



US00D562258S

(12) **United States Design Patent** (10) **Patent No.:** **US D562,258 S**  
**Nakao et al.** (45) **Date of Patent:** **\*\* Feb. 19, 2008**

(54) **ELECTROMAGNETIC RELAY**

(75) Inventors: **Daisuke Nakao**, Kumamoto (JP);  
**Shinichi Furusho**, Kumamoto (JP)

(73) Assignee: **Omron Corporation**, Kyoto (JP)

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

(21) Appl. No.: **29/281,439**

(22) Filed: **Jun. 22, 2007**

**Related U.S. Application Data**

(62) Division of application No. 29/258,748, filed on Apr. 27, 2006, now Pat. No. Des. 553,576.

(30) **Foreign Application Priority Data**

Oct. 27, 2005 (JP) ..... D2005-031420  
Oct. 27, 2005 (JP) ..... D2005-031421

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

(52) **U.S. Cl.** ..... **D13/159**

(58) **Field of Classification Search** ..... D13/158,  
D13/159, 160, 161, 133, 149, 151, 182; 335/281,  
335/274, 202, 17, 135, 129, 128, 86, 84,  
335/83, 81, 80, 78; 200/238, 329; 361/819;  
174/564; 337/166, 198, 242, 255, 295; 439/290,  
439/397, 745, 855

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,010,438 A \* 3/1977 Scherer ..... 337/232  
4,349,804 A \* 9/1982 Gaia ..... 337/198  
4,672,352 A \* 6/1987 Takano ..... 337/264  
4,837,538 A 6/1989 Dittman  
D332,773 S 1/1993 Sato et al.  
D337,991 S 8/1993 Linton et al.  
5,262,751 A \* 11/1993 Kudo et al. .... 337/296  
5,266,046 A 11/1993 Bogiel  
5,266,056 A 11/1993 Baderschneider et al.  
D369,345 S 4/1996 Burroughs et al.  
5,528,213 A \* 6/1996 Kondo et al. .... 337/160

D409,145 S 5/1999 Yoshiura  
D410,226 S 5/1999 Yoshiura  
5,917,399 A \* 6/1999 Ishii ..... 337/290  
6,118,359 A 9/2000 Dittmann et al.  
6,163,244 A \* 12/2000 Endo et al. .... 337/160  
6,259,342 B1 7/2001 Malingowski et al.  
6,917,277 B2 \* 7/2005 Ohashi et al. .... 337/160  
6,940,375 B2 9/2005 Sanada et al.  
D534,129 S 12/2006 Park  
D535,625 S 1/2007 Park  
7,205,870 B2 4/2007 Sanada et al.  
2006/0071741 A1 4/2006 Bogdon et al.

**OTHER PUBLICATIONS**

EICHHOFFRelais/Relays, HD03005893 dated May 9, 1991.  
JP Office Action (and partial English language translation).

\* cited by examiner

*Primary Examiner*—Selina Sikder

*Assistant Examiner*—Thomas J Johannes

(74) *Attorney, Agent, or Firm*—Harness, Dickey & Pierce,  
P.L.C.

(57) **CLAIM**

The ornamental design for an electromagnetic relay, as shown and described.

**DESCRIPTION**

FIG. 1 is a front, top, right side perspective view of the electromagnetic relay showing our new design;

FIG. 2 is a rear, top, right side perspective view thereof;

FIG. 3 is a front elevational view thereof;

FIG. 4 is a rear elevational view thereof;

FIG. 5 is a top plan view thereof;

FIG. 6 is a bottom plan view thereof;

FIG. 7 is a right side elevational view thereof; and,

FIG. 8 is a left side elevational view thereof.

The broken lines shown in the drawings are for illustrative purposes only and form no part of the claimed design.

