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(12) **United States Design Patent**  
**Hoshiba**

(10) **Patent No.:** **US D506,449 S**  
(45) **Date of Patent:** **\*\* Jun. 21, 2005**

- (54) **LIGHT EMITTING DIODE**
- (75) Inventor: **Toshiyuki Hoshiba, Anan (JP)**
- (73) Assignee: **Nichia Corporation, Anan (JP)**
- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/212,719**
- (22) Filed: **Sep. 8, 2004**

- RE36,614 E 3/2000 Lumbard et al.
- D432,095 S 10/2000 Seeger et al.
- D437,798 S 2/2001 Kiba et al.
- D439,351 S 3/2001 Kiba et al.
- 6,315,432 B1 11/2001 Kuo
- D453,745 S 2/2002 Suenaga
- D478,877 S 8/2003 Hoshiba
- D482,337 S 11/2003 Kamada

**Related U.S. Application Data**

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(30) **Foreign Application Priority Data**

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- Nov. 21, 2001 (JP) ..... 2001-034164
- Nov. 21, 2001 (JP) ..... 2001-034165
- Nov. 21, 2001 (JP) ..... 2001-034166
- Nov. 21, 2001 (JP) ..... 2001-034167

- (51) **LOC (8) Cl.** ..... **13-03**
- (52) **U.S. Cl.** ..... **D13/180**
- (58) **Field of Search** ..... D13/180, 182;  
D10/104, 114; 257/76, 79, 88, 89, 93-99,  
434, 676, 678, 687, 690, 698, 787; 313/498,  
499, 500; 372/45; 361/760, 820, 226, 241,  
249, 250, 307, 555, 800

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 4,152,624 A 5/1979 Knaebel
- 4,466,050 A 8/1984 Lockard
- 4,959,761 A 9/1990 Critelli et al.
- D312,979 S 12/1990 Oesterheld et al.
- D314,919 S 2/1991 Villar
- 5,045,895 A 9/1991 Yoshida et al.
- 5,226,053 A 7/1993 Cho et al.
- 5,325,271 A 6/1994 Hutchisson
- 5,528,079 A 6/1996 McLver

**FOREIGN PATENT DOCUMENTS**

- JP D984224 S 7/1997
- JP D984224-1 S 10/1997
- JP D1077515 S 7/2000

**OTHER PUBLICATIONS**

Surface Mount Type LED—Light Emitting Diode—, Product Guide, May 2001, 6 pages, Cat. No. 01055K, Nichia Corporation, Japan.

*Primary Examiner*—Stella Reid  
*Assistant Examiner*—Selina Sikder  
(74) *Attorney, Agent, or Firm*—Smith Patent Office

(57) **CLAIM**

I claim the ornamental design for the 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 of the light emitting diode according to FIG. 1;

FIG. 3 is a left side elevational view of the light emitting diode according to FIG. 1;

