



US00D499384S

(12) **United States Design Patent** (10) **Patent No.:** **US D499,384 S**
Kamada (45) **Date of Patent:** **** Dec. 7, 2004**

(54) **LIGHT EMITTING DIODE**

- (75) Inventor: **Kazuhiro Kamada**, Tokushima-ken (JP)
- (73) Assignee: **Nichia Corporation**, Anan (JP)
- (**) Term: **14 Years**
- (21) Appl. No.: **29/186,594**
- (22) Filed: **Jul. 21, 2003**

Related U.S. Application Data

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- Dec. 28, 2001 (JP) 2001-038917
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- (51) **LOC (7) Cl.** **13-03**
- (52) **U.S. Cl.** **D13/180; D13/182**
- (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; 362/226,
241, 249, 250, 307, 555, 800

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,783,353 A 1/1974 Pankove

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

JP D1095890 S 1/2001

(List continued on next page.)

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

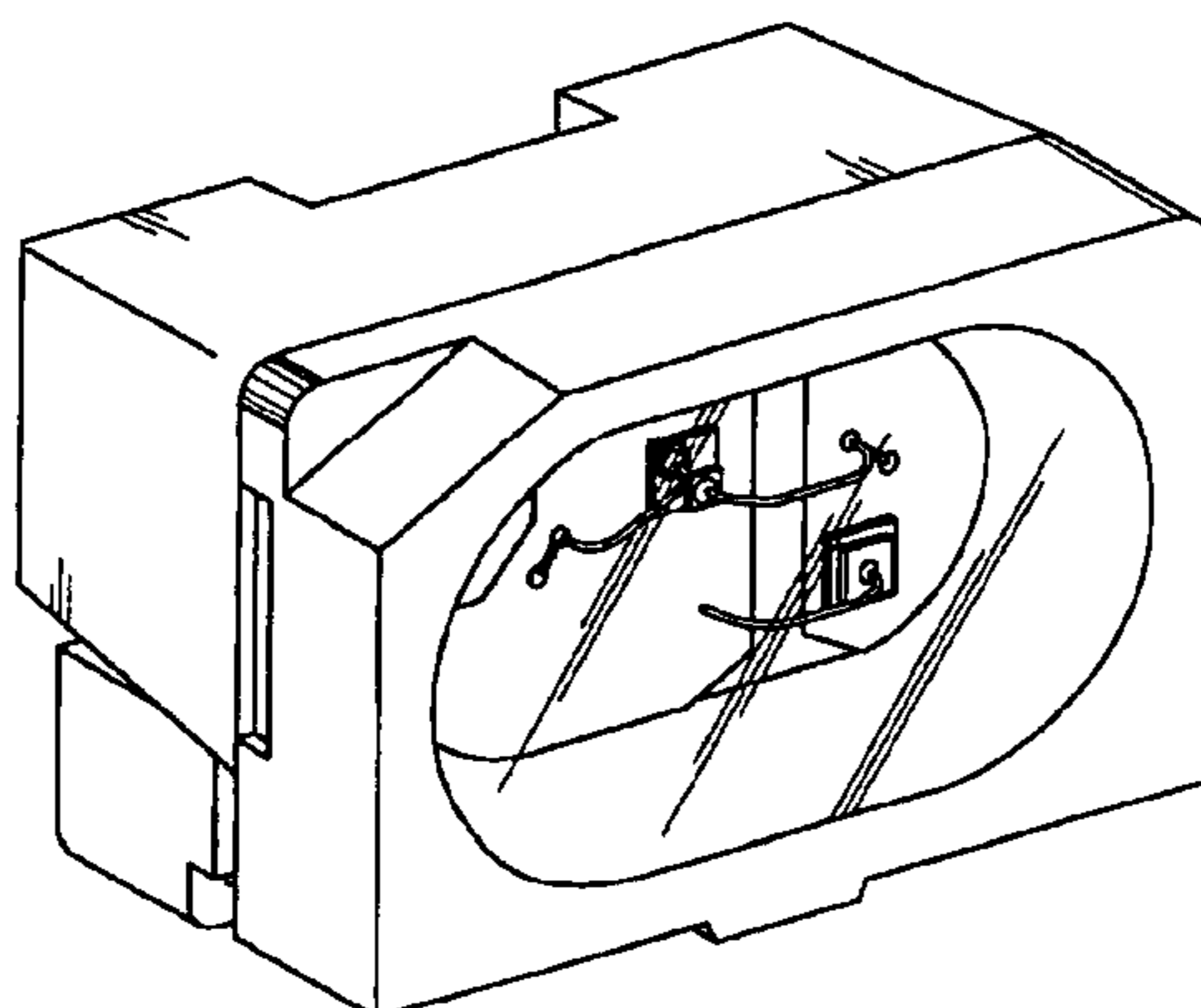
(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a plan view of a light emitting diode showing my new design;
 FIG. 2 is a left view of the light emitting diode according to the embodiment of FIG. 1;
 FIG. 3 is a front elevational view of the light emitting diode according to the embodiment of FIG. 1;
 FIG. 4 is a right view of the light emitting diode according to the embodiment of FIG. 1;
 FIG. 5 is a bottom plan view of the light emitting diode according to the embodiment of FIG. 1;
 FIG. 6 is a rear view of the light emitting diode according to the embodiment of FIG. 1;
 FIG. 7 is a perspective view of a light emitting diode according to another embodiment of my new design;
 FIG. 8 is a plan view of the light emitting diode according to the embodiment of FIG. 7;
 FIG. 9 is a left view of the light emitting diode according to the embodiment of FIG. 7;
 FIG. 10 is a front elevational view of the light emitting diode according to the embodiment of FIG. 7;
 FIG. 11 is a right view of the light emitting diode according to the embodiment of FIG. 7;
 FIG. 12 is a bottom plan view of the light emitting diode according to the embodiment of FIG. 7; and,
 FIG. 13 is a rear view of the light emitting diode according to the embodiment of FIG. 7.