**1 Claim, 6 Drawing Sheets**

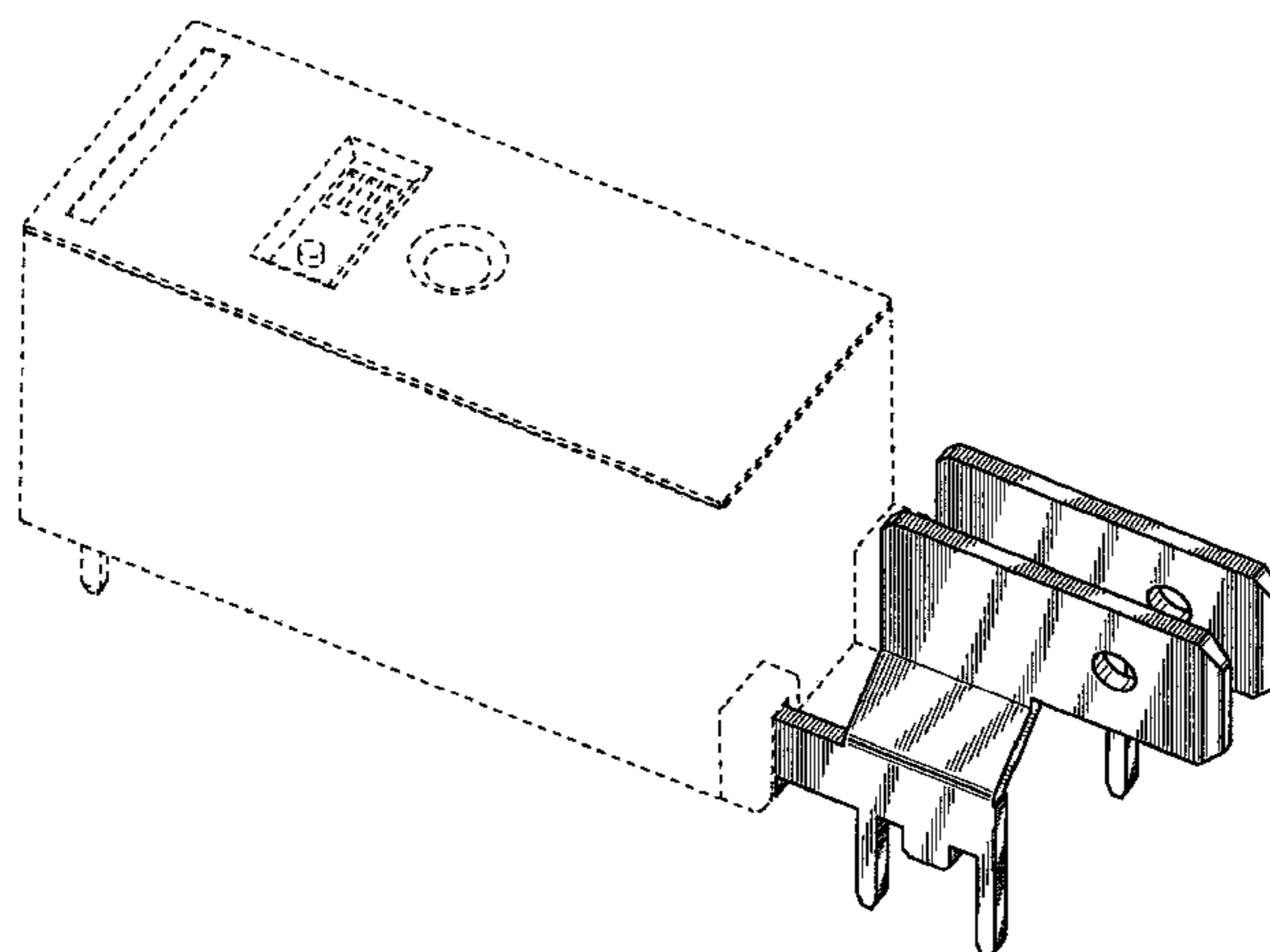
