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(12) **United States Design Patent**  
**Azuma**

(10) **Patent No.:** **US D471,522 S**

(45) **Date of Patent:** **\*\* Mar. 11, 2003**

- (54) **ELECTRICAL CONNECTOR**
- (75) Inventor: **Yumiko Azuma, Tokyo (JP)**
- (73) Assignee: **KEL Corporation, Tokyo (JP)**
- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/162,737**
- (22) Filed: **Jun. 19, 2002**

**Related U.S. Application Data**

- (63) Continuation of application No. 29/134,601, filed on Dec. 22, 2000, now abandoned.

(30) **Foreign Application Priority Data**

Jun. 27, 2000	(JP)	.....	2000-17449
Jun. 27, 2000	(JP)	.....	2000-17450
Jun. 27, 2000	(JP)	.....	2000-17451
Jun. 27, 2000	(JP)	.....	2000-17452

- (51) **LOC (7) Cl.** ..... **13-03**
- (52) **U.S. Cl.** ..... **D13/147**
- (58) **Field of Search** ..... **D13/146, 147;**  
**439/79, 567, 607, 636, 637**

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*Primary Examiner*—Joel Sincavage  
(74) *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 perspective view from above and right side of the connector according to a first embodiment, (a corresponding view from the left side being a mirror image);

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

FIG. 3 is a right side view of the connector according to the first embodiment, (a left side view being a mirror image).

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

FIG. 5 is a bottom view of the connector according to the first embodiment.

FIG. 6 is a rear view of the connector according to the first embodiment.

FIG. 7 is a sectional view along 7—7 of FIG. 2 of the connector according to the first embodiment.

FIG. 8 is a perspective view from above and right side of the connector according to a second embodiment, (a corresponding view from the left side being a mirror image).

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

FIG. 10 is a right side view of the connector according to the second embodiment, (a left side view being a mirror image).

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

FIG. 12 is a bottom view of the connector according to the second embodiment.

FIG. 13 is a rear view of the connector according to the second embodiment.

FIG. 14 is a sectional view along 14—14 of FIG. 9 of the connector according to the second embodiment.

FIG. 15 is a perspective view from above and a right side of the connector according to a third embodiment, (a corresponding view from the left side being a mirror image).

FIG. 16 is a front view of the connector according to the third embodiment.

FIG. 17 is a right side view of the connector according to the third embodiment, (a left side view being a mirror image).

FIG. 18 is a top view of the connector according to the third embodiment.

FIG. 19 is a bottom view of the connector according to the third embodiment.

FIG. 20 is a rear view of the connector according to the third embodiment.

FIG. 21 is a sectional view along 21—21 of FIG. 16 of the connector according to the third embodiment.

FIG. 22 is a perspective view from above and a right side of the connector according to a fourth embodiment, (a corresponding view from the left side being a mirror image).

FIG. 23 is a front view of the connector according to the fourth embodiment.

FIG. 24 is a right side view of the connector according to the fourth embodiment, (a left side view being a mirror image).

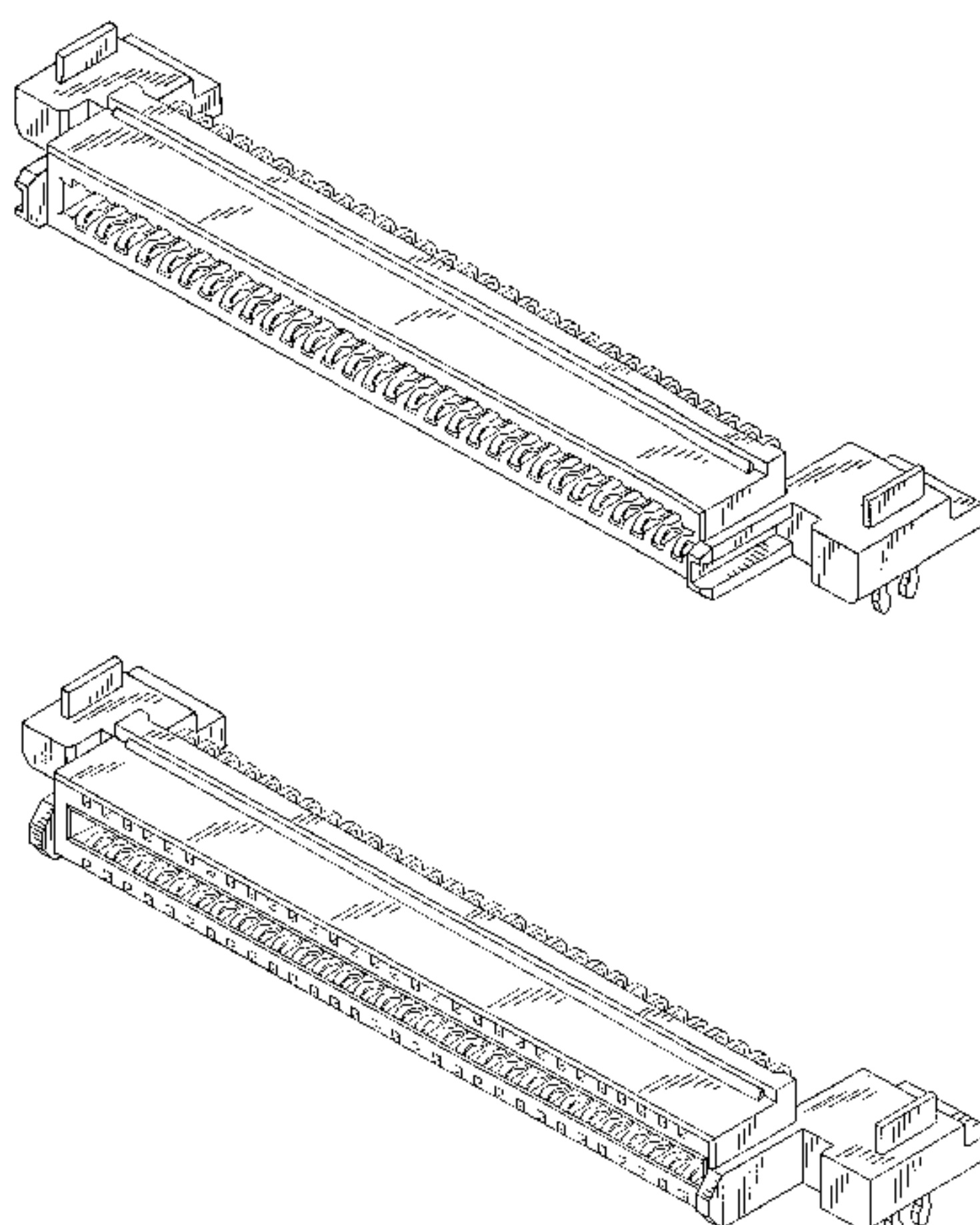
FIG. 25 is a top view of the connector according to the fourth embodiment.

FIG. 26 is a bottom view of the connector according to the fourth embodiment.

FIG. 27 is a rear view of the connector according to the fourth embodiment; and,

FIG. 28 is a sectional view along 28—28 of FIG. 23 of the connector according to the fourth embodiment.

