



US00D452477B1

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

(10) **Patent No.:** **US D452,477 S**

(45) **Date of Patent:** **\*\* Dec. 25, 2001**

(54) **ELECTRIC CONNECTOR**

(75) Inventors: **Masayuki Hiramoto**, Hirakata;  
**Takashi Suyama**, Amagasaki, both of  
(JP)

(73) Assignee: **J.S.T. Mfg. Co., Ltd**, Osaka (JP)

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

(21) Appl. No.: **29/132,845**

(22) Filed: **Nov. 17, 2000**

(30) **Foreign Application Priority Data**

May 19, 2000 (JP) ..... 12-013305

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

(52) **U.S. Cl.** ..... **D13/133**

(58) **Field of Search** ..... D13/133, 146,  
D13/147; 439/329, 397, 399, 400, 404,  
460, 577, 876, 76.1, 78

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 4,097,106 \* 6/1978 Over et al. .... 439/460 X
- 4,235,502 \* 11/1980 Marks et al. .... 439/557
- 4,693,536 \* 9/1987 Colleran et al. .... 439/404
- 4,993,803 \* 2/1991 Suverison et al. .... 439/577 X
- 5,073,126 \* 12/1991 Kikuchi et al. .... 439/460 X
- 5,252,094 \* 10/1993 Colleran et al. .... 439/733.1

- 5,277,603 \* 1/1994 Yamatani et al. .... 439/140
- 5,380,220 \* 1/1995 Okabe ..... 439/460 X
- 5,415,562 \* 5/1995 Matsumoto et al. .... 439/397
- 5,577,930 \* 11/1996 Dahlem et al. .... 439/400 X
- 6,163,958 \* 12/2000 Suzuki ..... 439/400 X

\* cited by examiner

*Primary Examiner*—Joel Sincavage

(74) *Attorney, Agent, or Firm*—Antonelli, Terry, Stout & Kraus, LLP

(57) **CLAIM**

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

**DESCRIPTION**

FIG. 1 is a top plan view;  
 FIG. 2 is a front elevation;  
 FIG. 3 is a rear elevation;  
 FIG. 4 is a bottom plan view;  
 FIG. 5 is a left-side elevation;  
 FIG. 6 is a perspective view; and,  
 FIG. 7 is an auxiliary figure of the connector shown in use, in which the subject article having two electrical wire ends secured thereto is fitted in a mating connector.  
 The broken lines showing the mating connector and the two electrical wire ends in FIG. 7 are included for the purpose of illustrating environmental structure only and form no part of the claimed design.

