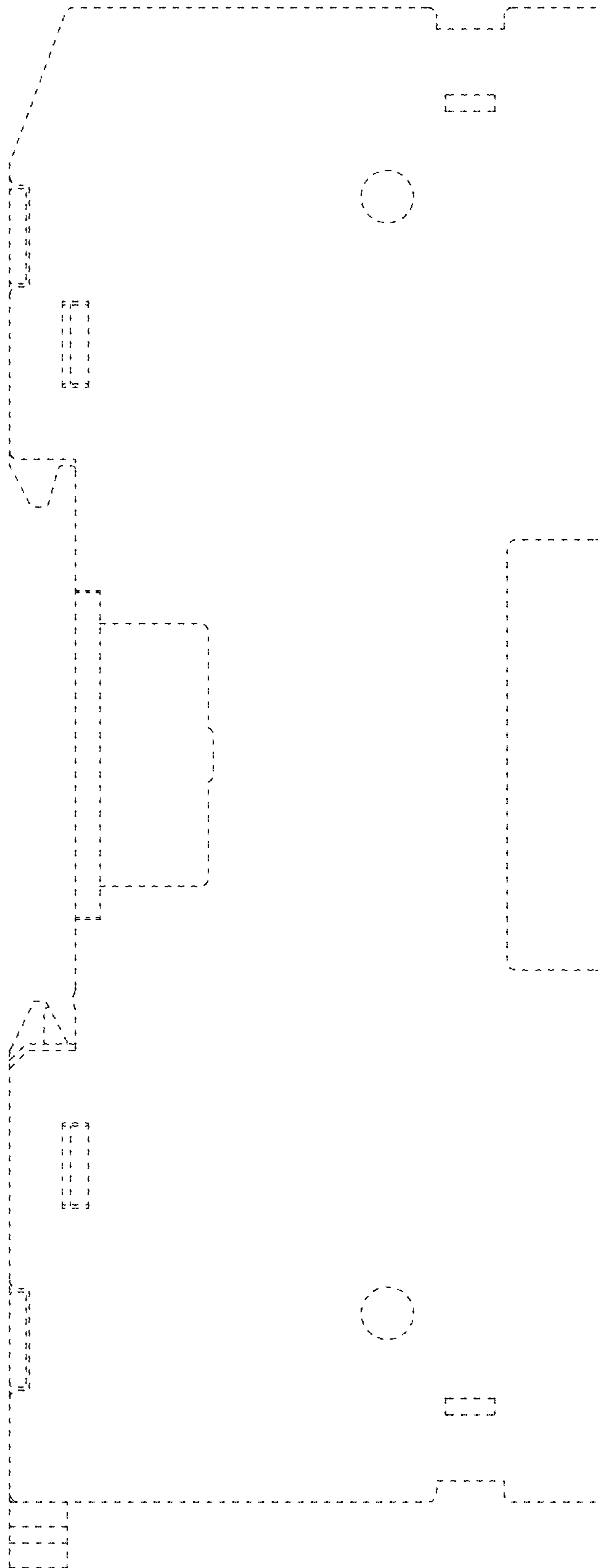


Fig. 5