**1 Claim, 28 Drawing Sheets**



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*Fig. 1*

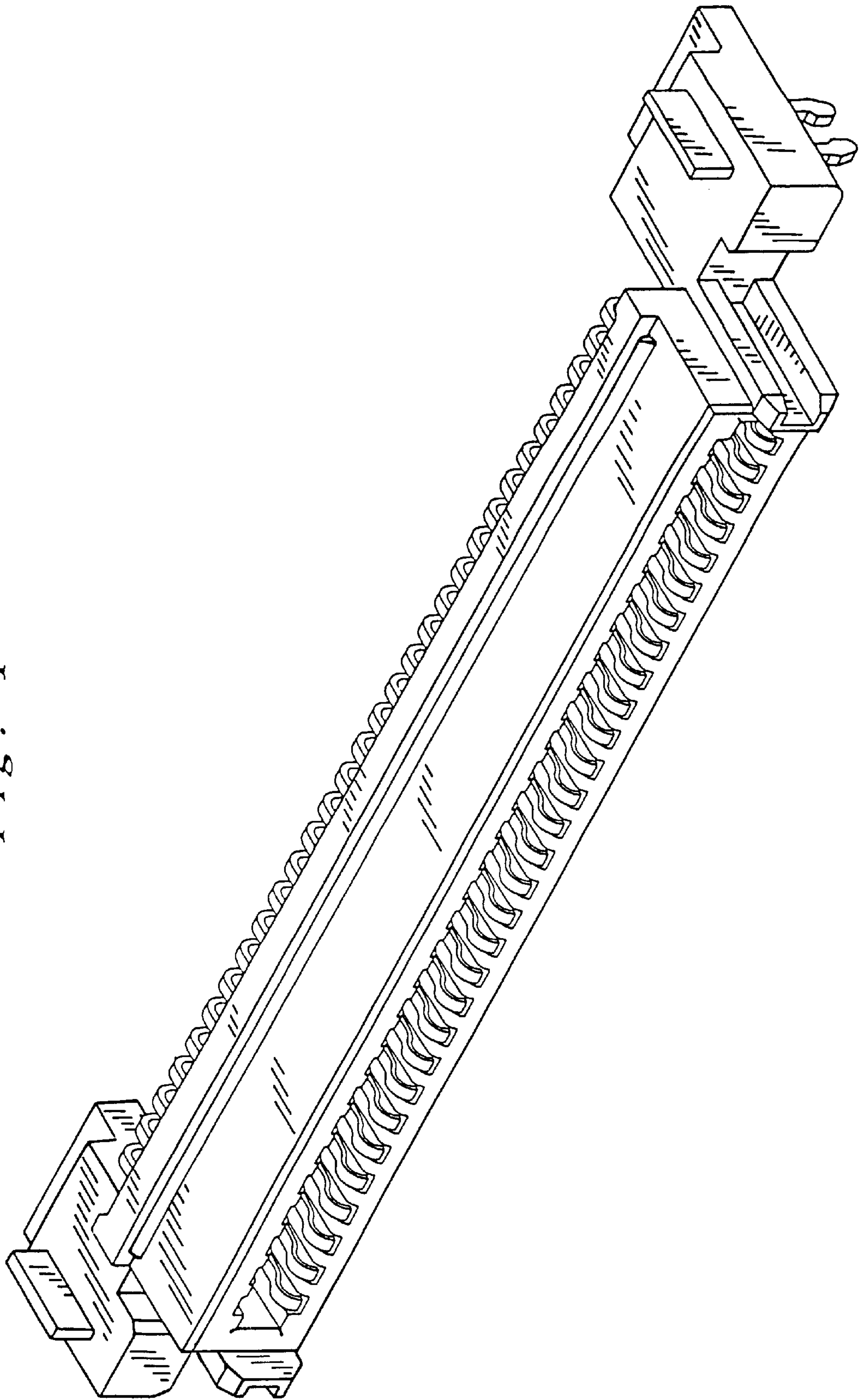


Fig. 2

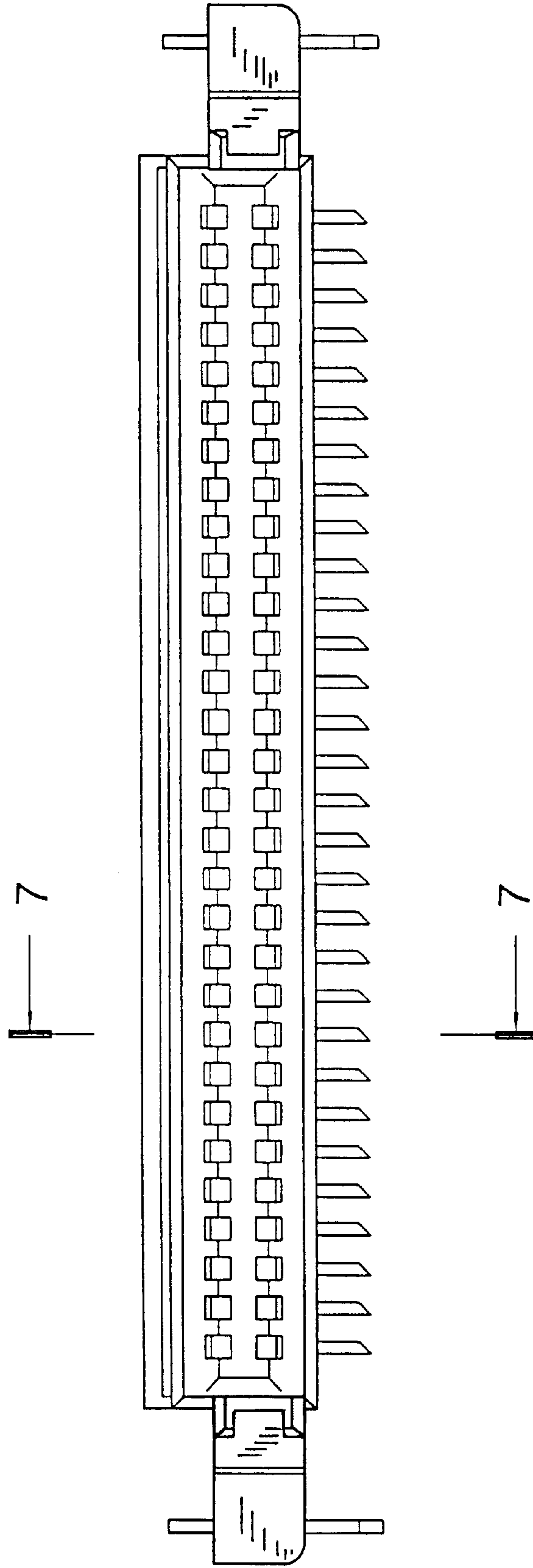
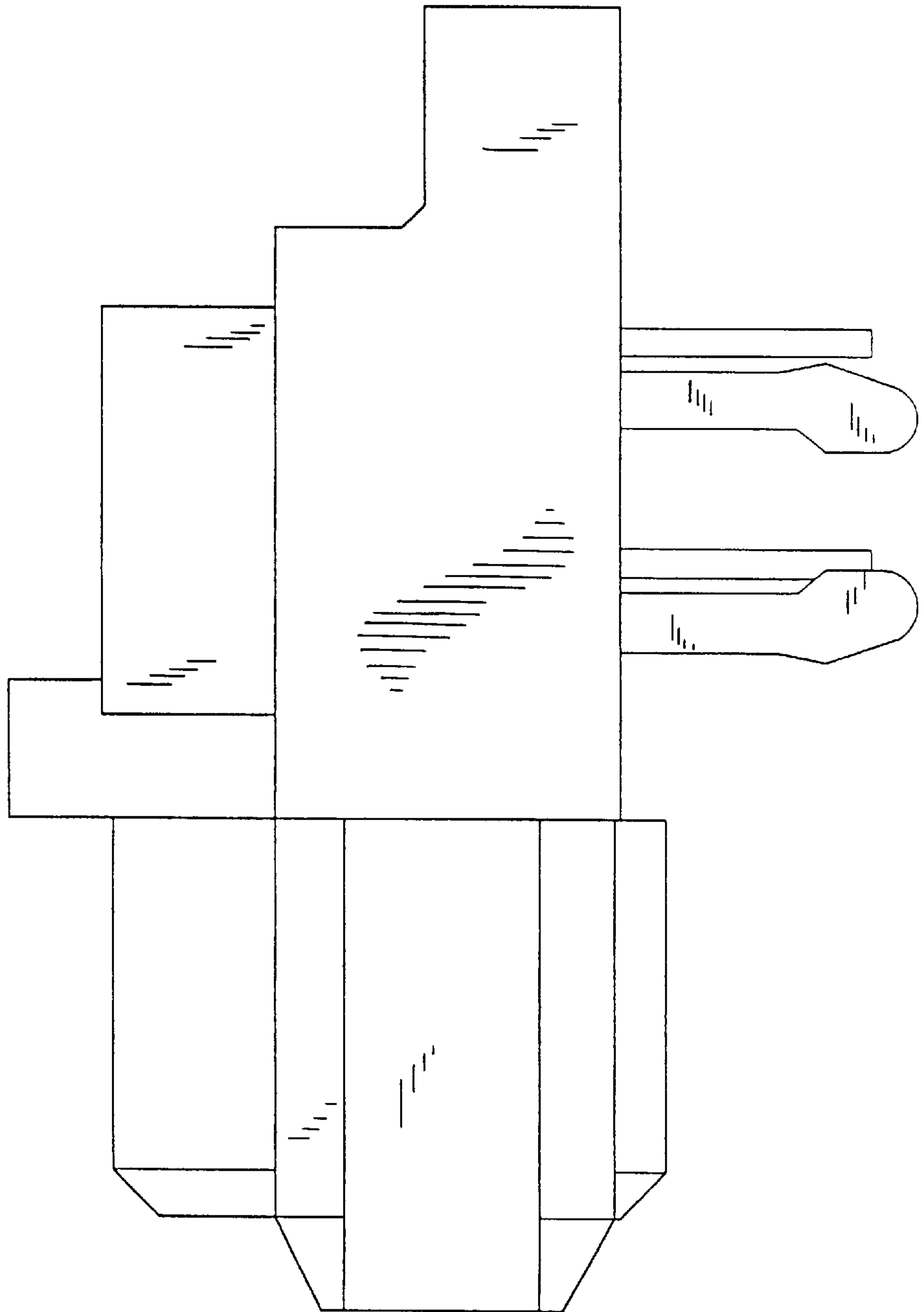
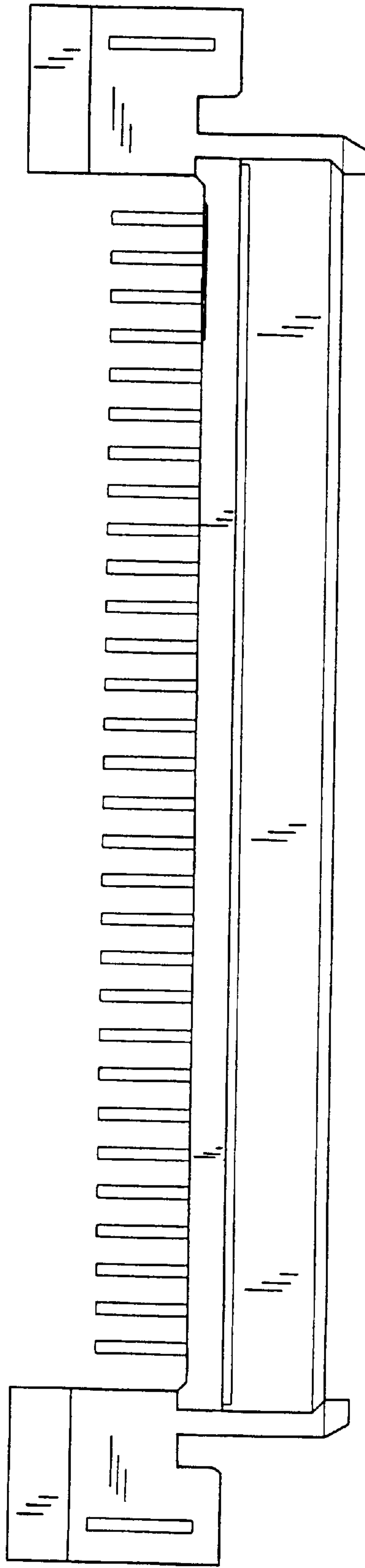