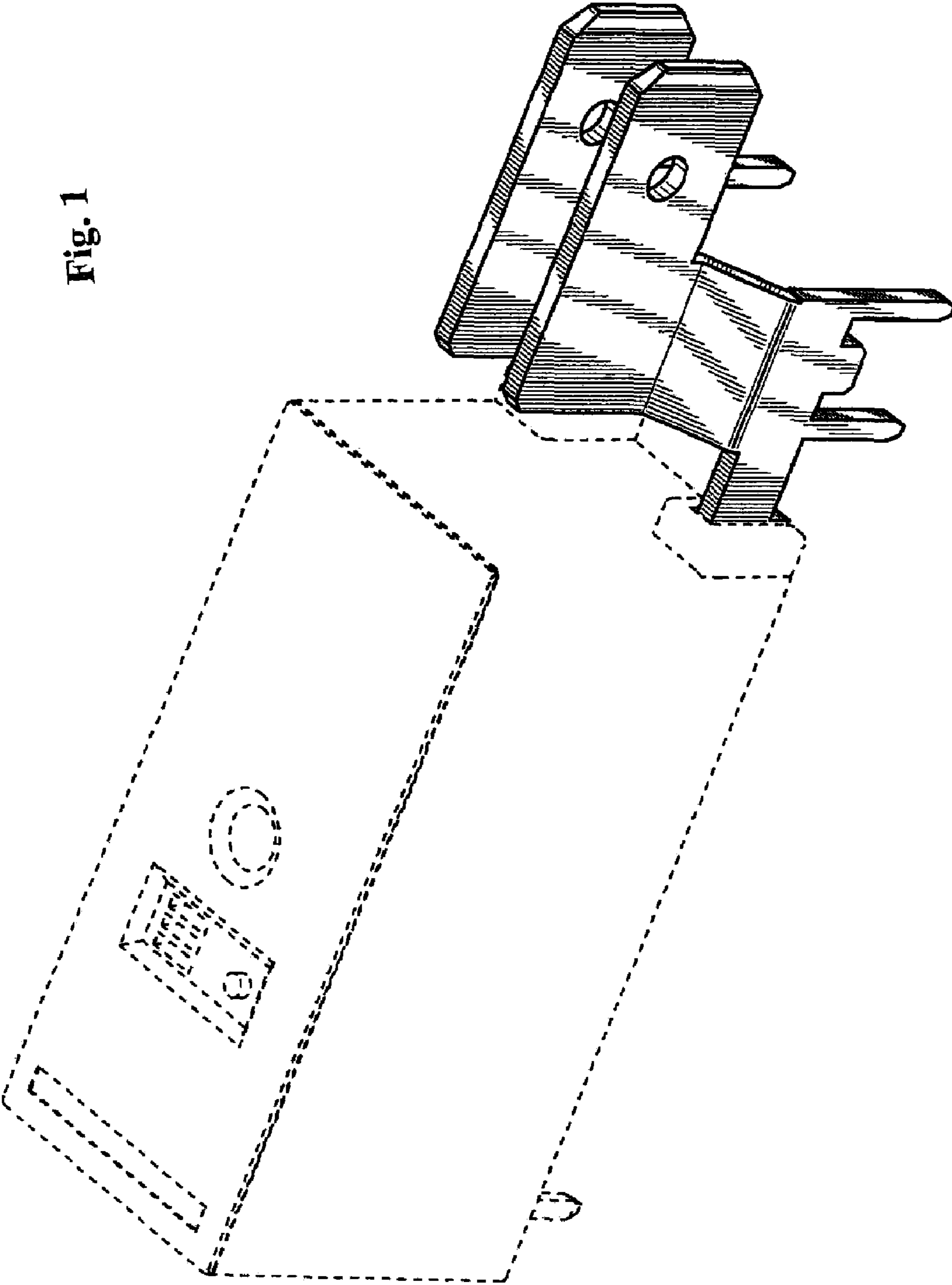