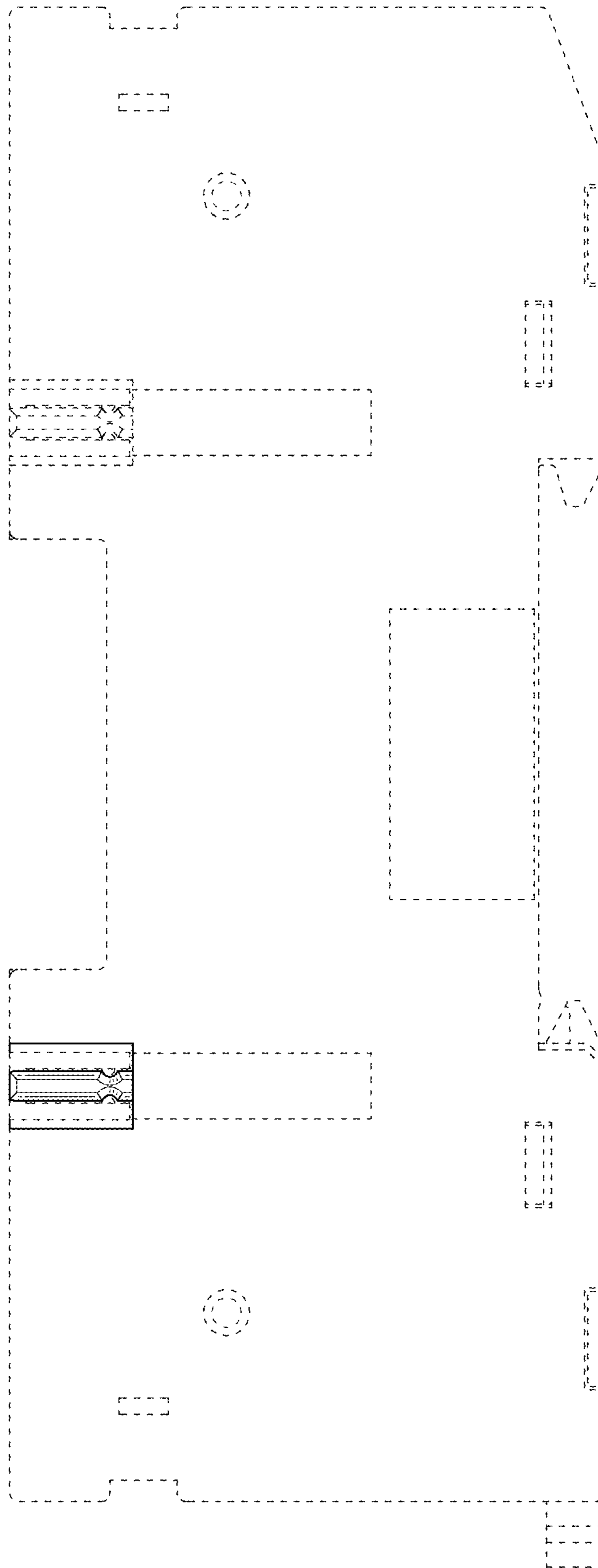


Fig. 6

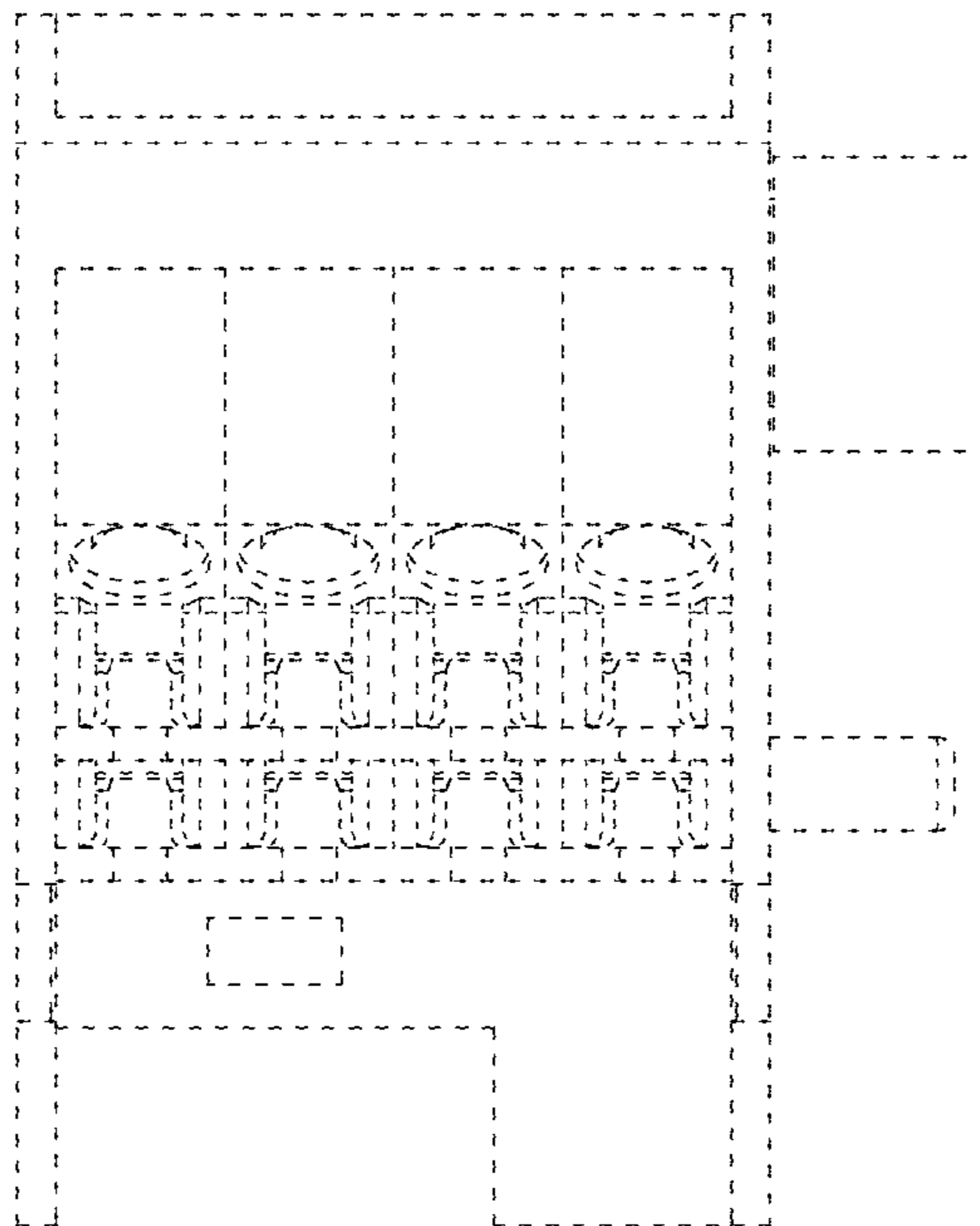


