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

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(45) **Date of Patent:** **\*\* Feb. 20, 2007**

(54) **OPTICAL CONNECTOR WITH SHUTTER**

(75) Inventors: **Naoya Takehara**, Higashiosaka (JP);  
**Keiji Mine**, Yao (JP); **Hiroshi Nakagawa**, Souraku-gun (JP)

(73) Assignee: **Hosiden Corporation**, Yao (JP)

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

(21) Appl. No.: **29/241,989**

(22) Filed: **Nov. 4, 2005**

(30) **Foreign Application Priority Data**

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(51) **LOC (8) Cl.** ..... **13-03**

(52) **U.S. Cl.** ..... **D13/133; D13/146; D13/147**

(58) **Field of Classification Search** ..... D13/133,  
D13/146-147, 154, 199; 439/79, 83, 108,  
439/181, 607-610, 639

See application file for complete search history.

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*Primary Examiner*—Daniel Bui

(74) *Attorney, Agent, or Firm*—Armstrong, Kratz, Quintos,  
Hanson & Brooks, LLP

(57) **CLAIM**

The ornamental design for an optical connector with shutter,  
as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of an optical connector with shutter  
showing our new invention;

FIG. 2 is a rear view thereof;

FIG. 3 is a right side view thereof;

FIG. 4 is a left side view thereof;

FIG. 5 is a plan view thereof;

FIG. 6 is a bottom view thereof;

FIG. 7 is a front perspective view thereof;

FIG. 8 is a rear perspective view thereof;

FIG. 9 is a cross-sectional view thereof, taken along line  
9—9 in FIG. 1;

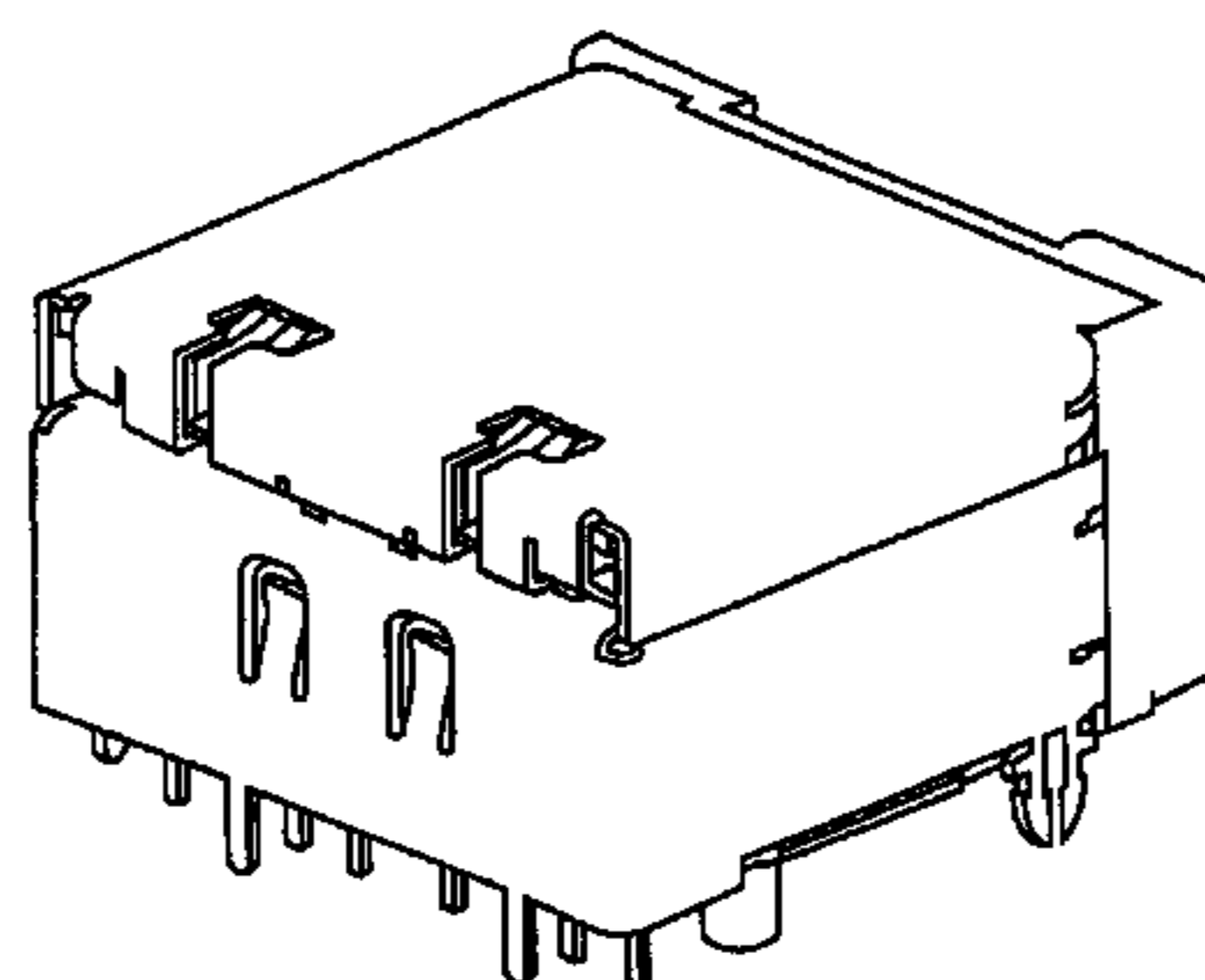
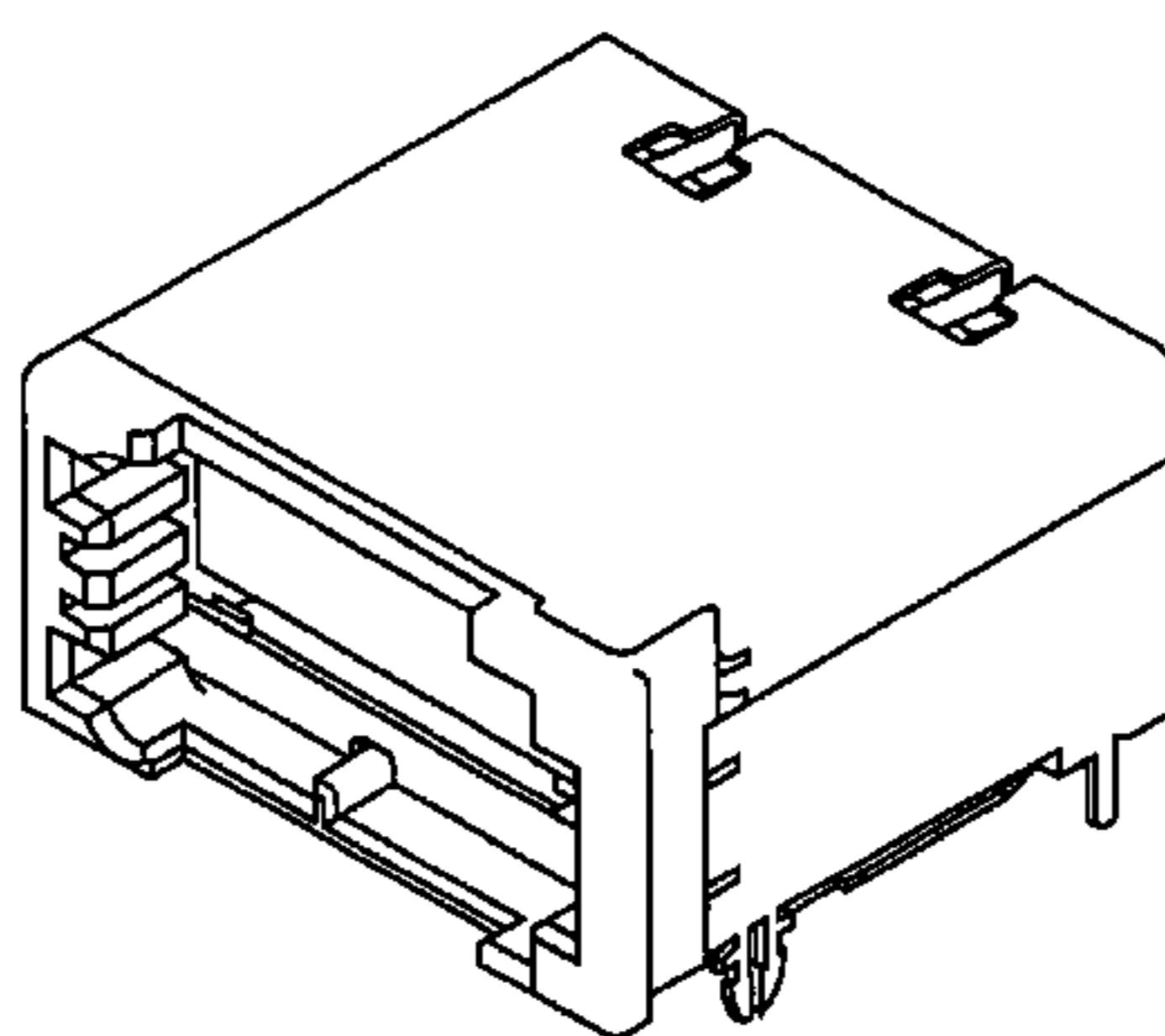
FIG. 10 is a cross-sectional view thereof, taken along line  
10—10 in FIG. 1;

