

US00D506978S

(12) **United States Design Patent** (10) **Patent No.:** **US D506,978 S**  
**Watanabe et al.** (45) **Date of Patent:** **\*\* Jul. 5, 2005**

(54) **OPTICAL RECEPTACLE**

(75) Inventors: **Yuji Watanabe**, Yokohama (JP);  
**Takashi Tsukamoto**, Yokohama (JP);  
**Tsuyoshi Hisano**, Kadoma (JP);  
**Katsunori Kitagawa**, Kadoma (JP);  
**Kenji Furufuji**, Kadoma (JP);  
**Yasusuke Hioki**, Tokyo (JP); **Mikio Hojo**, Tokyo (JP); **Katsuyuki Nakano**, Tokyo (JP)

(73) Assignees: **Matsushita Electric Works, Ltd.**, Osaka (JP); **Sanwa Denki Kogyo Co., Ltd.**, Tokyo (JP)

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

(21) Appl. No.: **29/157,440**

(22) Filed: **Mar. 20, 2002**

(30) **Foreign Application Priority Data**

Sep. 21, 2001 (JP) ..... 2001-027843

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

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

(58) **Field of Search** ..... D13/133, 146,  
D13/147; 385/56, 69, 58-60, 84, 89, 92,  
137, 139; 439/493, 351, 354-355, 357-358,  
577, 594, 598, 681, 752

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D279,669	S	*	7/1985	Robinson	.....	D13/133
4,601,506	A	*	7/1986	Hillson	.....	294/82.14
5,104,243	A	*	4/1992	Harding	.....	385/84
5,166,995	A	*	11/1992	Briggs et al.	.....	385/58
5,167,542	A	*	12/1992	Haitmanek	.....	439/681
5,760,139	A		6/1998	Koike et al.		

(Continued)

*Primary Examiner*—Stella Reid  
*Assistant Examiner*—Daniel Bui  
(74) *Attorney, Agent, or Firm*—Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

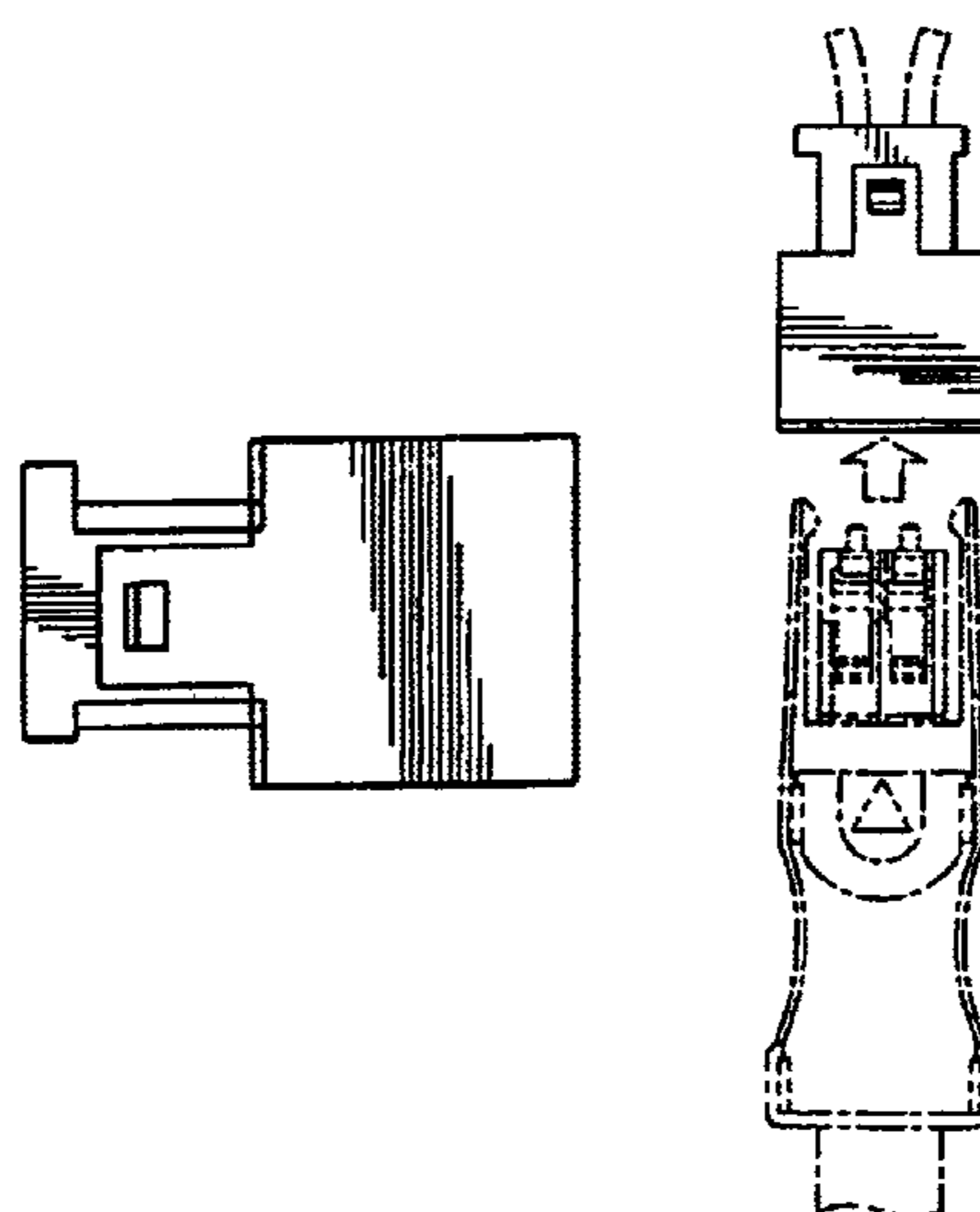
(57) **CLAIM**

The ornamental design for an optical receptacle, as shown and described.

