



US00D413576S

# United States Patent [19] Ono et al.

[11] **Patent Number: Des. 413,576**  
[45] **Date of Patent: \*\* Sep. 7, 1999**

[54] **ELECTRICAL CONNECTOR**

[75] Inventors: **Yasuhiro Ono**, Kanagawa; **Shinichi Ikemoto**, Tokyo, both of Japan

[73] Assignee: **KEL Corporation**, Tokyo, Japan

[\*\*] Term: **14 Years**

[21] Appl. No.: **29/087,174**

[22] Filed: **Apr. 28, 1998**

[51] **LOC (6) Cl.** ..... **13-03**

[52] **U.S. Cl.** ..... **D13/147**

[58] **Field of Search** ..... D13/147; 439/62,  
439/79, 81, 83, 252, 325, 326, 378, 571,  
607, 630, 636, 682

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

D. 318,650	7/1991	Matsuzaki	.....	D13/147
D. 379,620	6/1997	Aramaki	.....	D13/147
5,044,988	9/1991	Hirayama	.....	439/609 X
5,104,326	4/1992	Smith et al.	.....	439/79 X
5,692,912	12/1997	Nelson et al.	.....	439/62 X

*Primary Examiner*—Joel Sincavage  
*Attorney, Agent, or Firm*—Robert W. J. Usher

[57] **CLAIM**

The ornamental design for an electrical connector, as shown and described.

**DESCRIPTION**

FIG. 1 is a top view of an electrical connector according to a first embodiment showing our new design;

FIG. 2 is a front view of the connector according to the first embodiment;

FIG. 3 is a bottom view of the connector according to the first embodiment;

FIG. 4 is a rear view of the connector according to the first embodiment;

FIG. 5 is an enlarged, right side view of the connector according to the first embodiment, the opposite side being a mirror image;

FIG. 6 is an enlarged sectional view taken along 6—6 in FIG. 2 of the connector according to the first embodiment, with exposed signal contacts shown in elevation;

FIG. 7 is an enlarged sectional view taken along 7—7 in FIG. 2 of the connector according to the first embodiment;

FIG. 8 is a top view of the connector according to a second embodiment;

FIG. 9 is a front view of the connector according to a second embodiment;

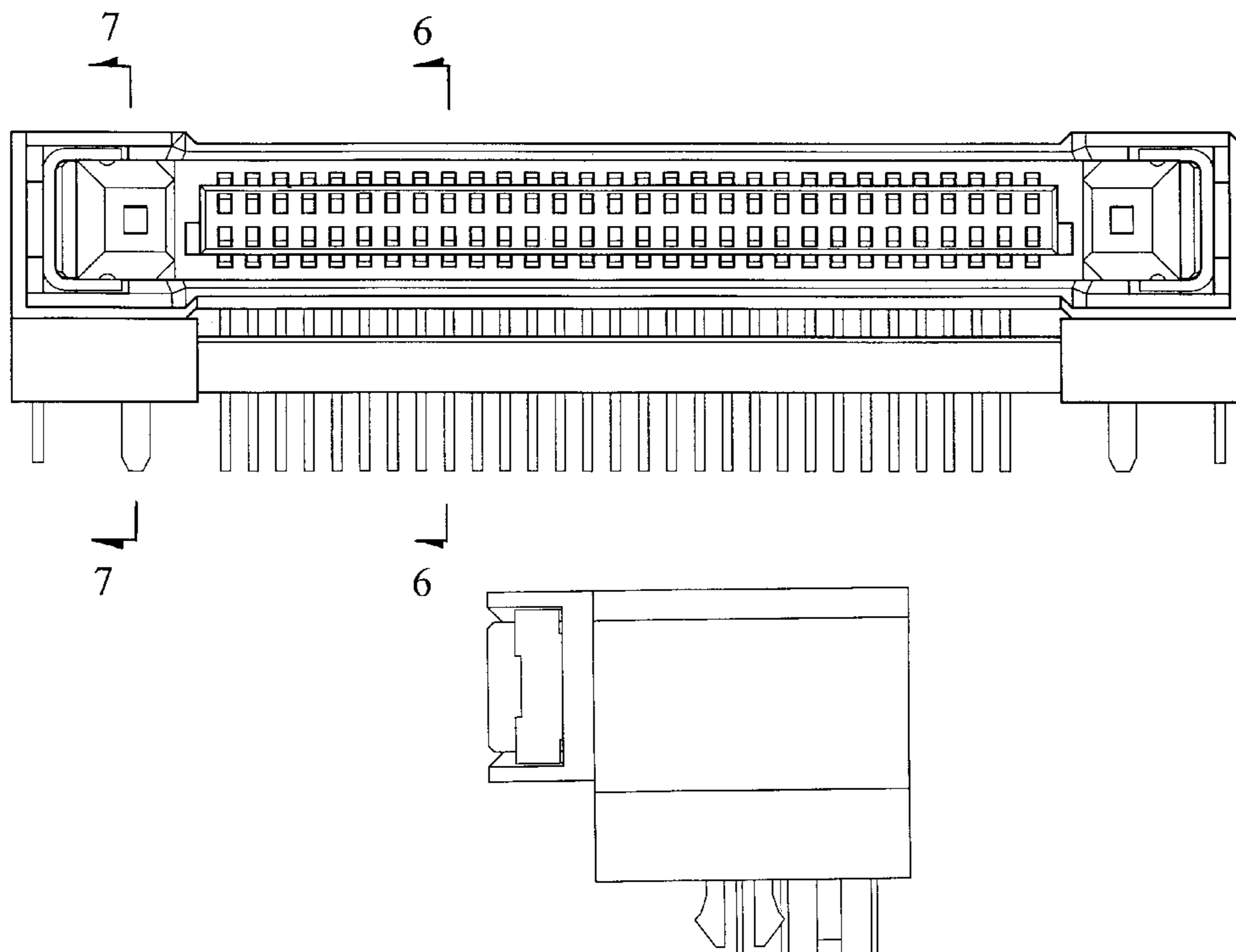
FIG. 10 is a bottom view of the connector according to the second embodiment;

FIG. 11 is a rear view of the connector according to the second embodiment;

FIG. 12 is an enlarged right side view of the connector according to the second embodiment, the opposite side being a mirror image; and,

FIG. 13 is an enlarged sectional view along 13—13 in FIG. 9 of the connector according to the second embodiment, with exposed contacts shown in elevation.