1 Claim, 3 Drawing Sheets



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U.S. PATENT DOCUMENTS

4,127,792 A 11/1978 Nakata
5,226,053 A 7/1993 Cho et al.
5,534,718 A 7/1996 Chang
RE36,614 E 3/2000 Lombard et al.
D432,095 S 10/2000 Seeger et al.
6,174,070 B1 1/2001 Takamura et al.
D437,798 S 2/2001 Kiba et al.
D439,351 S 3/2001 Kiba et al.
6,386,733 B1 5/2002 Ohkohdo et al.
6,450,663 B1 9/2002 Reinbach
D477,579 S * 7/2003 Suenaga D13/180

6,610,563 B1 * 8/2003 Waitl et al. 438/166
D482,337 S * 11/2003 Kamada D13/182
D490,782 S * 6/2004 Suenaga D13/180

FOREIGN PATENT DOCUMENTS

JP D1095891 S 1/2001
JP D1106536 S 4/2001
JP D1106839 S 4/2001
JP D1106840 S 4/2001

* cited by examiner

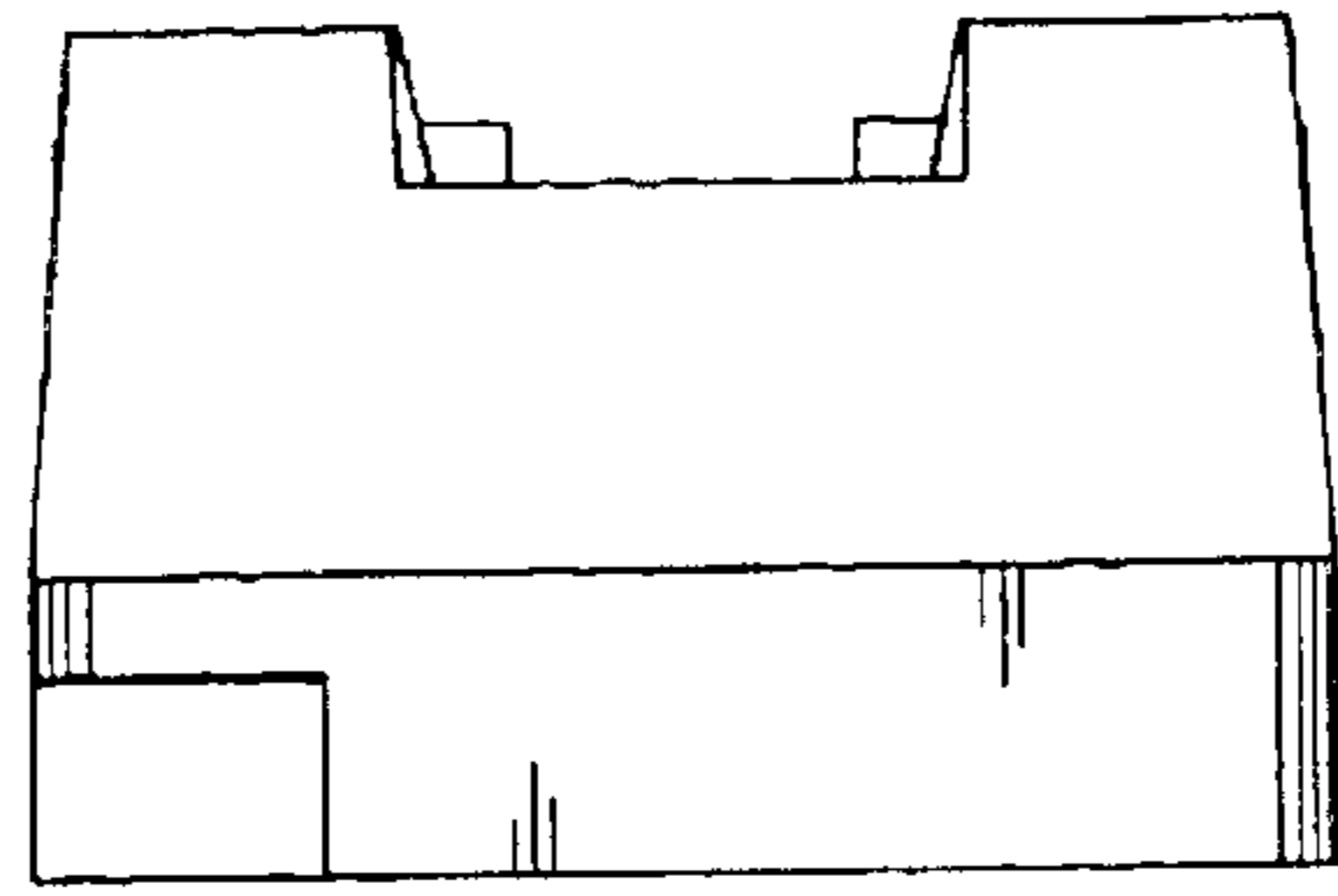


FIG. 1

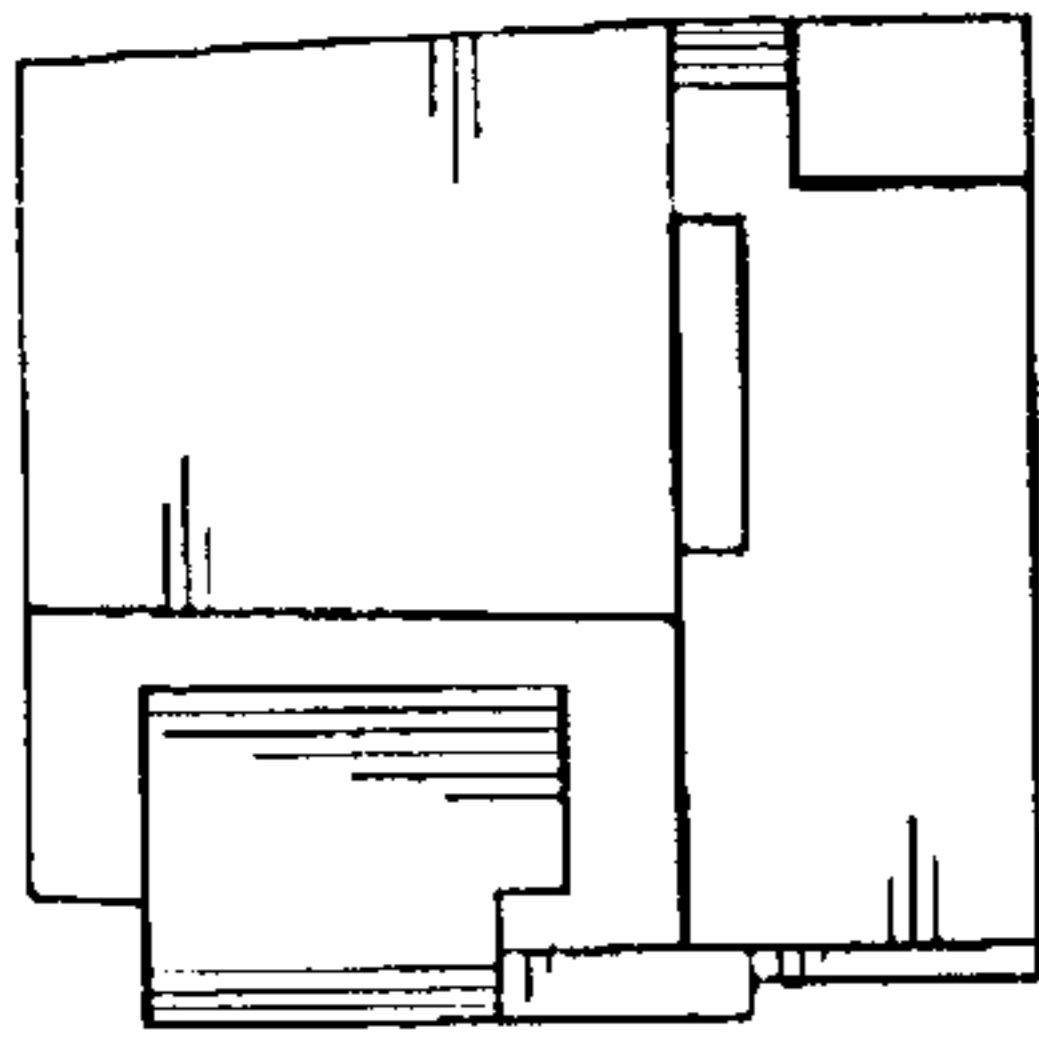