**DESCRIPTION**

FIG. 1 is a front elevational view of an optical receptacle, showing our new design;  
FIG. 2 is a rear view thereof;  
FIG. 3 is a top plan view thereof;  
FIG. 4 is a bottom plan view thereof;  
FIG. 5 is a left side elevational view thereof;  
FIG. 6 is a right side elevational view thereof;  
FIG. 7 is a cross-sectional view taking along line 7—7 of FIG. 1;  
FIG. 8 is a cross-sectional view taking along line 8—8 of FIG. 6;  
FIG. 9 is a schematic view showing the optical receptacle in used condition, and on a reduced scale;  
FIG. 10 is a schematic side elevation view showing the optical receptacle in used condition, on a reduced scale and before insertion;  
FIG. 11 is a schematic front elevation view showing the optical receptacle in used condition, on a reduced scale and before insertion;  
FIG. 12 is a schematic side elevation view showing the optical receptacle in used condition, on a reduced scale and after insertion; and,  
FIG. 13 is a schematic front elevation view showing the optical receptacle in used condition, on a reduced scale and after insertion.  
The broken line showing of the environment is for illustrative purposes only and forms no part of the claimed design.

**1 Claim, 4 Drawing Sheets**



# US D506,978 S

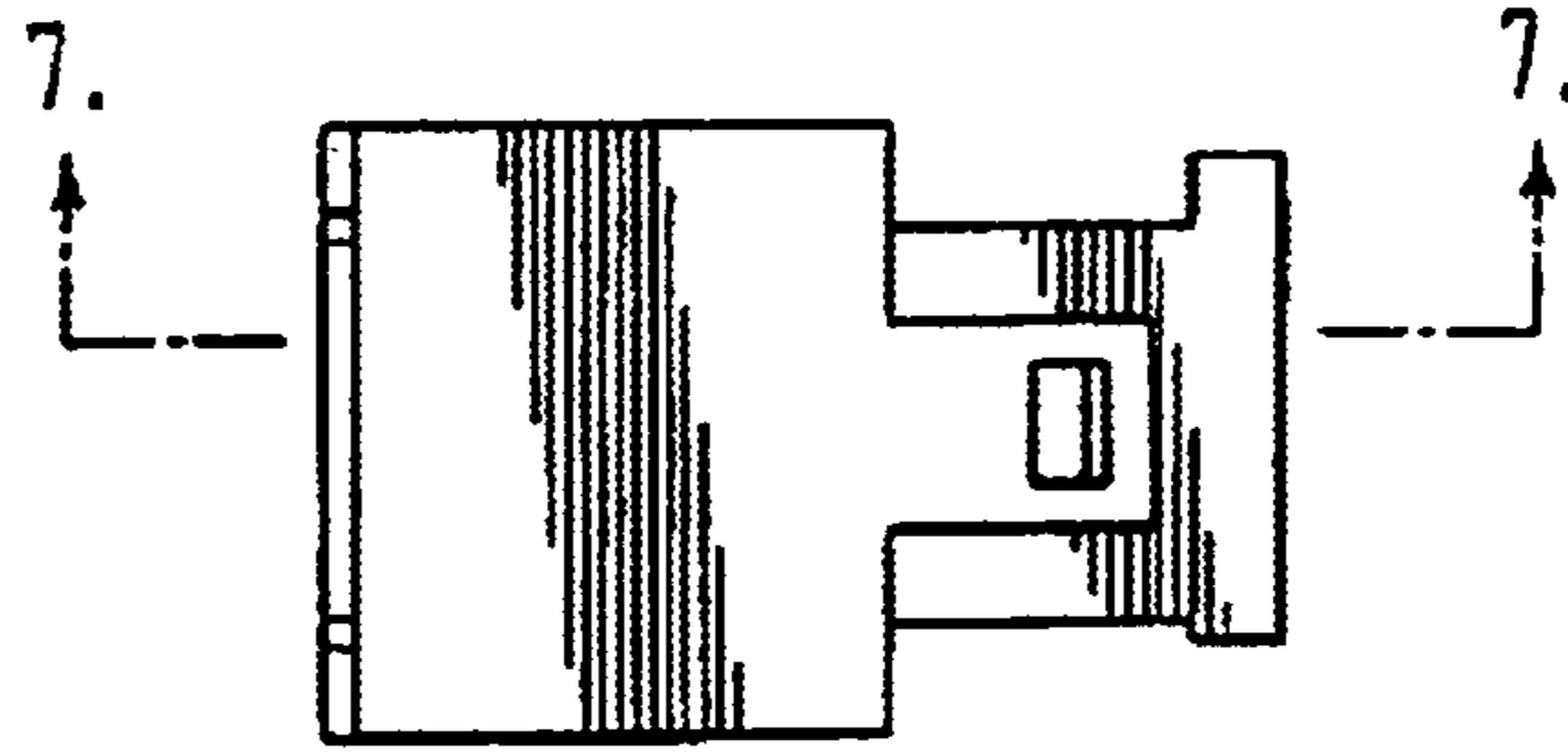
Page 2

---

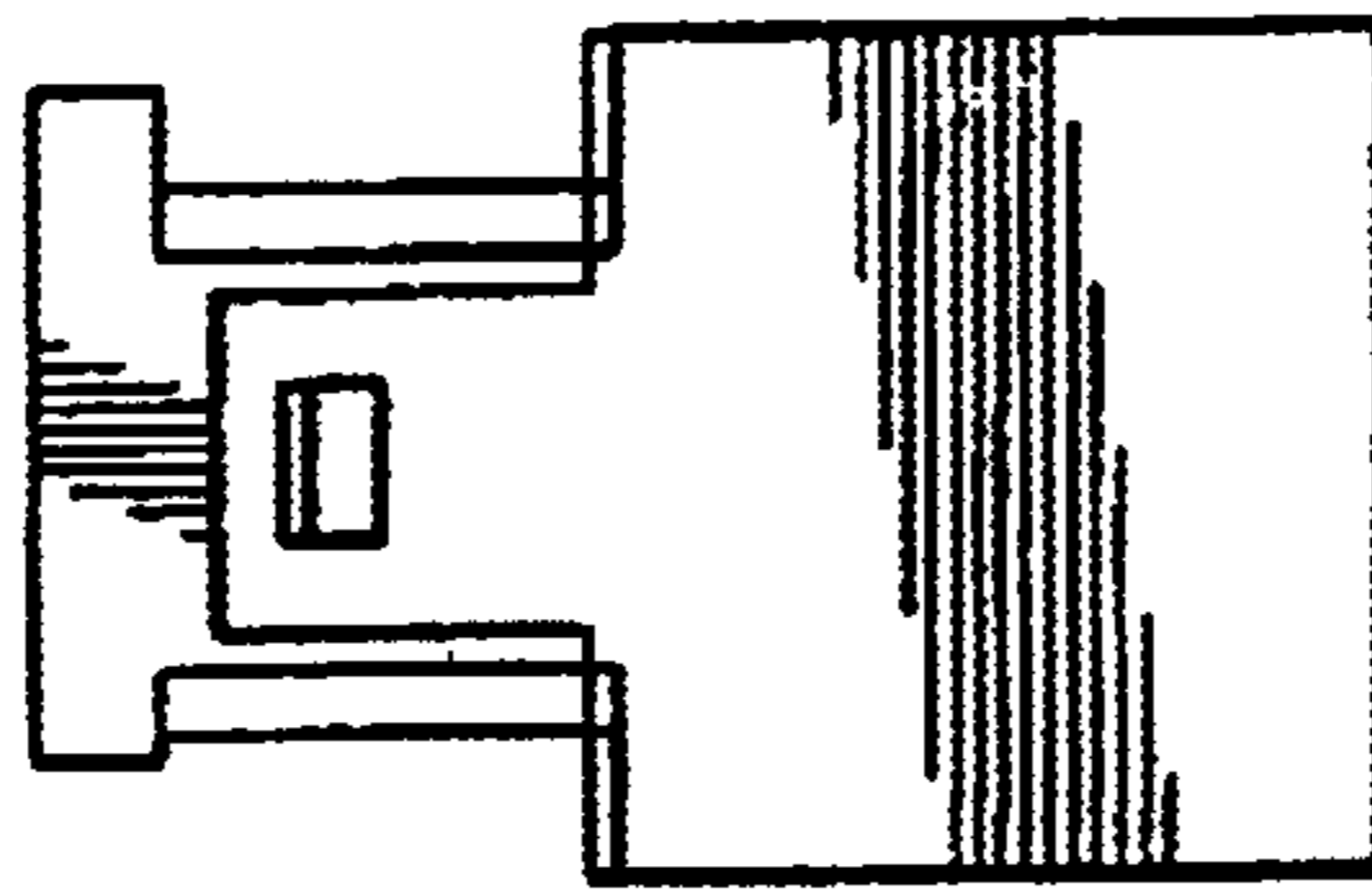
## U.S. PATENT DOCUMENTS

5,783,636 A	7/1998	Koike et al.		6,166,125 A	12/2000	Sugiyama et al.	
5,898,813 A *	4/1999	Beier .....	385/139	6,221,987 B1	4/2001	Sugiyama	
5,916,971 A	6/1999	Koike et al.		6,225,382 B1	5/2001	Matsukura et al.	
D417,192 S *	11/1999	Yip et al. ....	D13/133	6,271,312 B1	8/2001	Koike et al.	
6,071,441 A	6/2000	Koganezawa et al.		6,448,452 B2	9/2002	Kashiwagi et al.	
6,074,511 A	6/2000	Takano et al.		D475,013 S *	5/2003	Grimm .....	D13/133
6,111,062 A	8/2000	Shirota et al.		2003/0068135 A1 *	4/2003	Watanabe et al. ....	385/53
D431,023 S *	9/2000	Yip et al. ....	D13/133				