Fig. 3

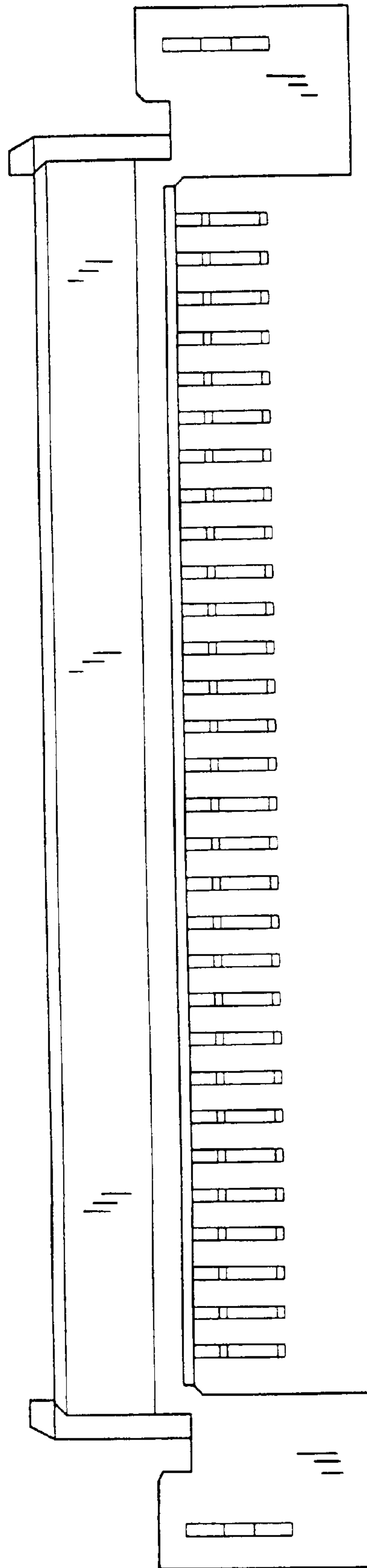




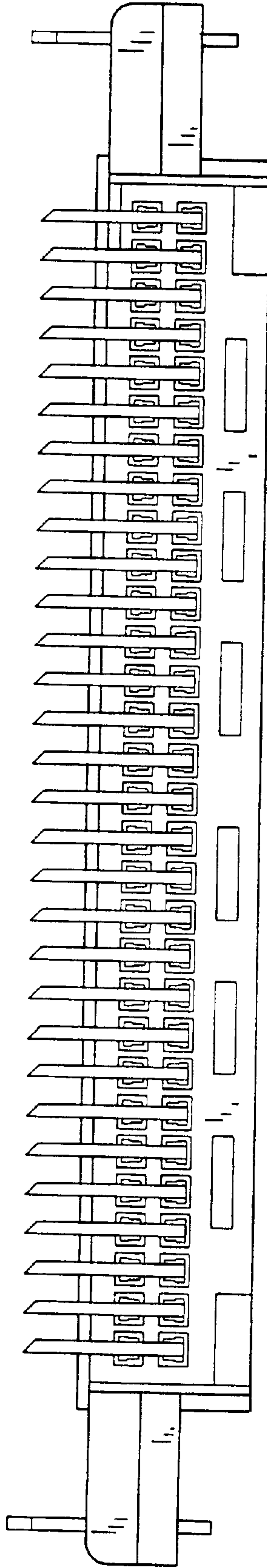
*Fig. 4*



*Fig. 5*

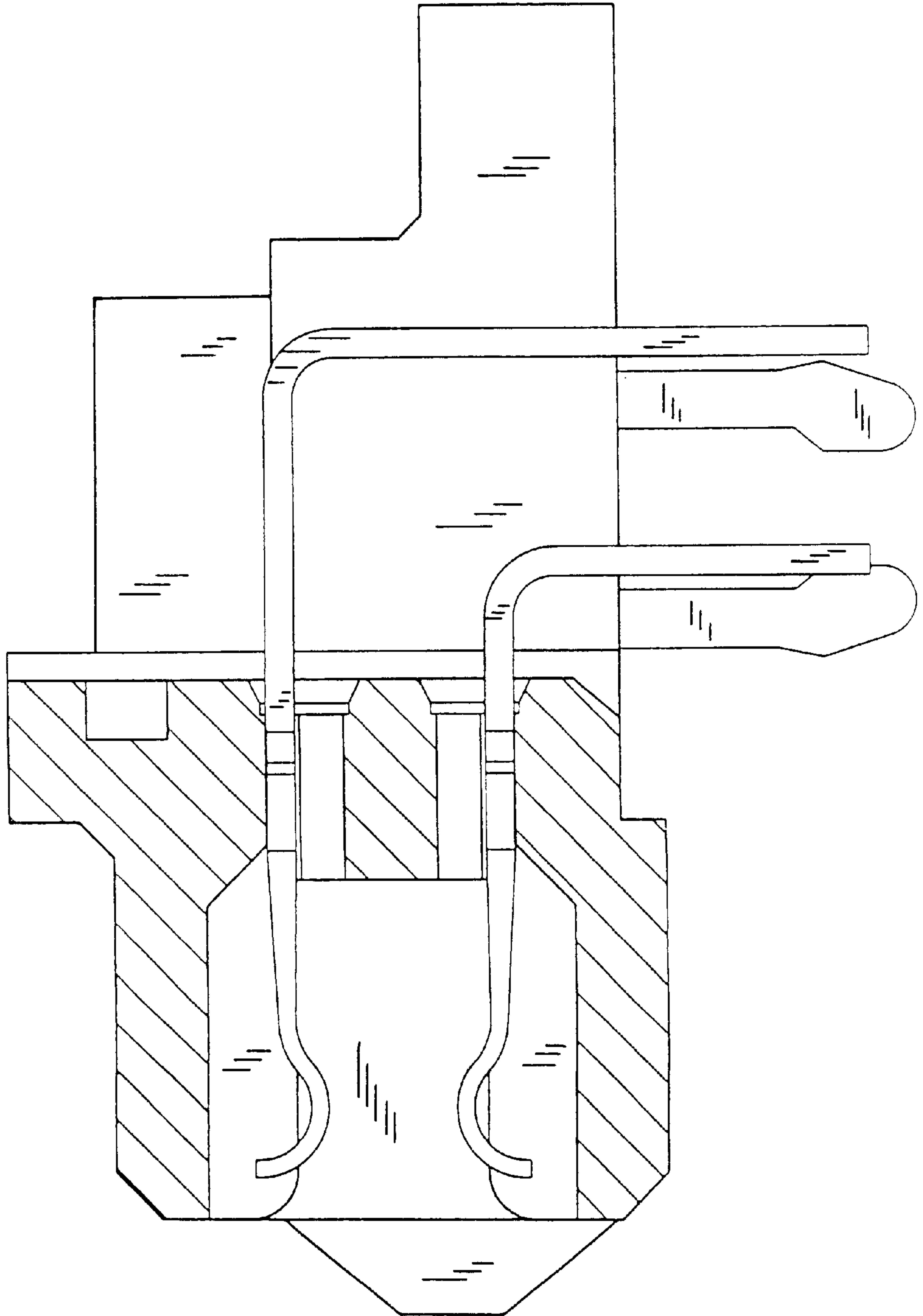


*Fig. 6*





*Fig. 7*