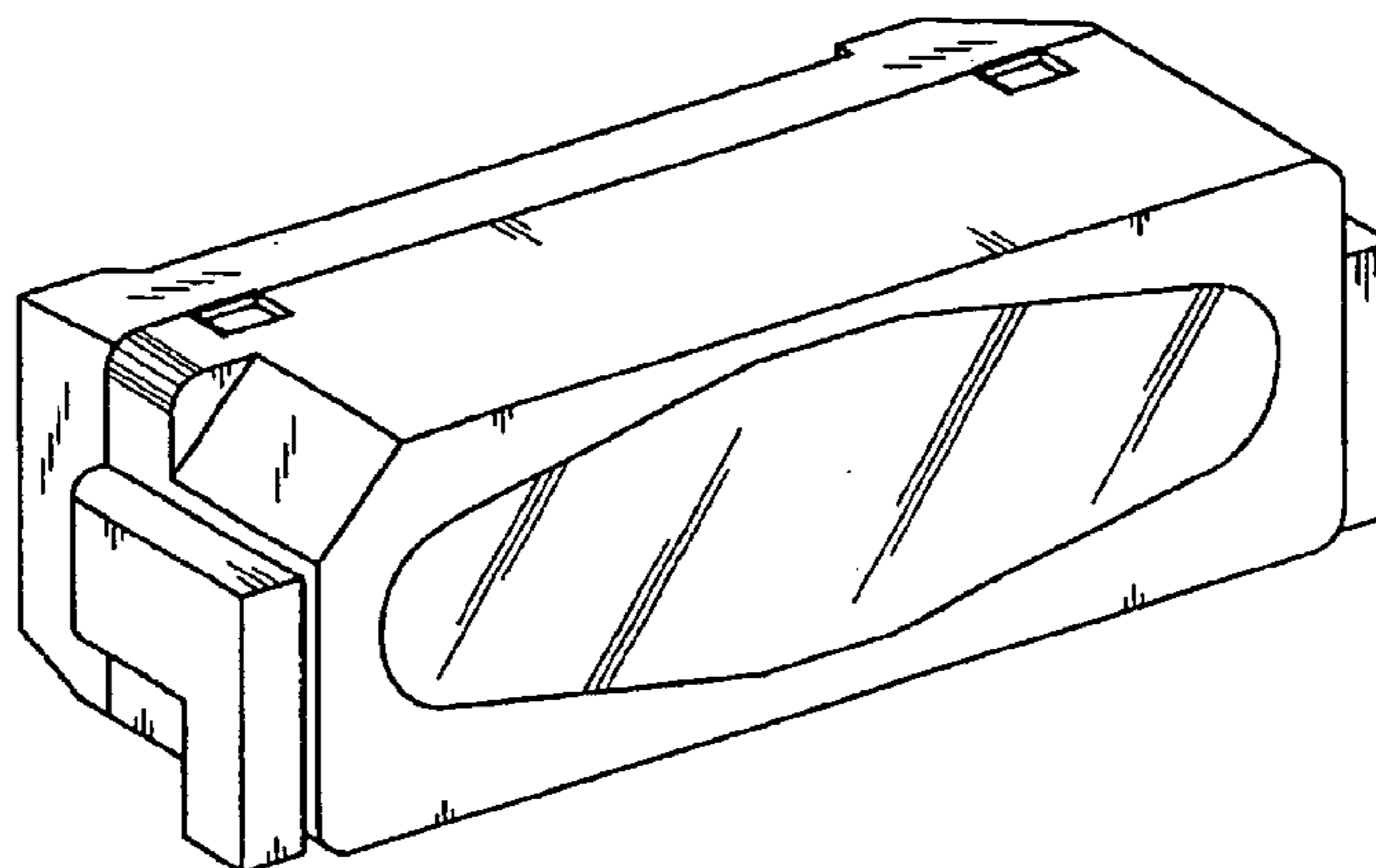
FIG. 4 is a front elevational view of the light emitting diode according to FIG. 1;

FIG. 5 is a right side elevational view of the light emitting diode according to FIG. 1;

FIG. 6 is a bottom plan view of the light emitting diode according to FIG. 1; and,

FIG. 7 is a rear elevational view of the light emitting diode according to FIG. 1.