**1 Claim, 10 Drawing Sheets**



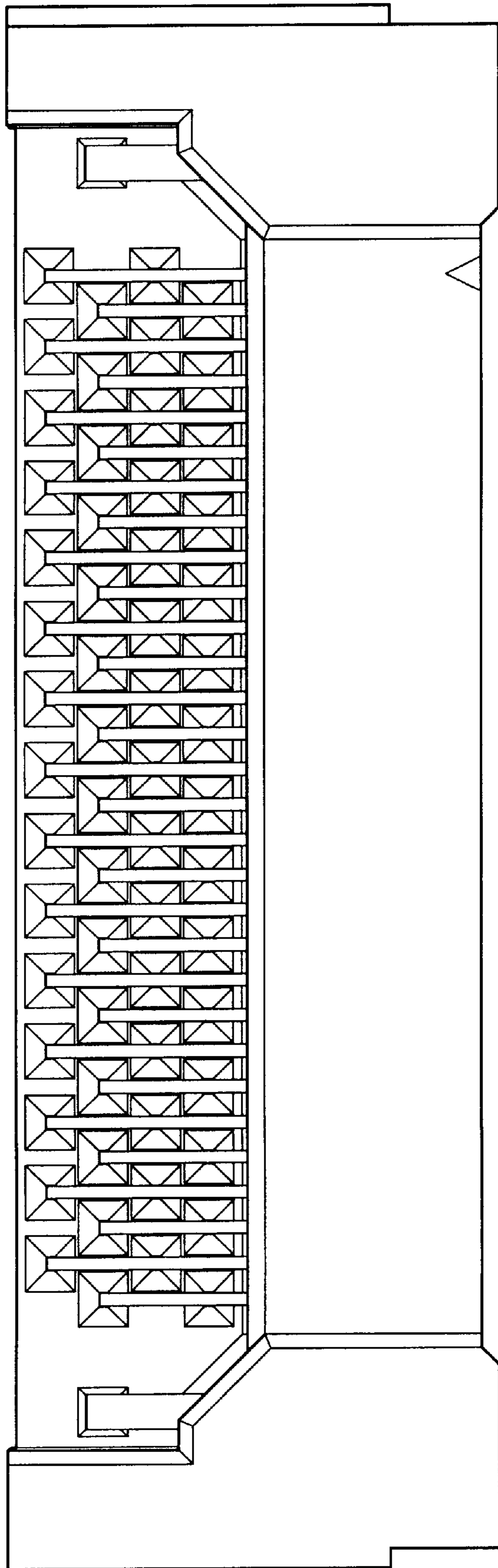


Fig. 1