Fig. 7

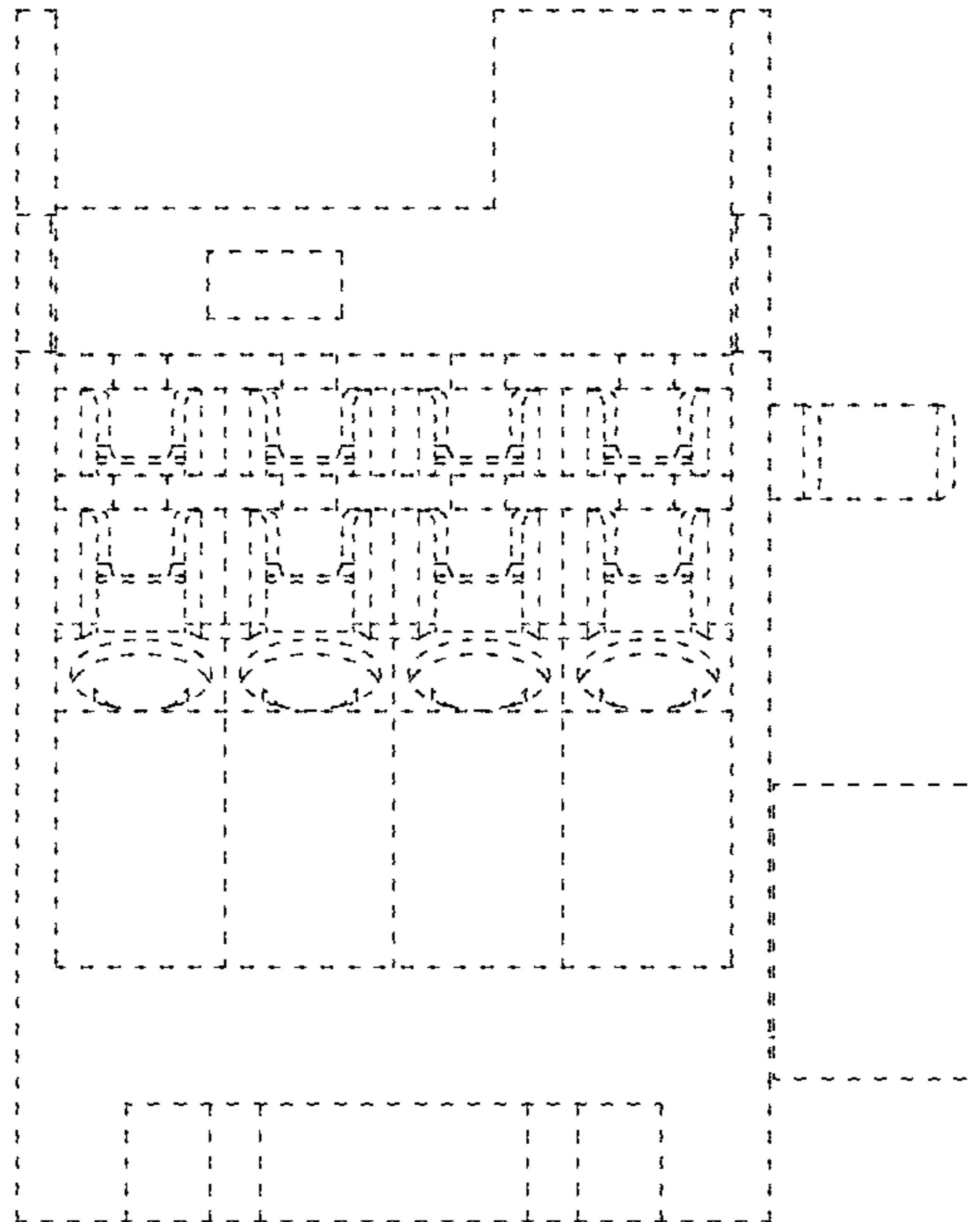