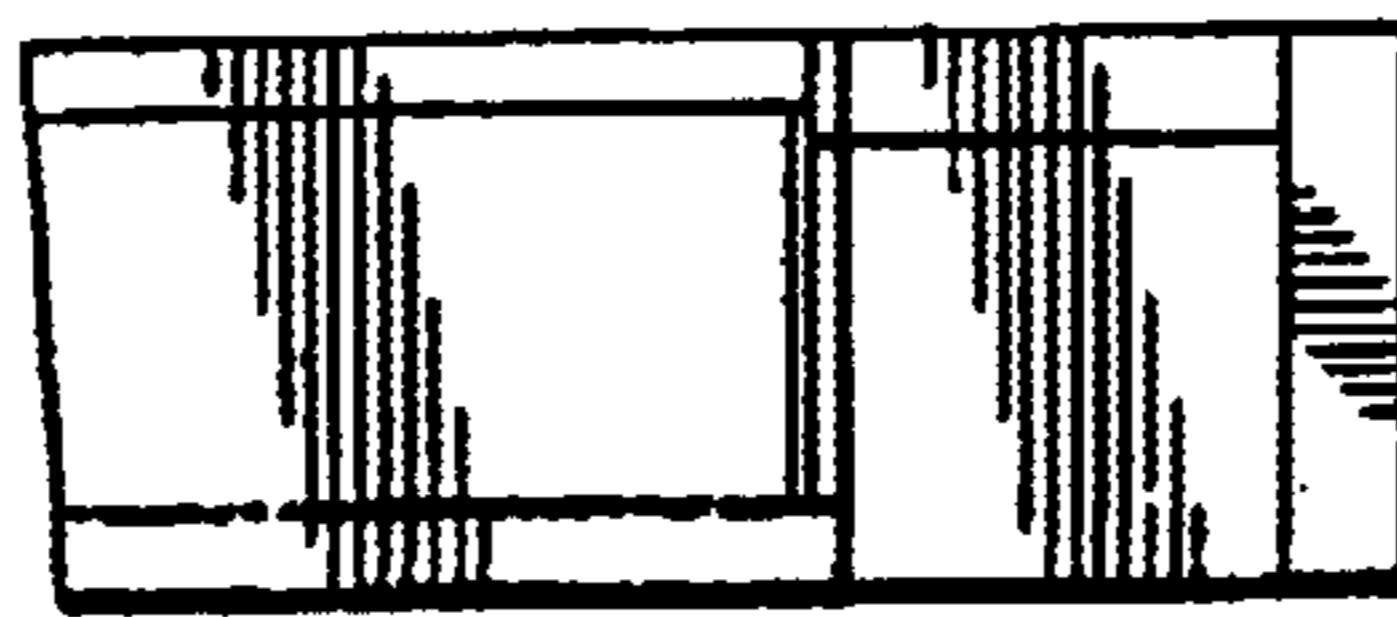
\* cited by examiner



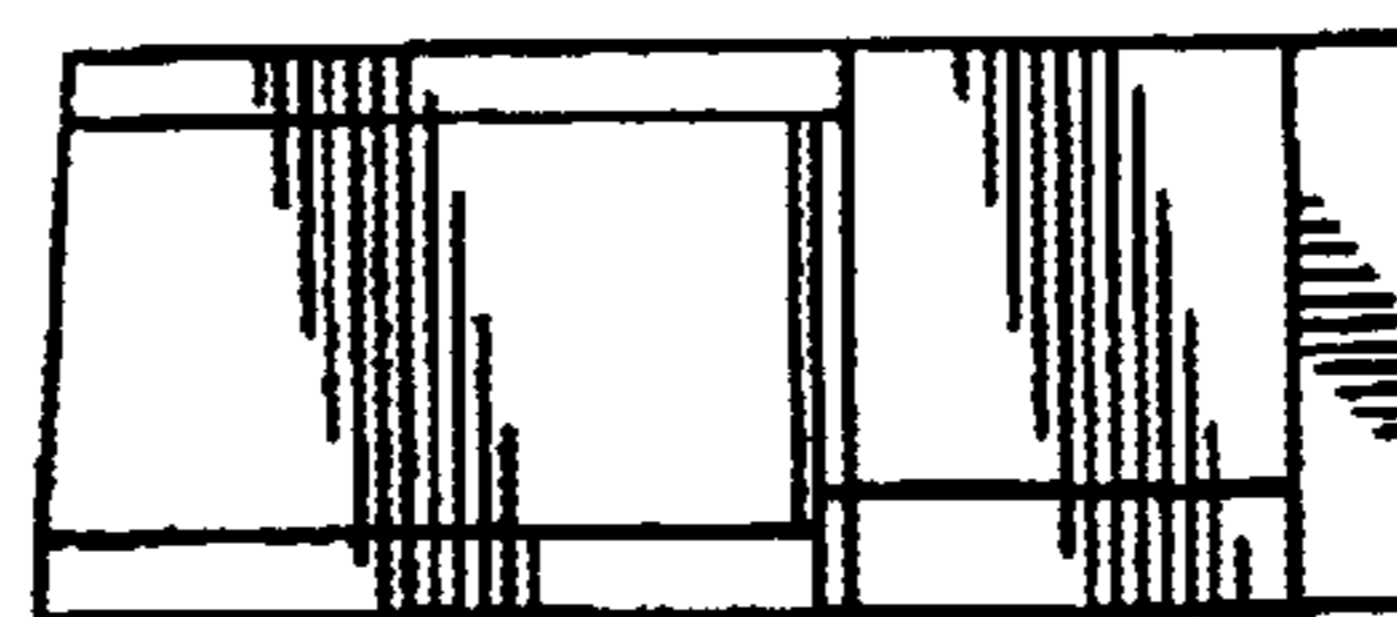