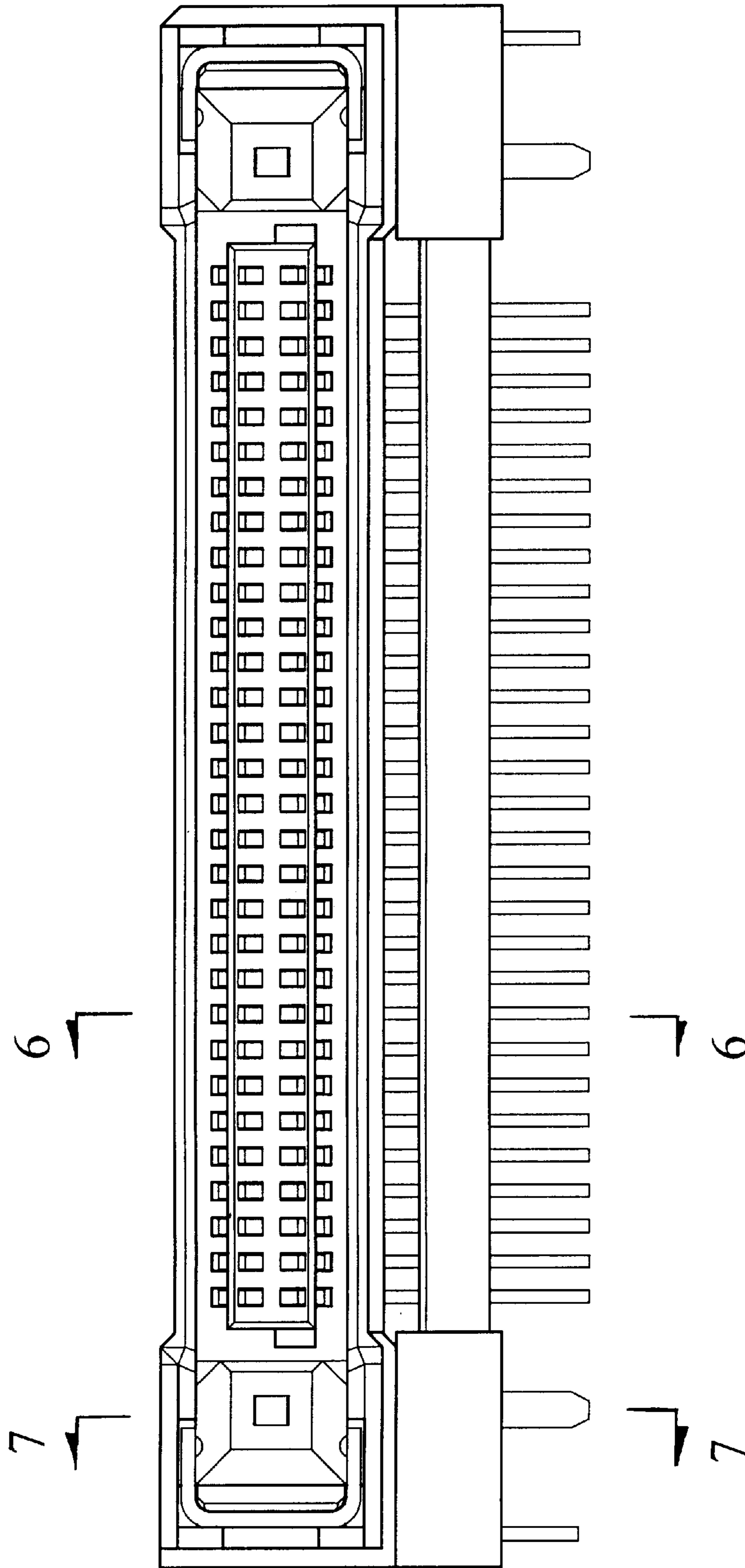


Fig. 2

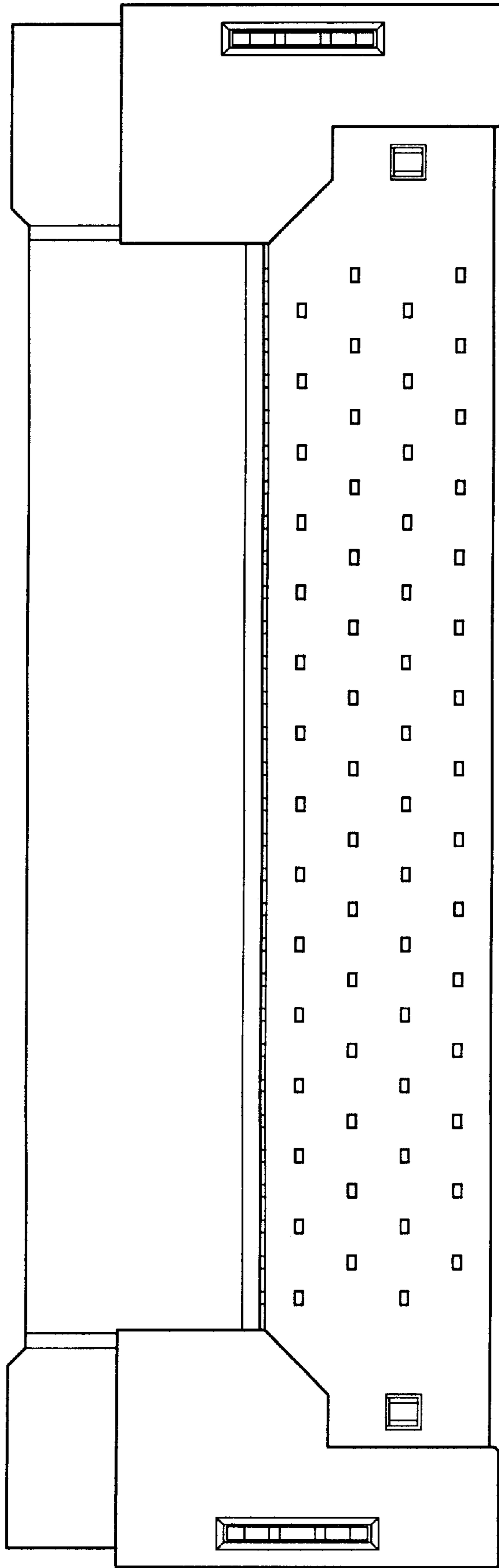