**1 Claim, 2 Drawing Sheets**

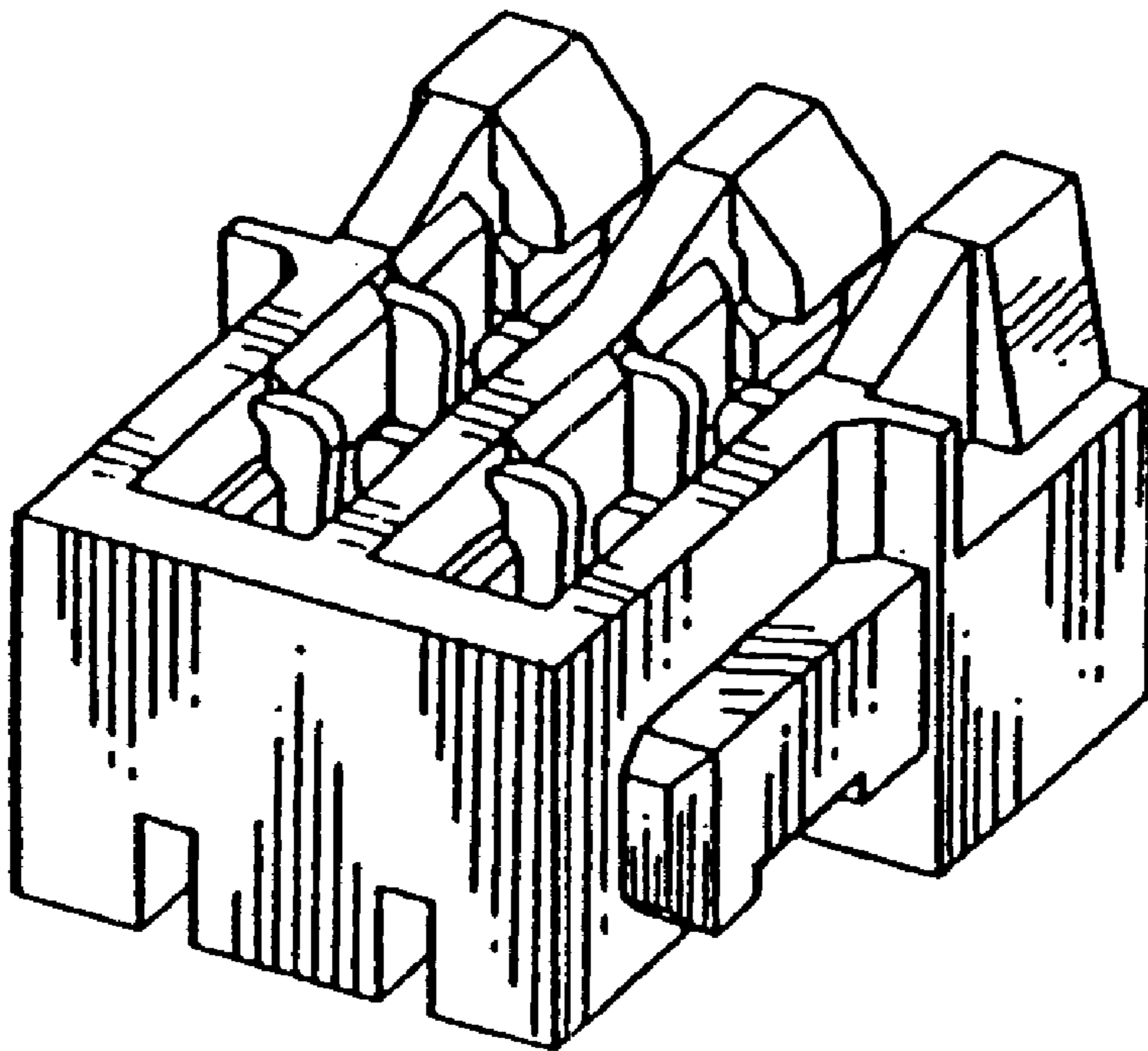