Fig. 1



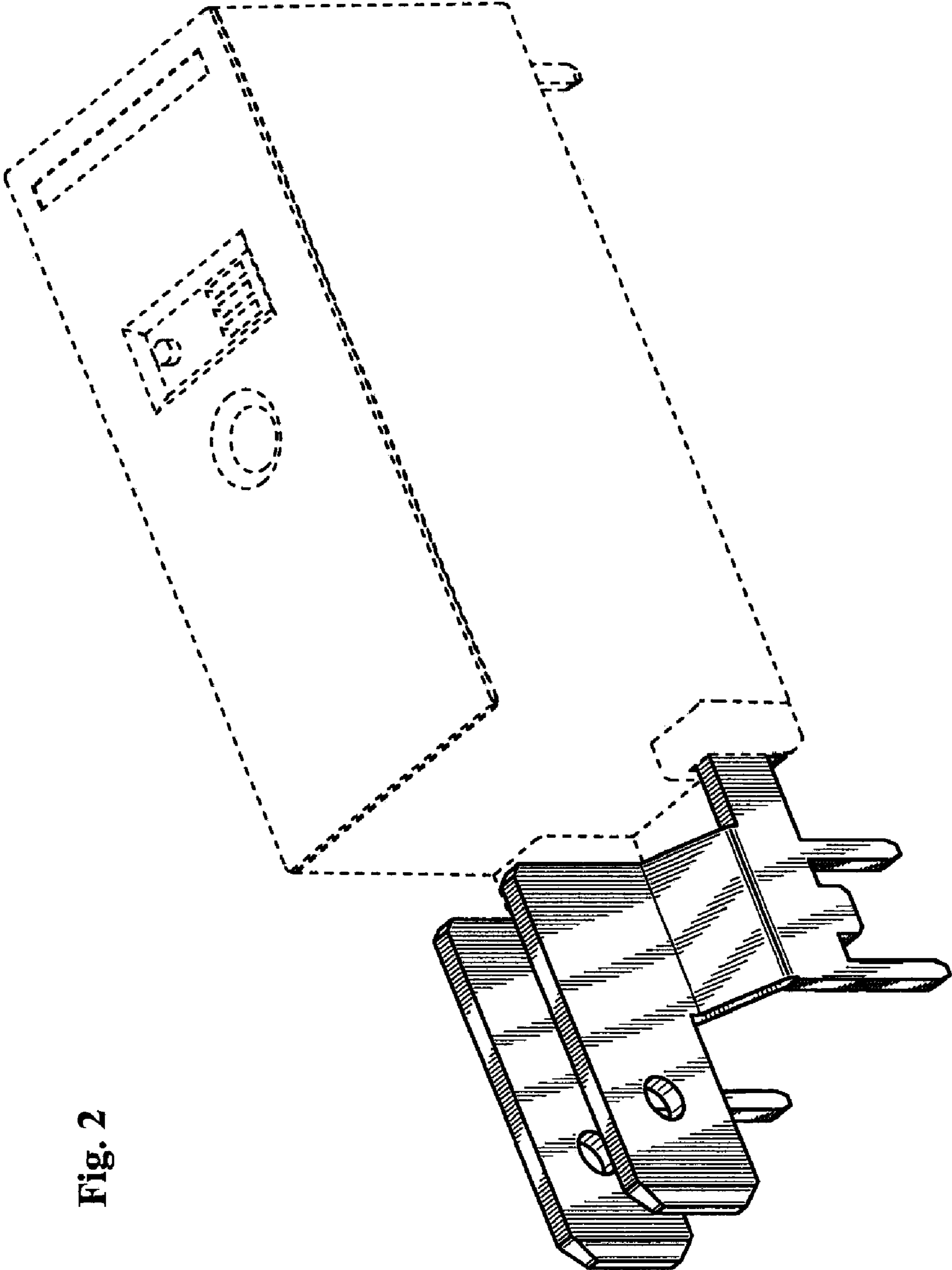


Fig. 2

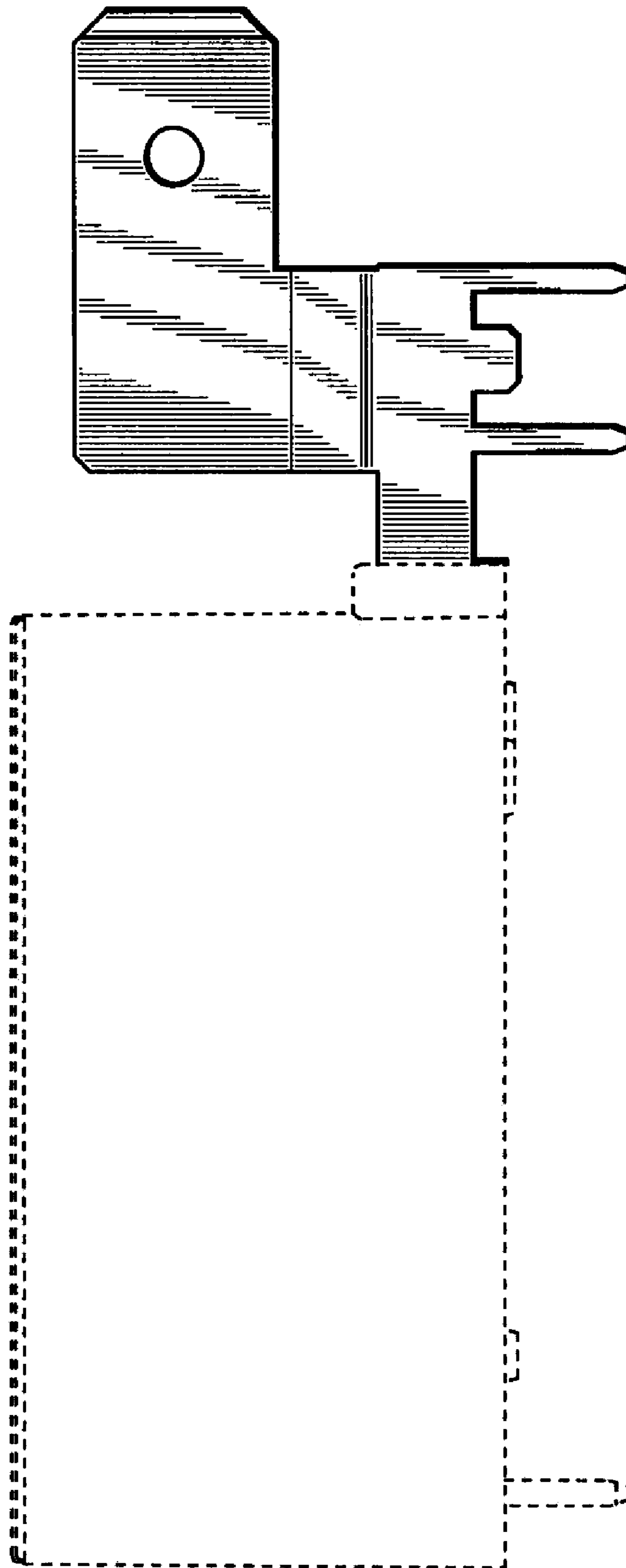