**1 Claim, 2 Drawing Sheets**



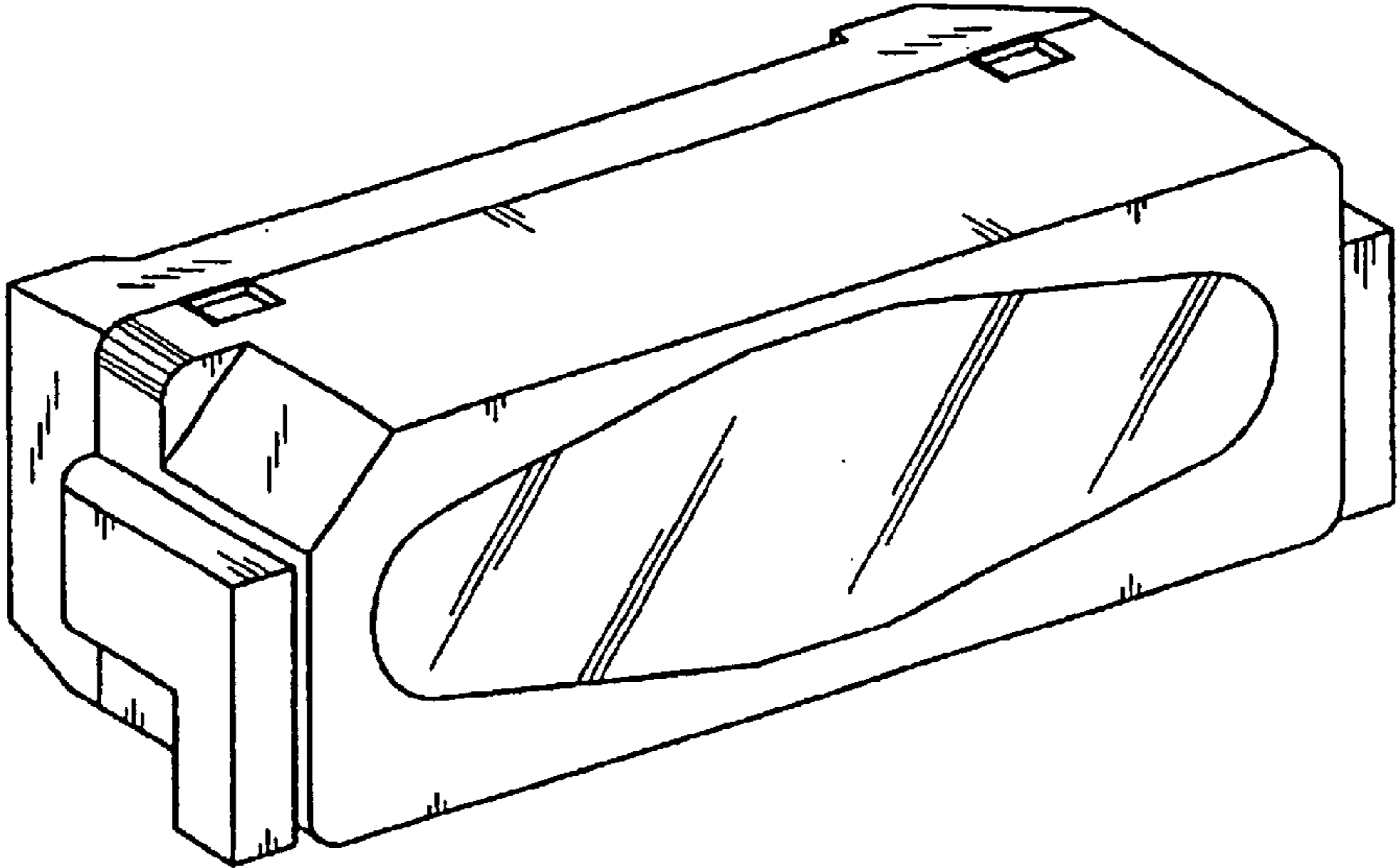


FIG. 1