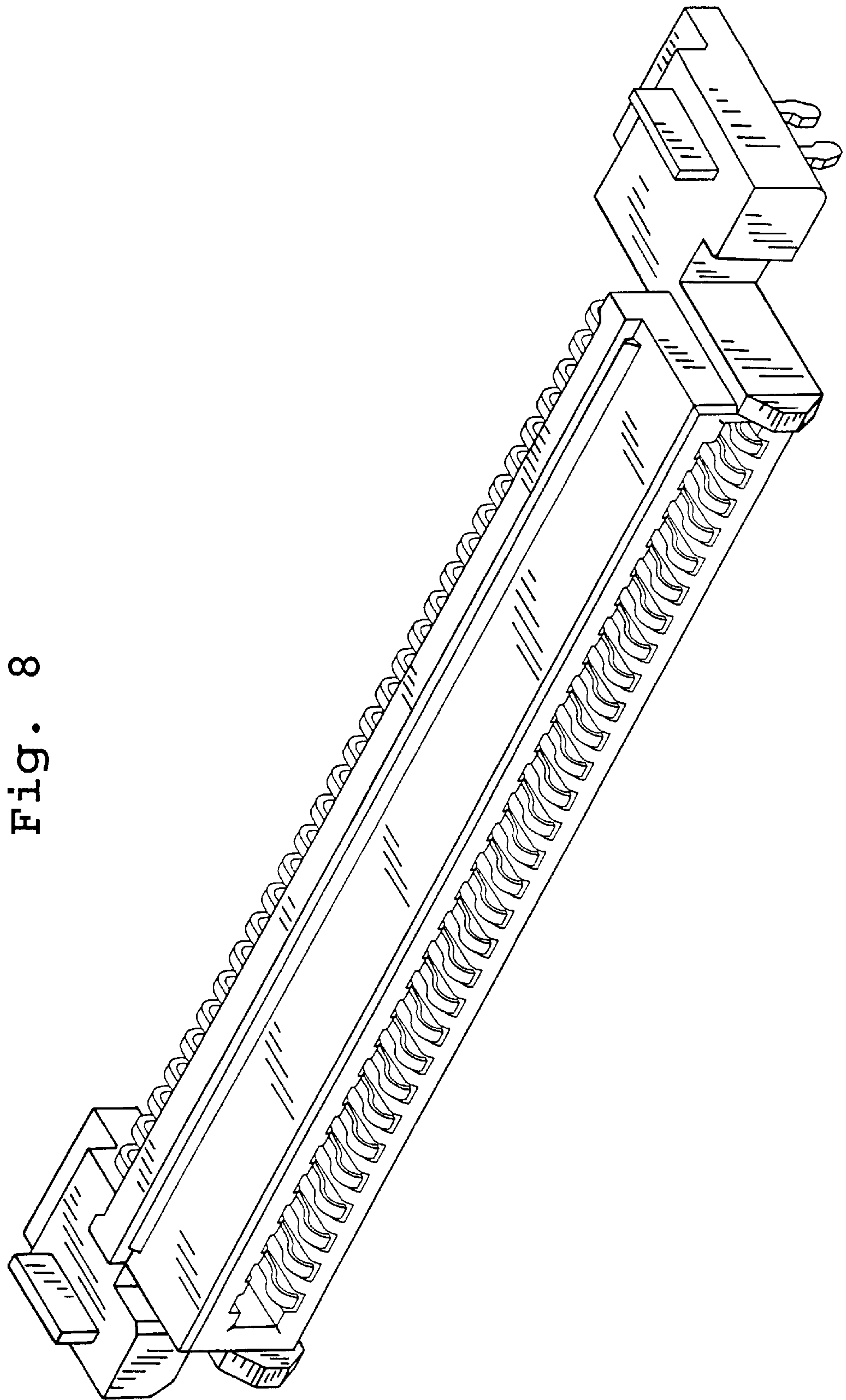


Fig. 8

Fig. 9

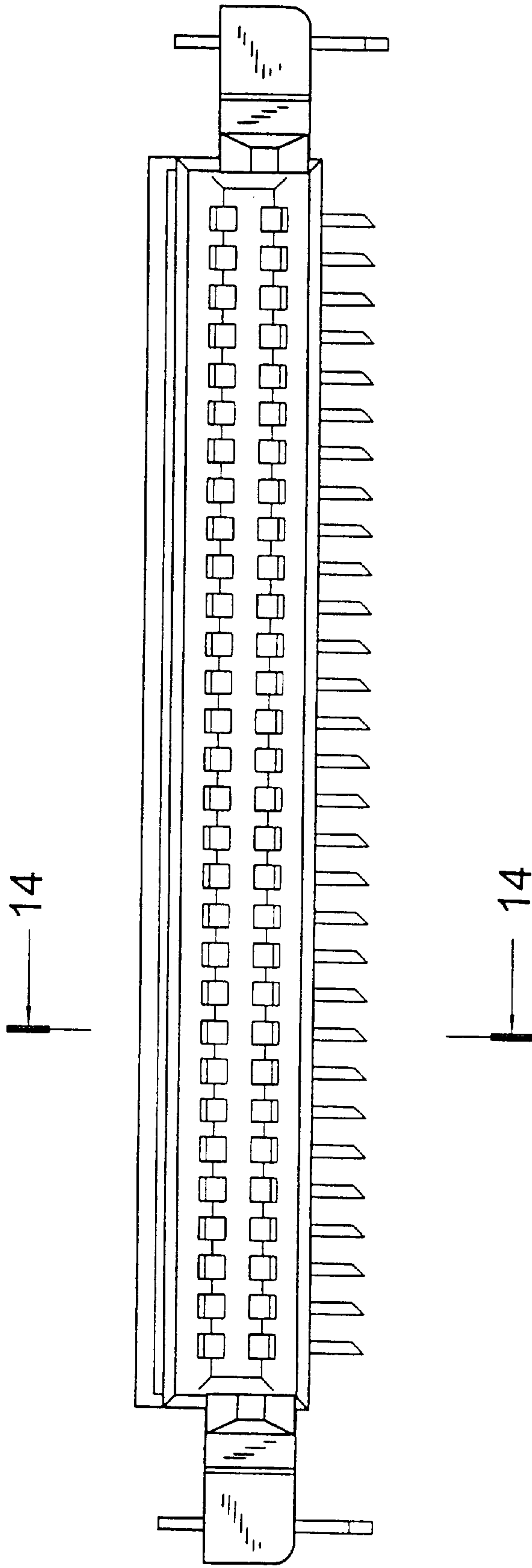


Fig. 10

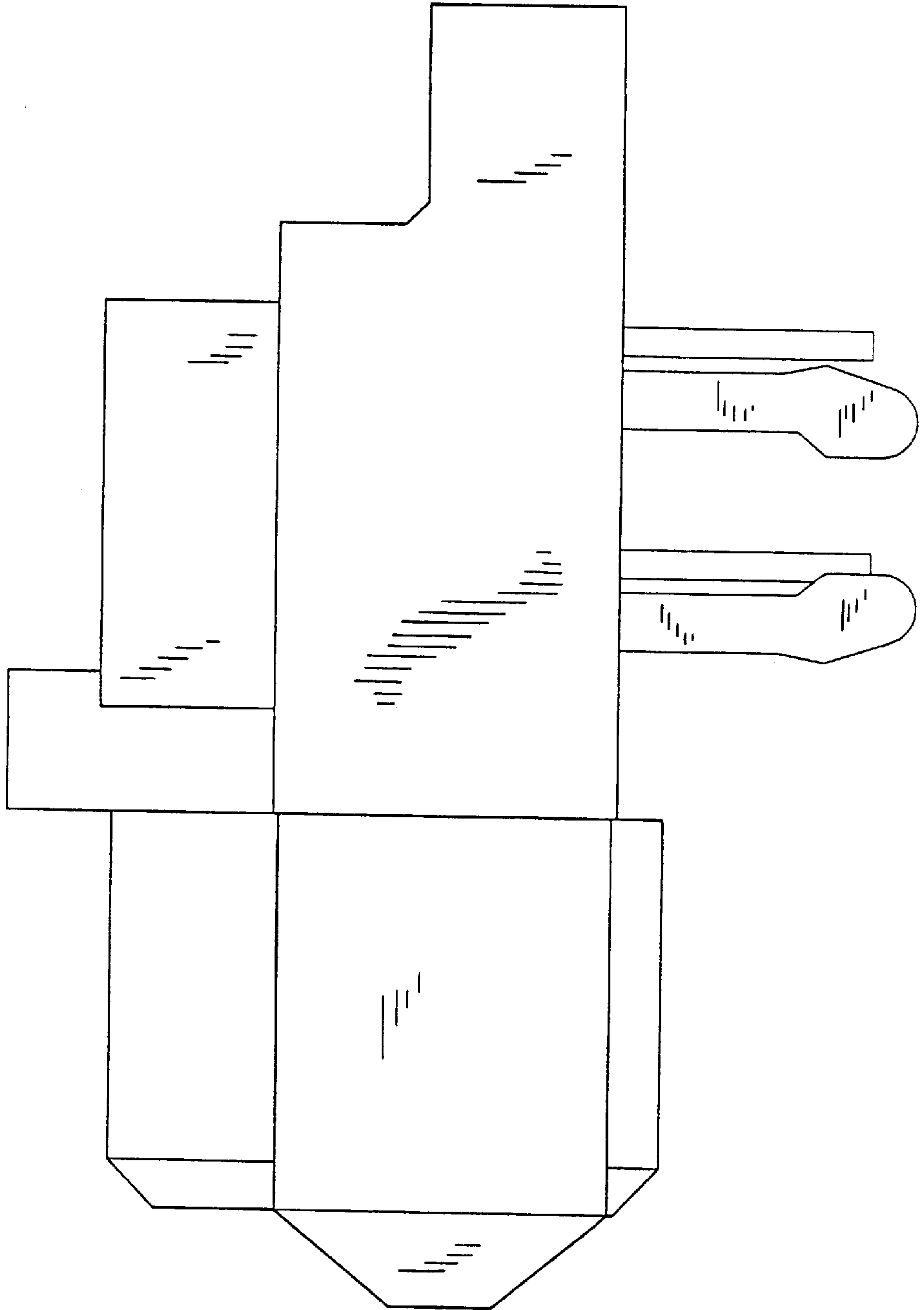


Fig. 11

