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(12) **United States Design Patent**
Saito et al.

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(54) **ELECTRICAL CONNECTOR**

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(**) Term: **14 Years**

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(30) **Foreign Application Priority Data**

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(51) **LOC (7) Cl.** **13-03**

(52) **U.S. Cl.** **D13/147**

(58) **Field of Search** D13/147; 439/62,
439/260, 329, 395, 495, 422, 499

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 5,882,223 A * 3/1999 Igarashi 439/495
- 6,099,346 A * 8/2000 Hashiguchi et al. 439/495
- 6,146,171 A * 11/2000 Kunishi et al. 439/260
- D435,831 S * 1/2001 Ko D13/147
- 6,293,818 B1 * 9/2001 Kim et al. 439/495
- D453,319 S * 2/2002 Yokoyama D13/147
- D457,138 S * 5/2002 Igarashi D13/147
- 6,416,360 B1 * 7/2002 Zhang et al. 439/607

- D467,549 S * 12/2002 Wu D13/147
- D470,109 S * 2/2003 Yokoyama et al. D13/147
- D470,110 S * 2/2003 Yamane D13/147

* cited by examiner

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(57) **CLAIM**

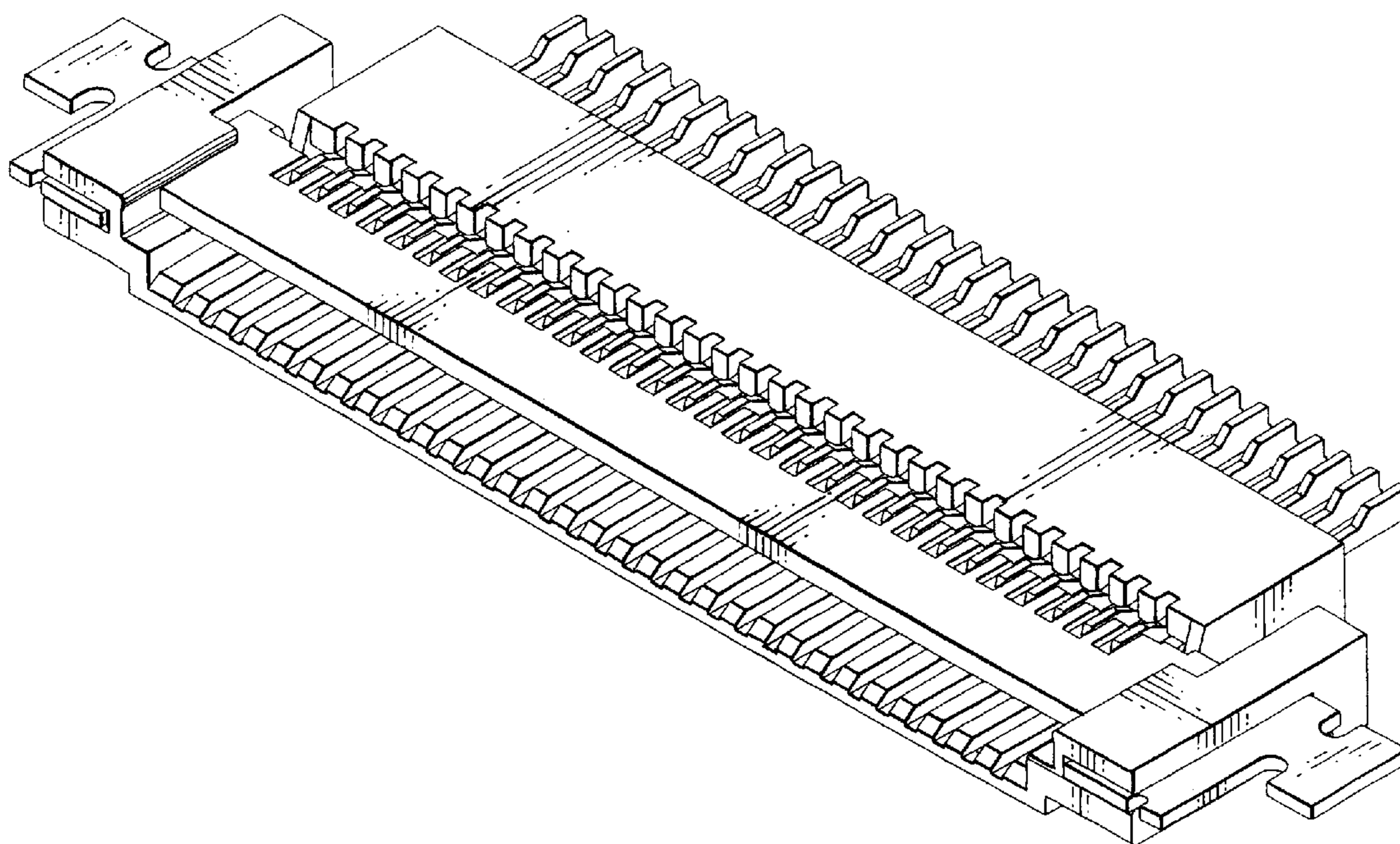
The ornamental design for an electrical connector, as shown and described.