Fig. 3

Fig. 4

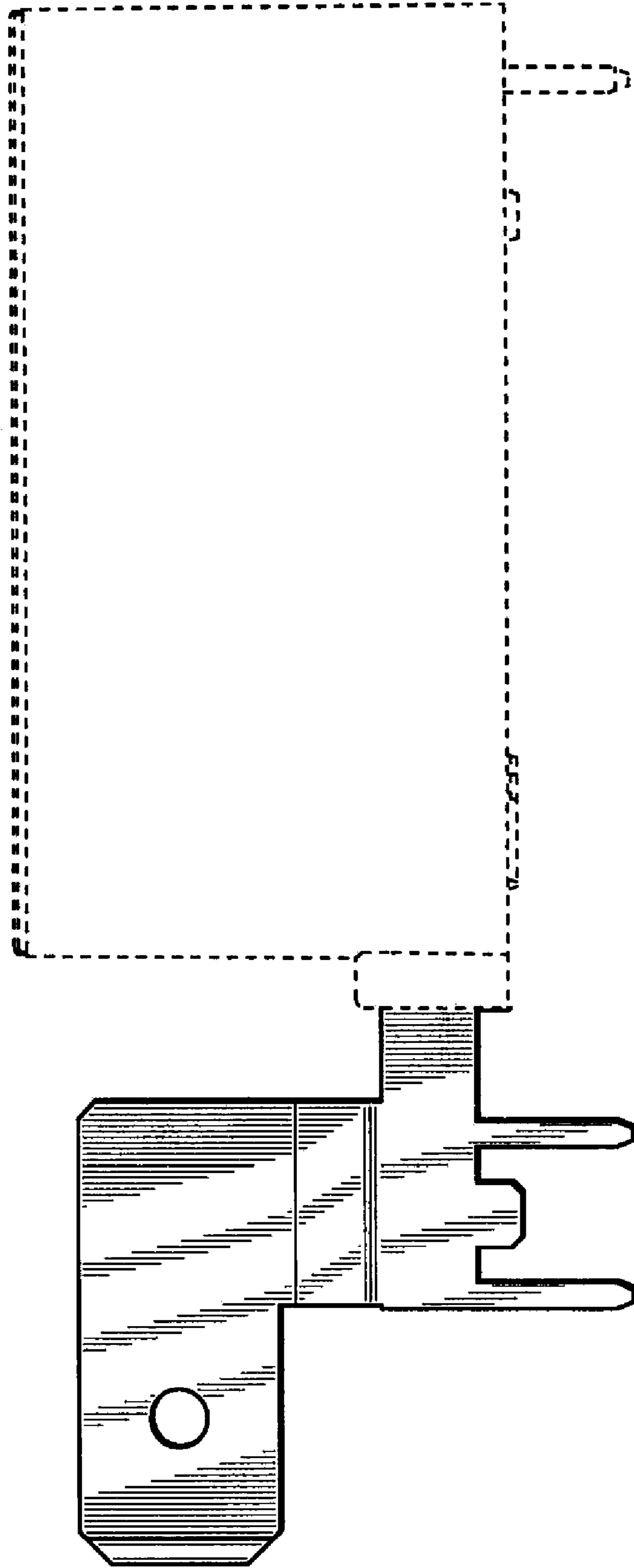