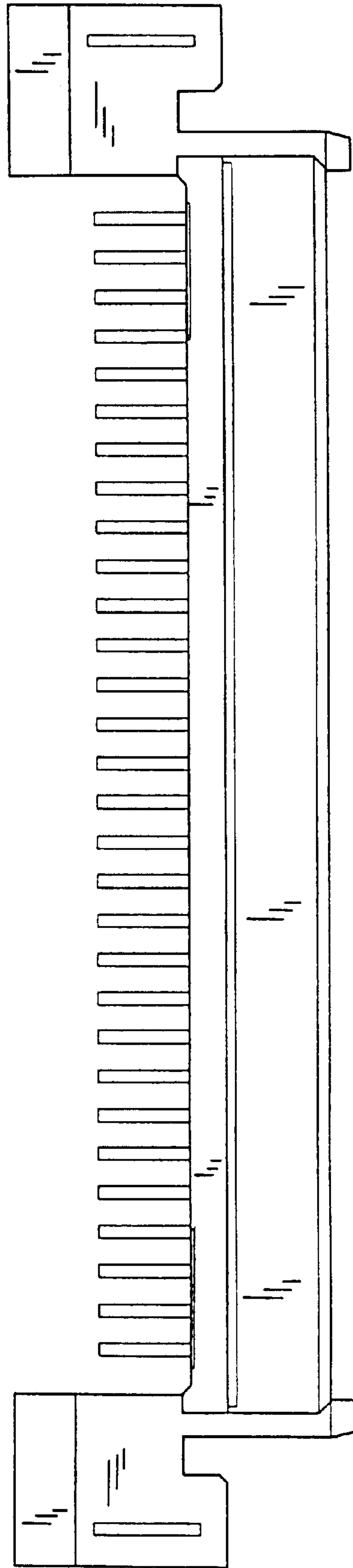


Fig. 12

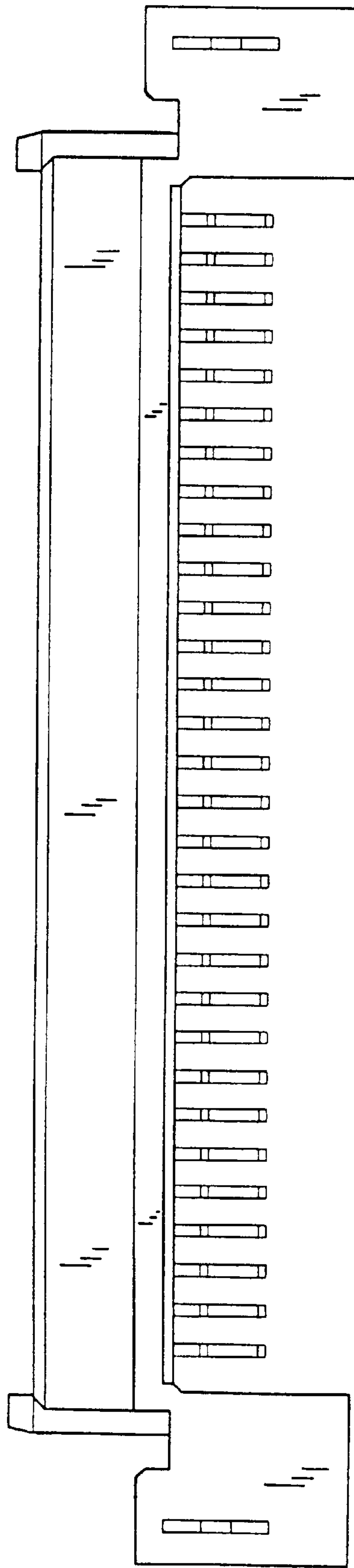




Fig. 13

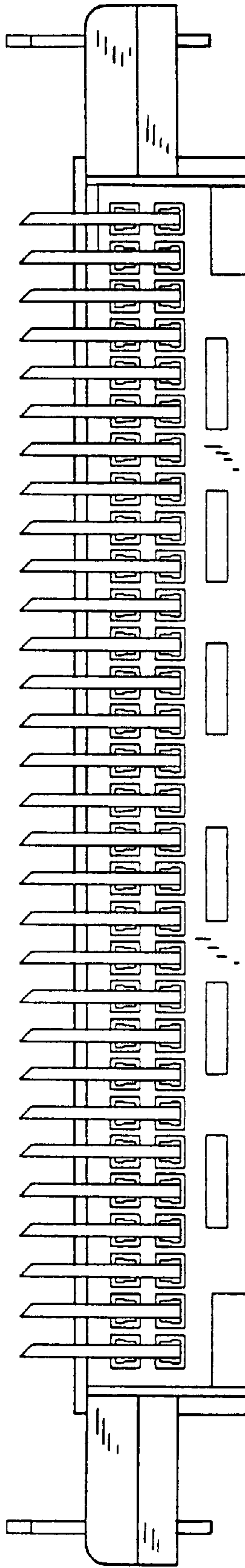
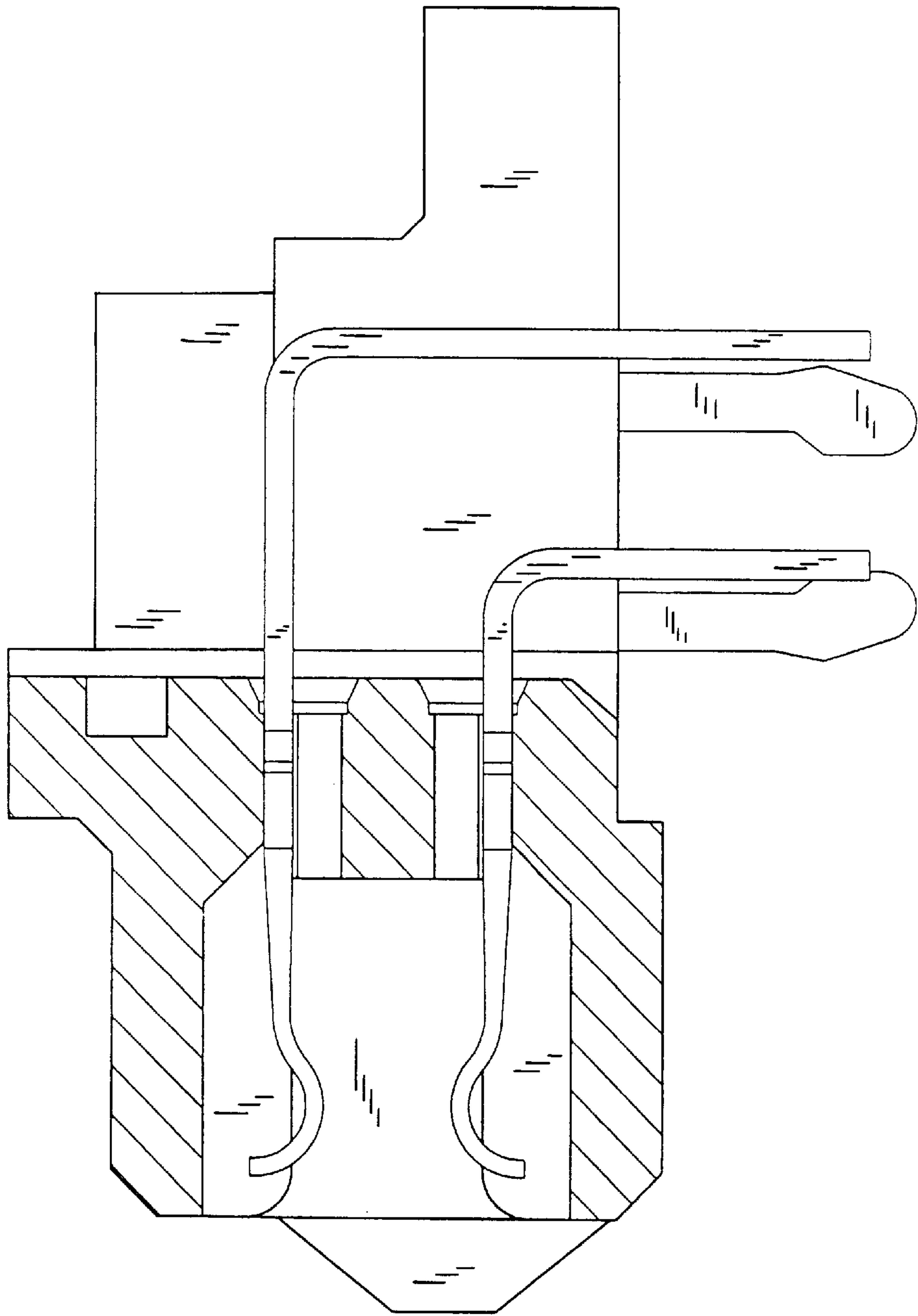