DESCRIPTION

FIG. 1 is a front elevation view of an electrical connector; FIG. 2 is a rear elevation view thereof; FIG. 3 is a right side elevation view thereof; FIG. 4 is a top plan view thereof; FIG. 5 is a bottom plan view thereof; FIG. 6 is a perspective view of the front and right side thereof; and, FIG. 7 is another right side elevation view thereof in an enlarged scale, where a part thereof is presented by a cross section showing the actuator handle in the raised position. A left side elevation view of the electrical connector is omitted because it is presented symmetrical to the right side elevation view of FIG. 3.

A flexible printed circuit board or cable used with the electrical connector is drawn by dashed lines in FIG. 7 and forms no part of the claimed design.

1 Claim, 6 Drawing Sheets



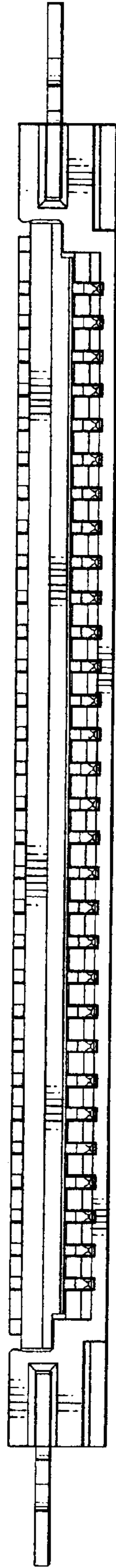


FIG. 1