Fig. 8

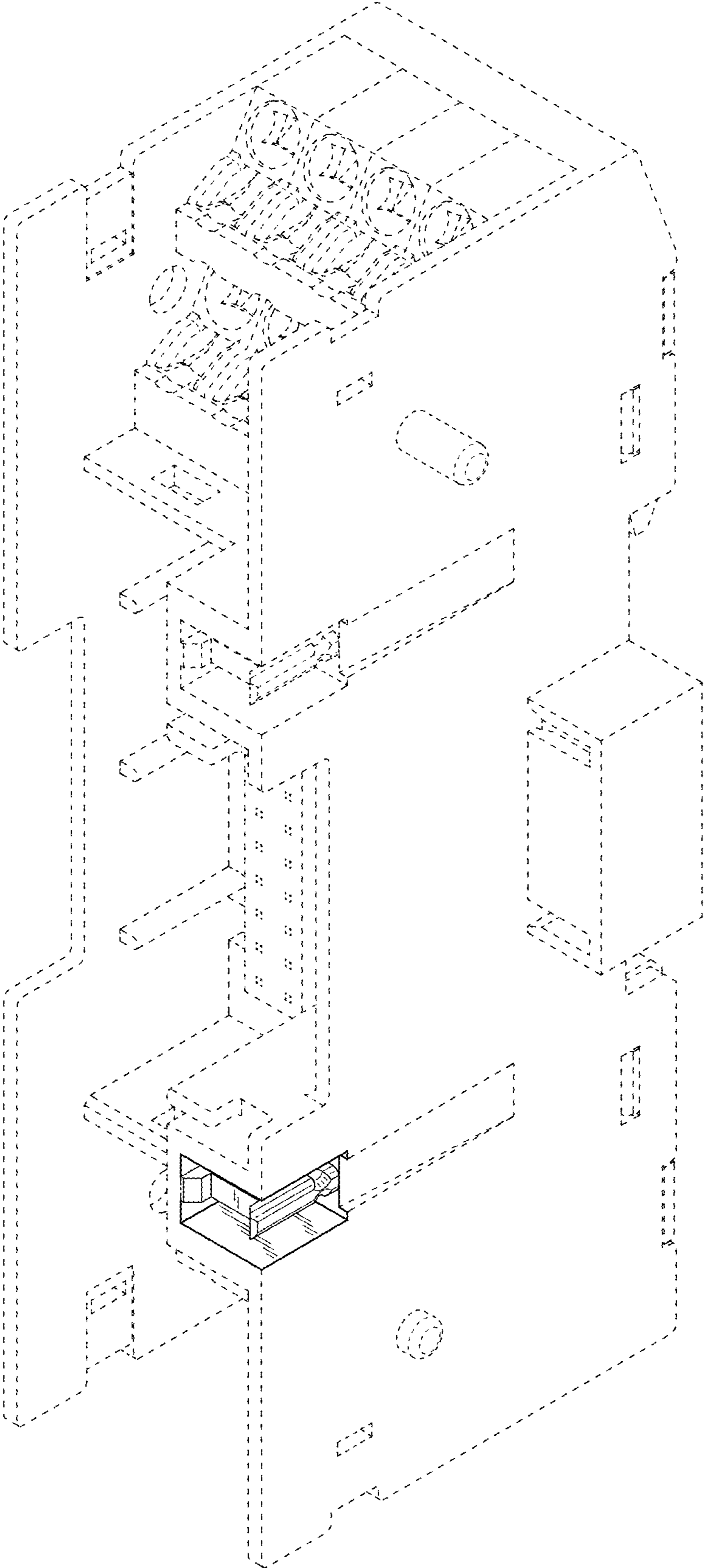