Fig. 3

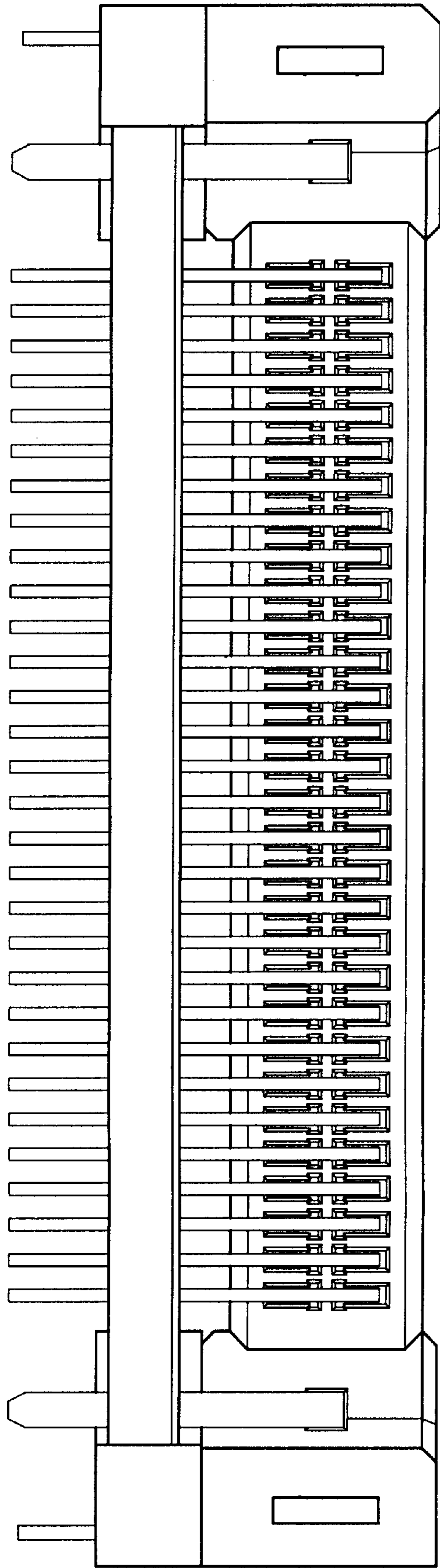
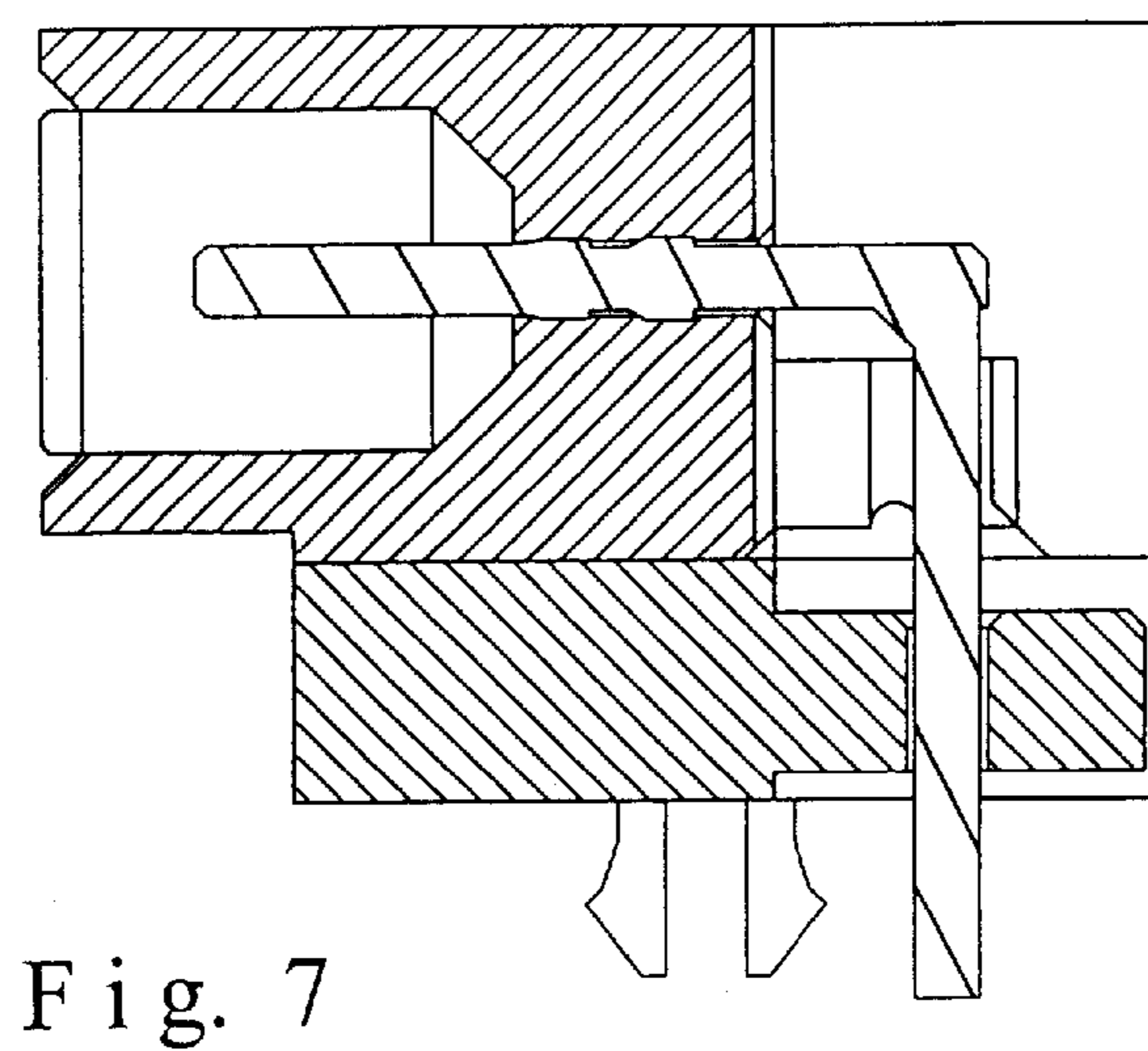