*FIG. 1*



*FIG. 2*



*FIG. 3*



**FIG. 4**

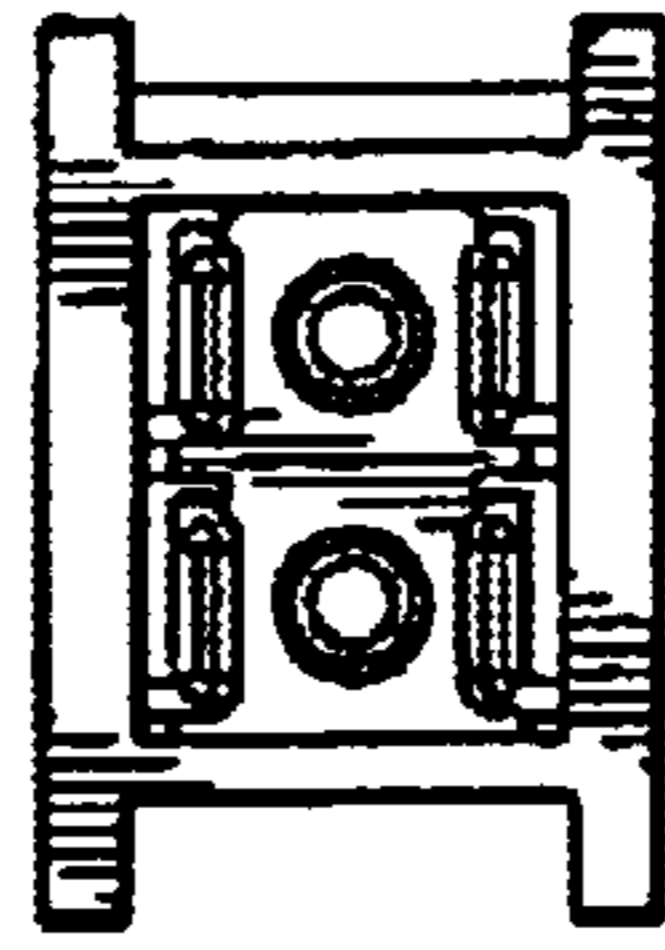


FIG. 5