FIG. 11 is a cross-sectional view thereof, taken along line  
11—11 in FIG. 1, in use condition; and,

FIG. 12 is a cross-sectional view thereof, taken along line  
12—12 in FIG. 1, with the lower-side shutter being inclined.

The broken line showing of the environment is for illustrative  
proposes only and forms no part of the claimed design.

**1 Claim, 5 Drawing Sheets**



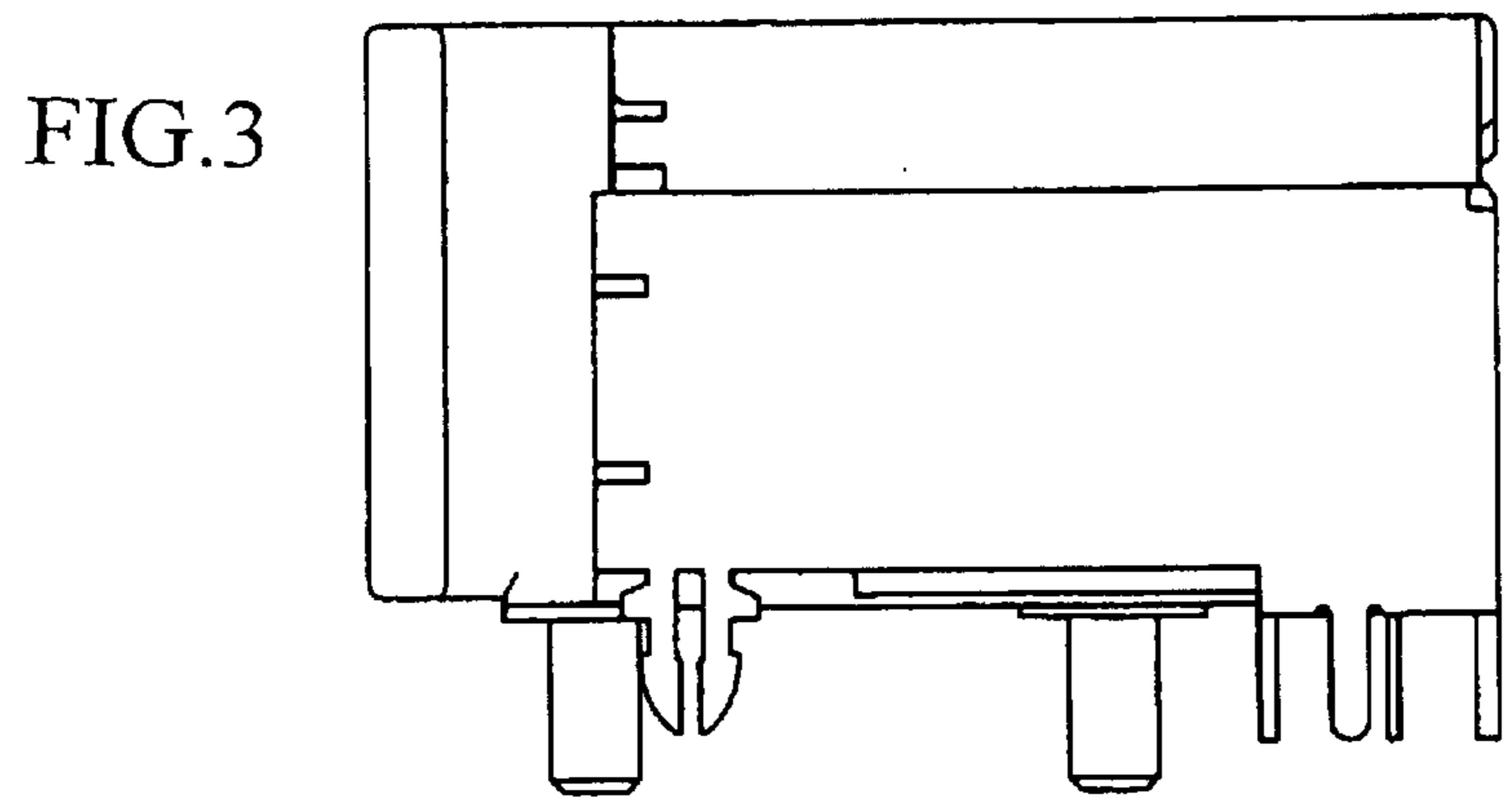
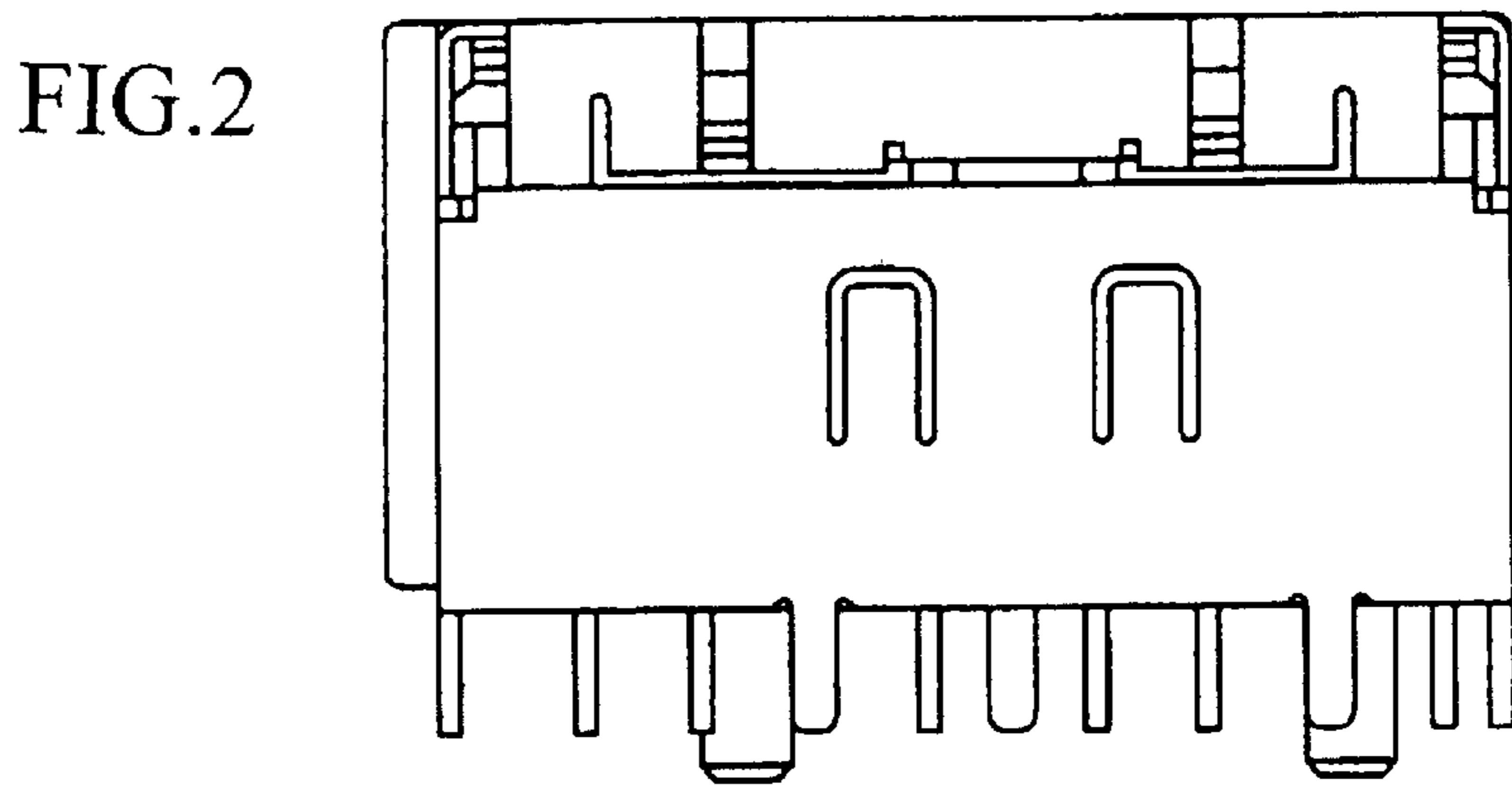
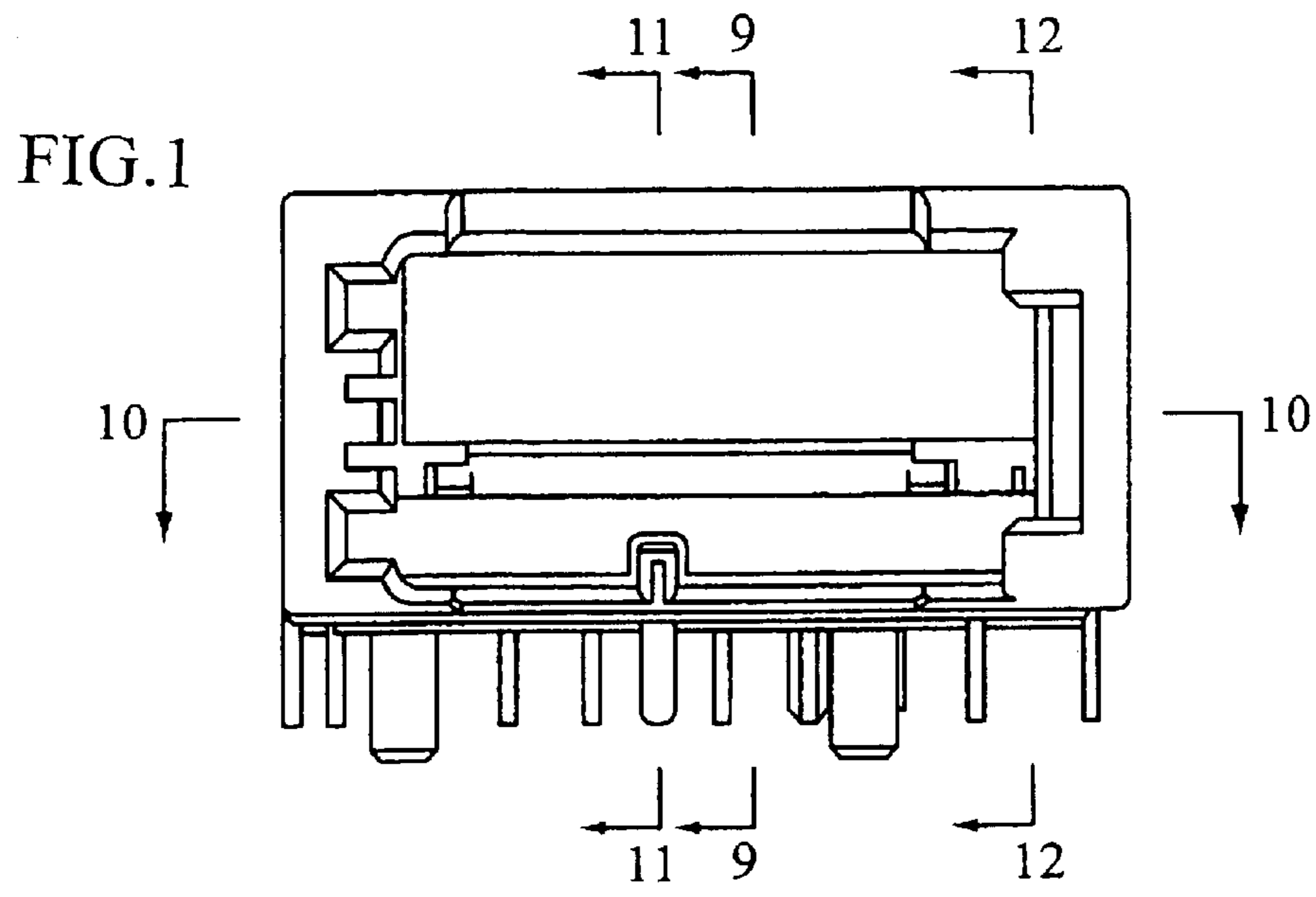