Fig. 1

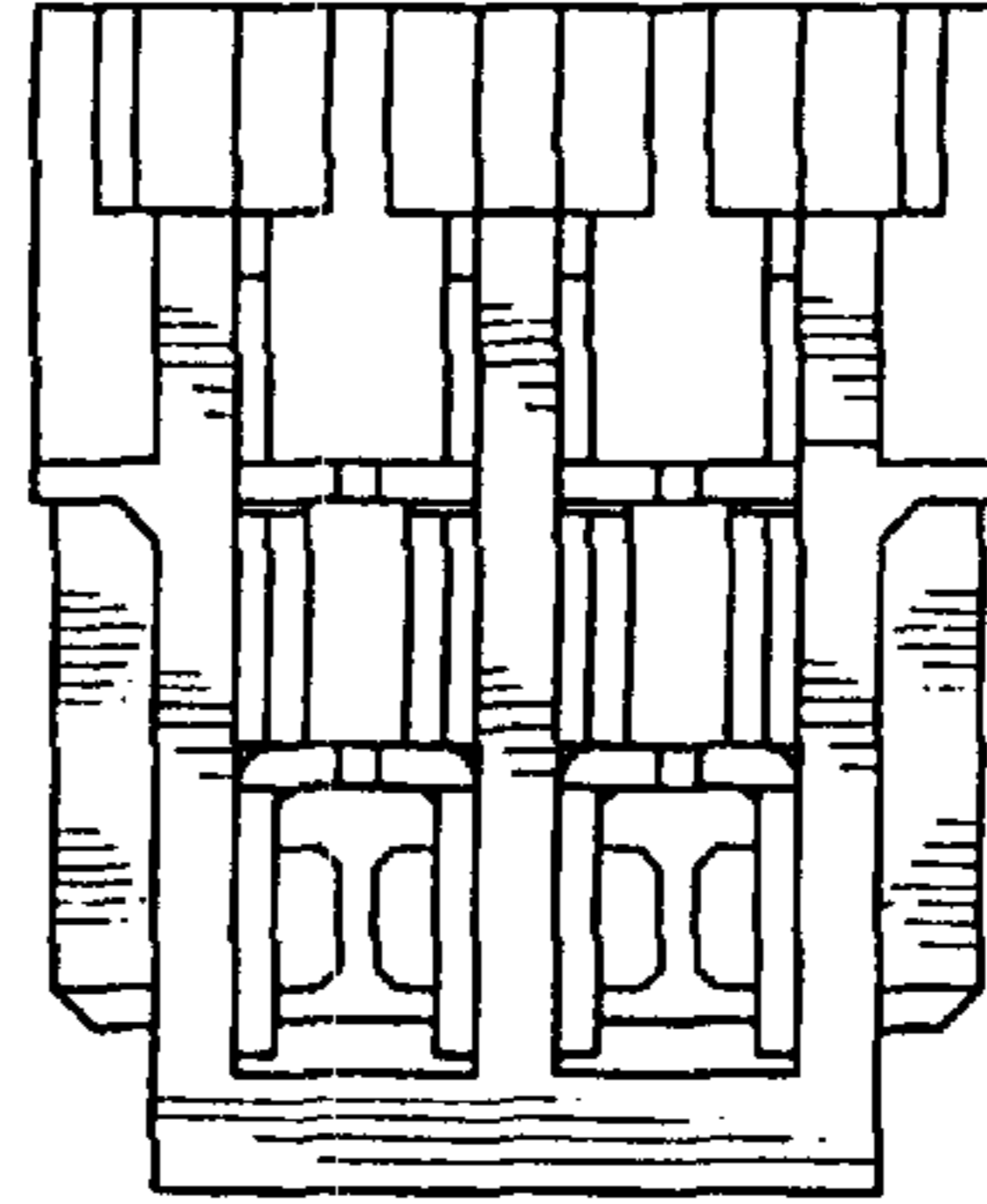


Fig. 2