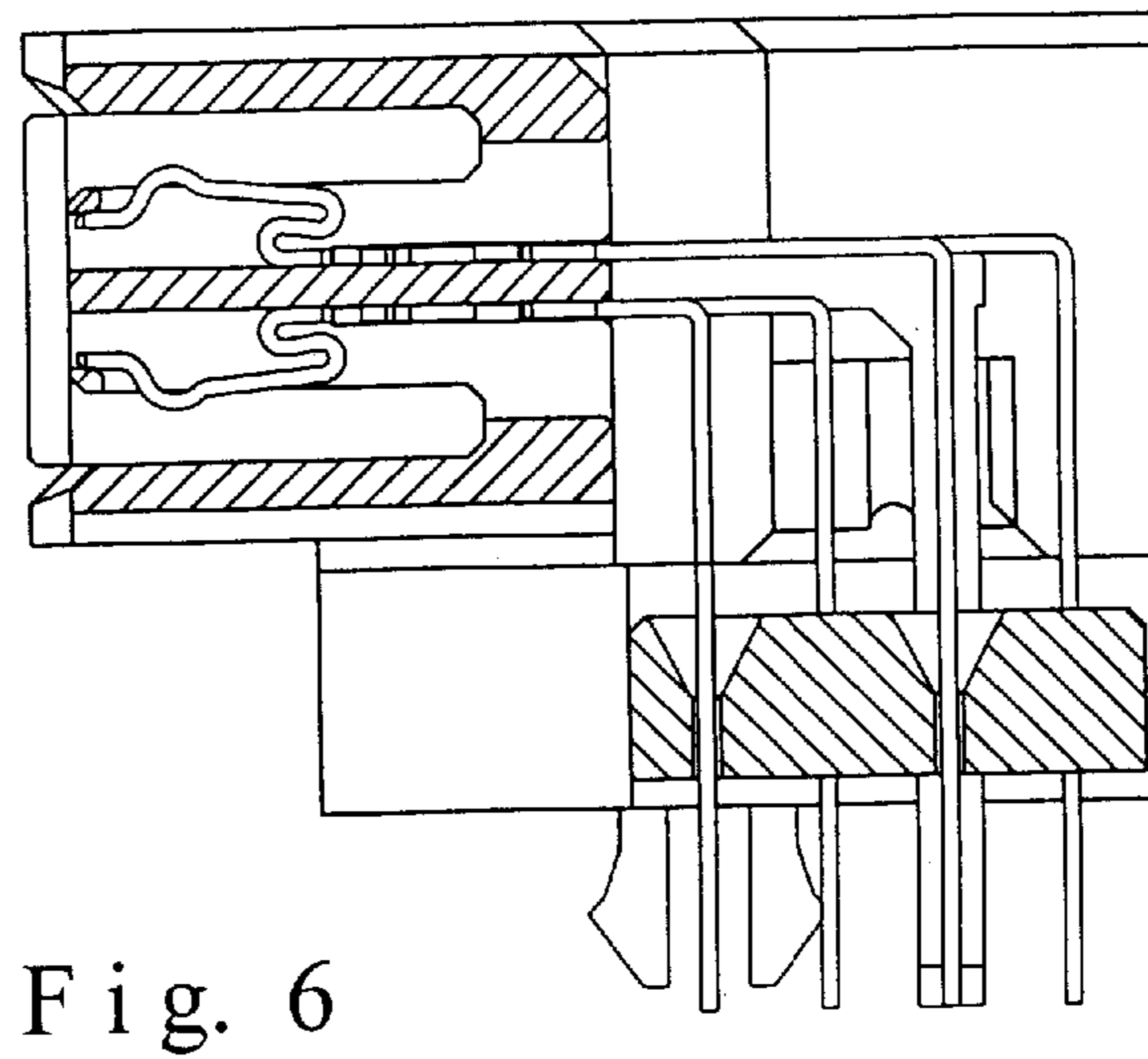
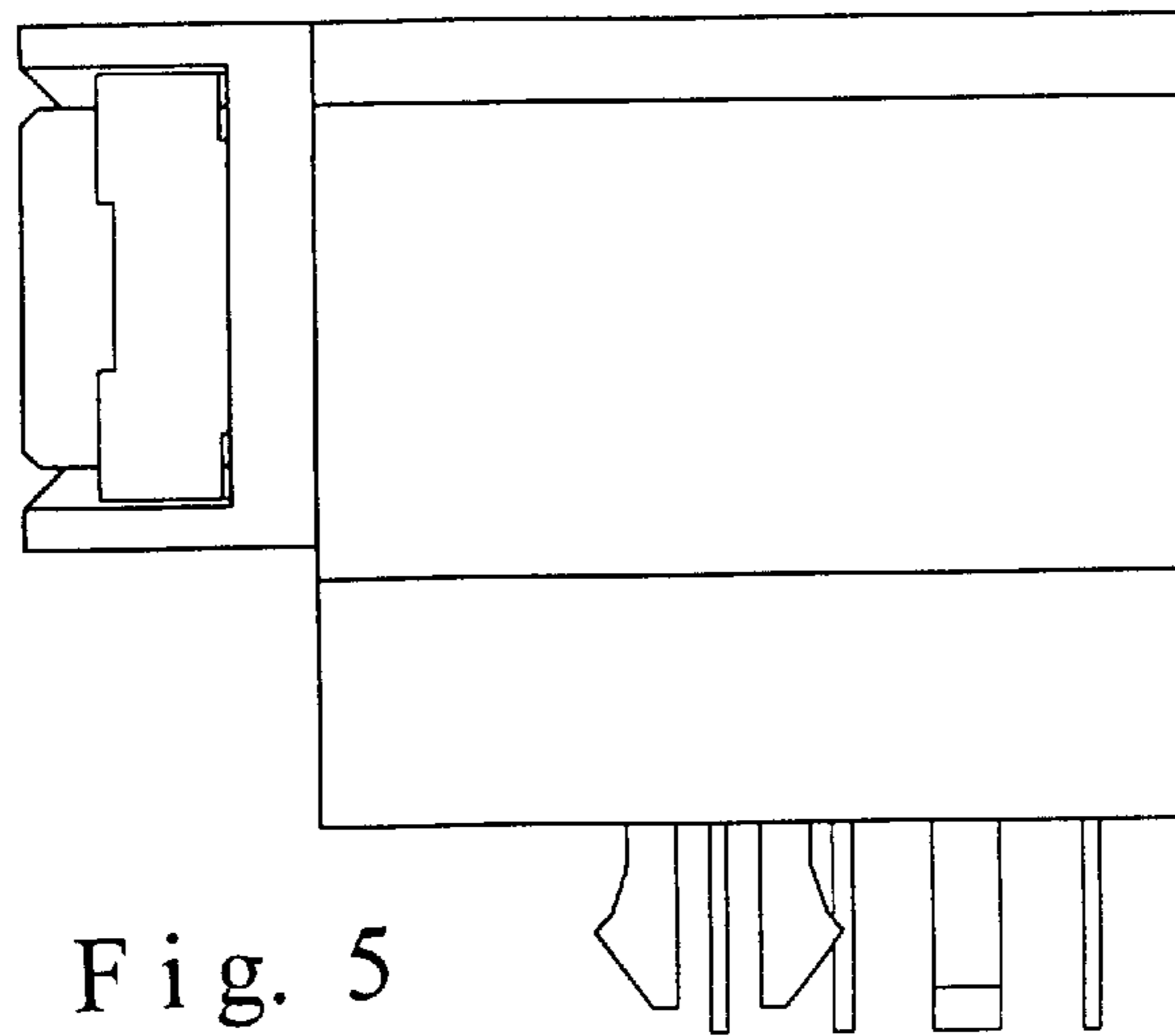