FIG.4

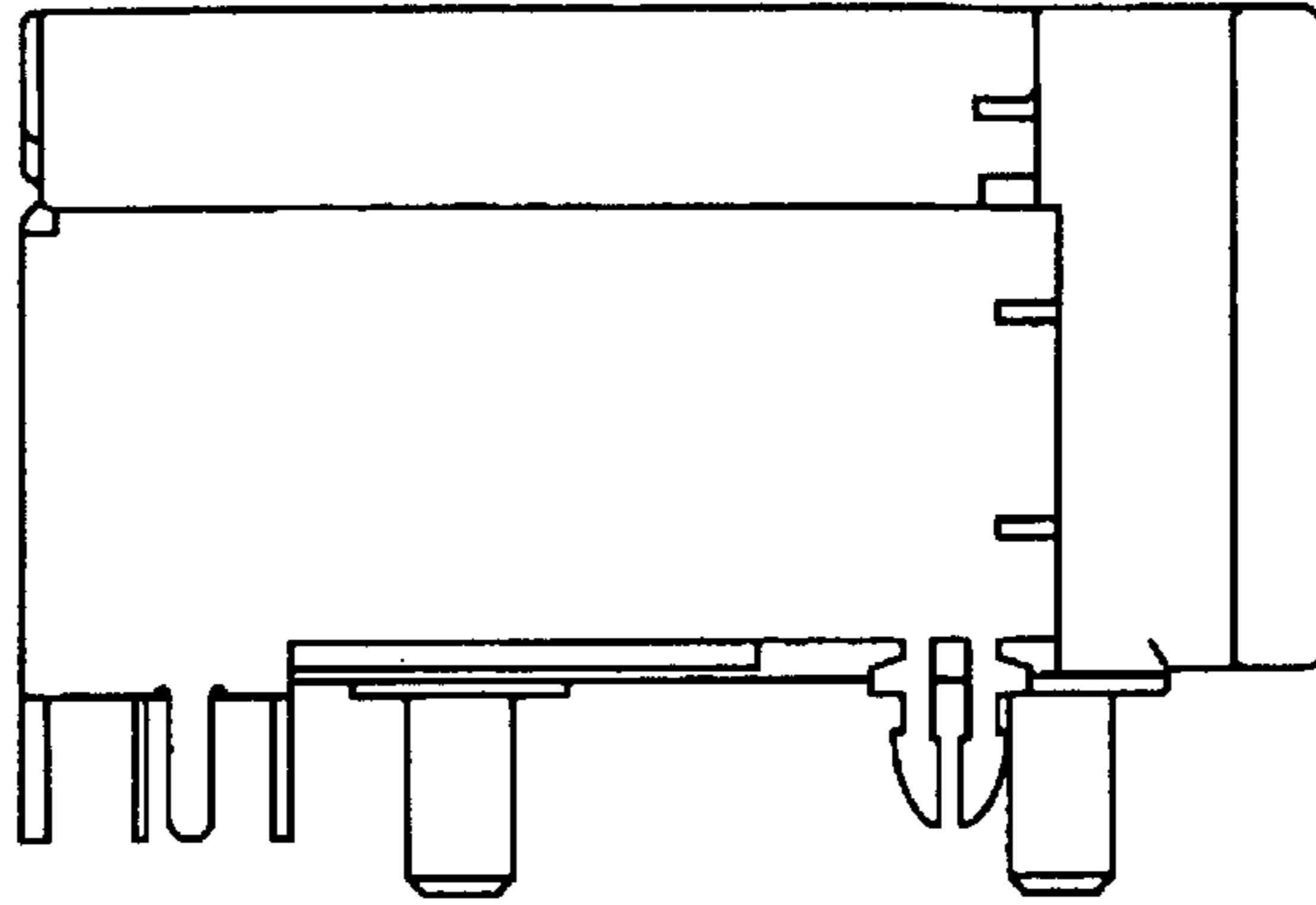


FIG.5

