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(12) **United States Design Patent**
Shimonishi et al.

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(54) **LIGHT EMITTING DIODE**

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

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(30) **Foreign Application Priority Data**

Mar. 30, 2007 (JP) 2007-008137

(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, 88, 89, 95, 98, 99,
257/100; 313/483, 498, 500; 362/555, 800
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,727,457 A * 2/1988 Thillays 362/582
6,297,598 B1 * 10/2001 Wang et al. 315/169.3
D497,883 S * 11/2004 Wedig et al. D13/180
D499,075 S * 11/2004 Yoon et al. D13/180
6,834,977 B2 * 12/2004 Suehiro et al. 362/187
D506,732 S * 6/2005 Wang et al. D13/180
6,919,624 B2 * 7/2005 Tani et al. 257/684
2003/0234431 A1 * 12/2003 Huang et al. 257/433
2005/0128767 A1 * 6/2005 Wang et al. 362/555

2006/0113906 A1 * 6/2006 Ogawa 313/512
2006/0214273 A1 * 9/2006 Wang et al. 257/678
2007/0096114 A1 * 5/2007 Aoki et al. 257/79
2007/0295970 A1 * 12/2007 Chang 257/79

FOREIGN PATENT DOCUMENTS

JP 1170089 4/2003
JP 1224965 12/2004
JP 1258611 11/2006
KR 30-0294490-06 2/2003
KR 30-0377782 3/2005

* cited by examiner

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PLLC

(57) **CLAIM**

The ornamental design for a light emitting diode, as shown
and described.

DESCRIPTION

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

FIG. 2 is a bottom perspective view thereof;

FIG. 3 is a top plan view thereof;

FIG. 4 is a bottom view thereof;

FIG. 5 is a front view thereof;

FIG. 6 is a right side view thereof;

FIG. 7 is a cross-sectional view taken along line 7—7 in FIG.
3; and,

FIG. 8 is a cross-sectional view taken along line 8—8 in FIG.
3.

The broken lines represent unclaimed subject matter.