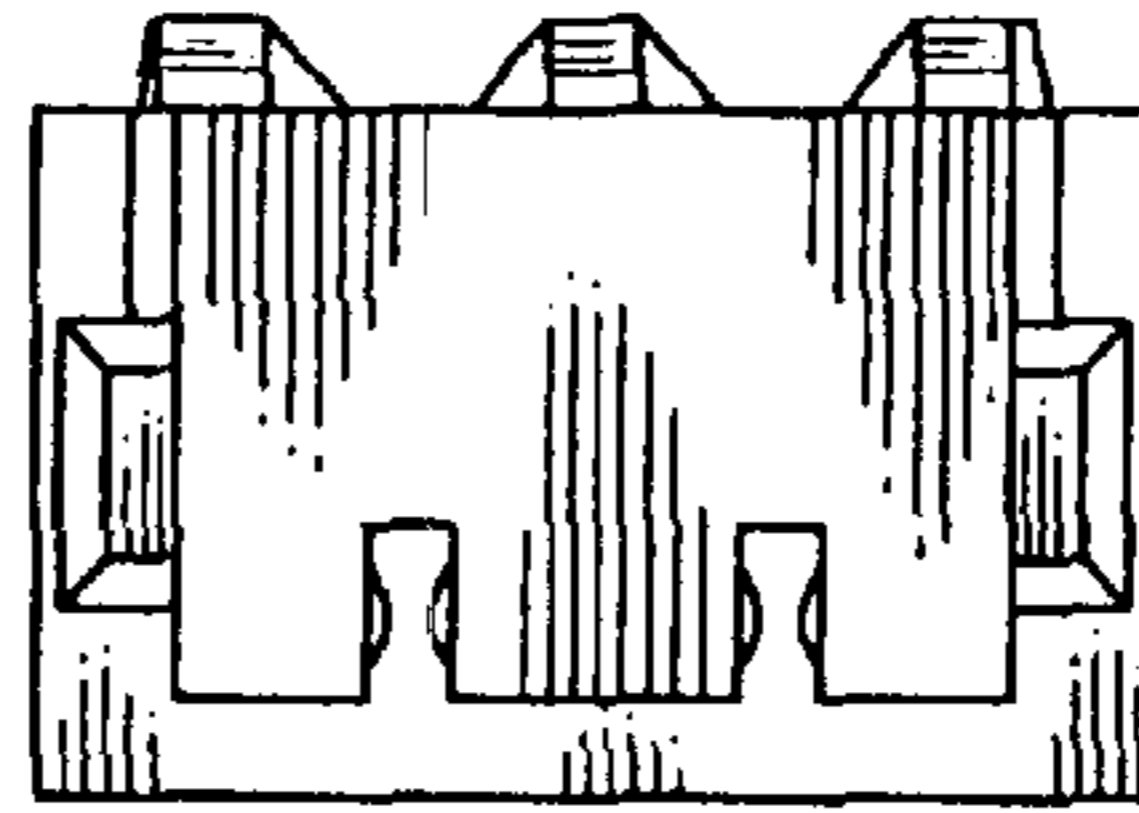


Fig. 3