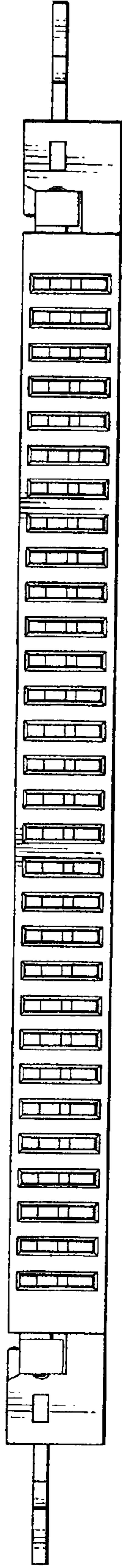


FIG. 2

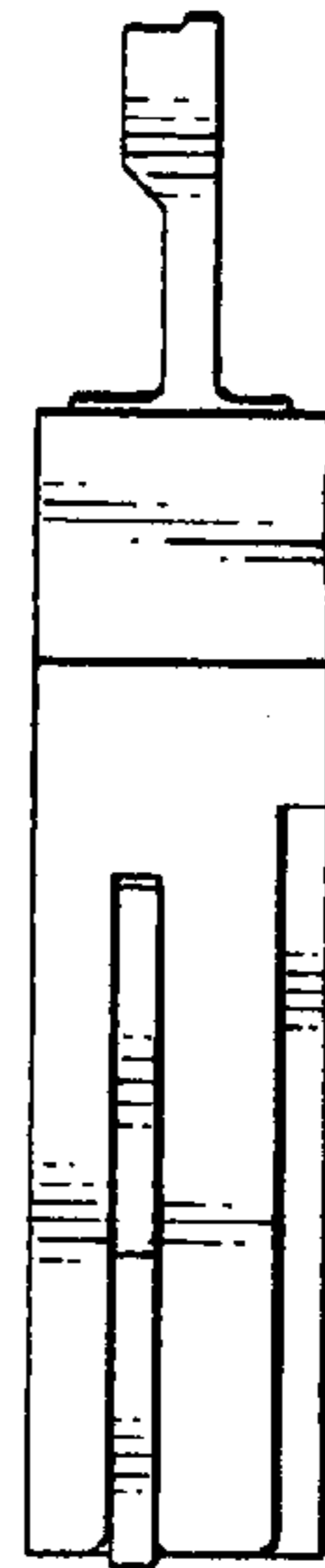


FIG. 3

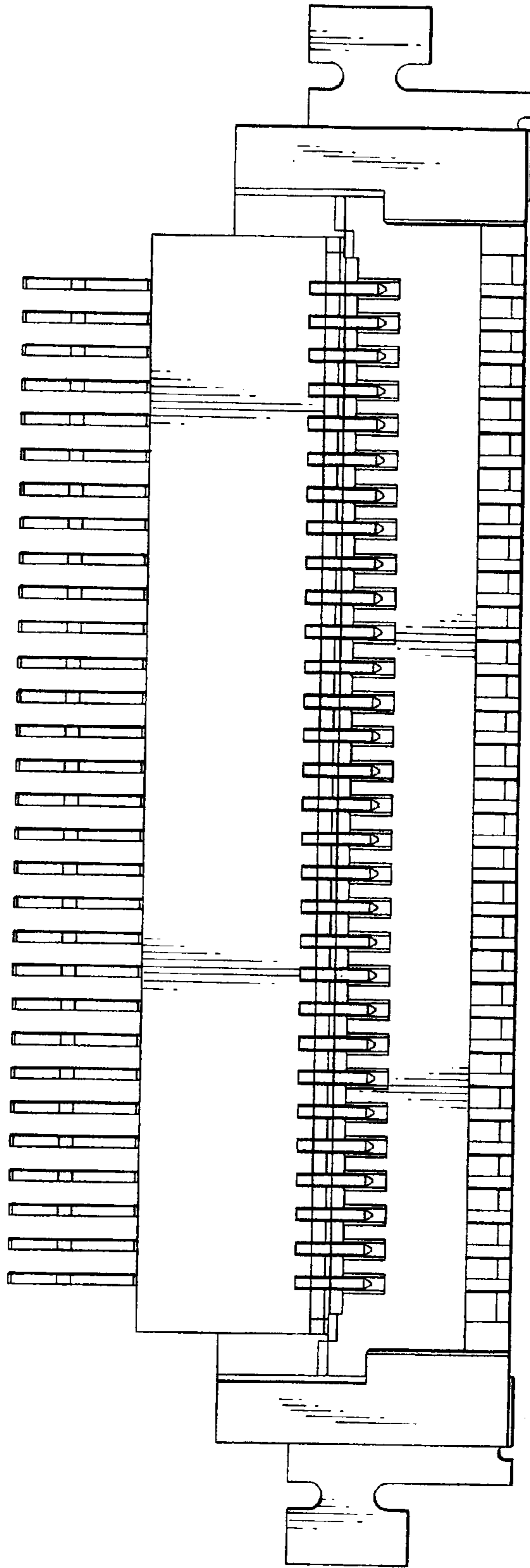


FIG. 4

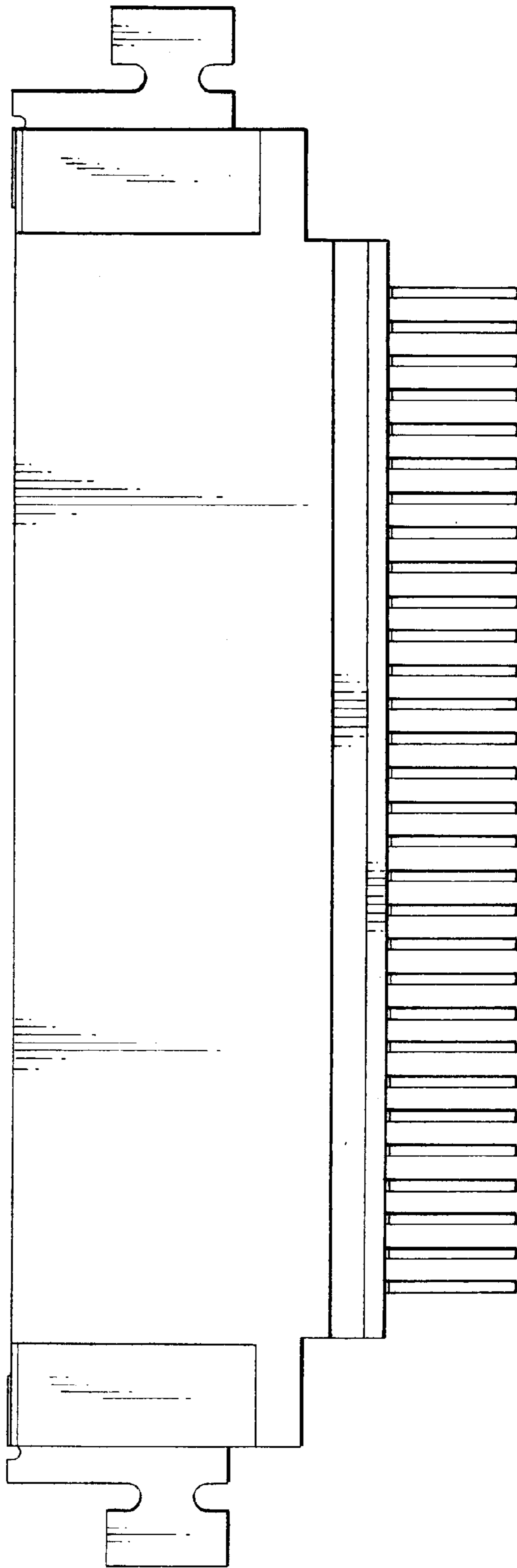


FIG. 5

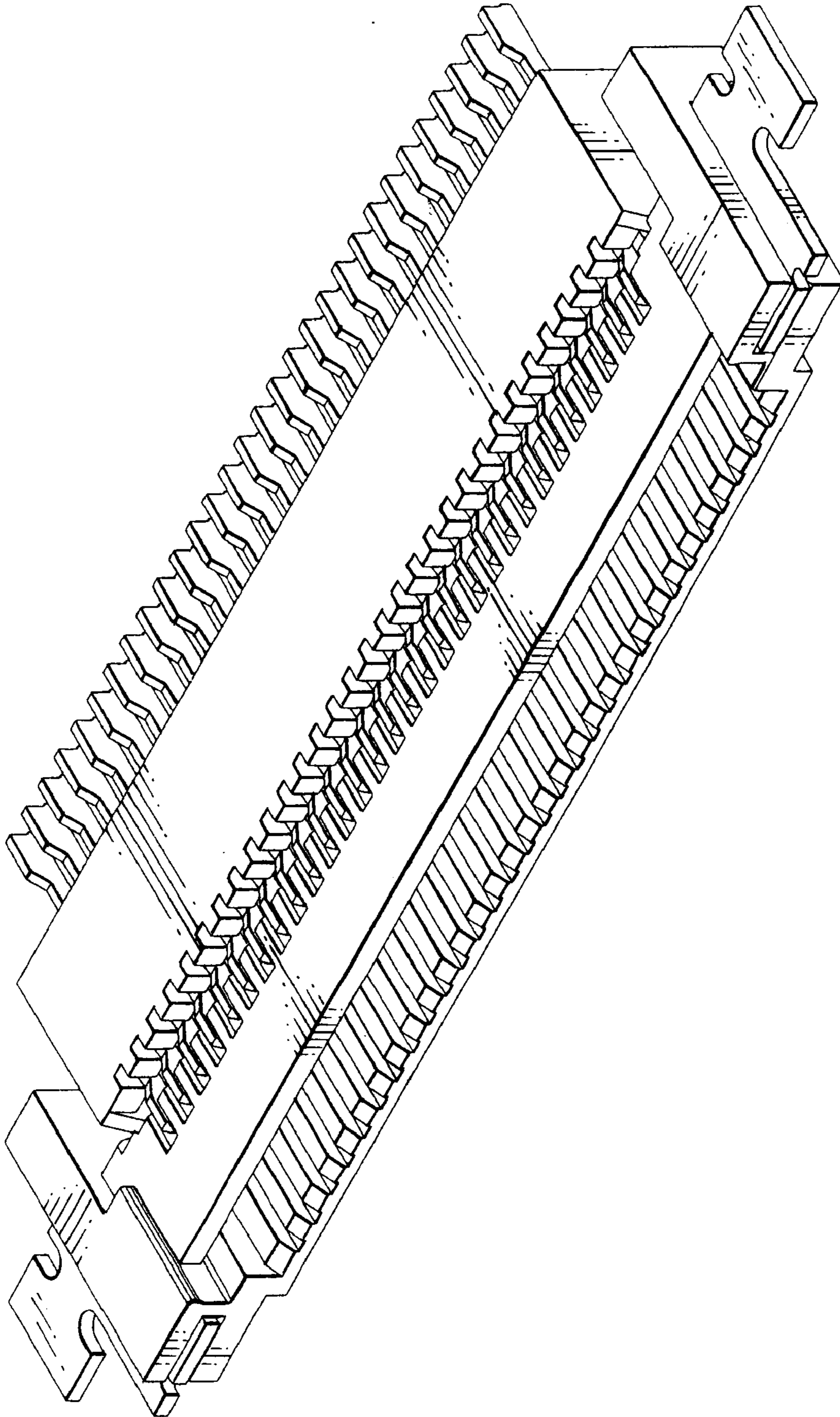


FIG. 6

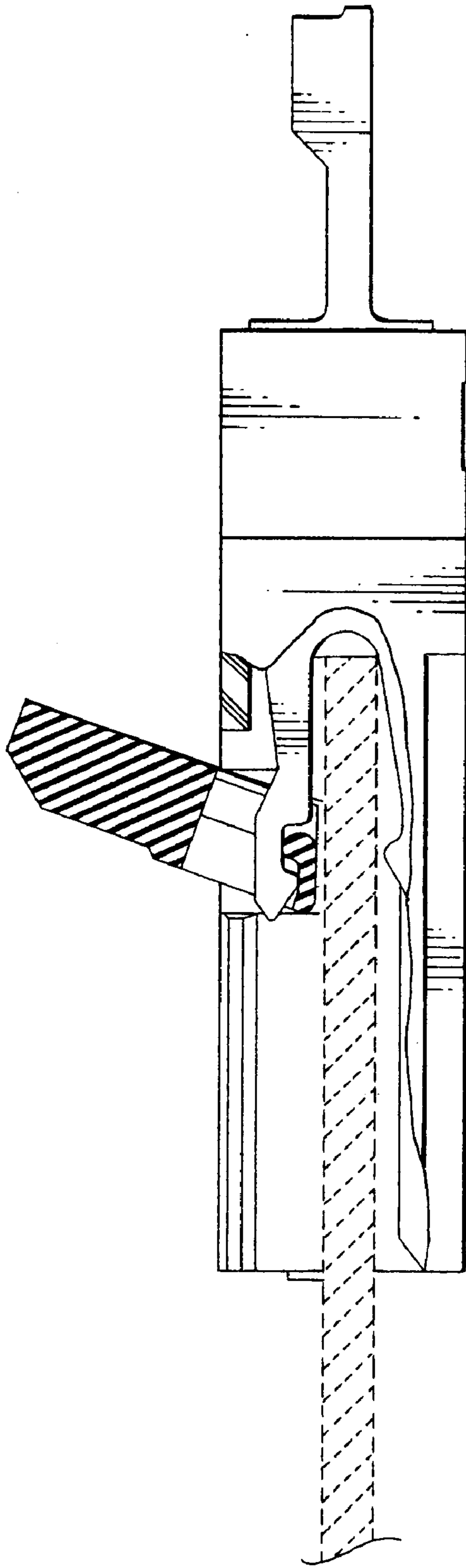


FIG. 7