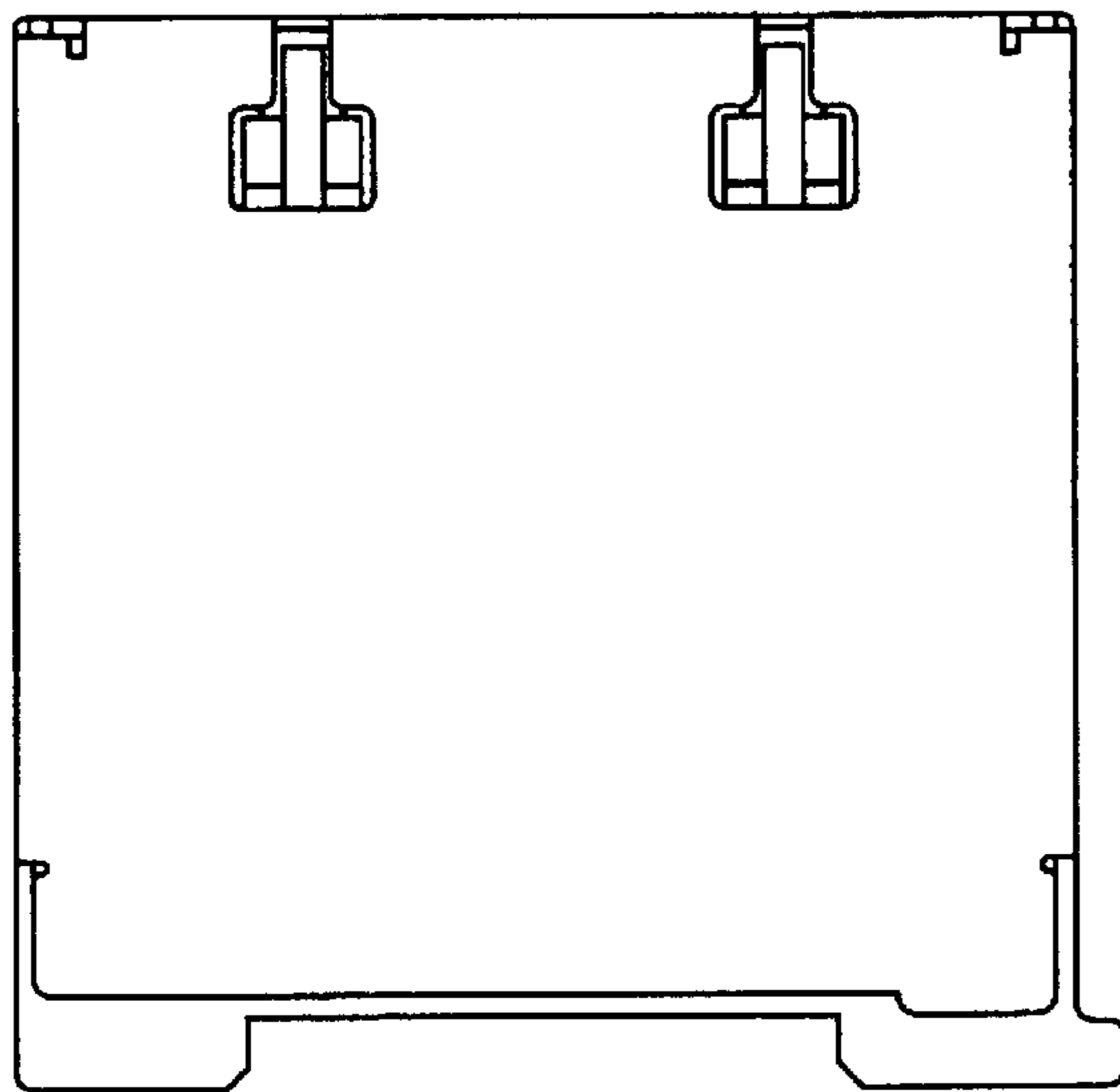
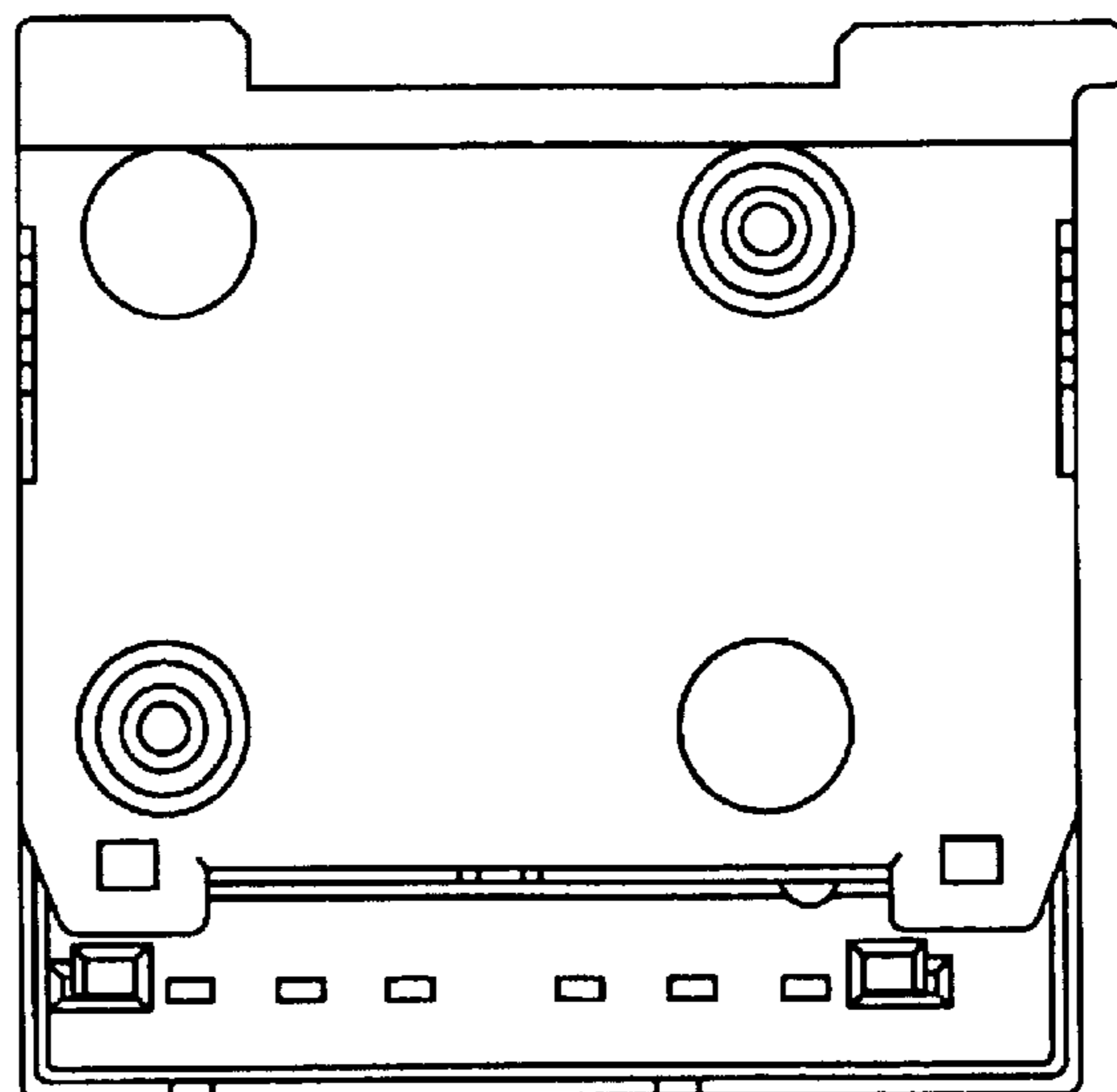