Fig. 4



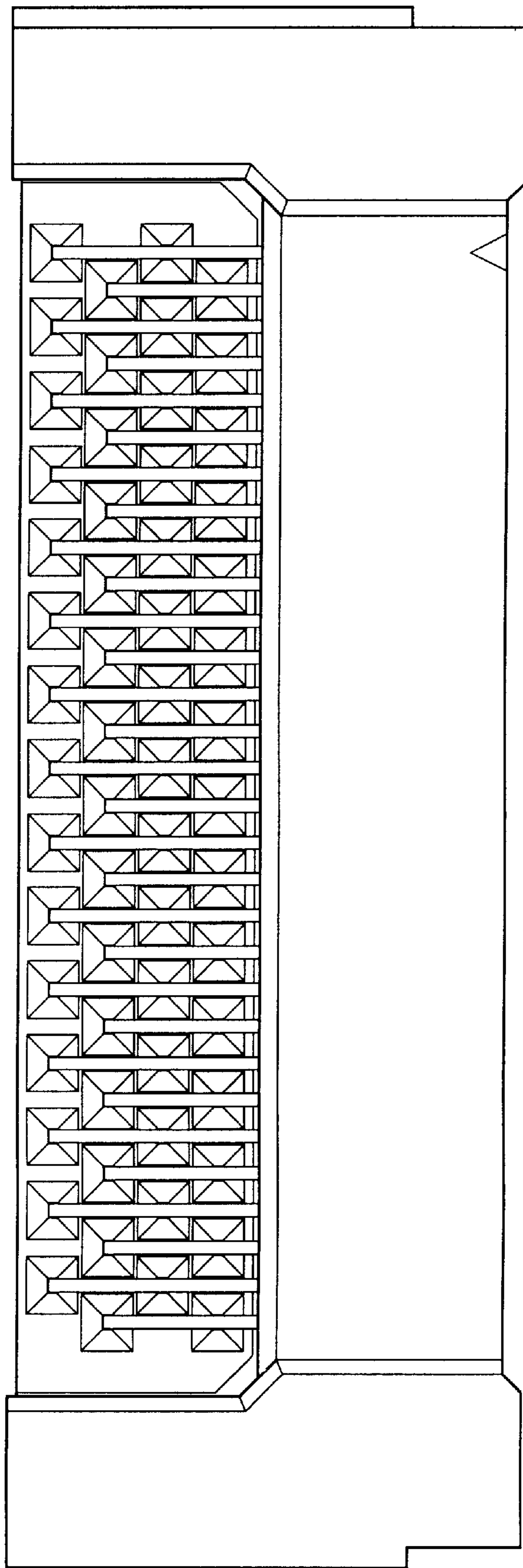


Fig. 8

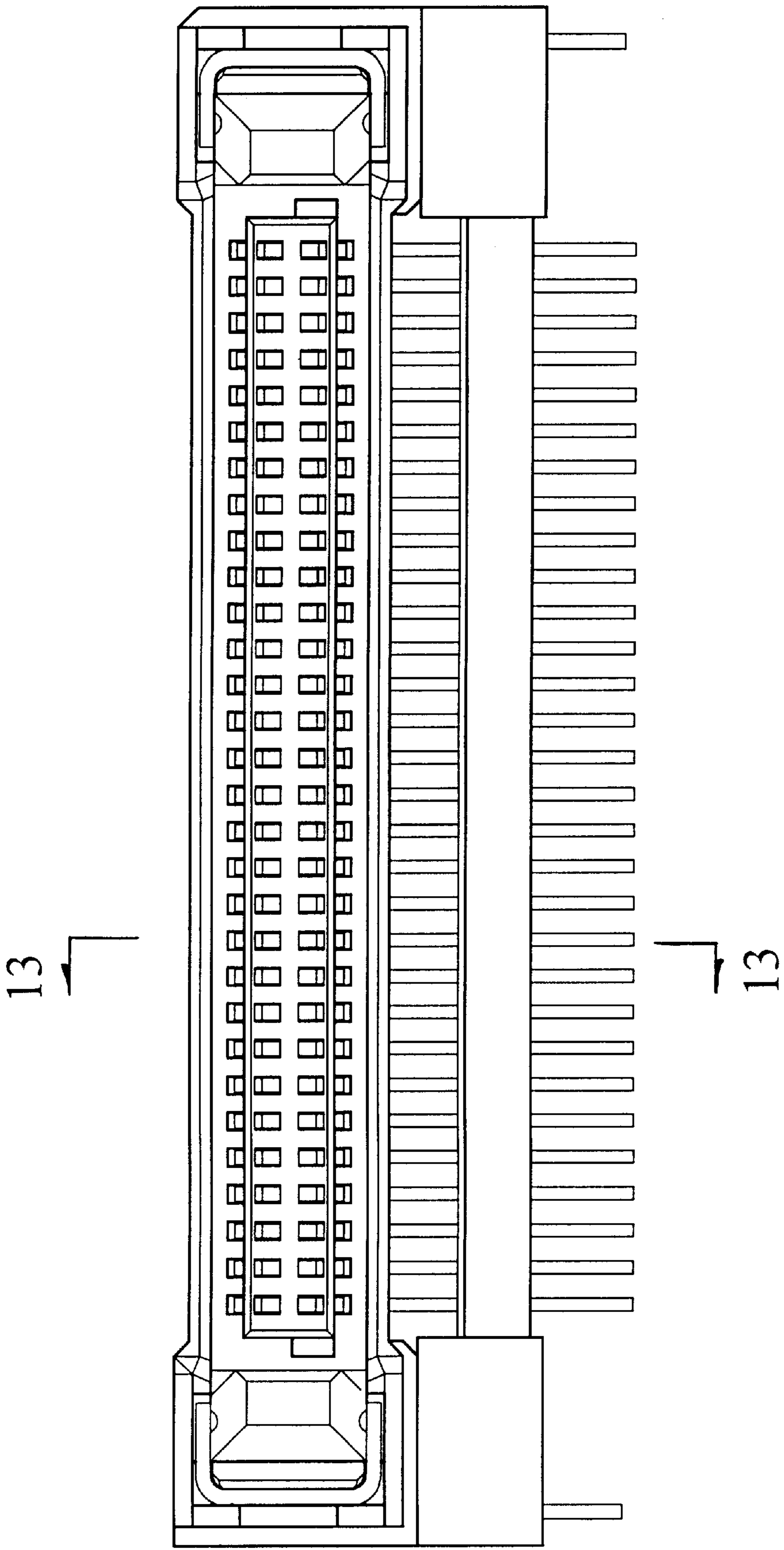