FIG. 2

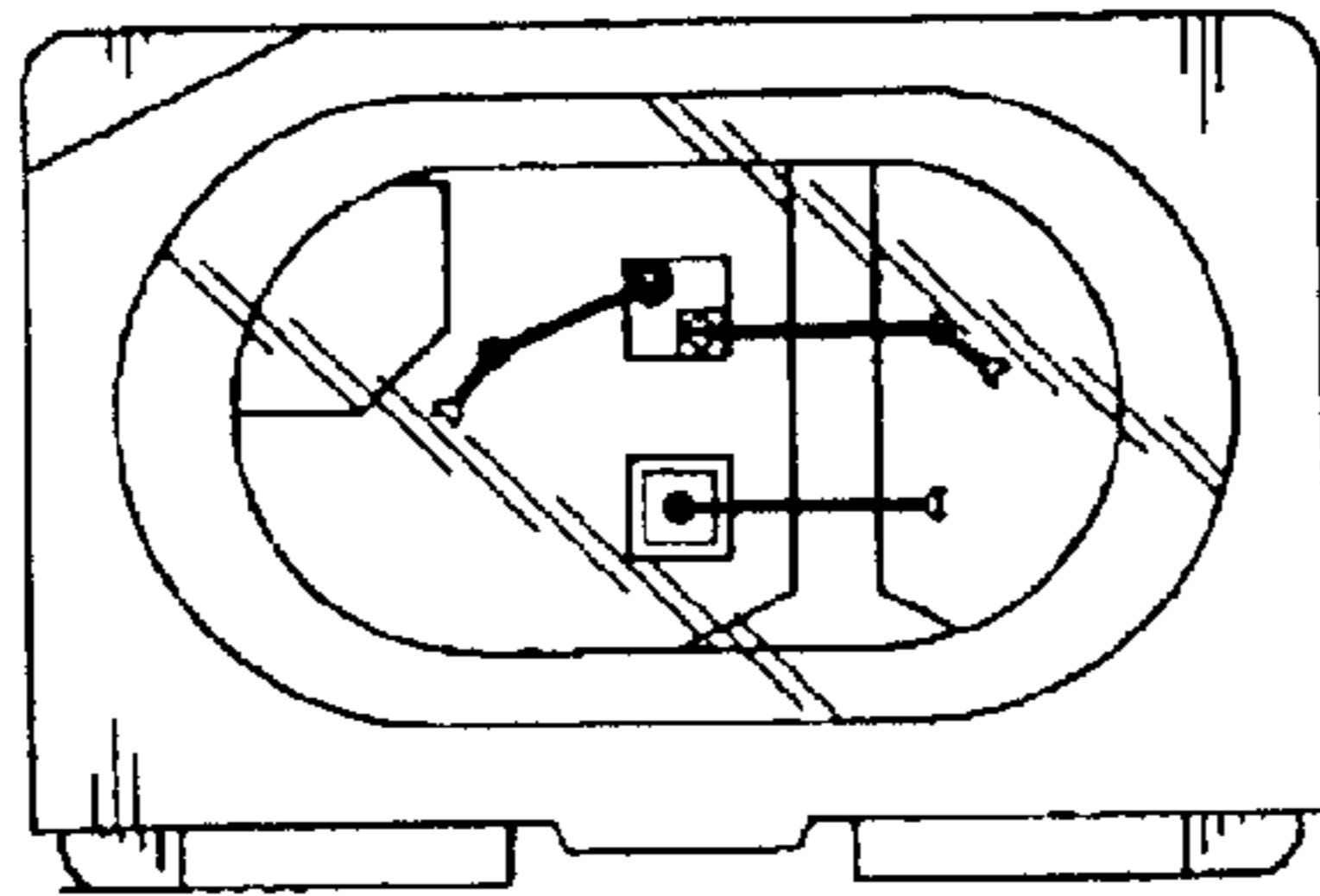


FIG. 3

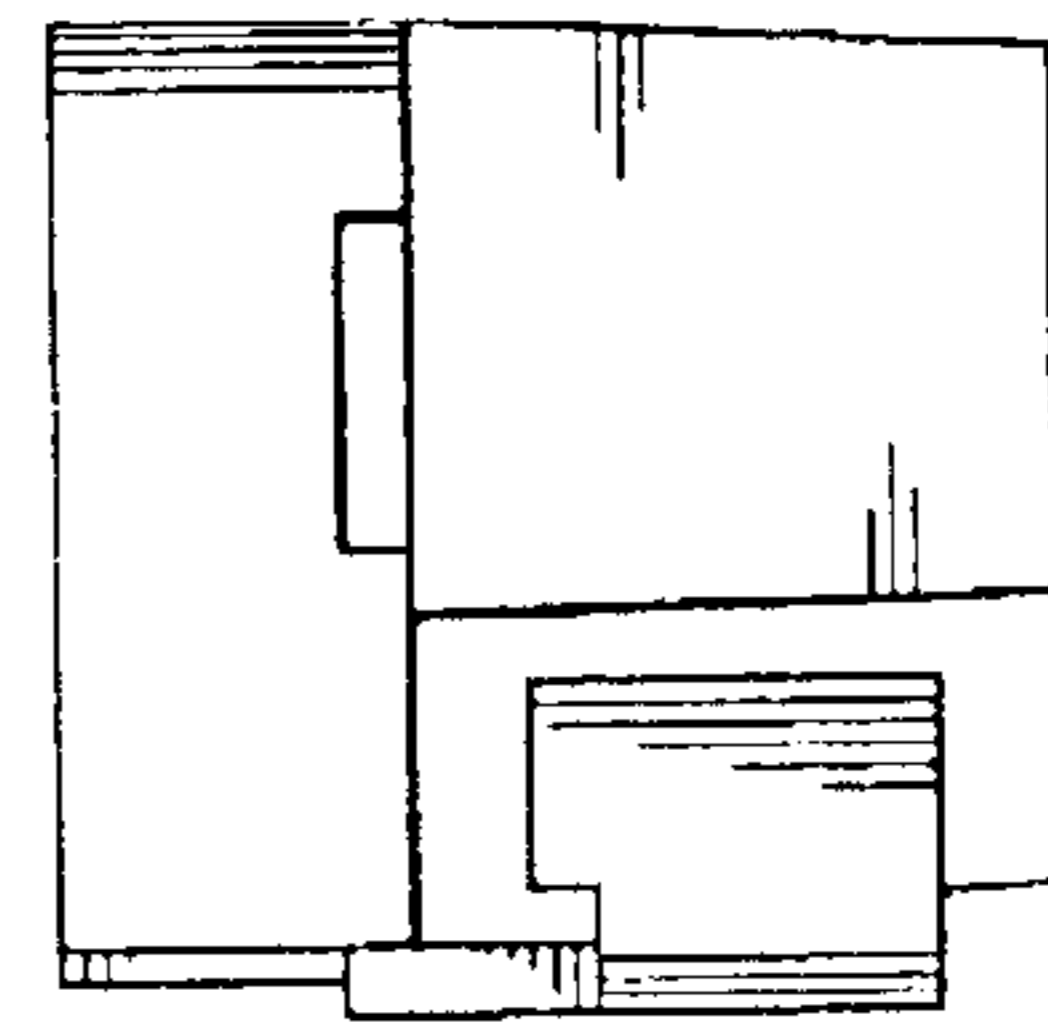


FIG. 4

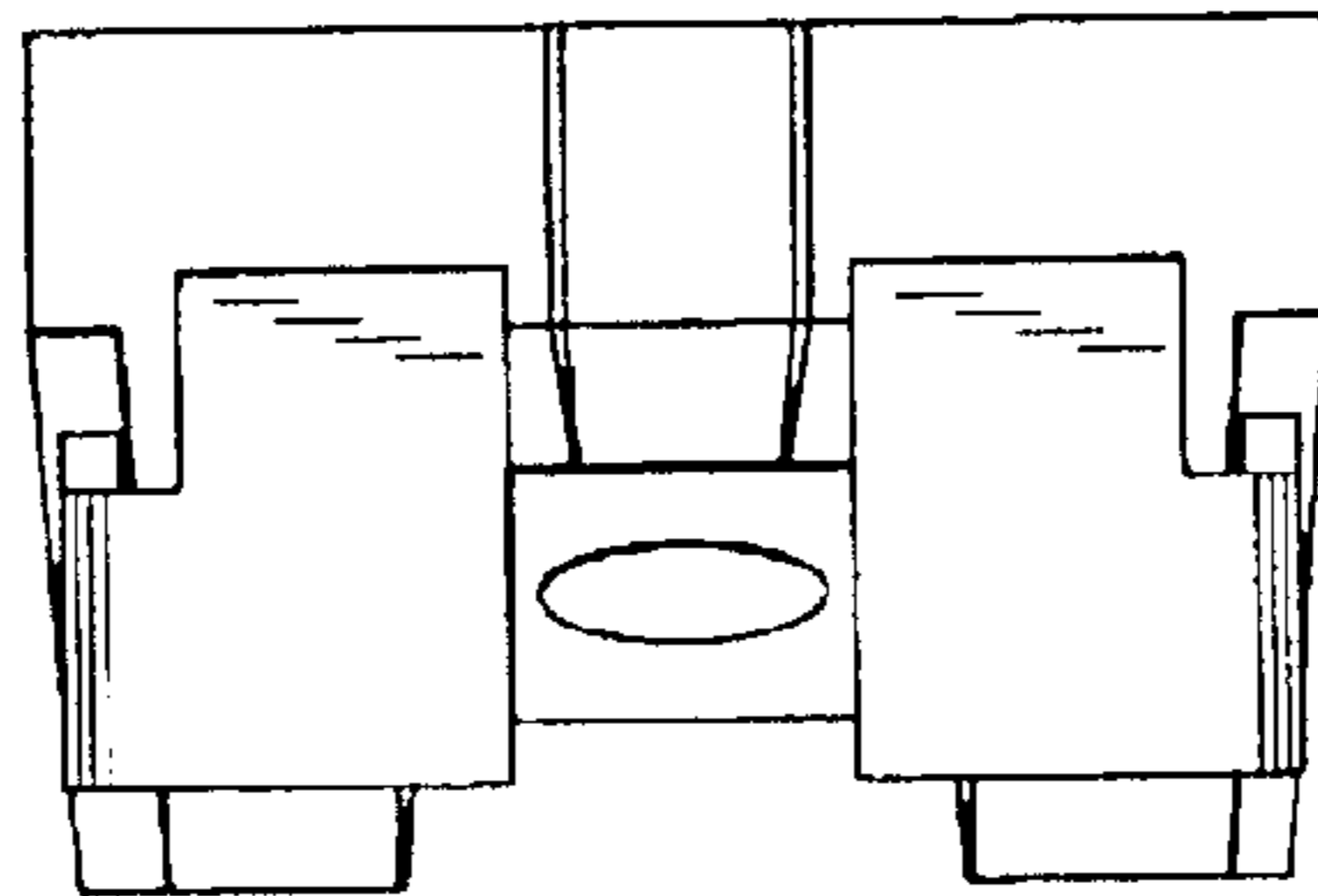


FIG. 5

