



US00D537047S

(12) **United States Design Patent** (10) **Patent No.:** **US D537,047 S**  
**Asakawa** (45) **Date of Patent:** **\*\* Feb. 20, 2007**

(54) **LIGHT EMITTING DIODE**

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- (73) Assignee: **Nichia Corporation**, Anan (JP)
- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/236,747**
- (22) Filed: **Aug. 23, 2005**

**Related U.S. Application Data**

- (63) Continuation of application No. 10/655,323, filed on Sep. 5, 2003, now Pat. No. 6,953,952.

(30) **Foreign Application Priority Data**

- Sep. 5, 2002 (JP) ..... 2002-259482
- May 13, 2003 (JP) ..... 2003-133874

- (51) **LOC (8) Cl.** ..... **13-03**
- (52) **U.S. Cl.** ..... **D13/180**
- (58) **Field of Classification Search** ..... D13/180;  
D26/2; 257/79, 80, 81, 82, 88, 89, 95, 98,  
257/99, 100, 433, 434, 666; 313/483, 498,  
313/500; 361/820; 362/235, 249, 555, 800  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 6,274,890 B1 8/2001 Oshio et al.
- 6,747,293 B2 6/2004 Nitta et al.
- D493,429 S \* 7/2004 Ishida ..... D13/180
- D495,667 S 9/2004 Kim et al.
- D495,668 S 9/2004 Kim et al.
- D500,292 S \* 12/2004 Ishida ..... D13/180
- D500,294 S \* 12/2004 Ishida ..... D13/180
- D501,831 S \* 2/2005 Ishida ..... D13/180
- 6,953,952 B2 \* 10/2005 Asakawa ..... 257/103
- D511,148 S \* 11/2005 Ishida ..... D13/180
- 2001/0010449 A1 8/2001 Chiu et al.
- 2004/0041220 A1 3/2004 Kwak et al.
- 2005/0121688 A1 \* 6/2005 Nagai et al. .... 257/99

**FOREIGN PATENT DOCUMENTS**

- JP 6-204569 A 7/1994
- JP 7-214600 A 8/1995
- JP 8-264842 A 10/1996
- JP 984224 S 7/1997
- JP 984224-1 S 10/1997
- JP 1048229 S 9/1999
- JP 2000-196153 A 7/2000

**OTHER PUBLICATIONS**

Surface Mount Type LED—Light Emitting Diode, Product Guide, Jan. 2001, 6 pages, Cat. No. 01033K, Nichia Corporation, Japan.

Surface Mount Type LED Light Emitting Diode, Product Guide, Feb. 2002, 26 pages, Cat. No. 02025K, Nichia Corporation, Japan.

\* cited by examiner

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(57) **CLAIM**

I claim the ornamental design for a light emitting diode, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a light emitting diode showing my new design;

FIG. 2 is a top plan view thereof;

FIG. 3 is a left side elevation view thereof;

FIG. 4 is a front elevation view thereof;

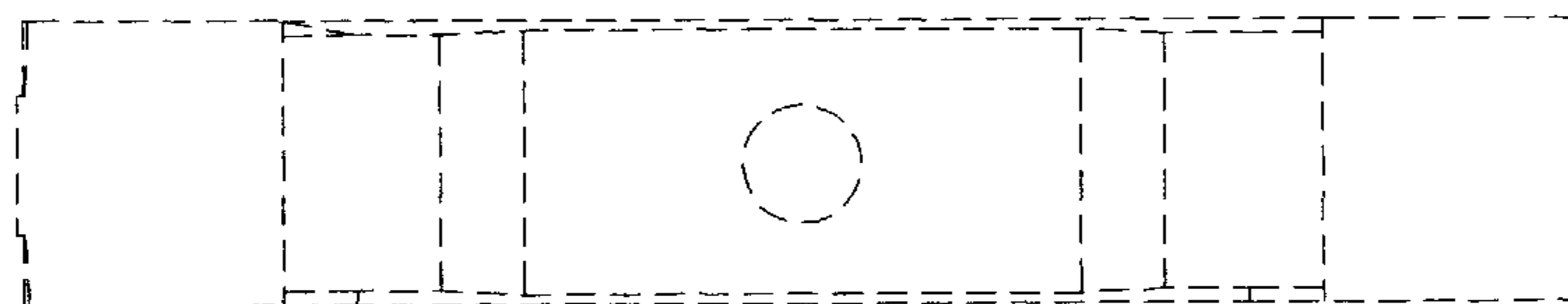
FIG. 5 is a right side elevation view thereof;

FIG. 6 is a bottom plan view thereof; and,

FIG. 7 is a rear elevation view thereof.