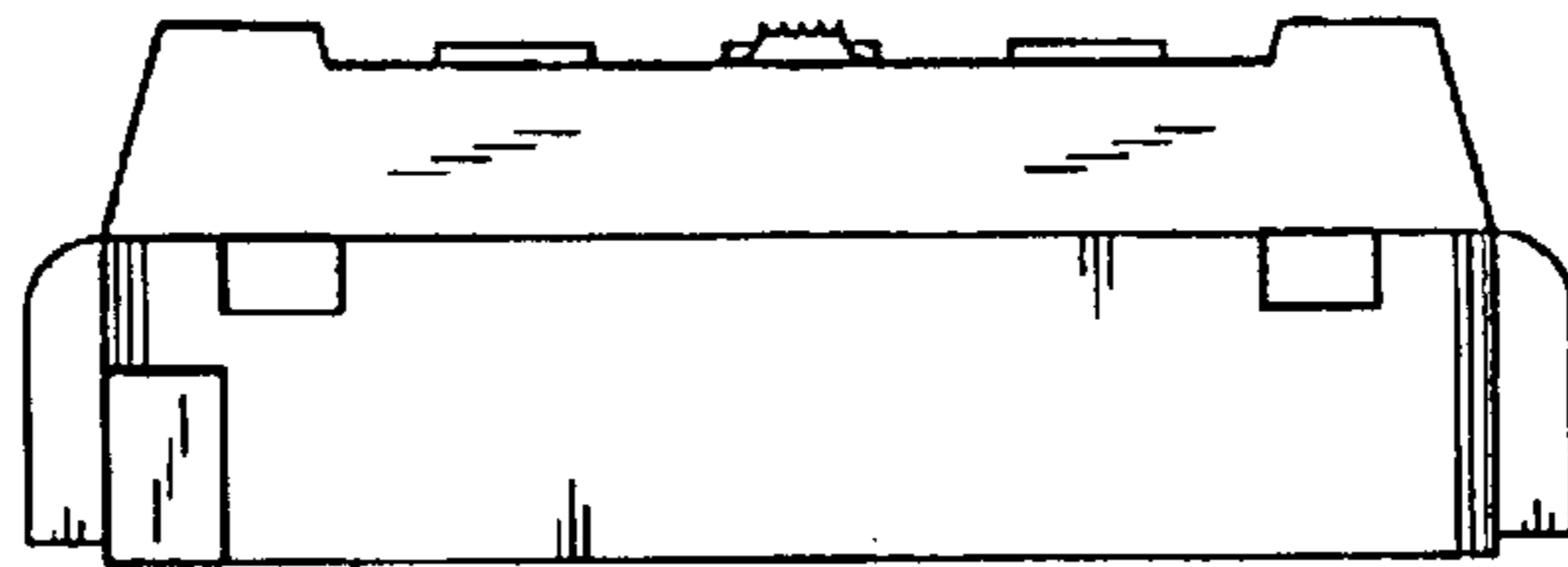


FIG. 2

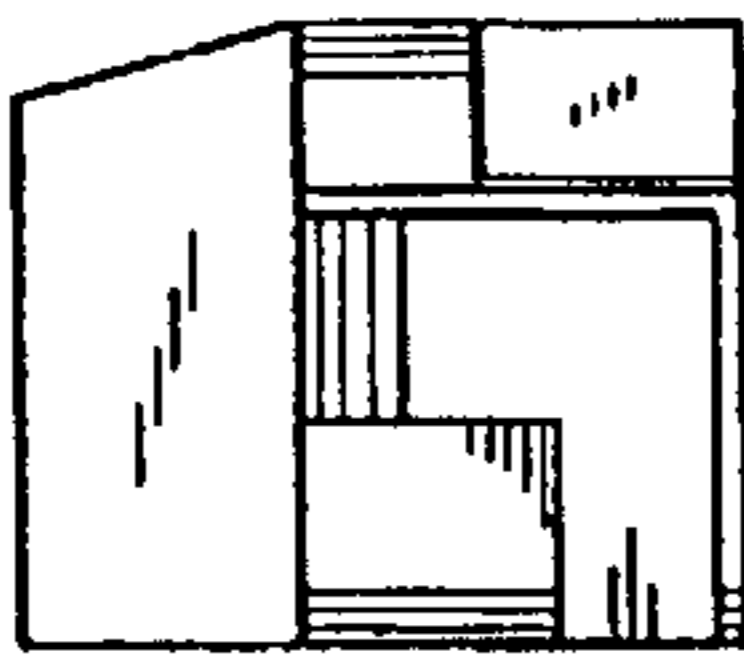


FIG. 3