FIG.6



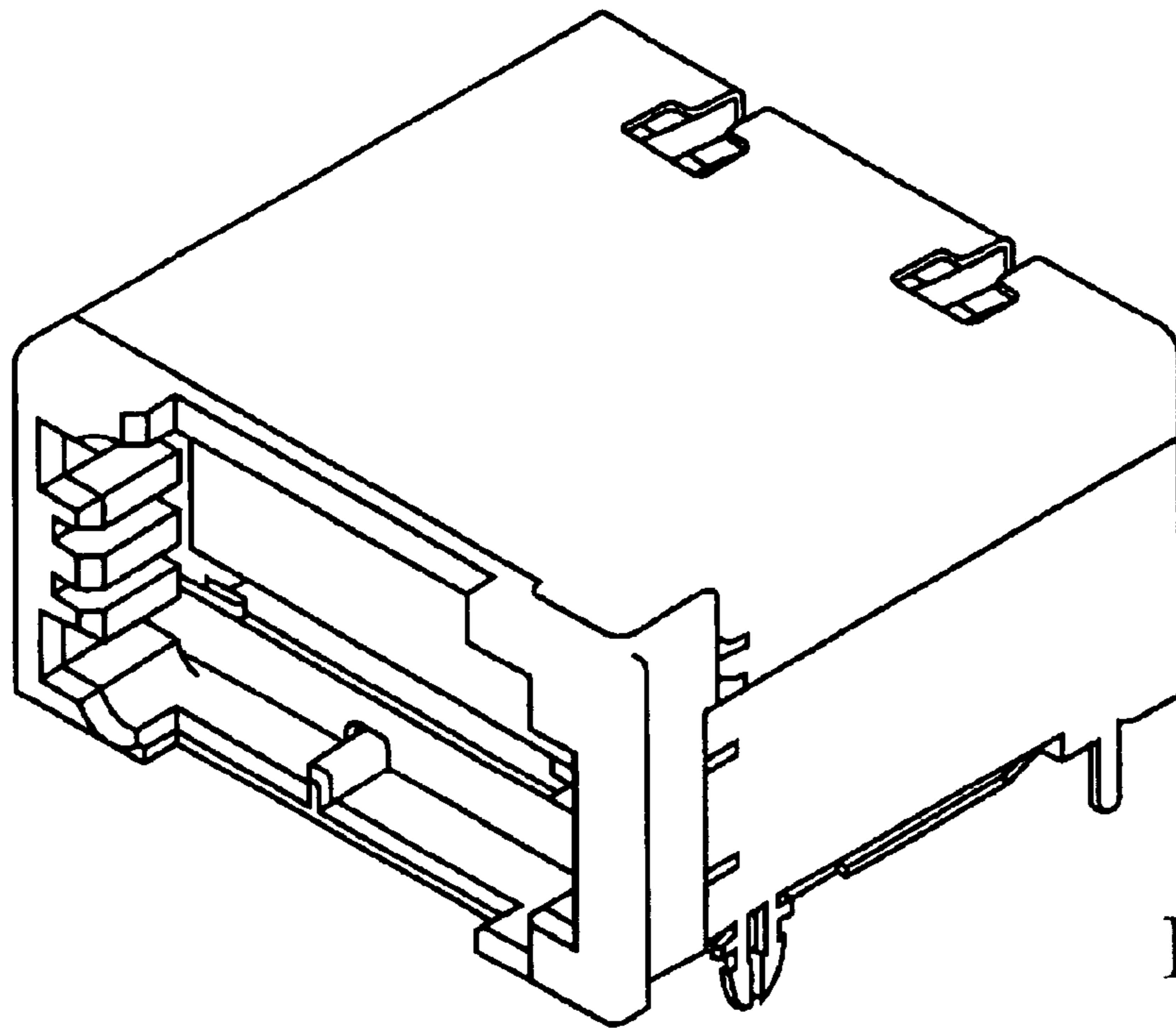


FIG. 7

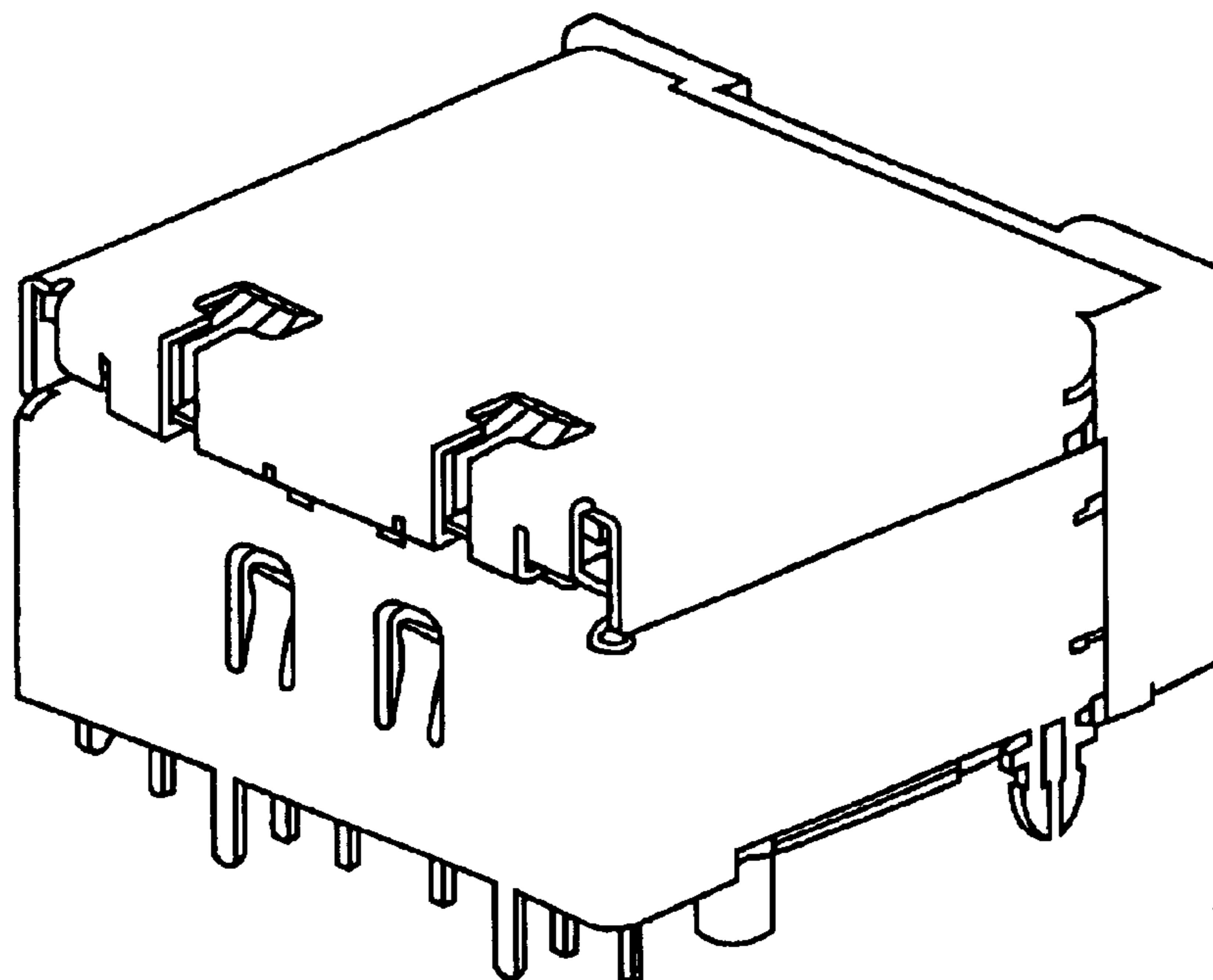