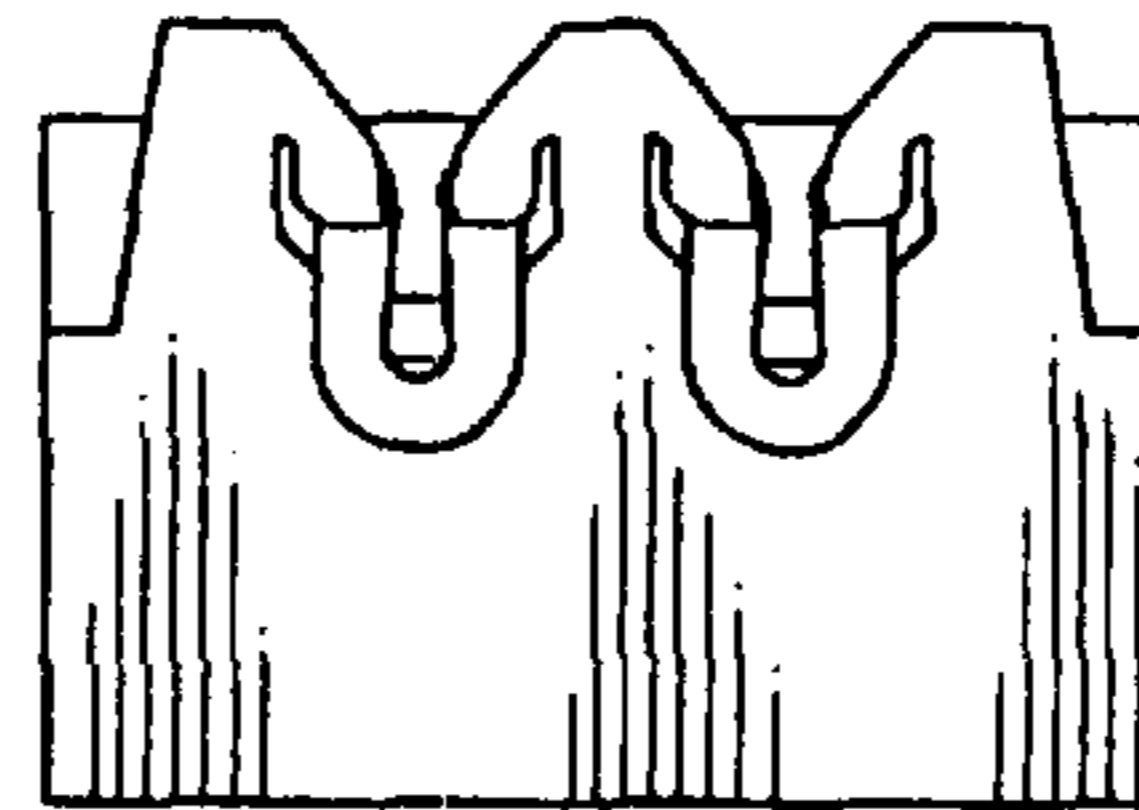


Fig. 4

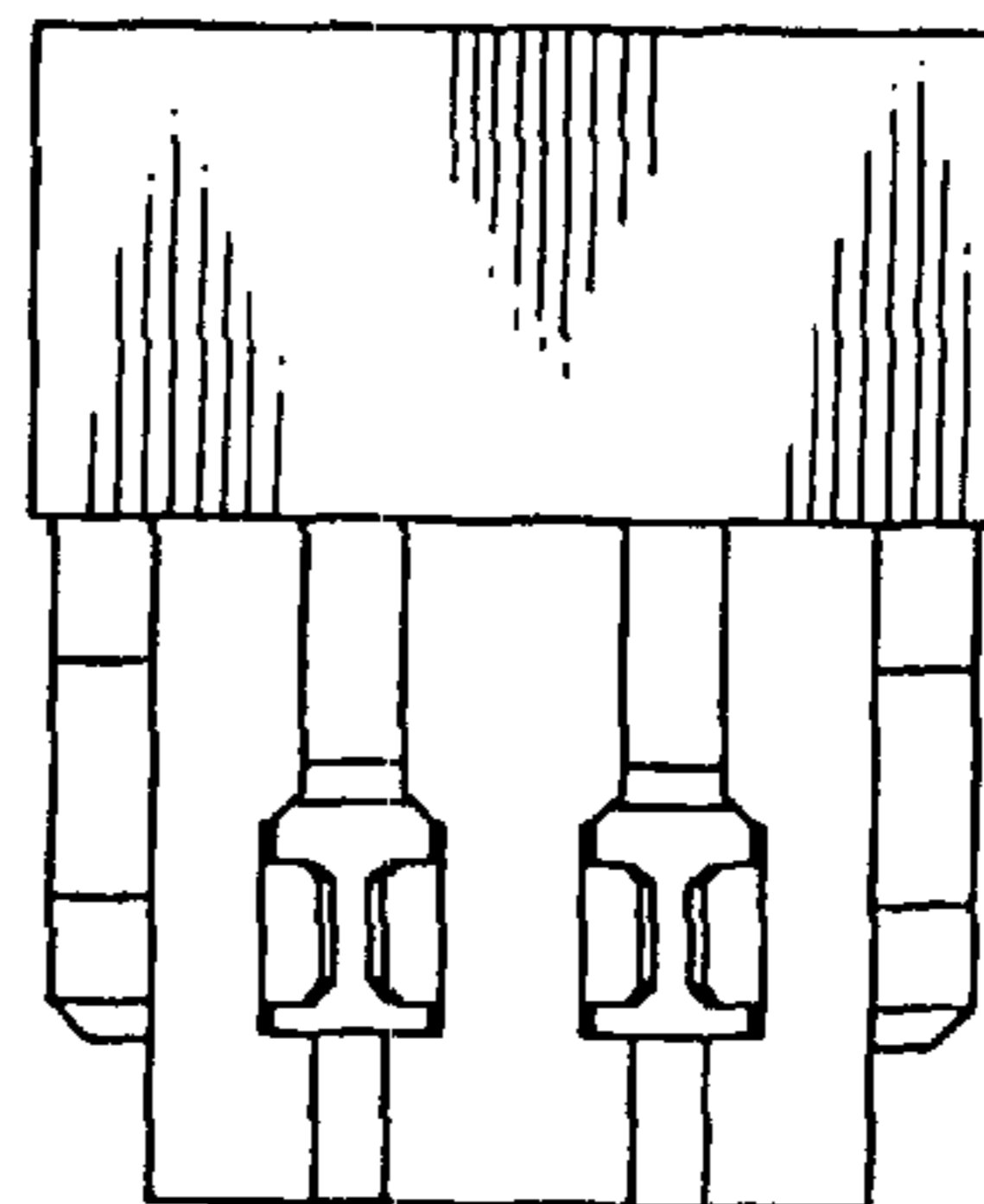