1 Claim, 8 Drawing Sheets

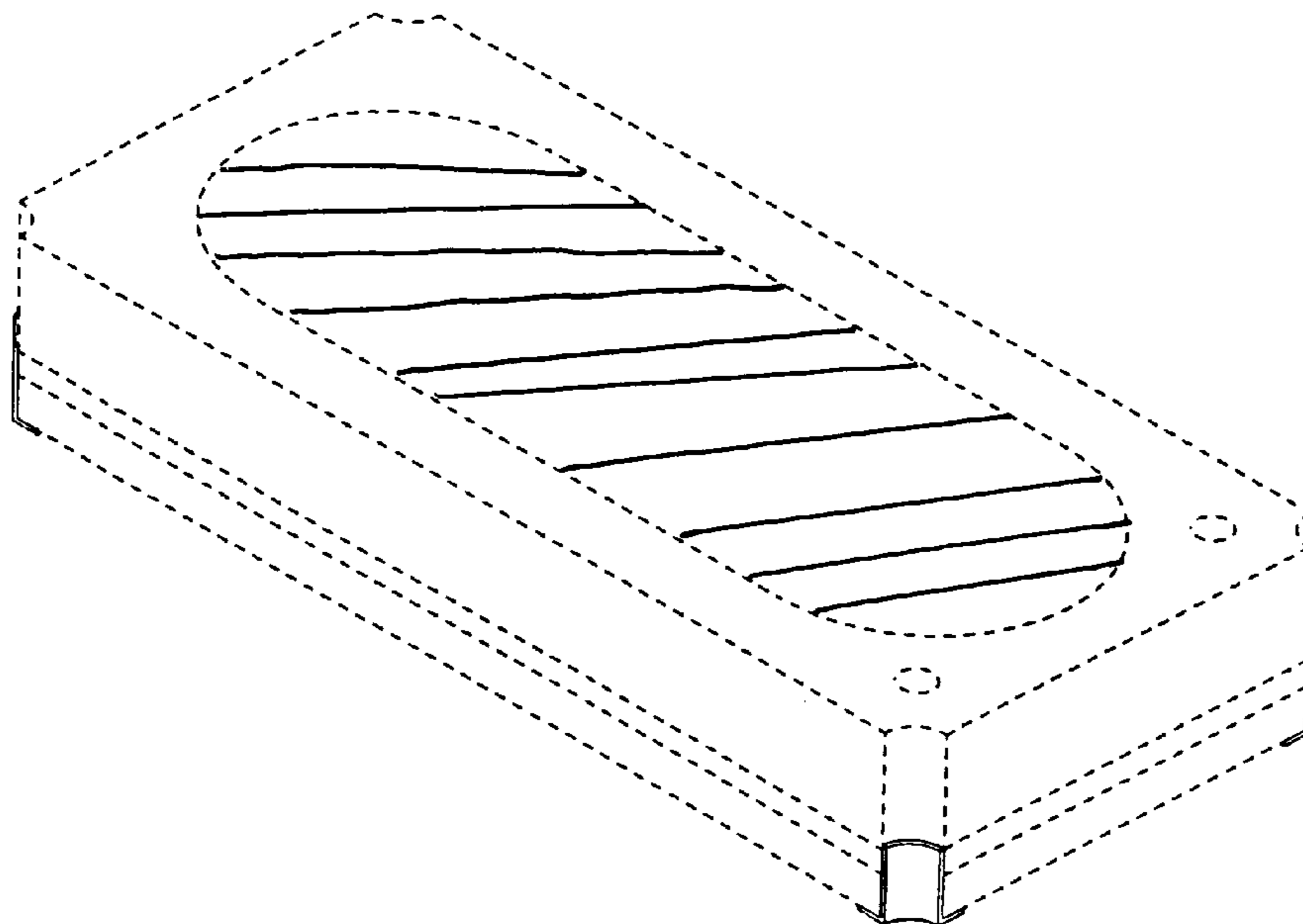


FIG. 1