FIG. 8

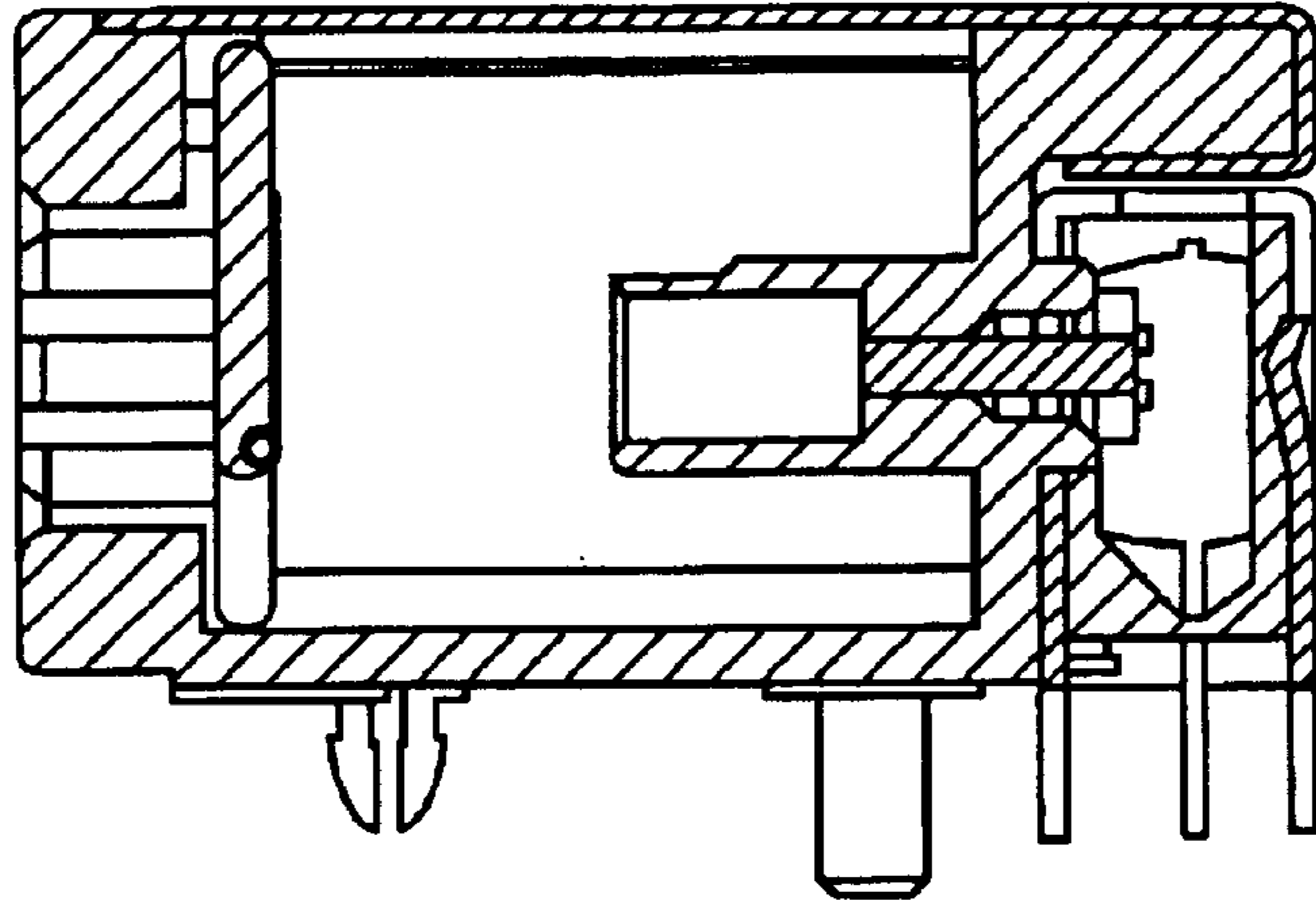


FIG.9

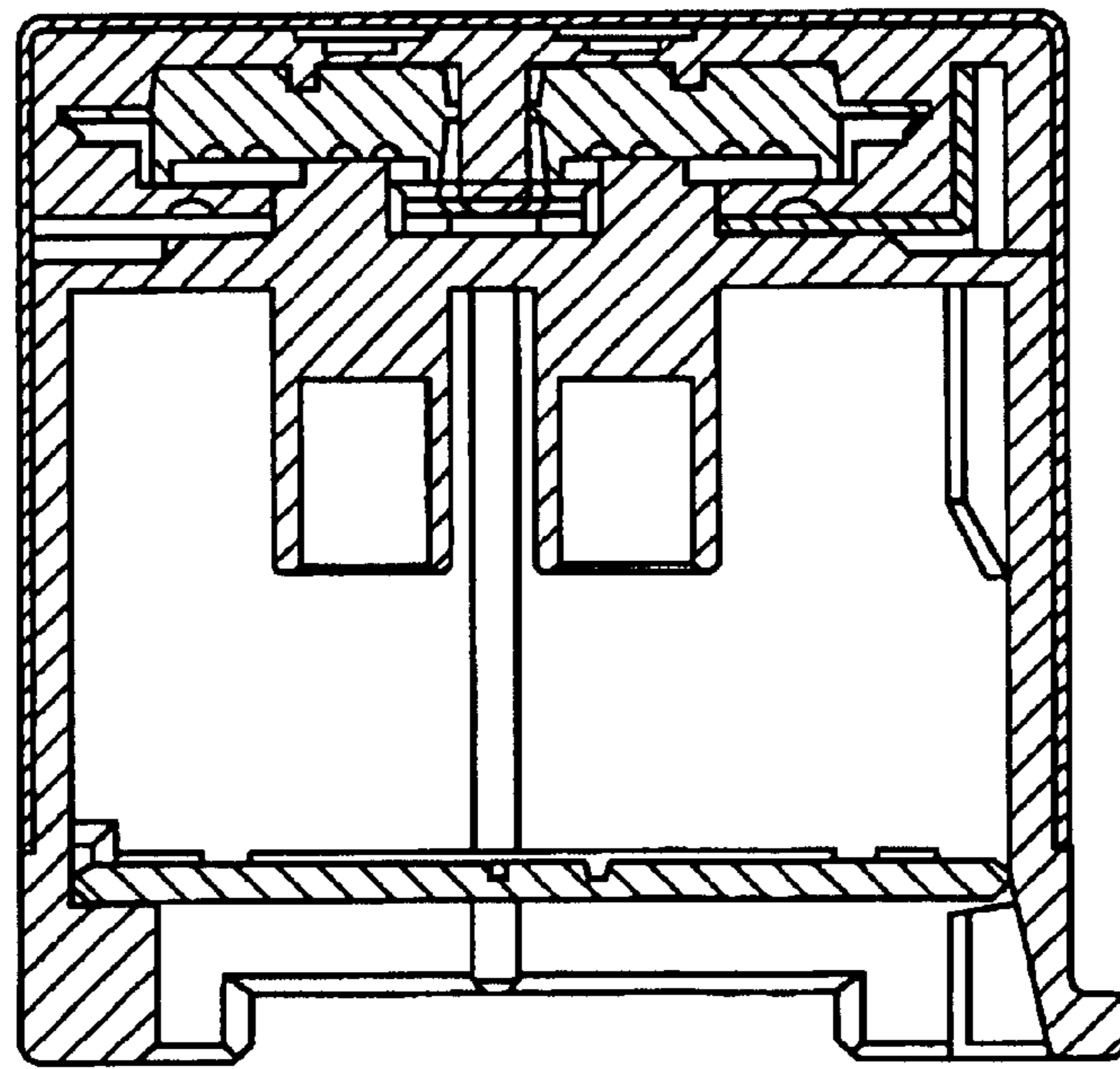


FIG.10