Fig. 5

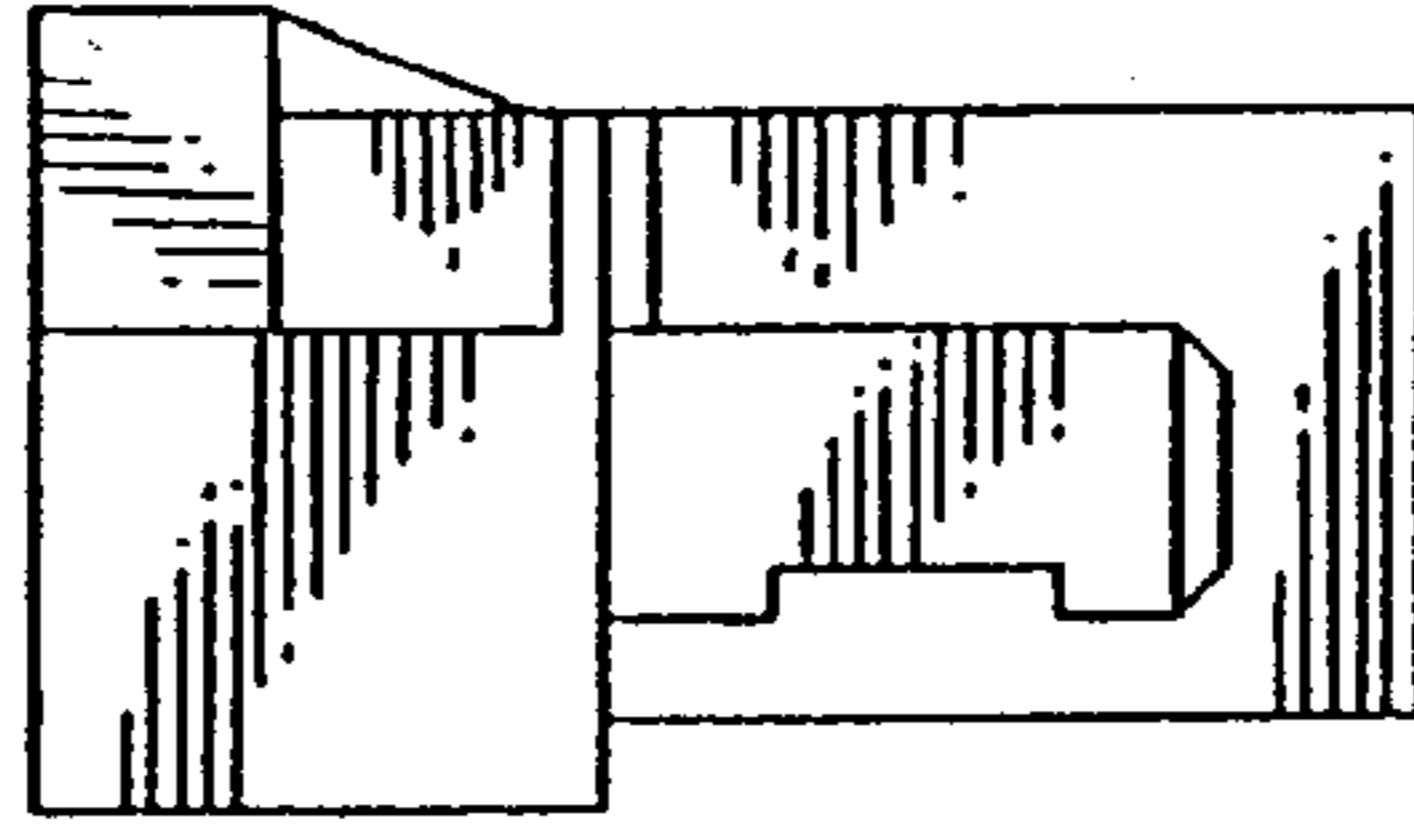