The dash-dash broken line showing of the environment is for illustrative purpose only and forms no part of the claimed design. The dash-dot broken lines define the bounds of the claimed design and form no part thereof.

**1 Claim, 2 Drawing Sheets**



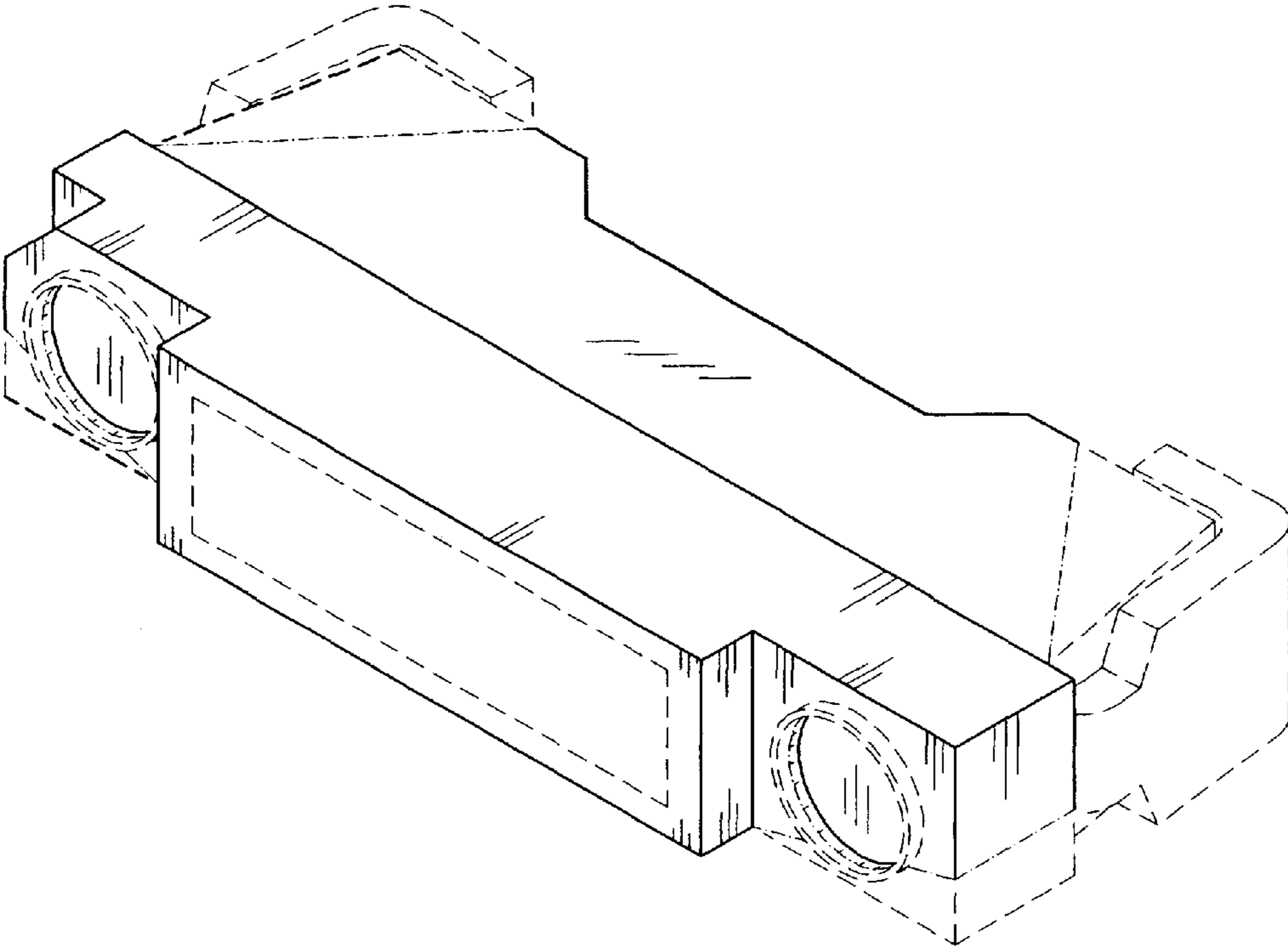


FIG. 1

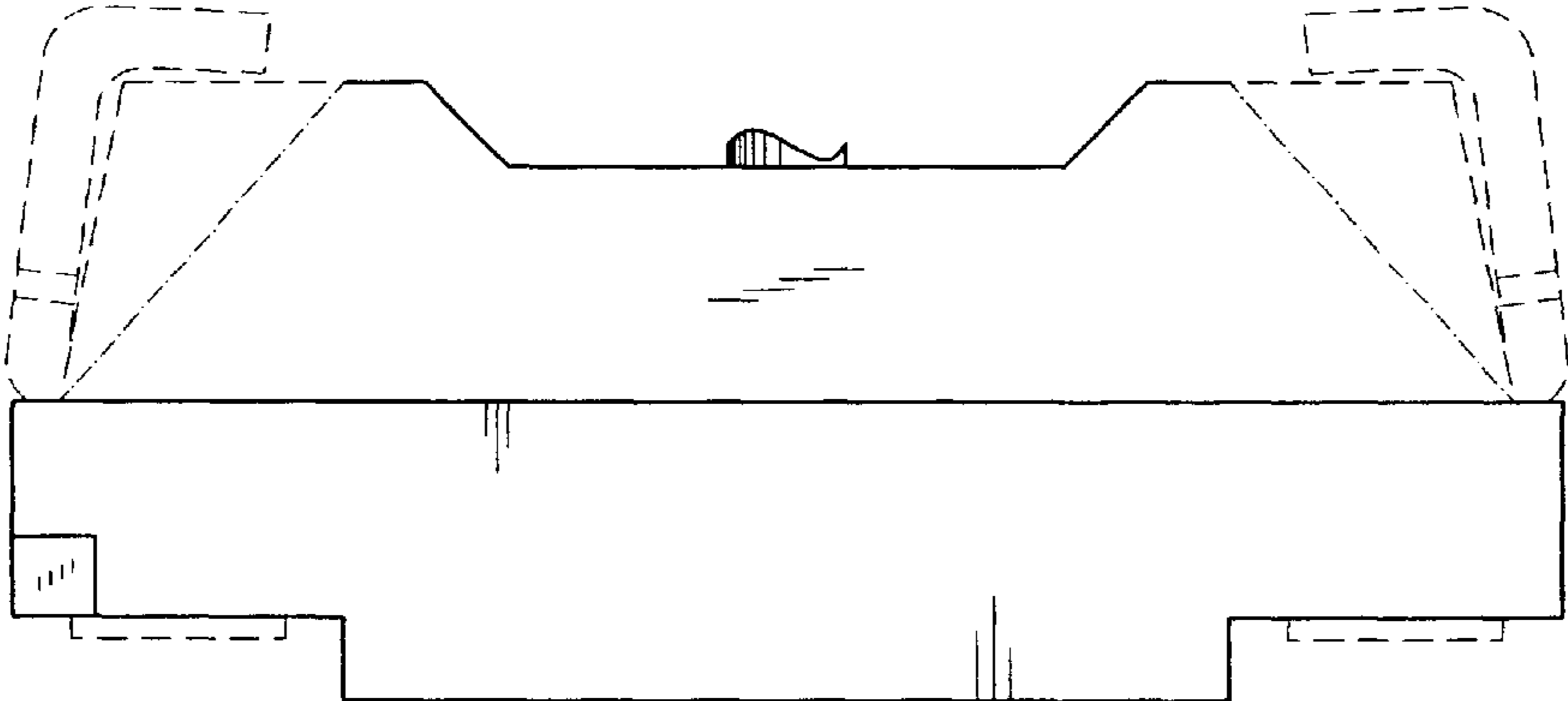


FIG. 2