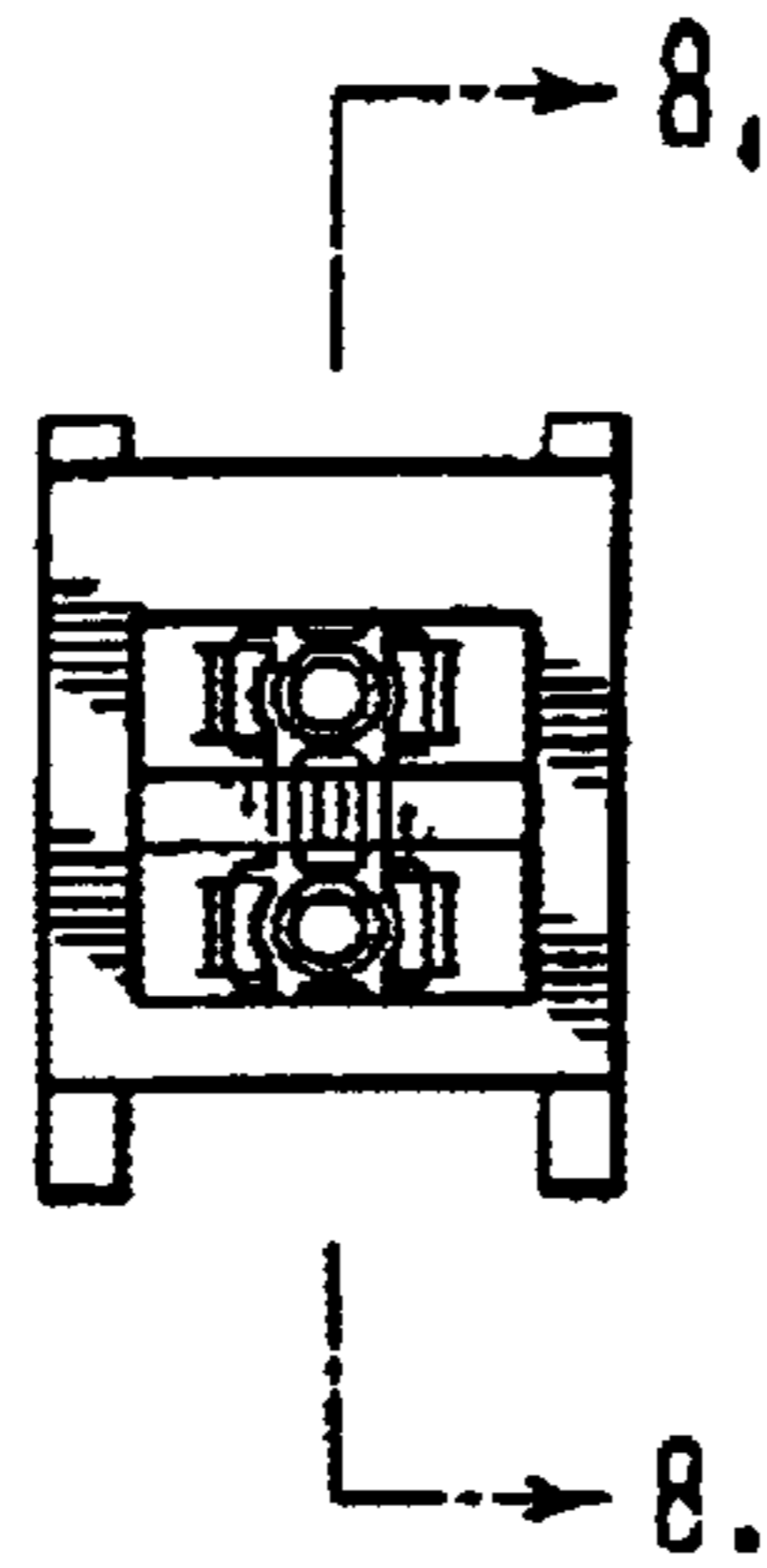


FIG. 6

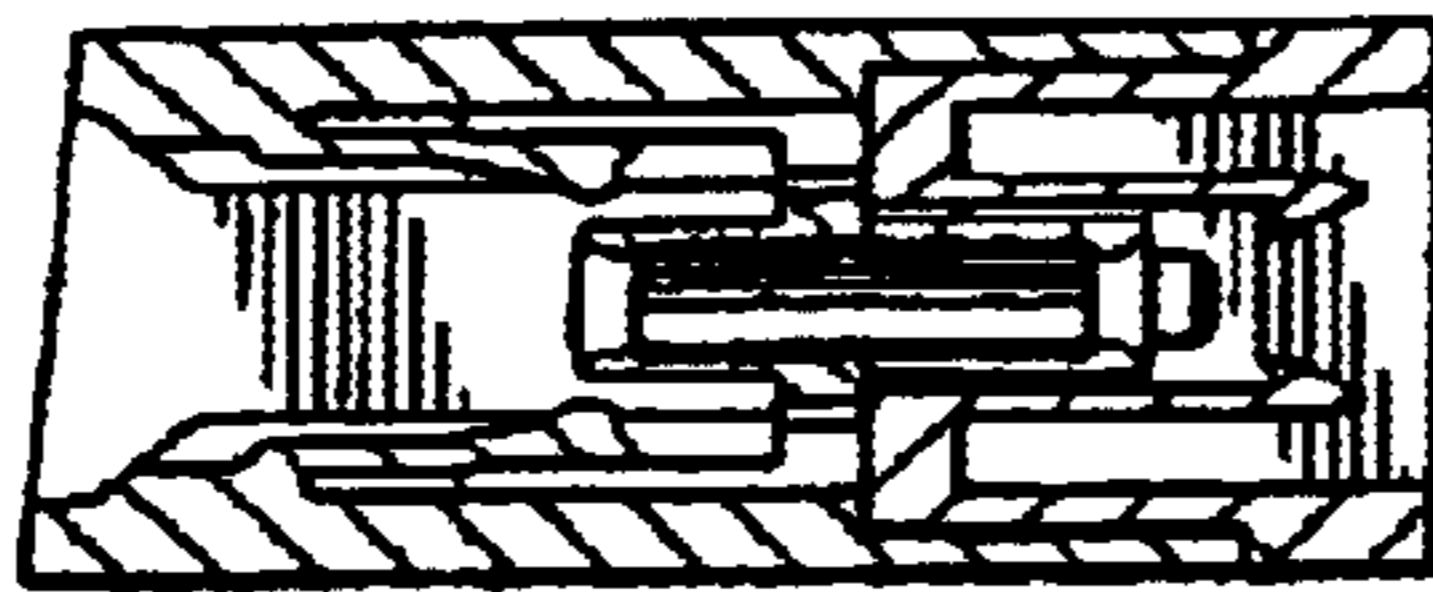


FIG. 7