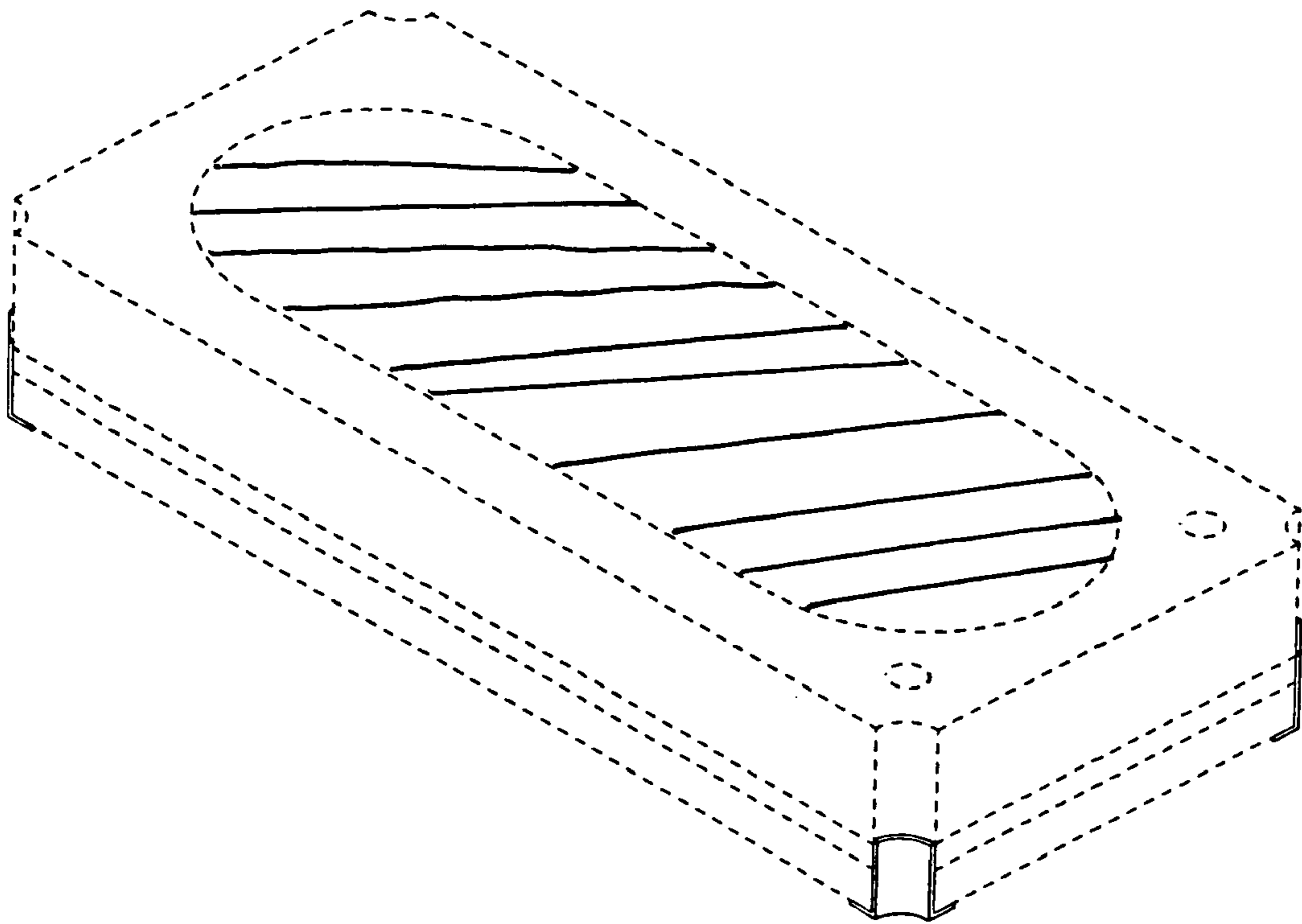


FIG. 2

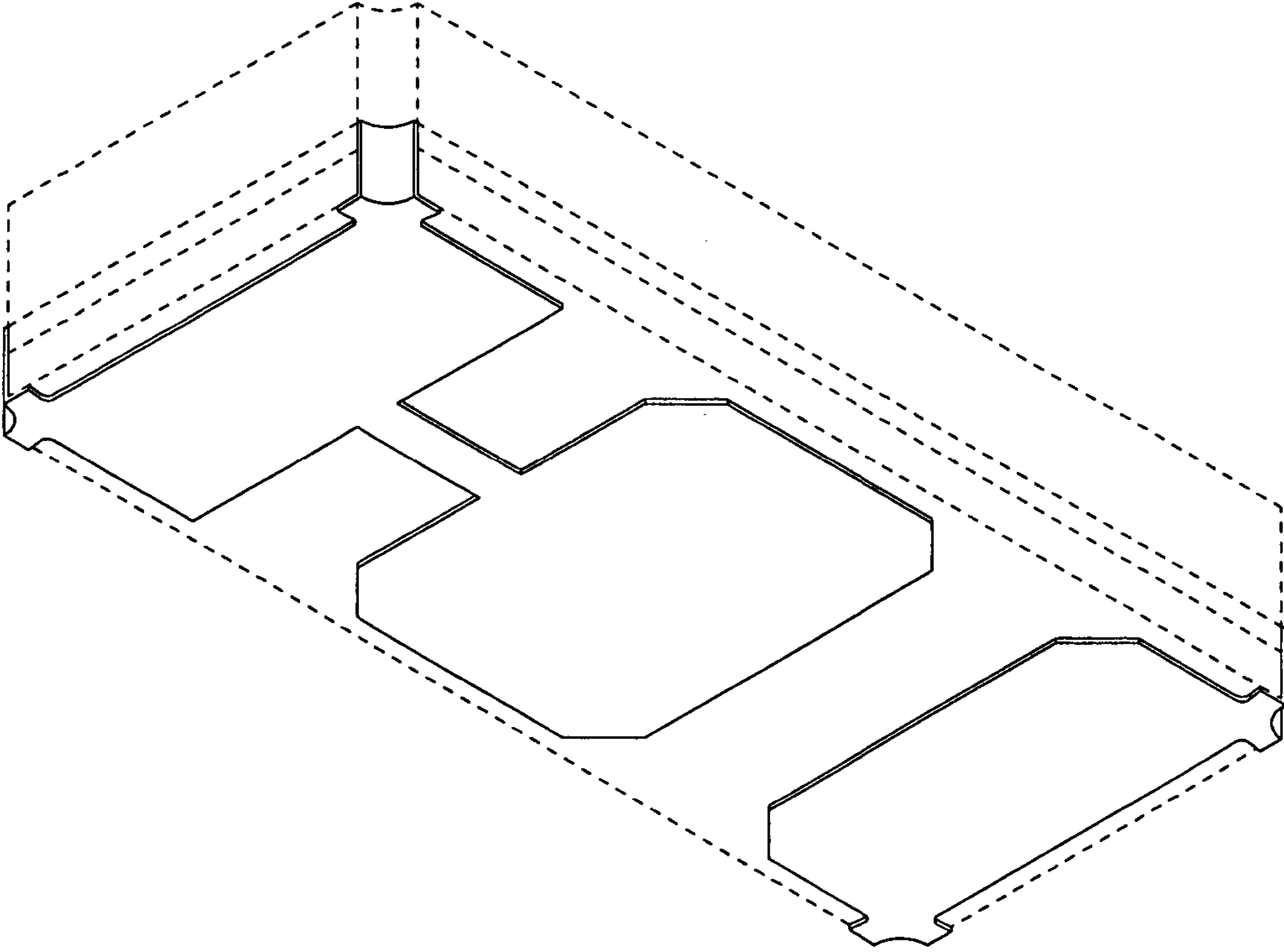