Fig. 6

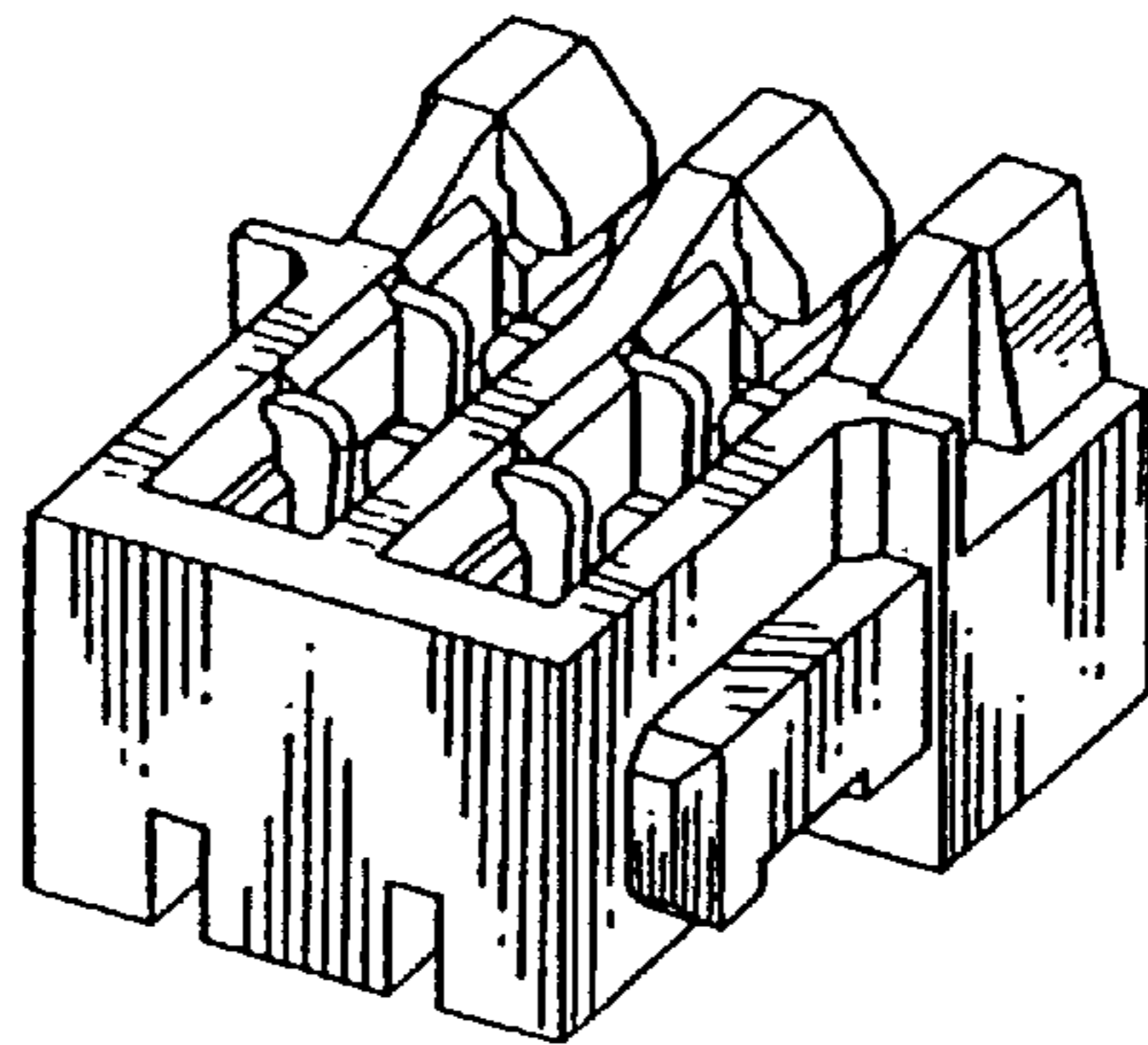


Fig. 7