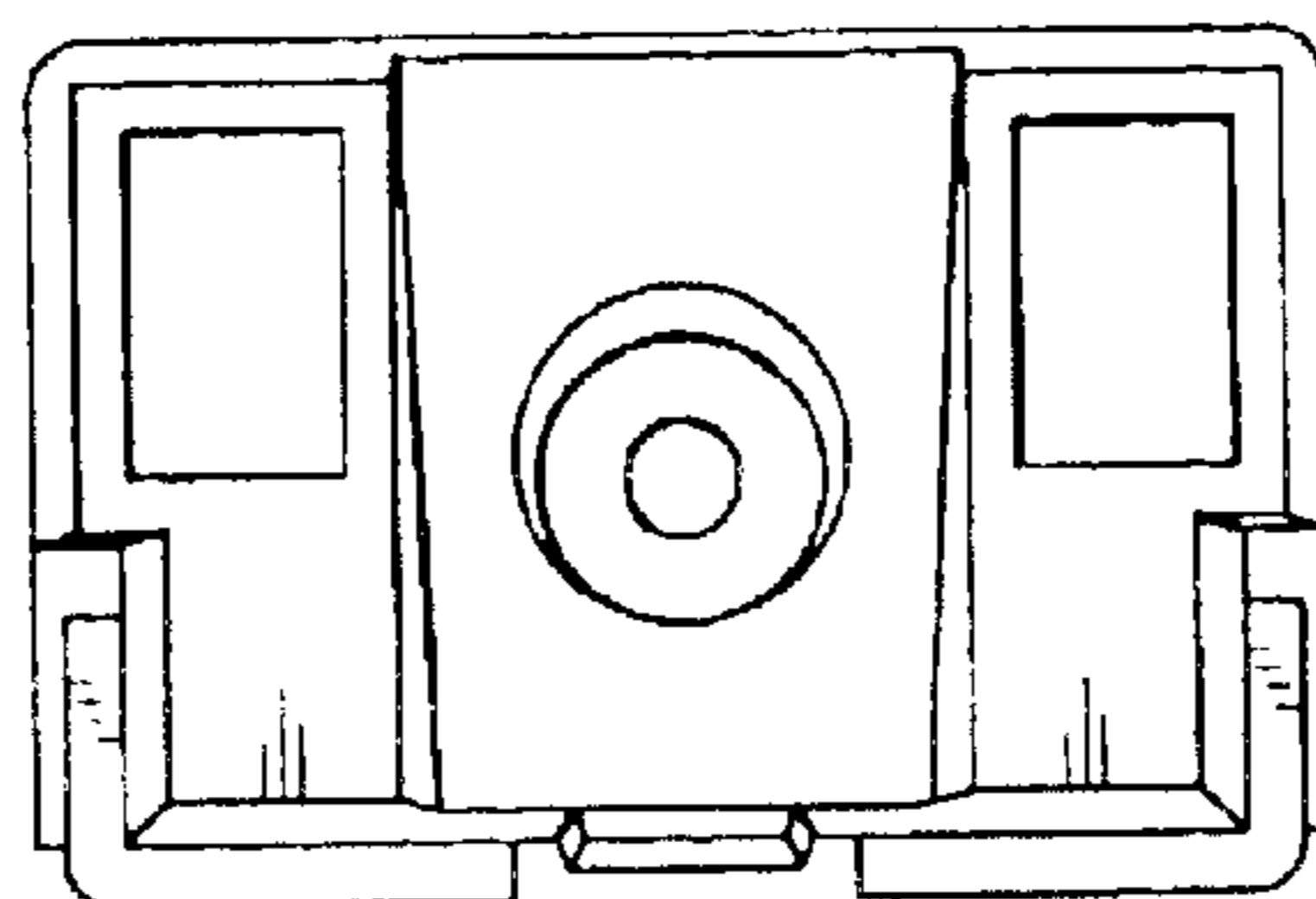


FIG. 6

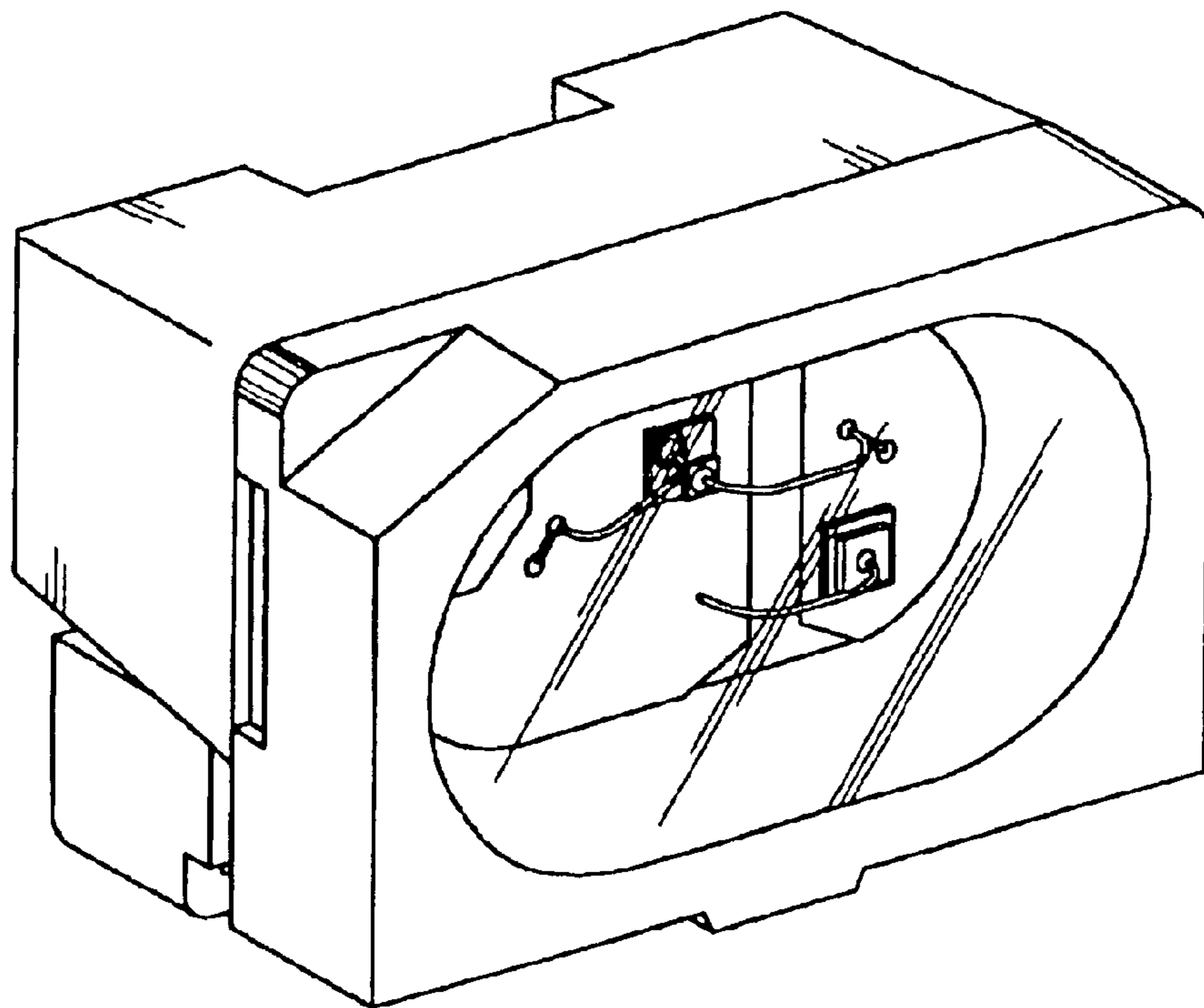


FIG. 7

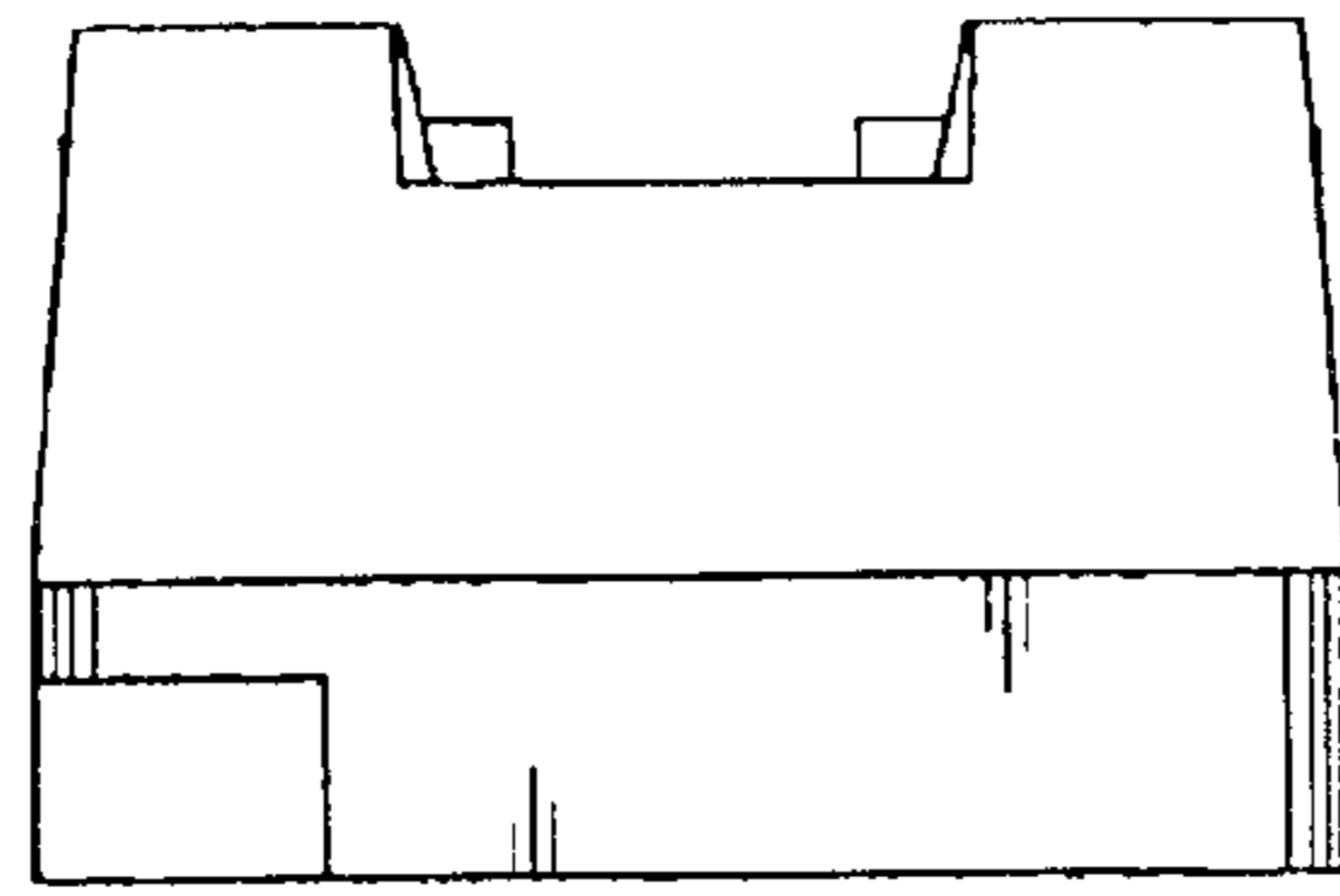


FIG. 8

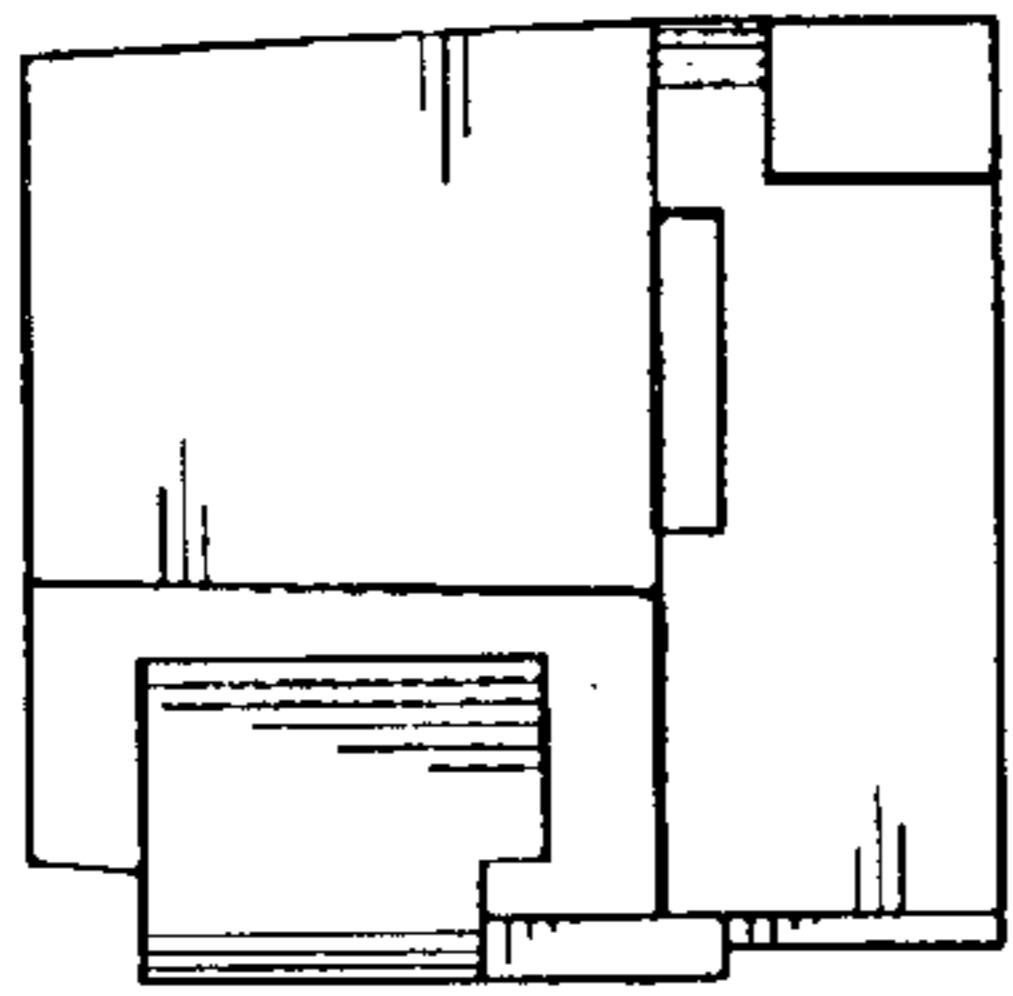


FIG. 9