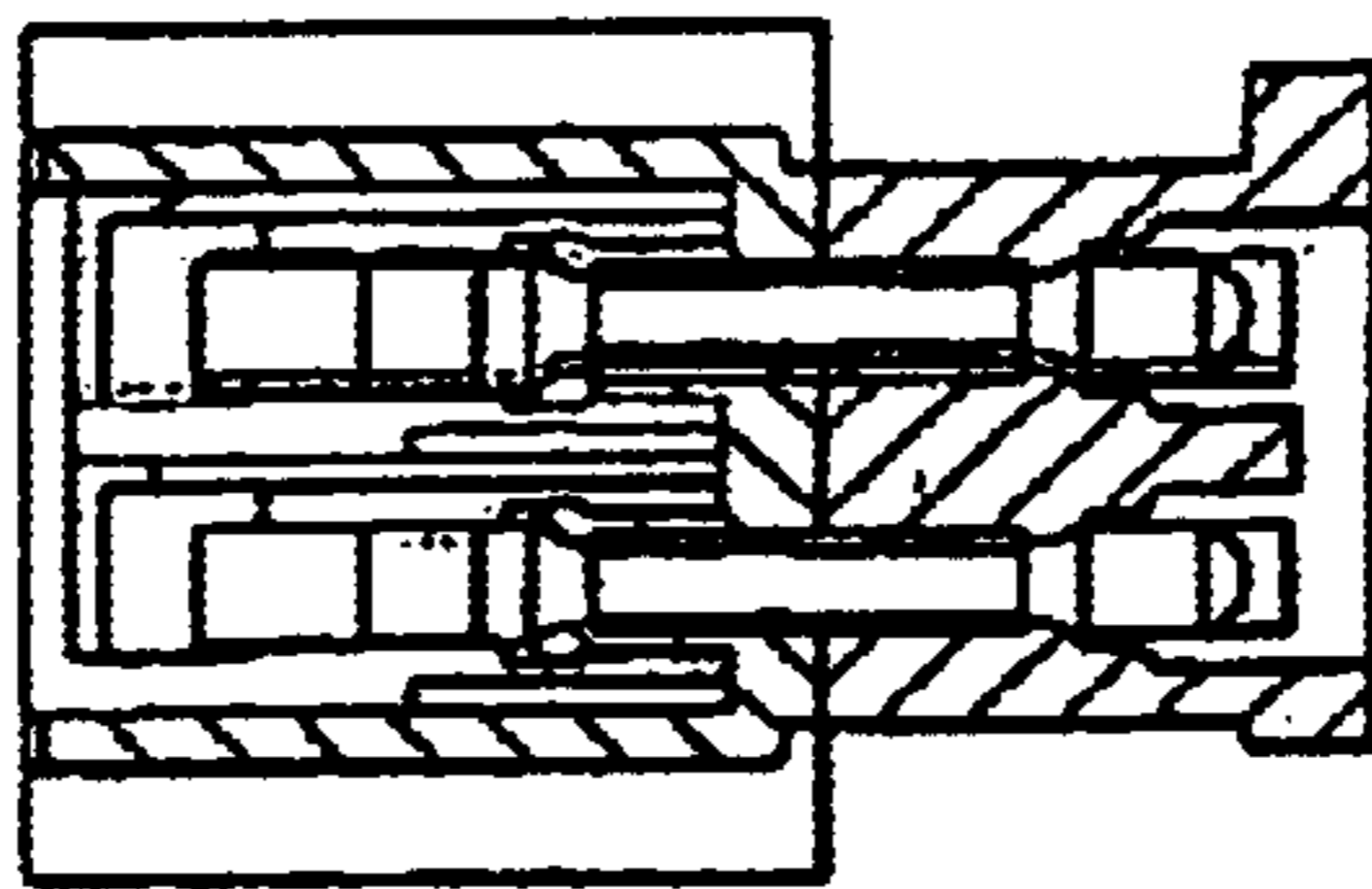
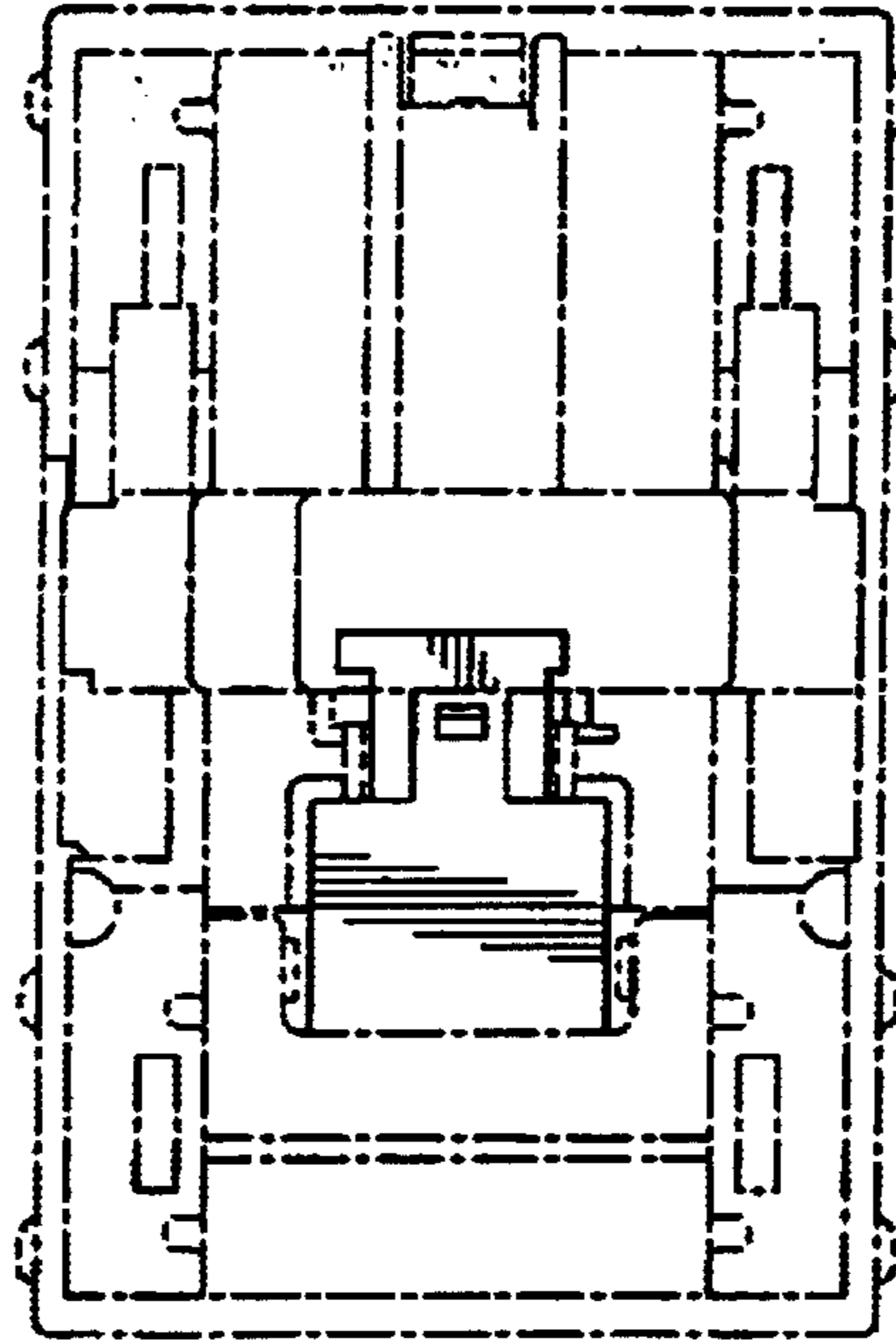
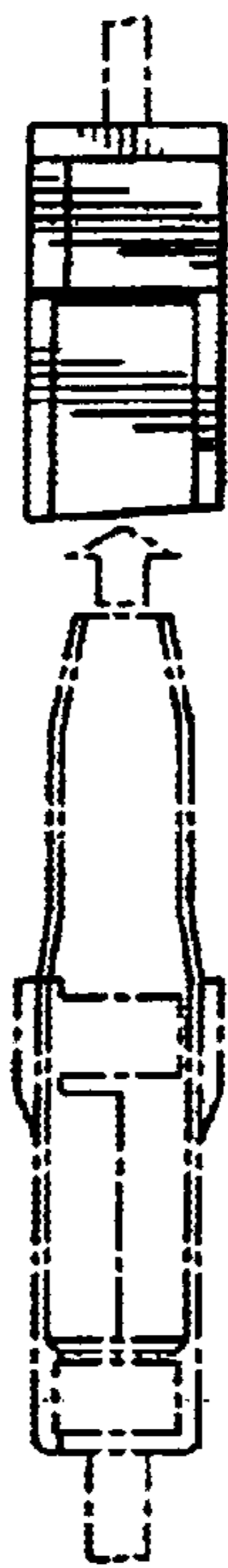