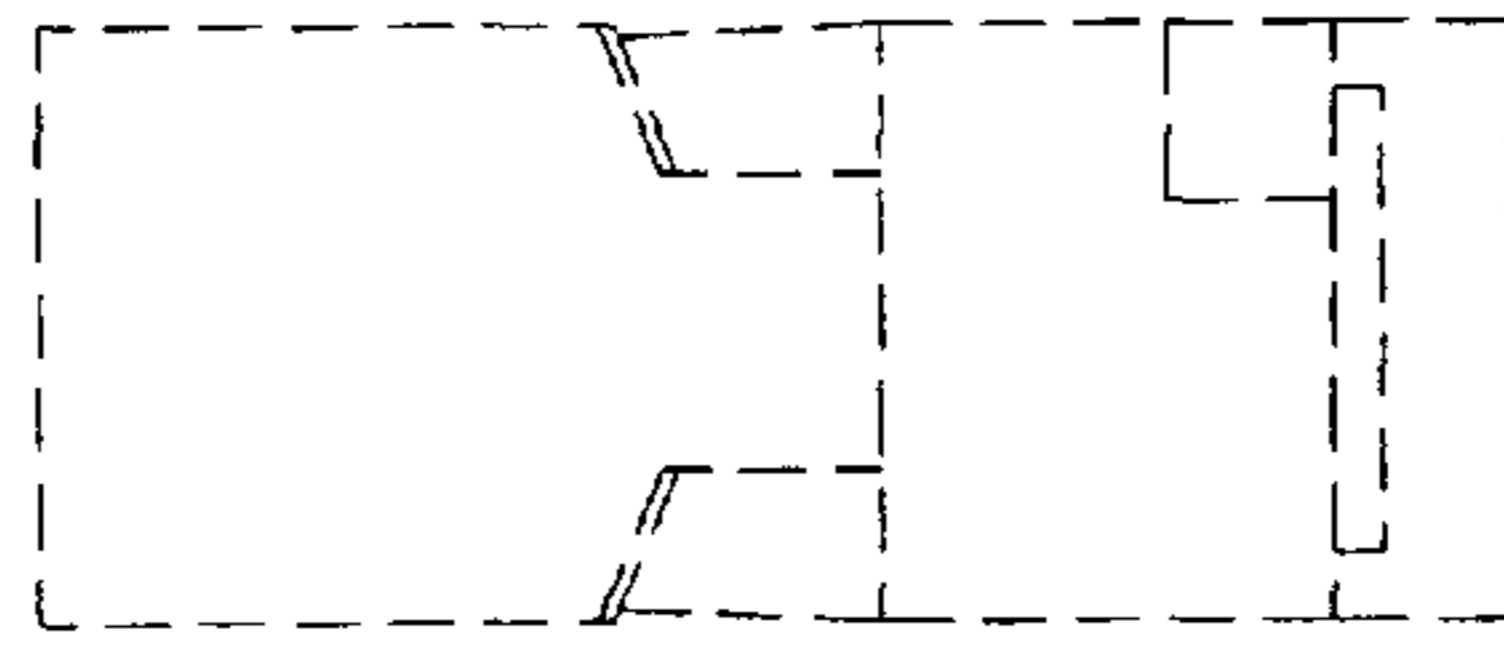


FIG. 3

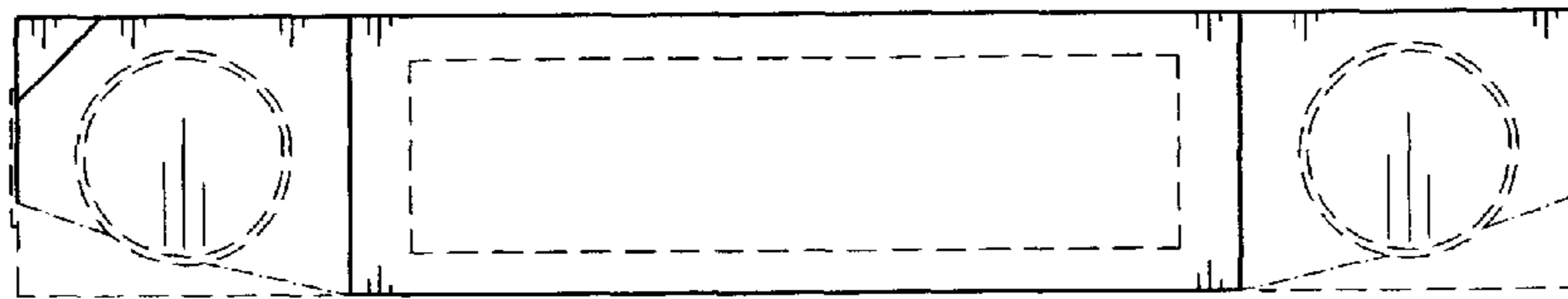


FIG. 4

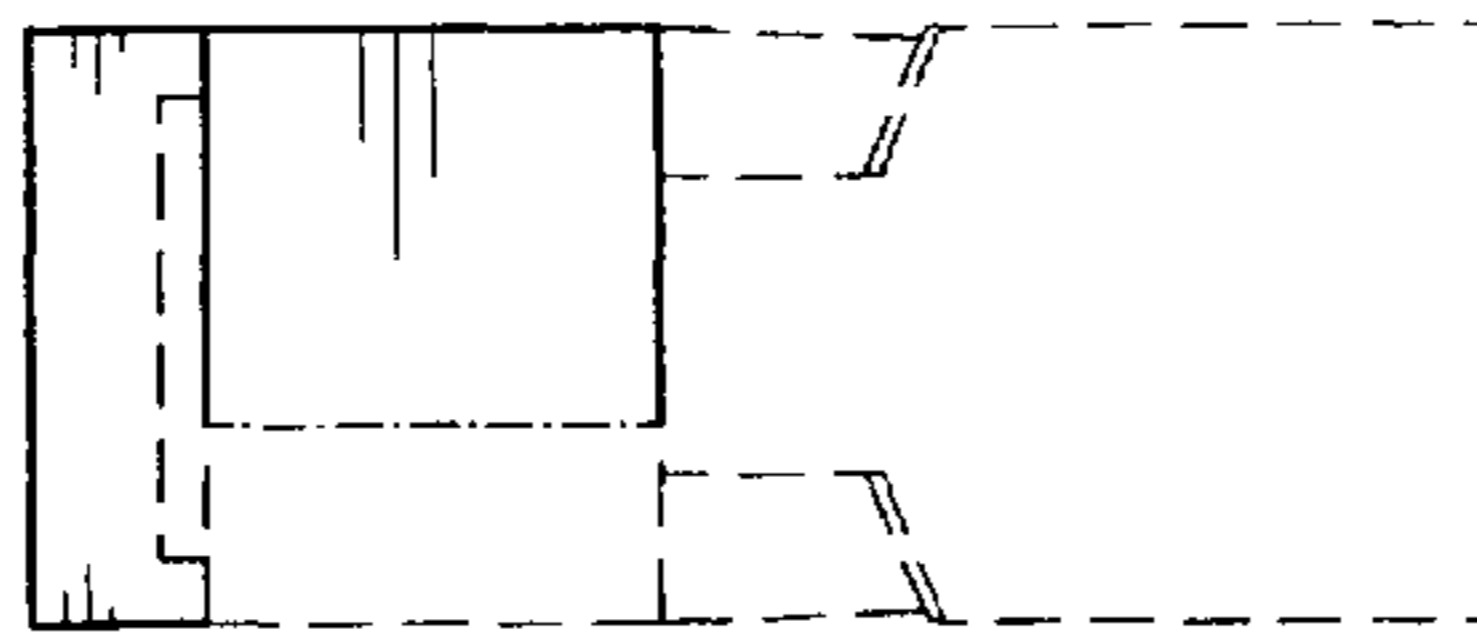