Fig. 14



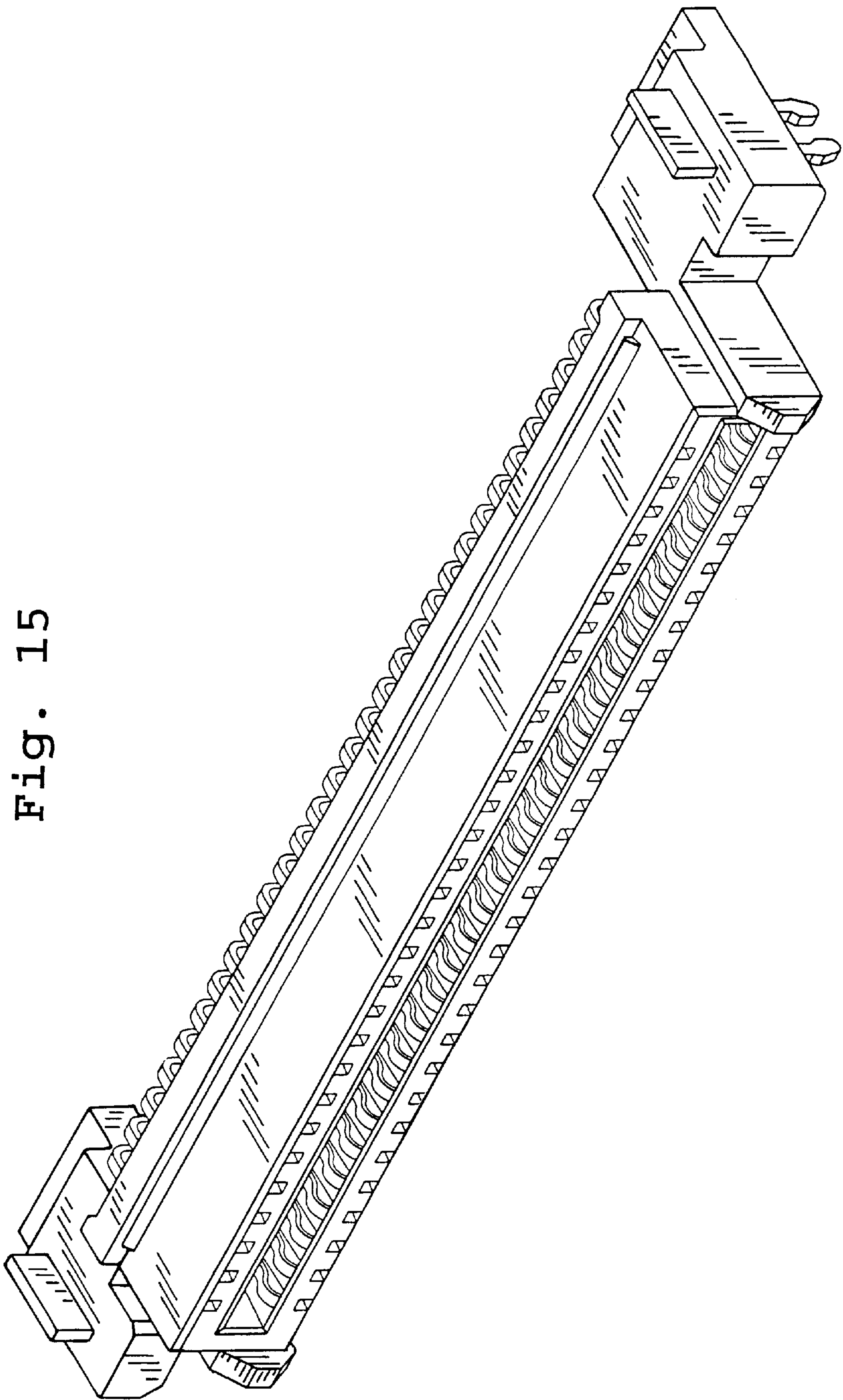


Fig. 15

Fig. 16

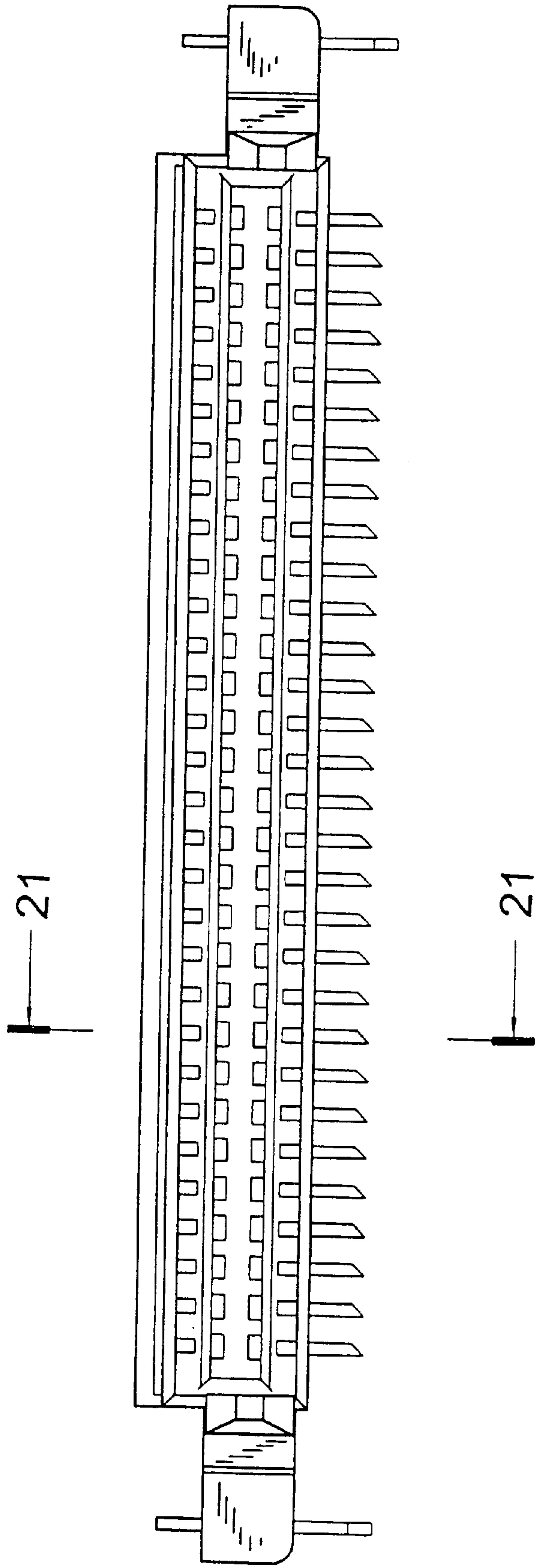


Fig. 17

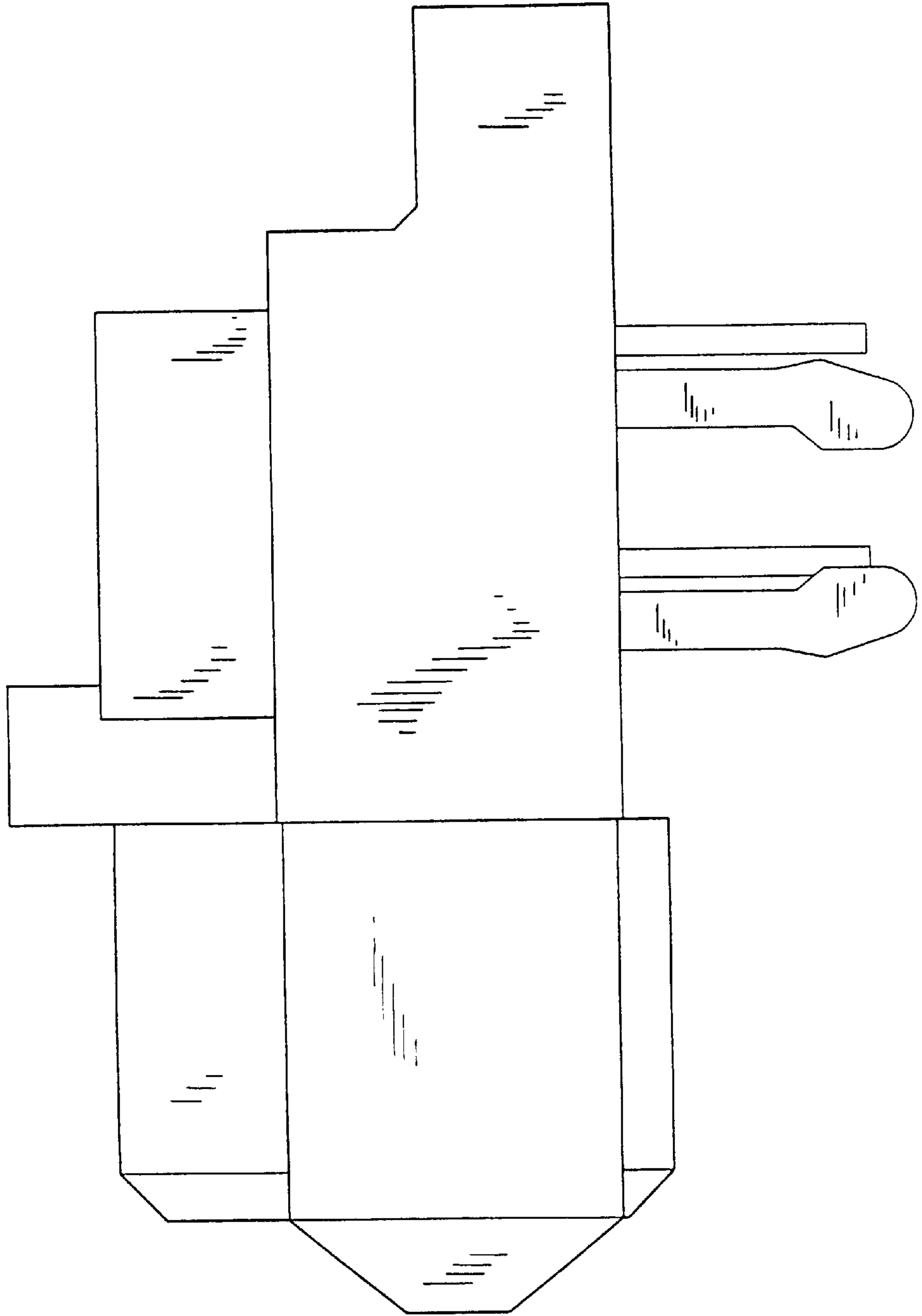


Fig. 18