Fig. 9

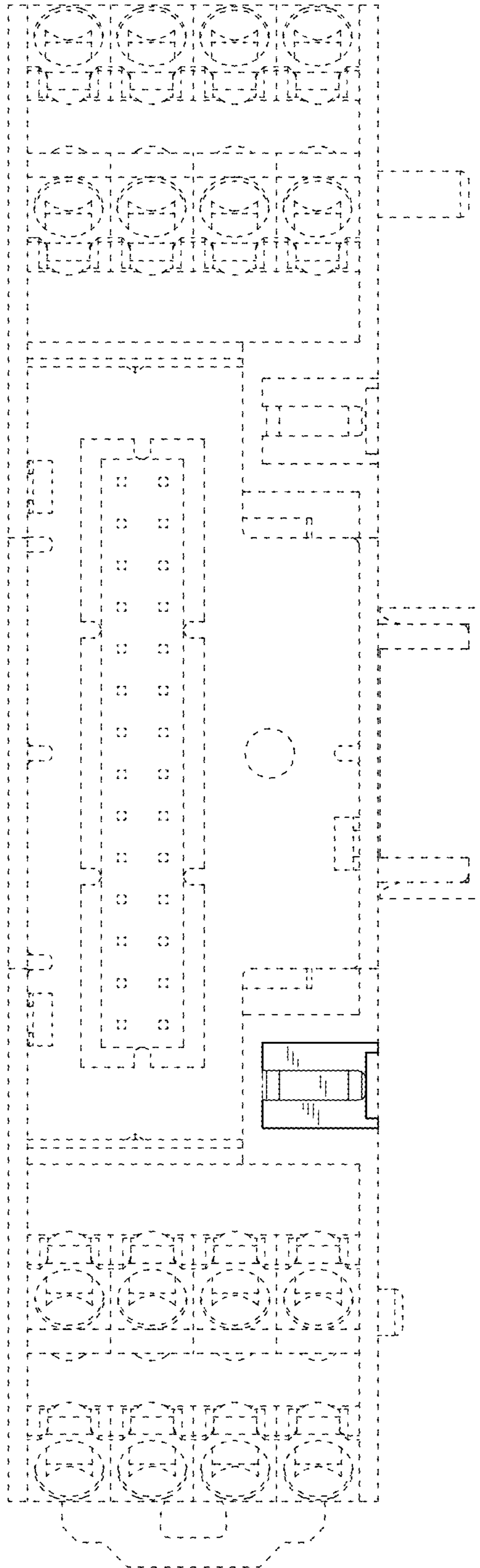


Fig. 10