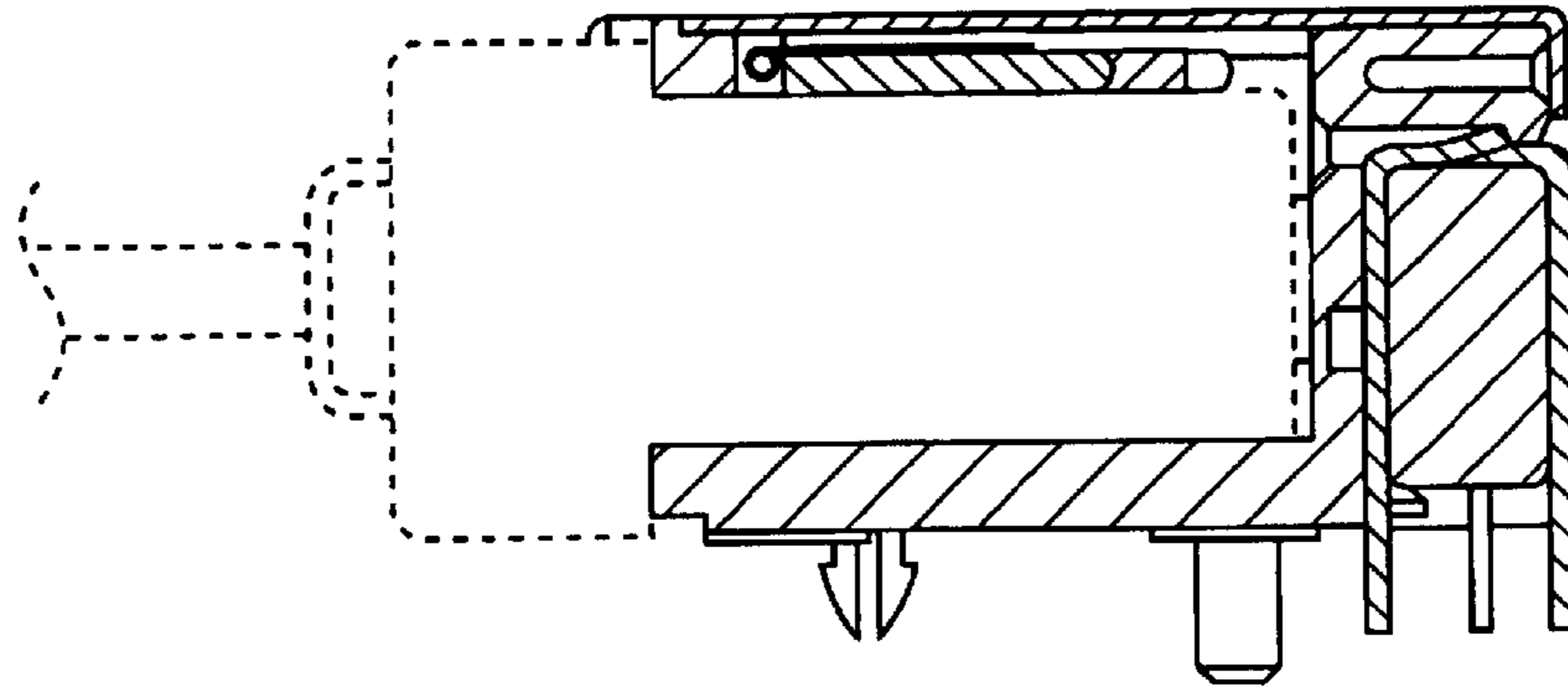


FIG. 11

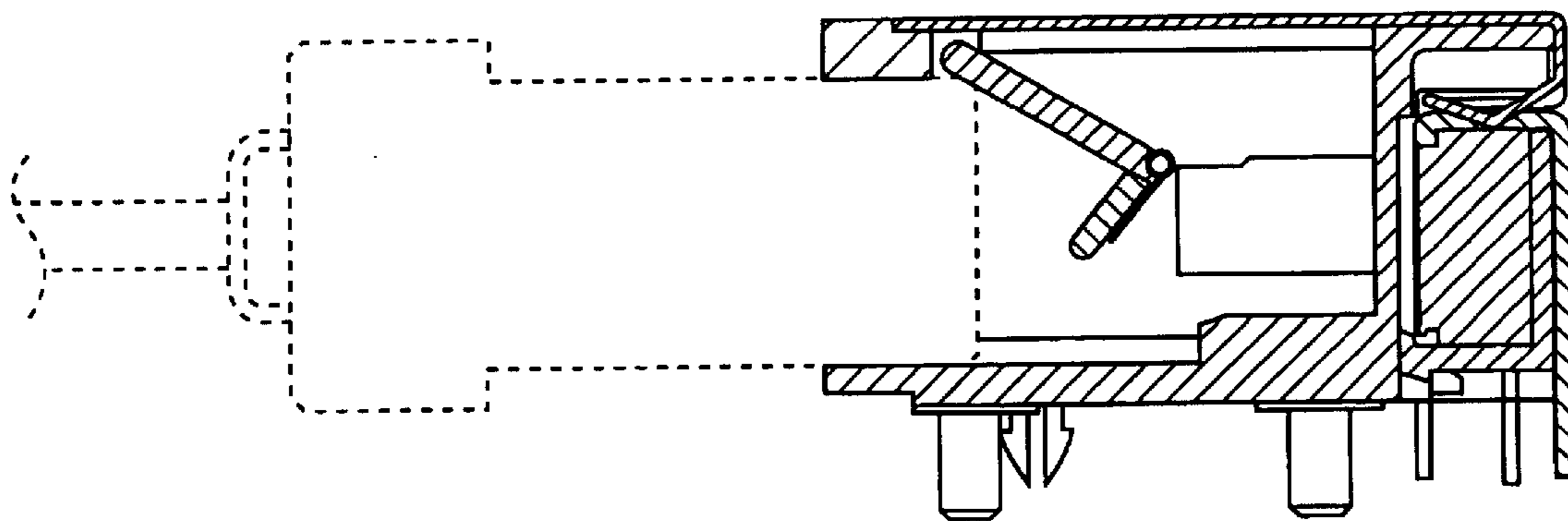


FIG. 12