Fig. 9



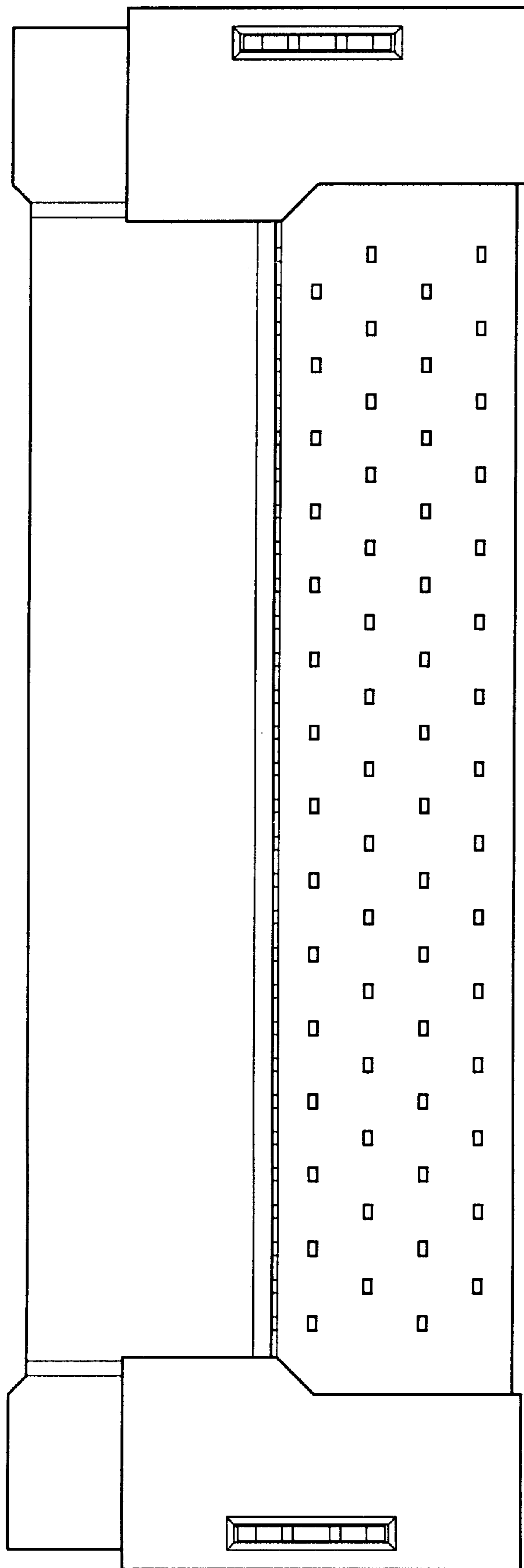


Fig. 10

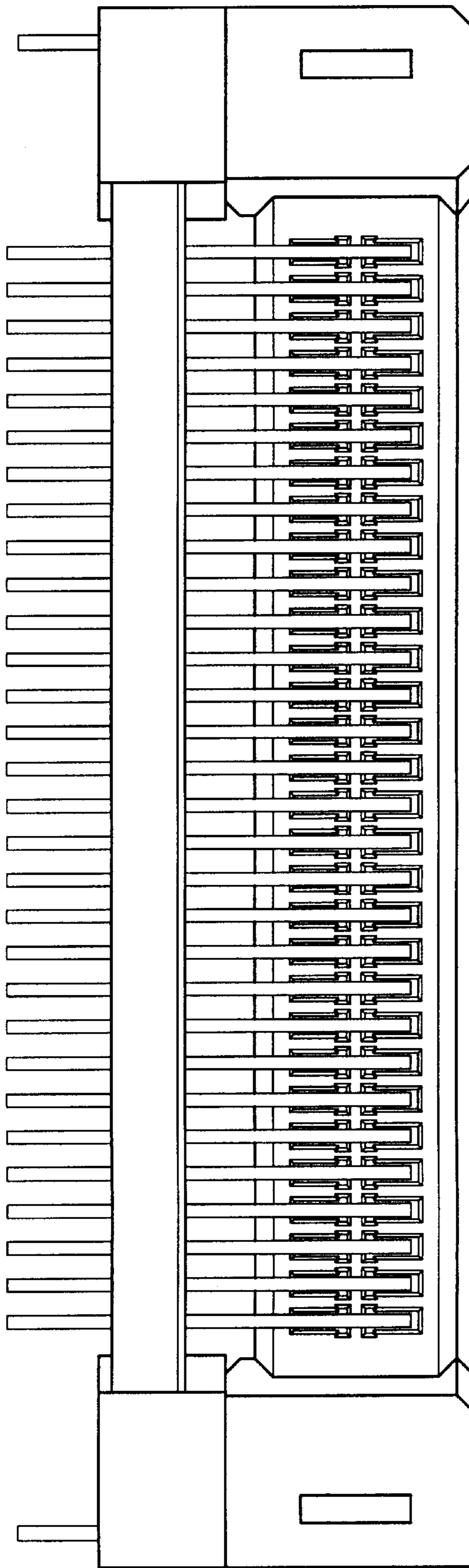