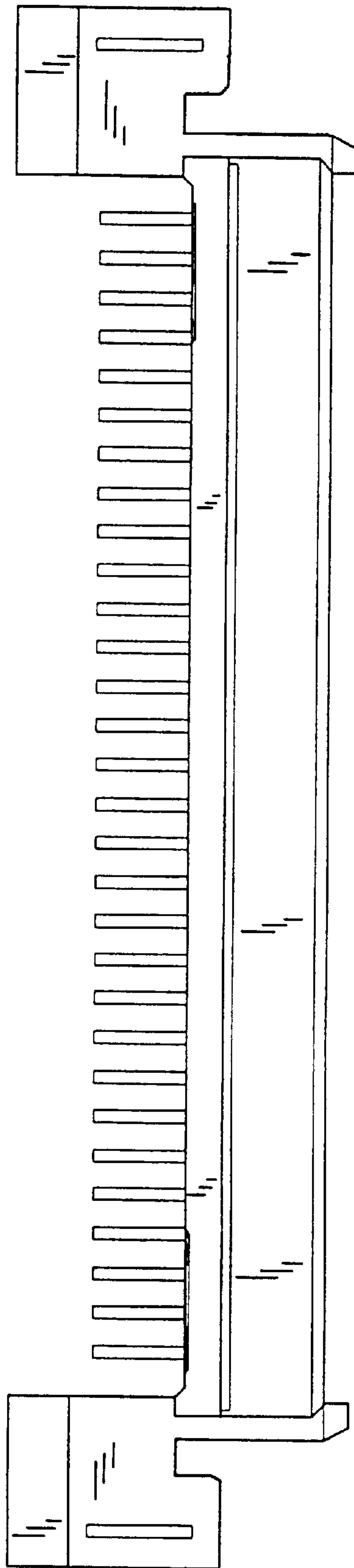




Fig. 19

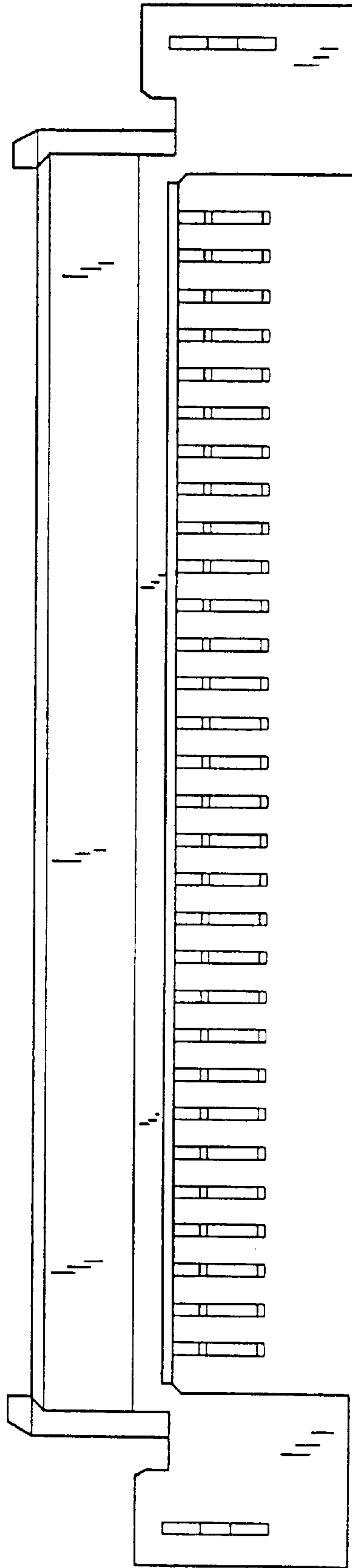


Fig. 20

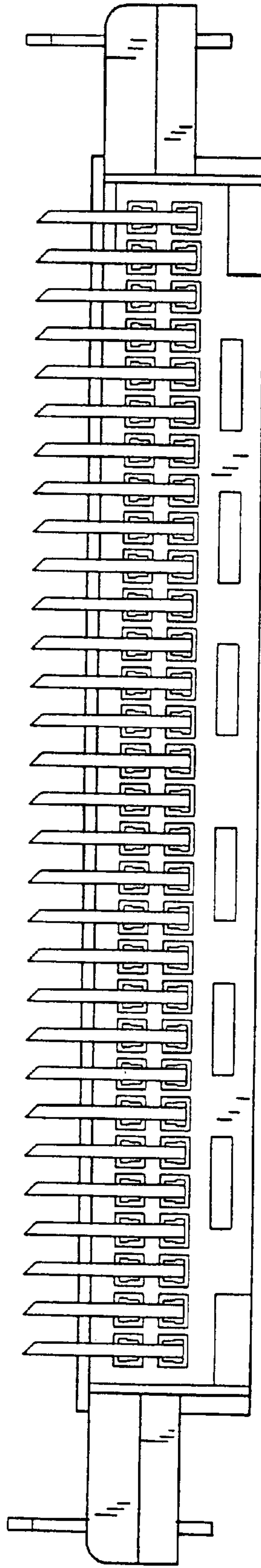
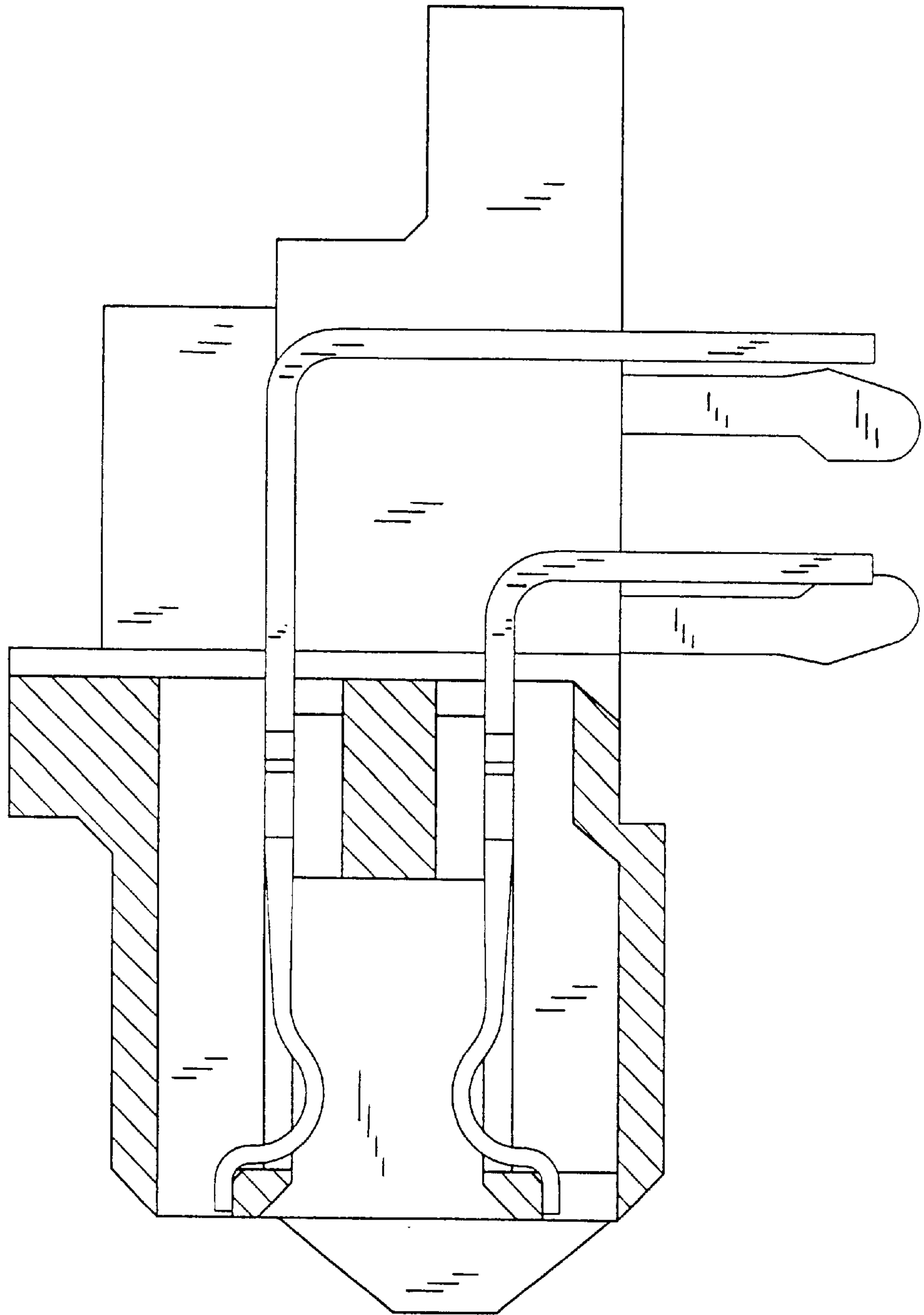