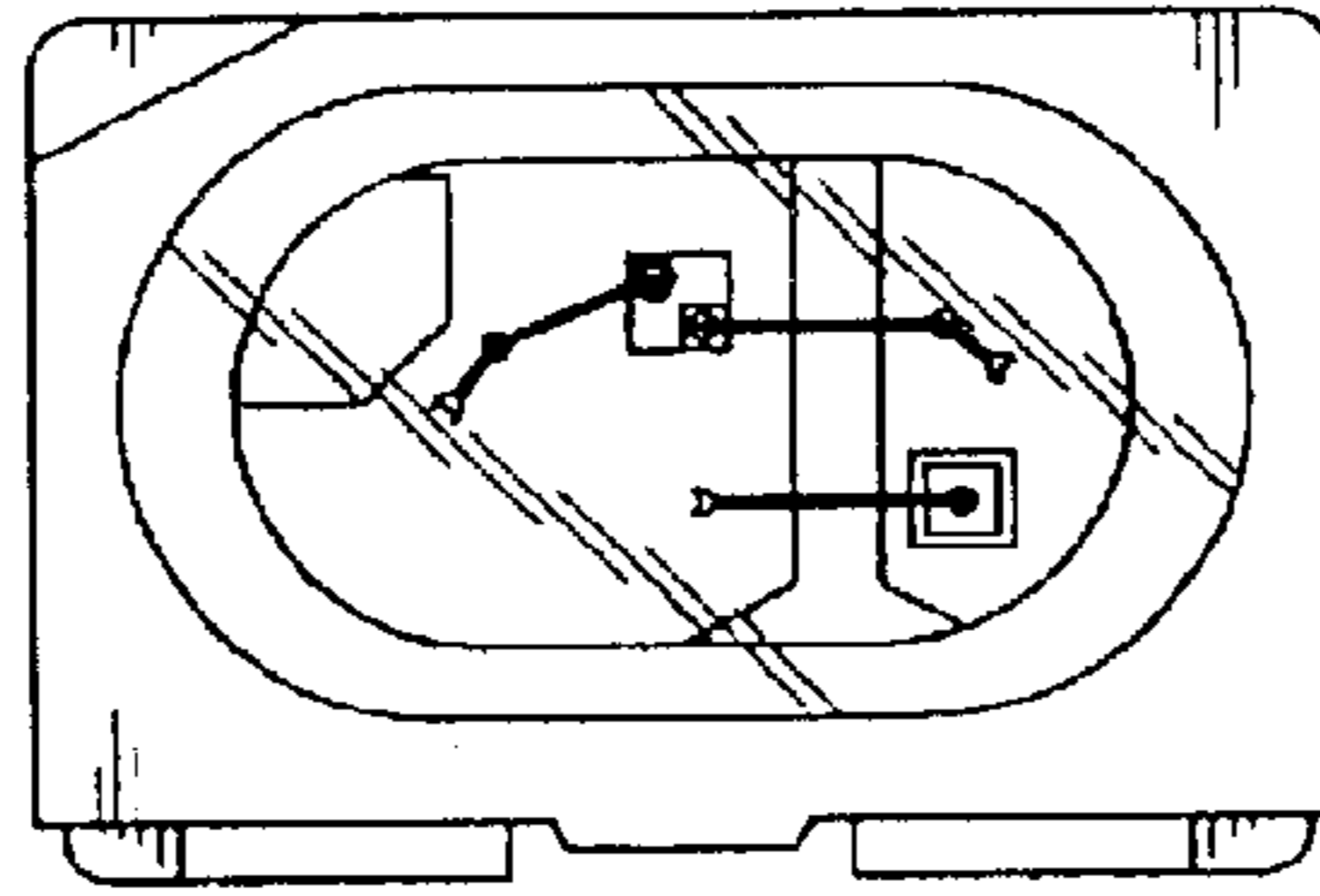


FIG. 10

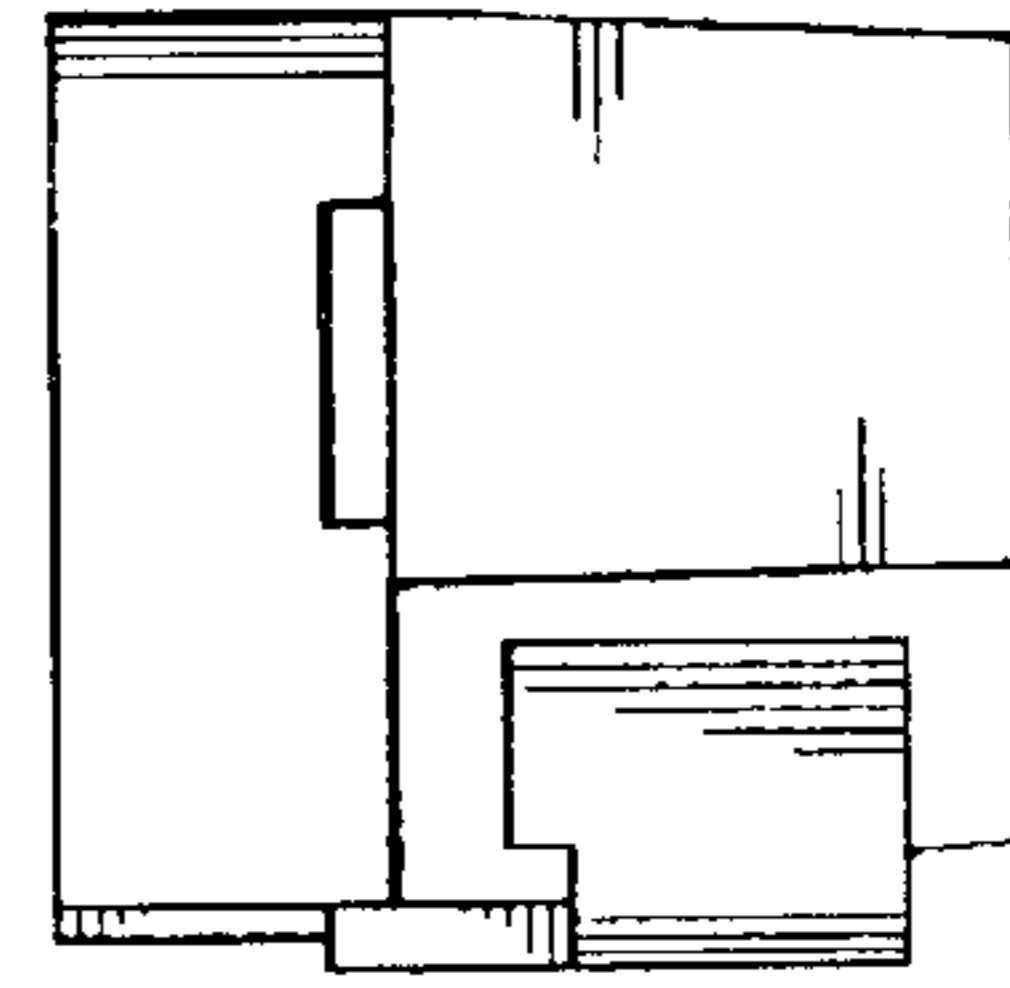


FIG. 11

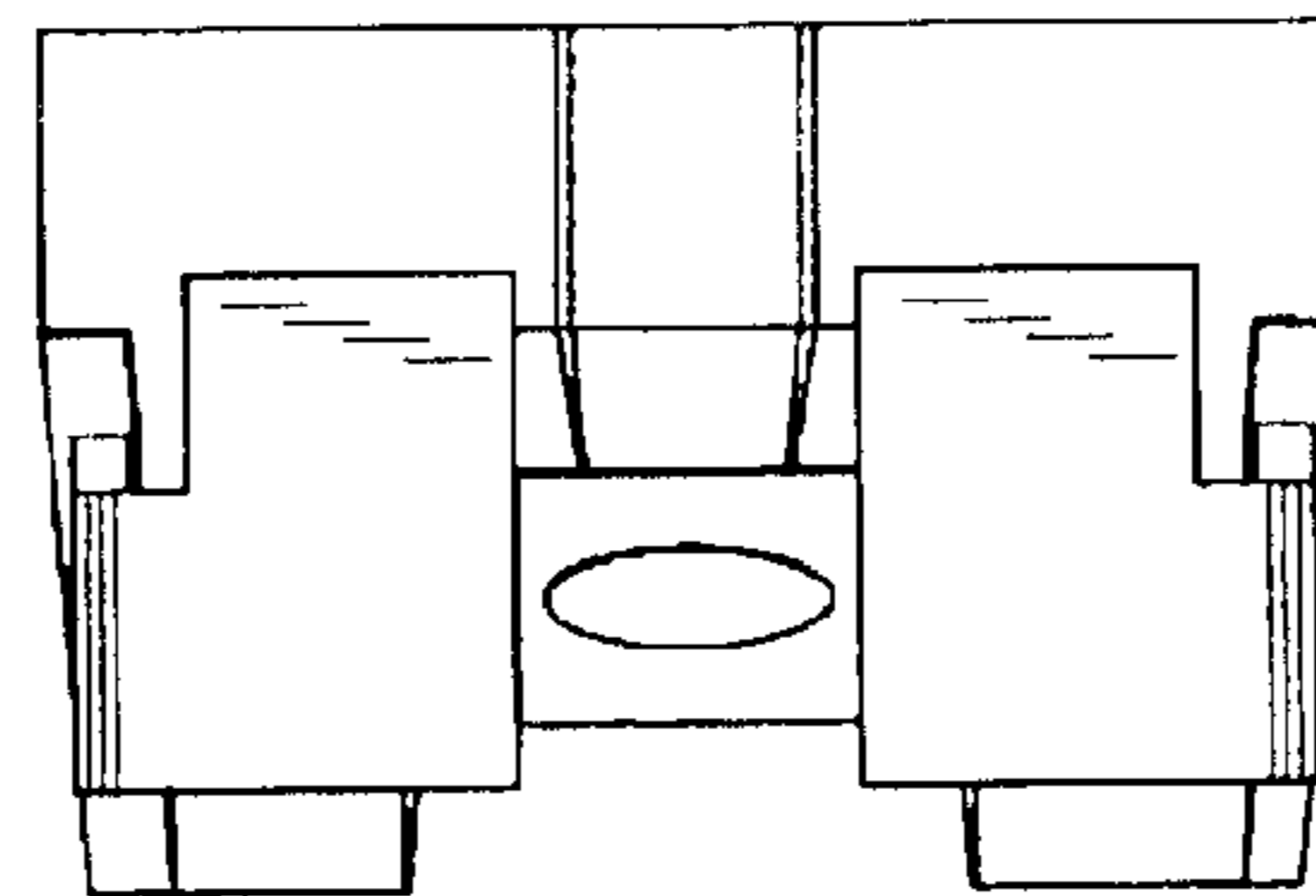


FIG. 12

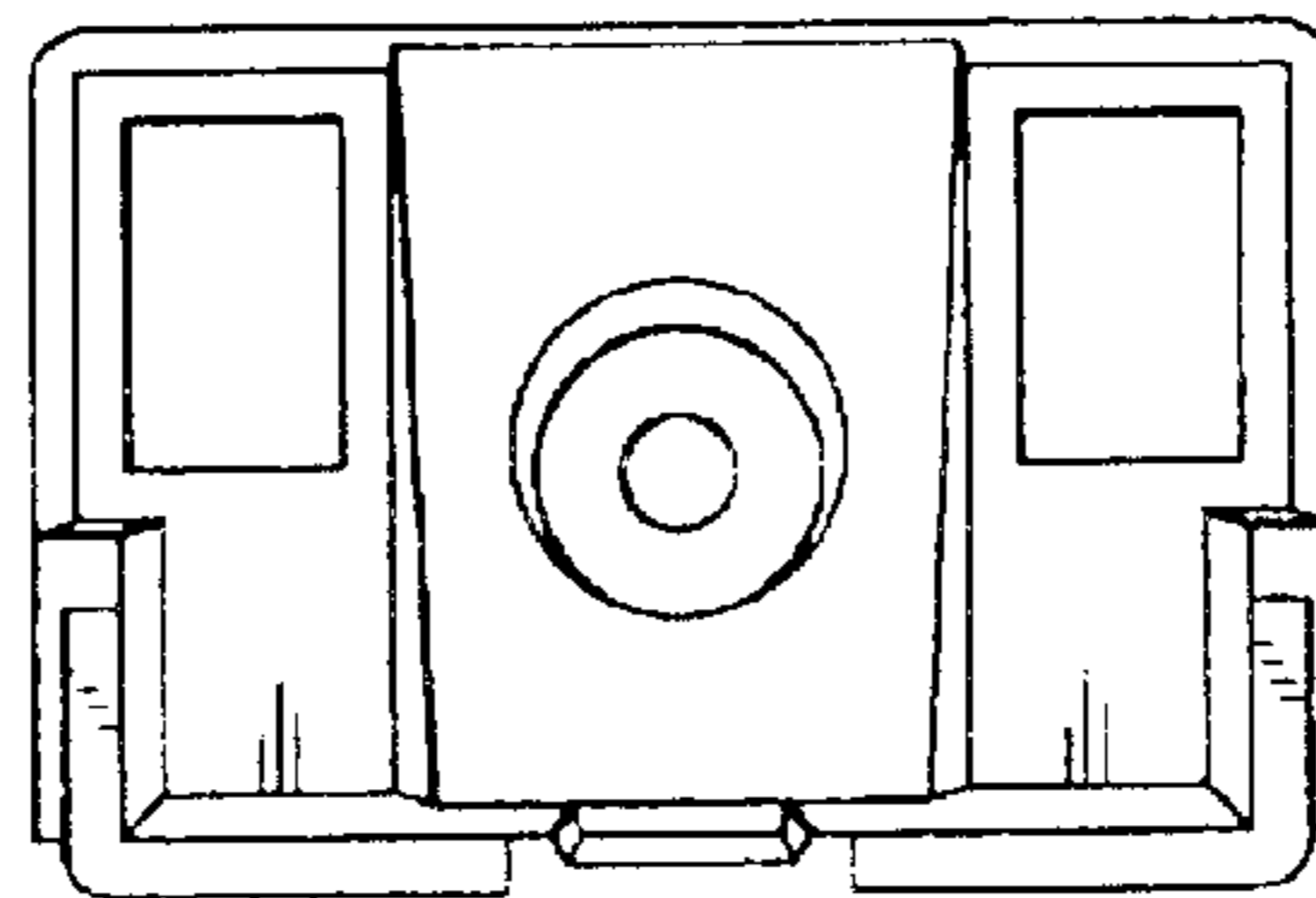


FIG. 13