FIG. 5

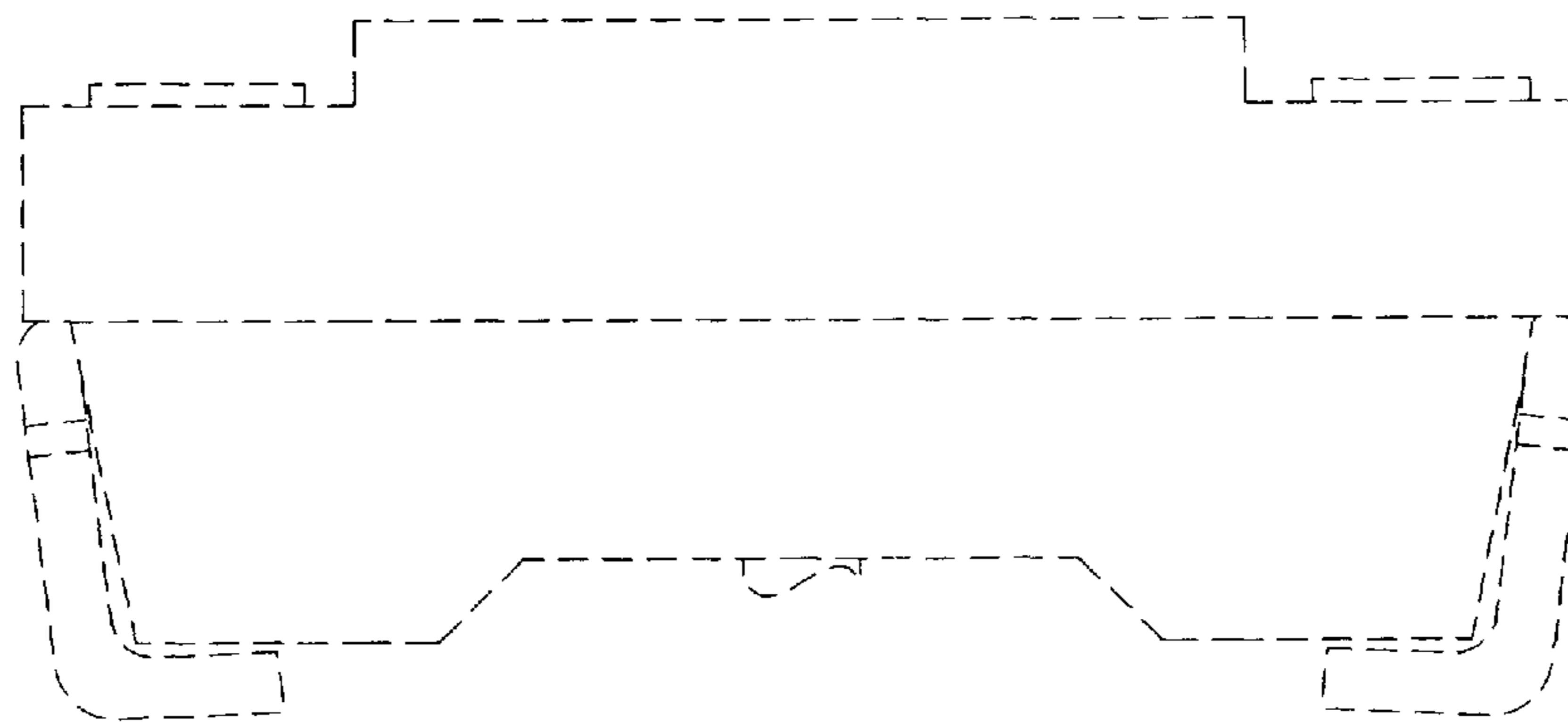


FIG. 6

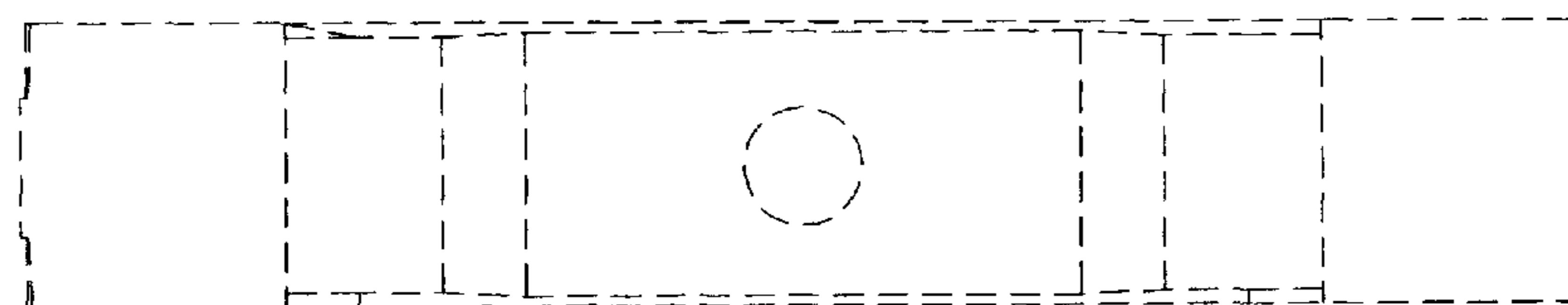


FIG. 7