Fig. 11

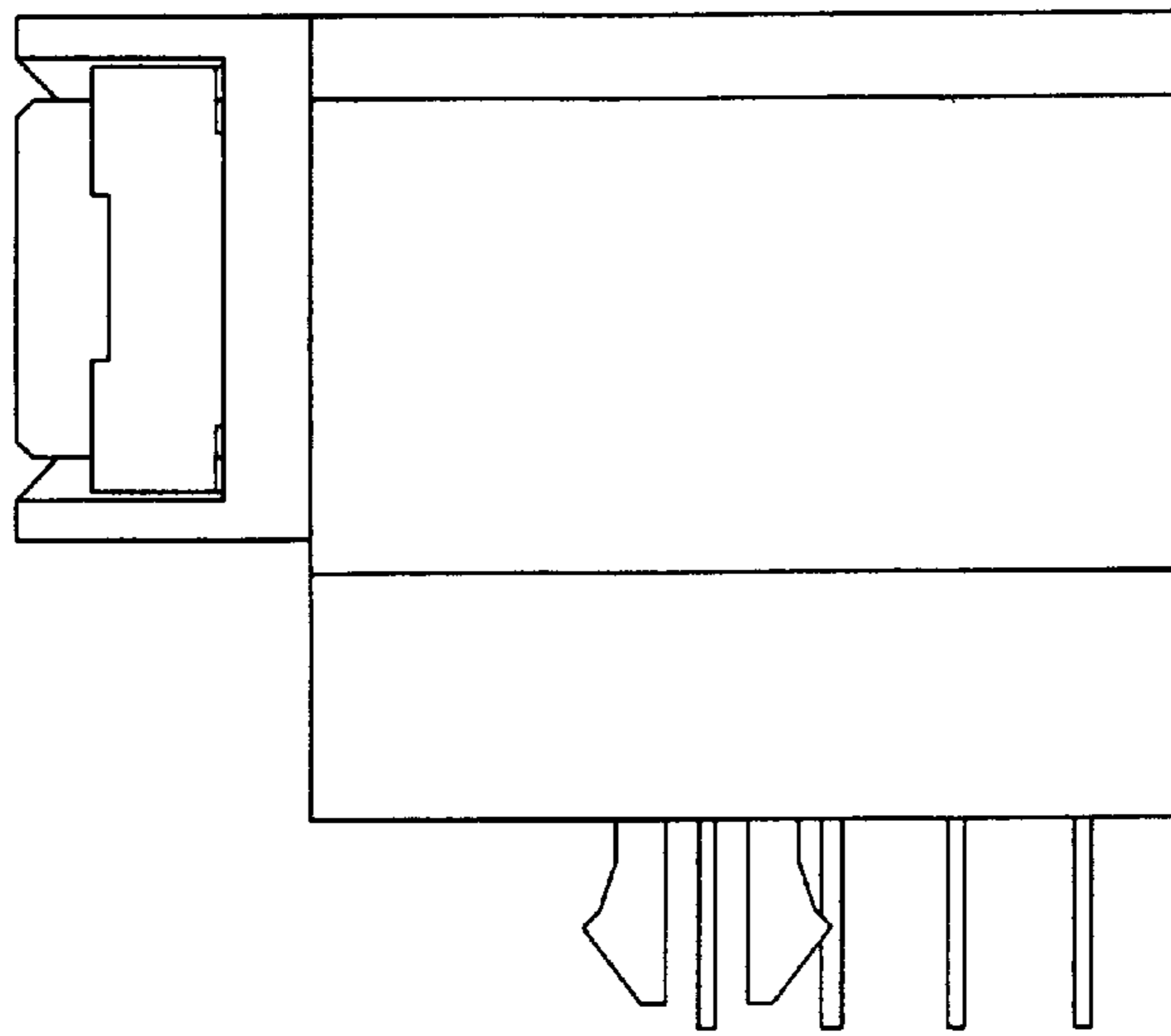


Fig. 12

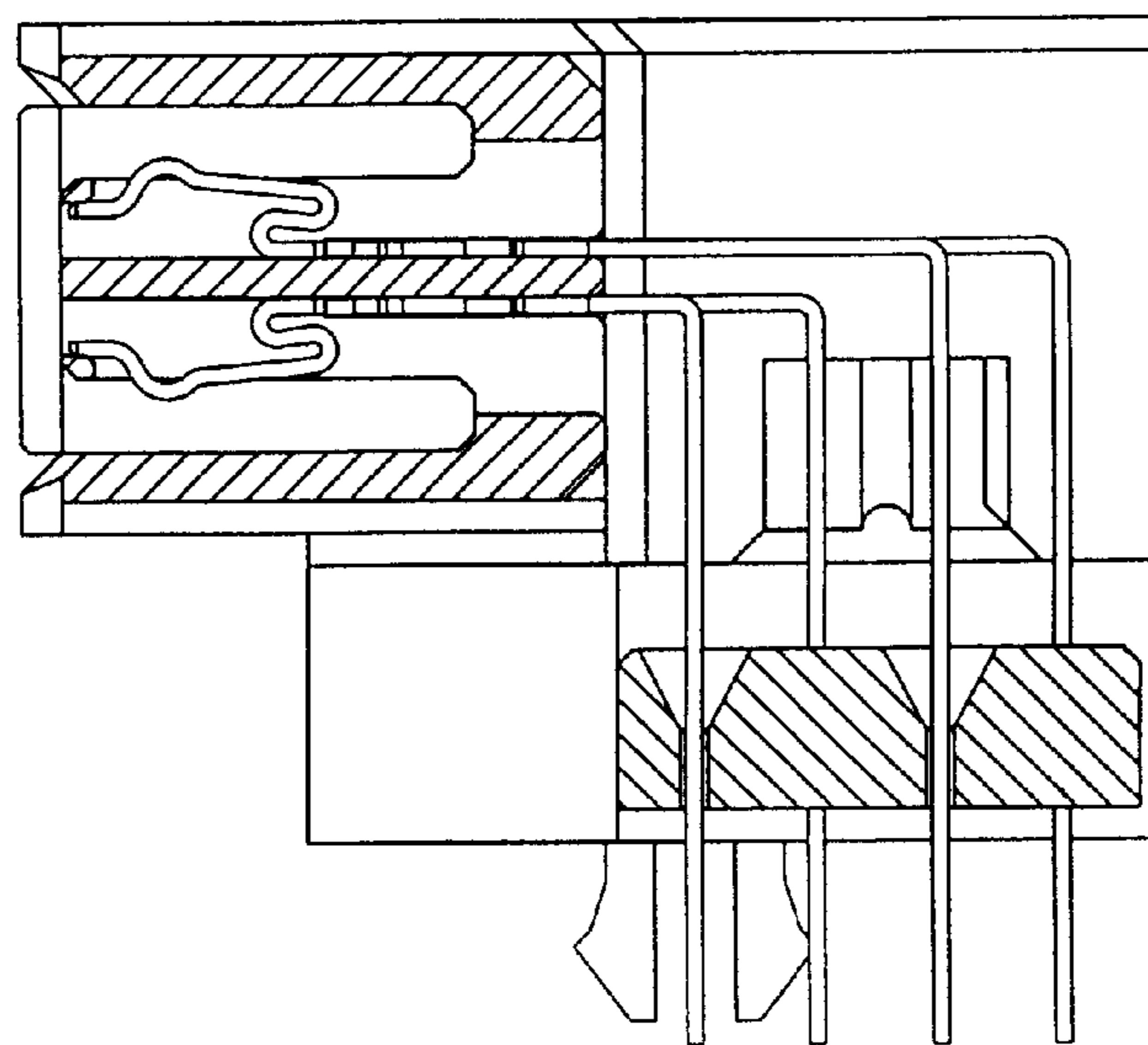


Fig. 13