Fig. 5

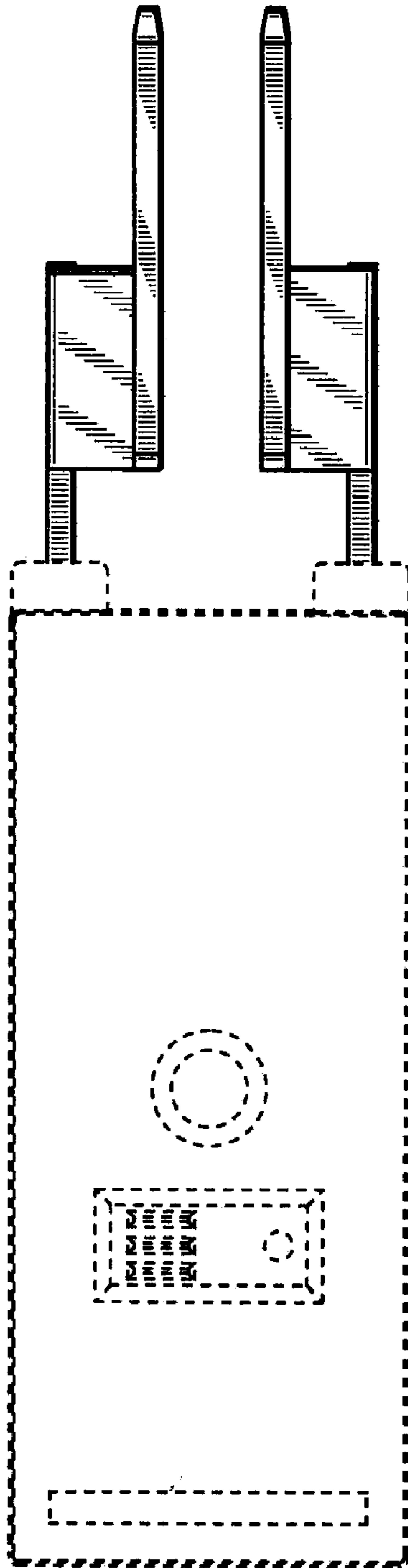


Fig. 6

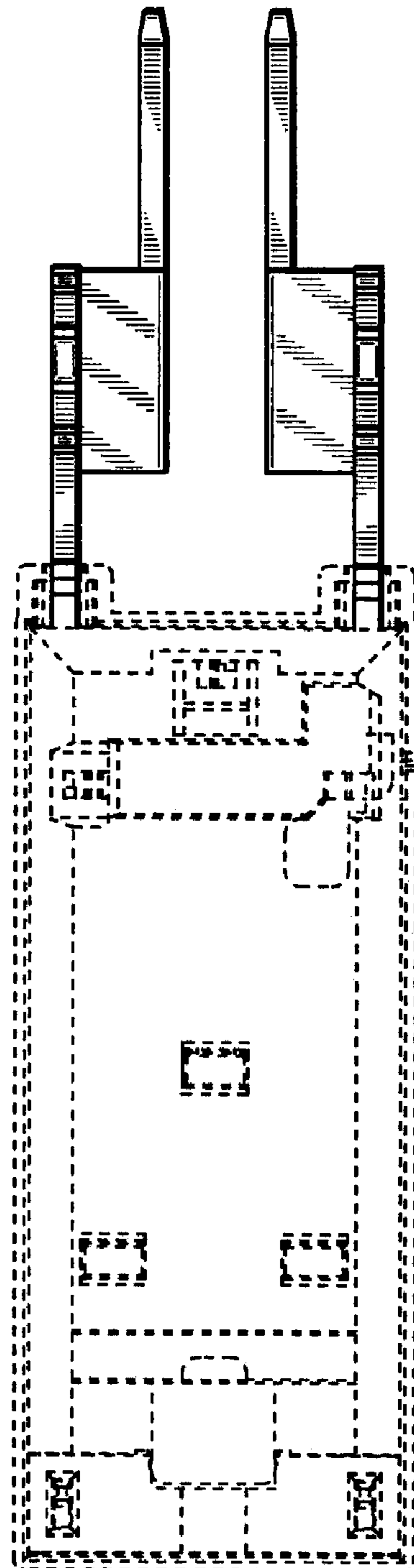