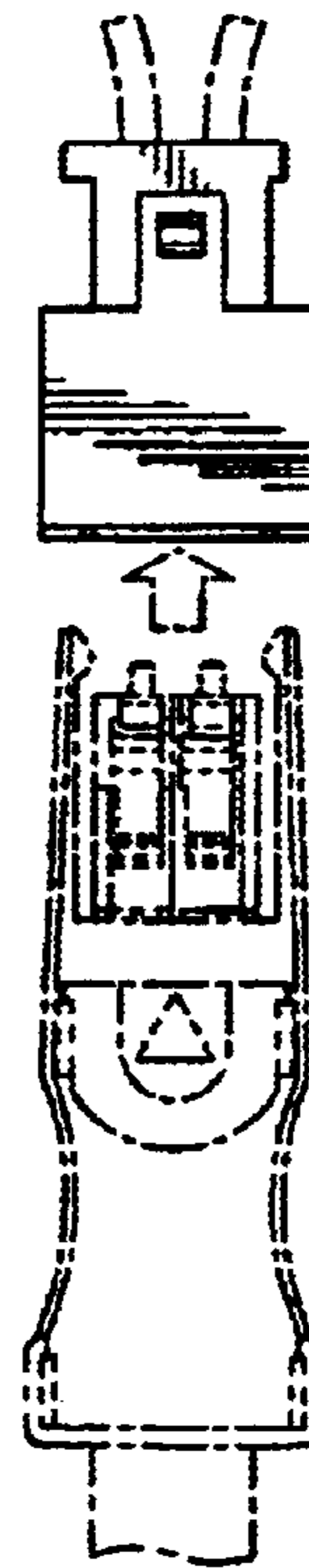
FIG. 8



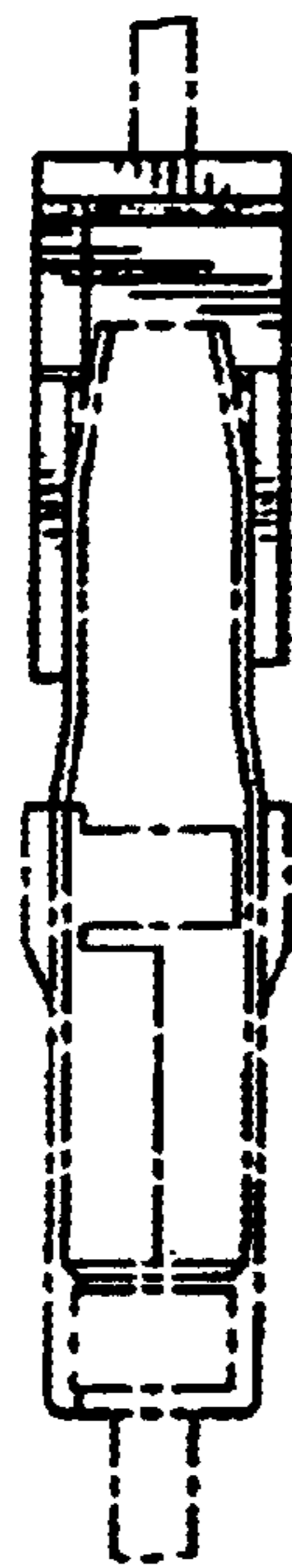
*FIG. 9*



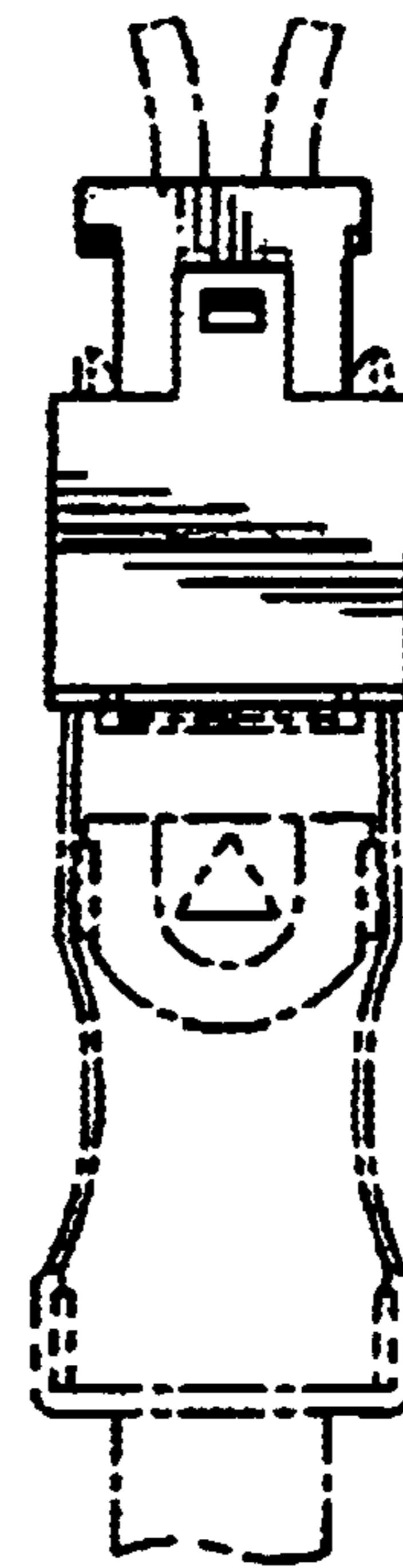
*FIG. 10*



*FIG. 11*



*FIG. 12*



*FIG. 13*