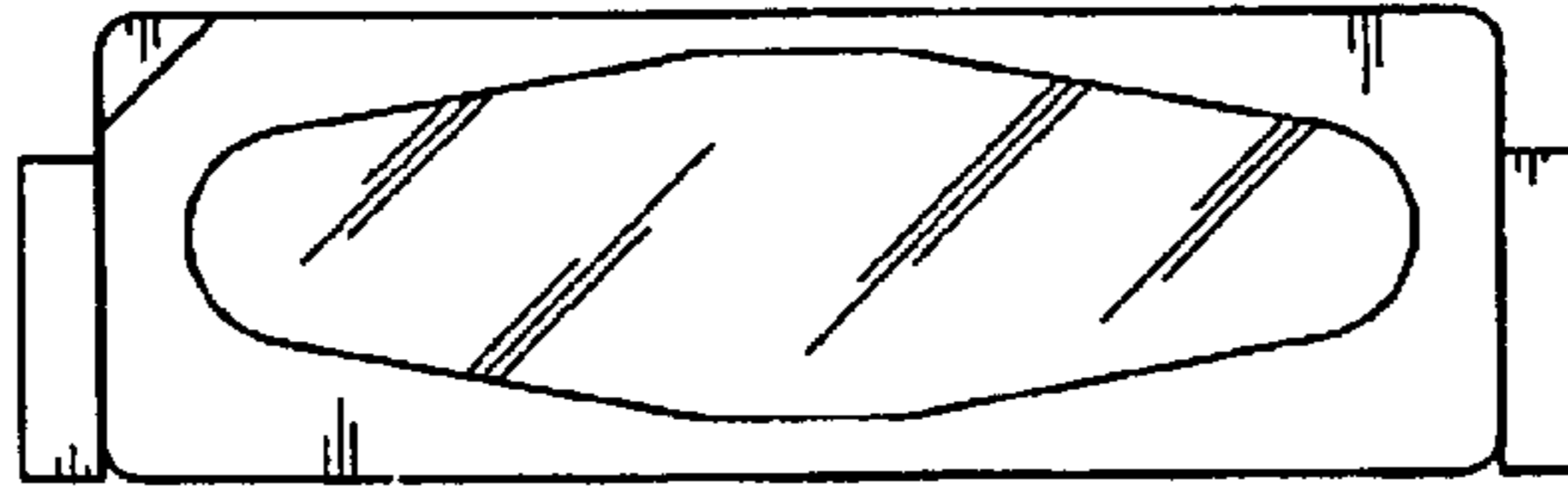


FIG. 4

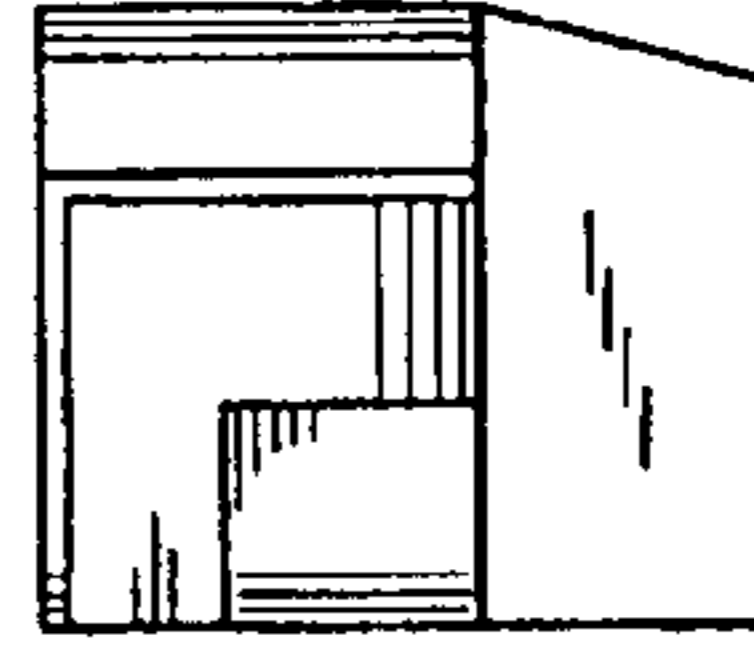


FIG. 5