Fig. 21



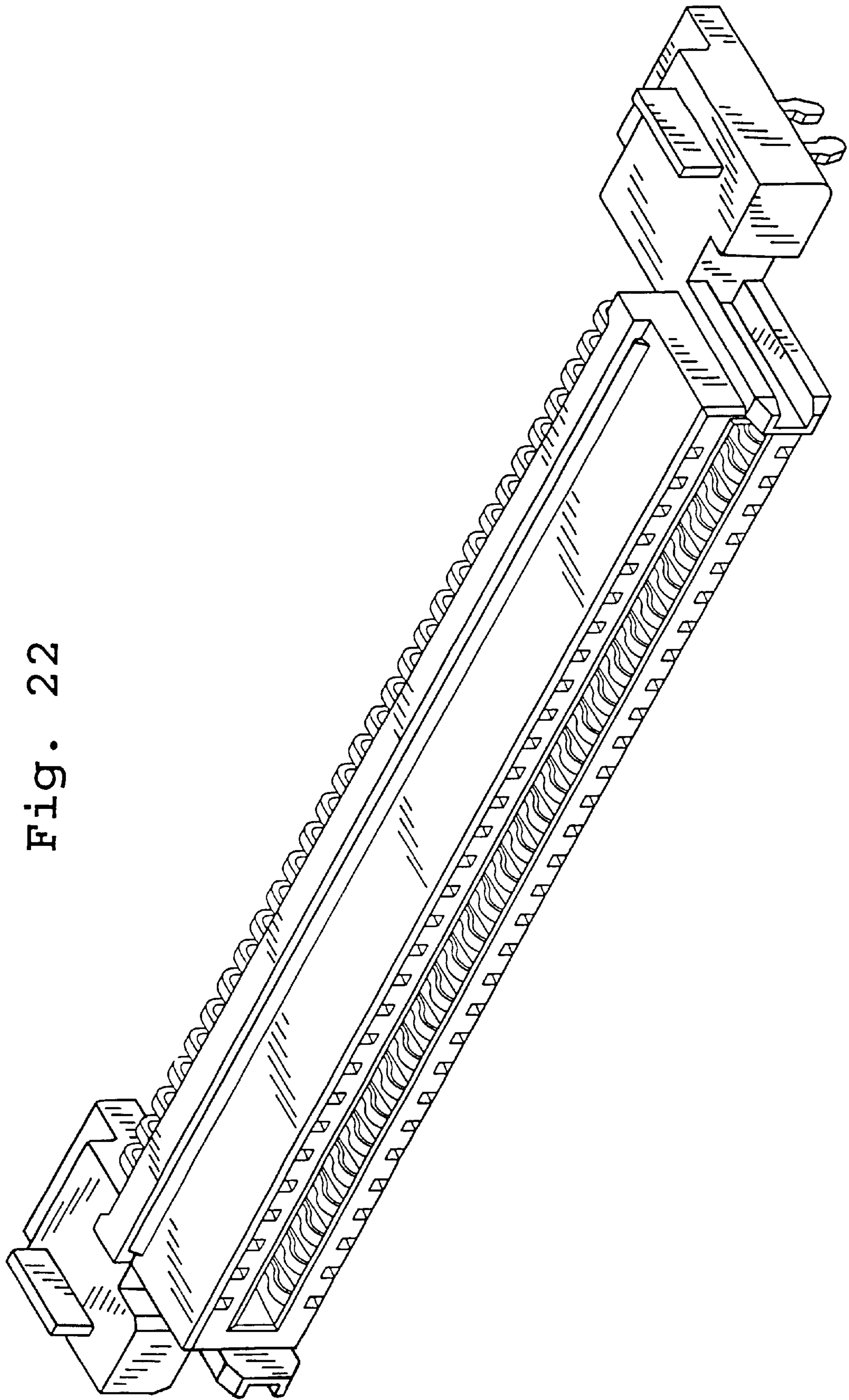


Fig. 22

Fig. 23

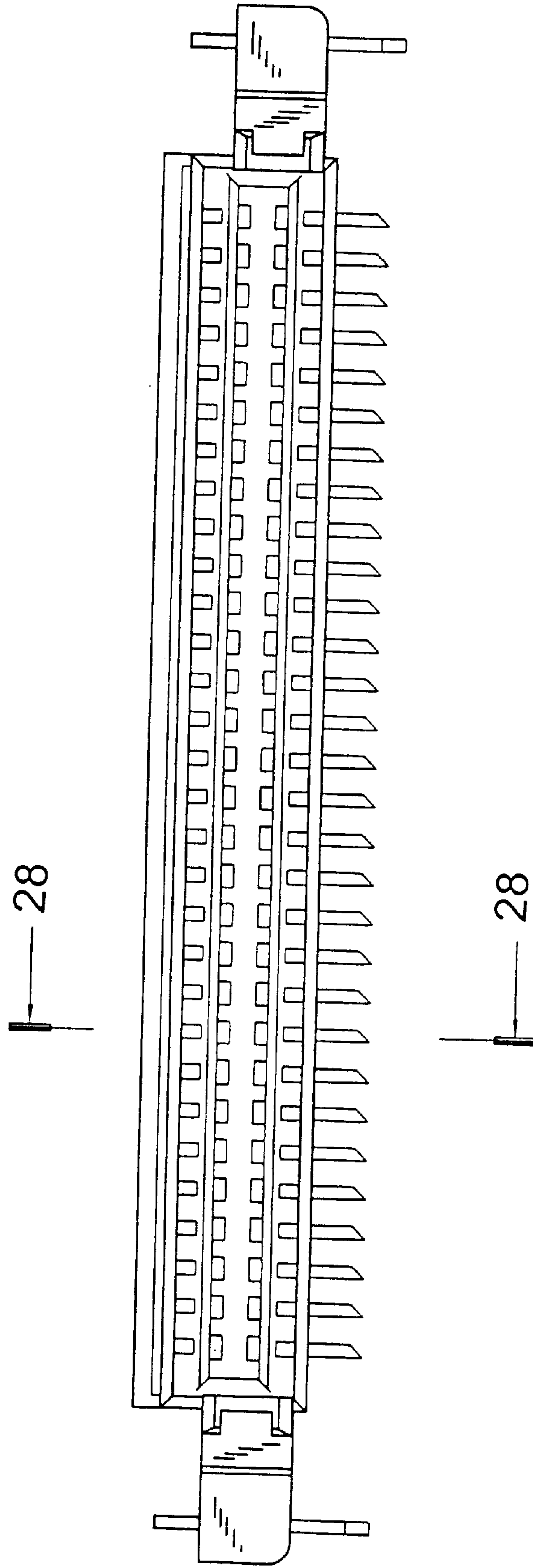


Fig. 24

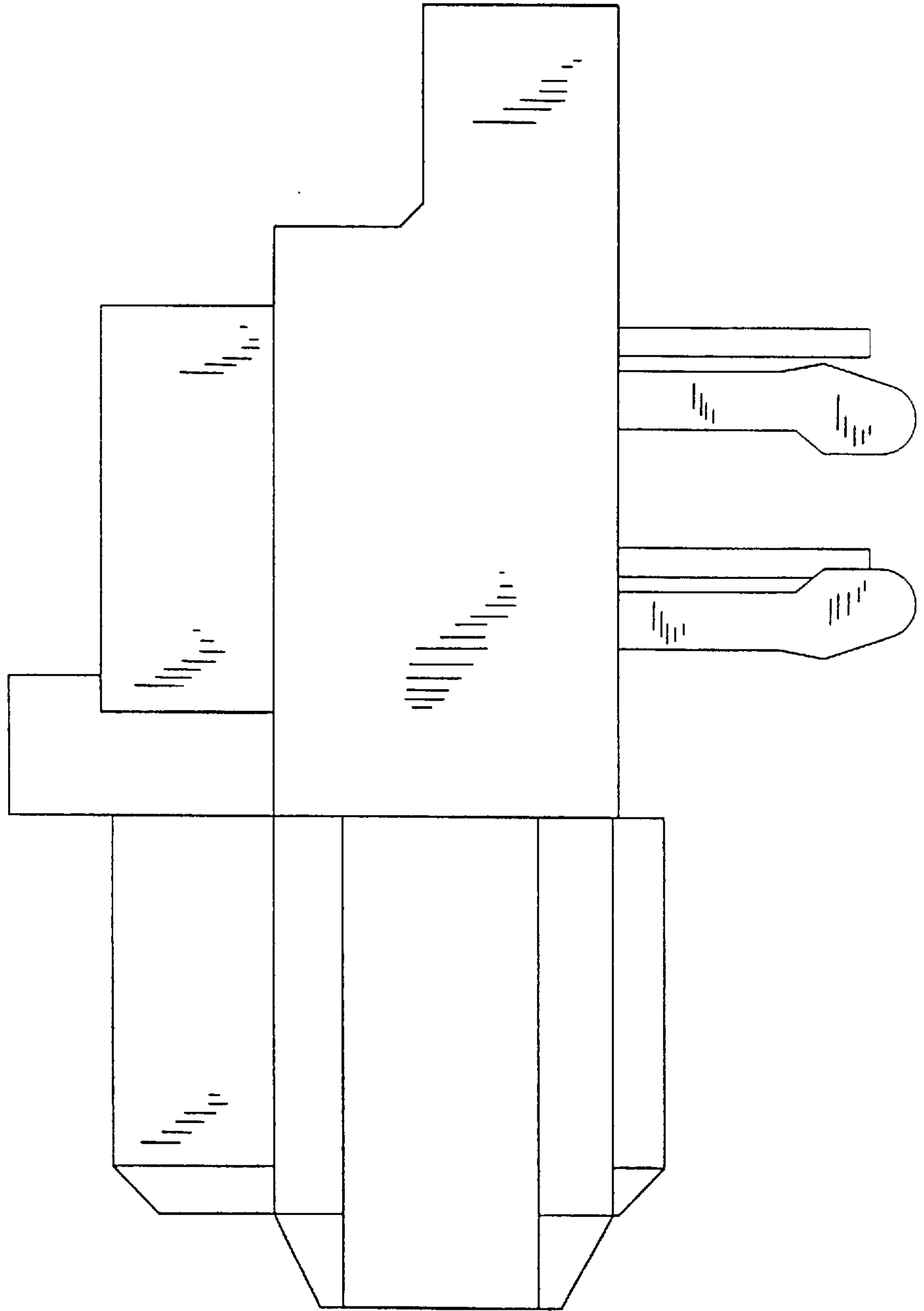




Fig. 25

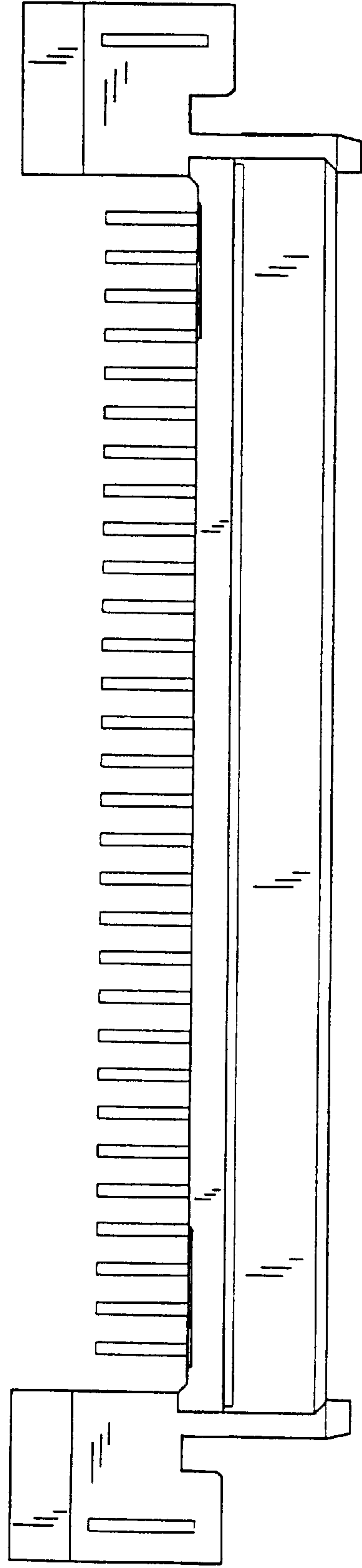


Fig. 26

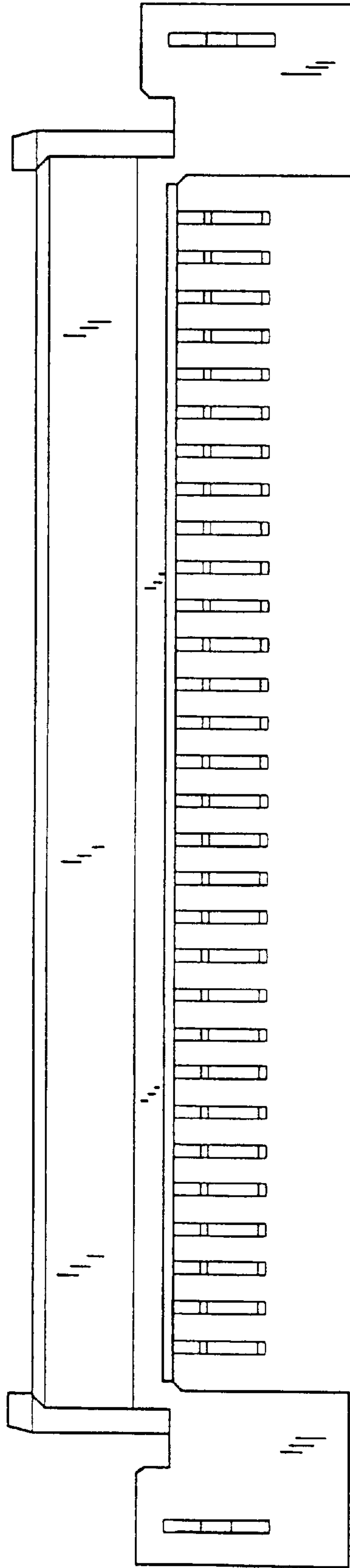


Fig. 27

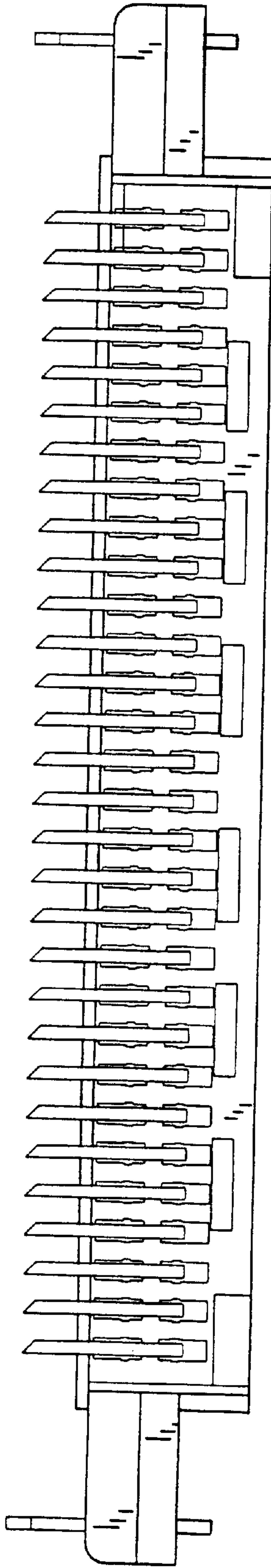


Fig. 28