Fig. 8

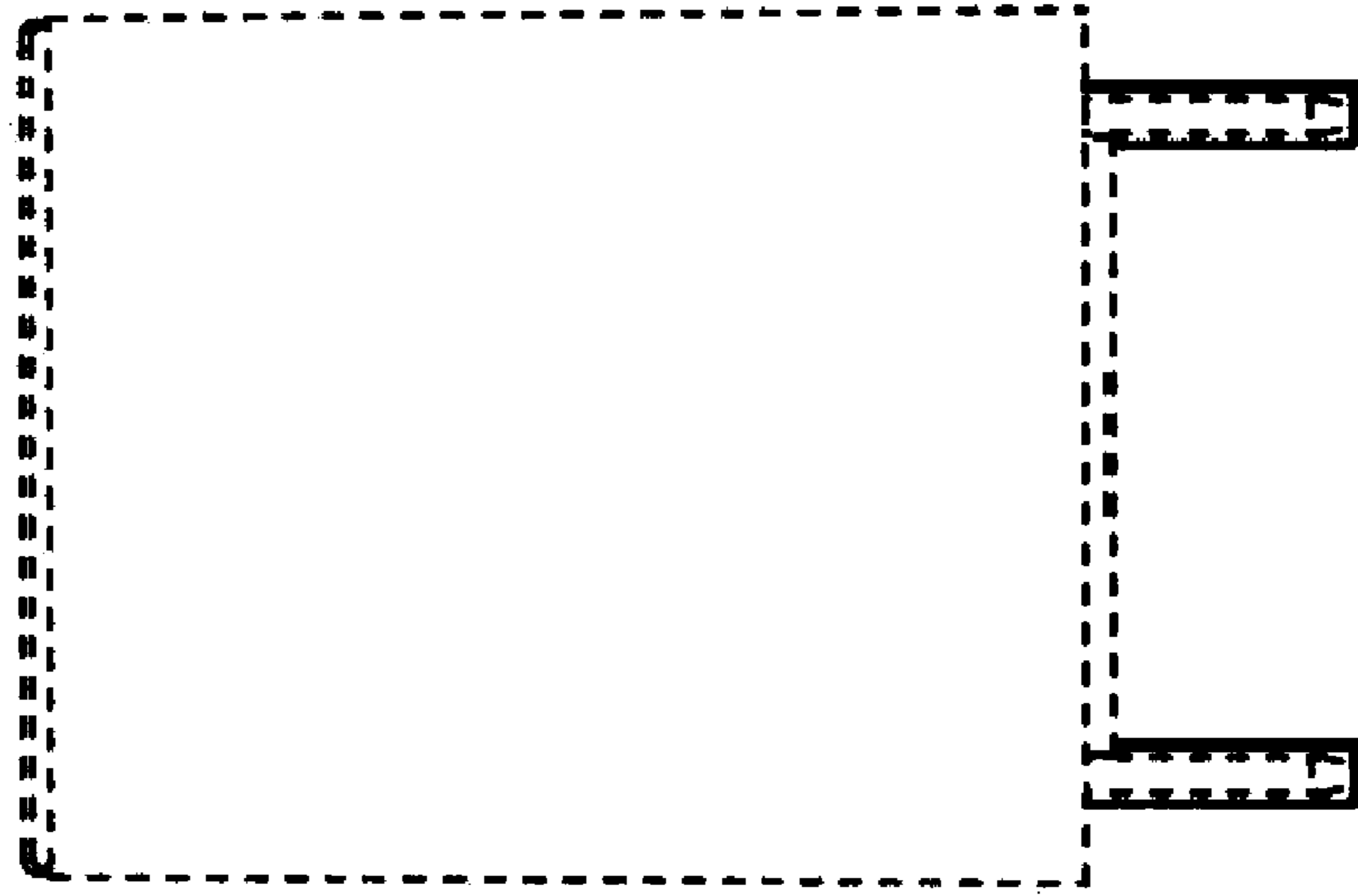


Fig. 7