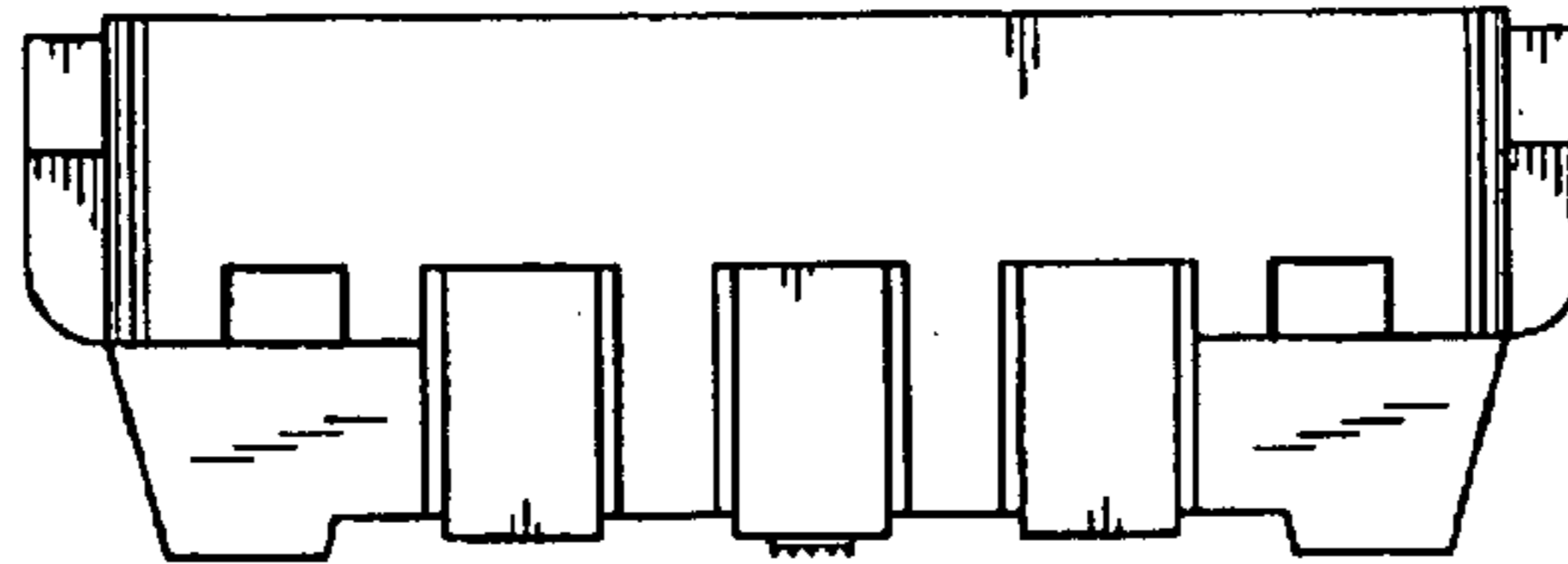


FIG. 6

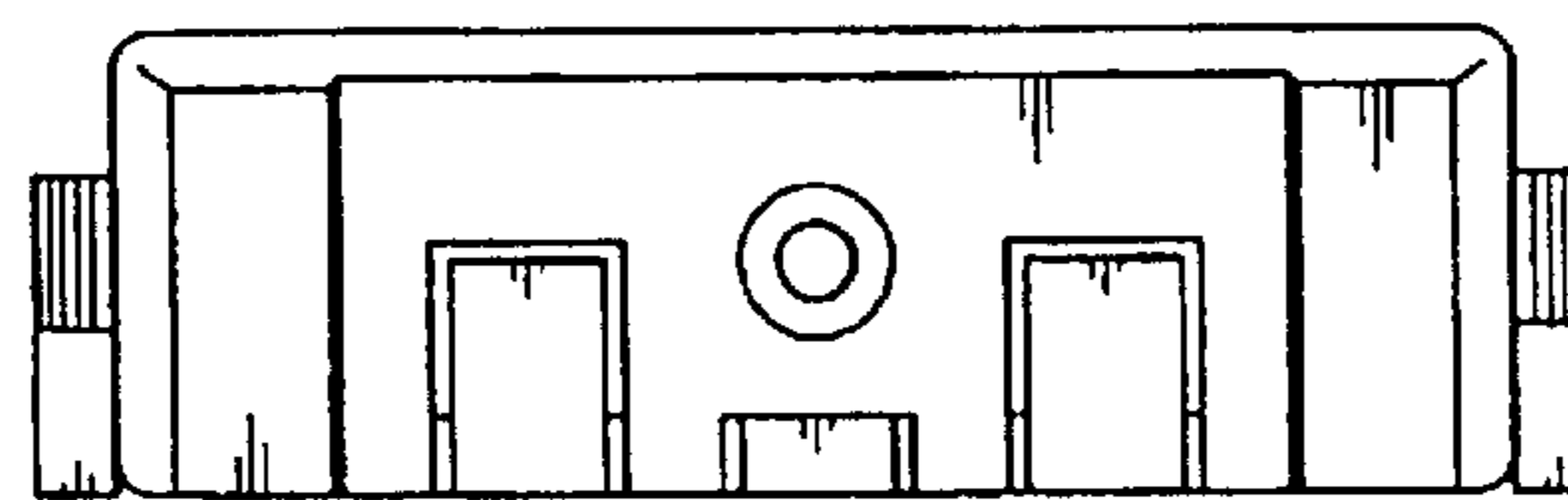


FIG. 7