FIG. 3

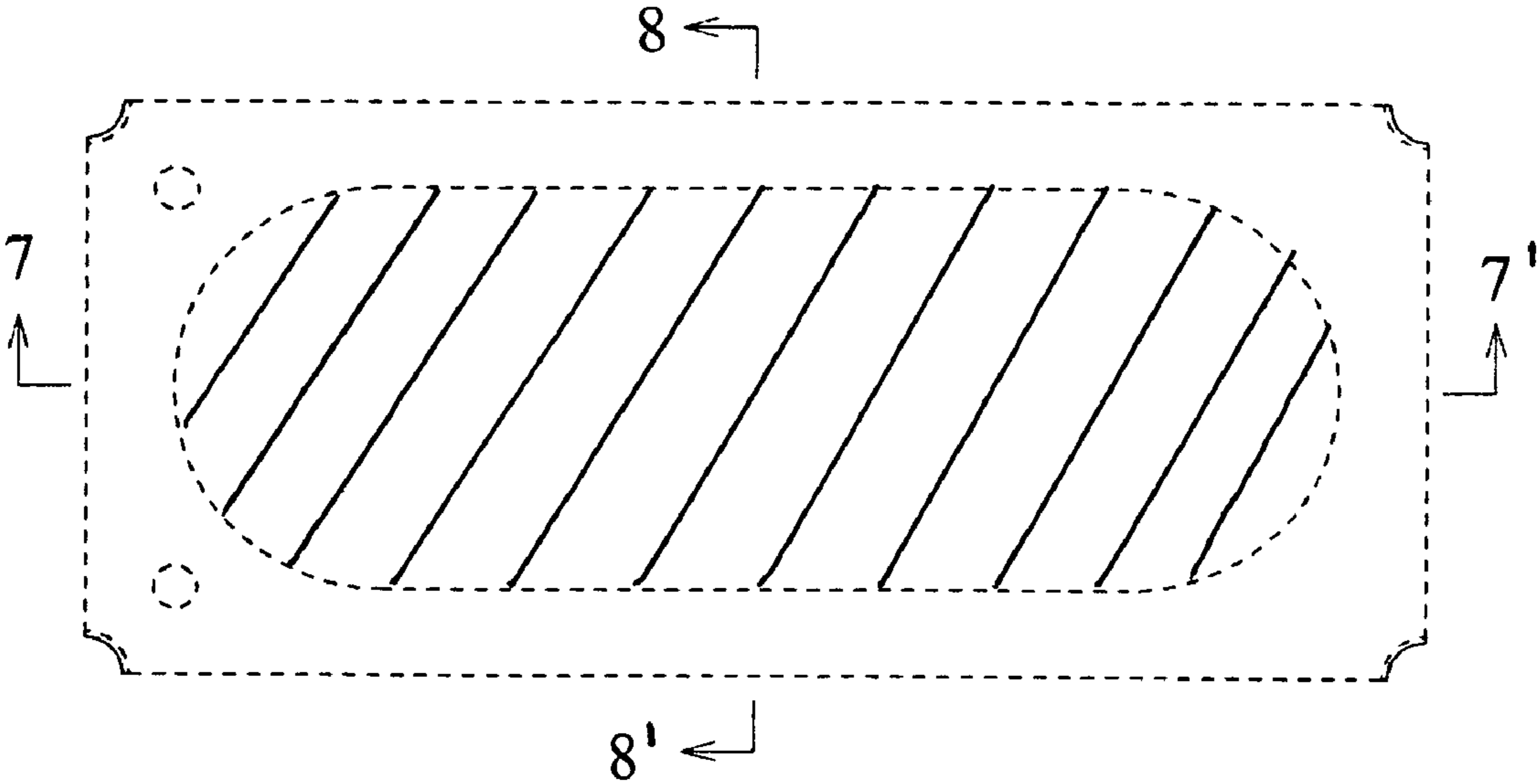


FIG. 4

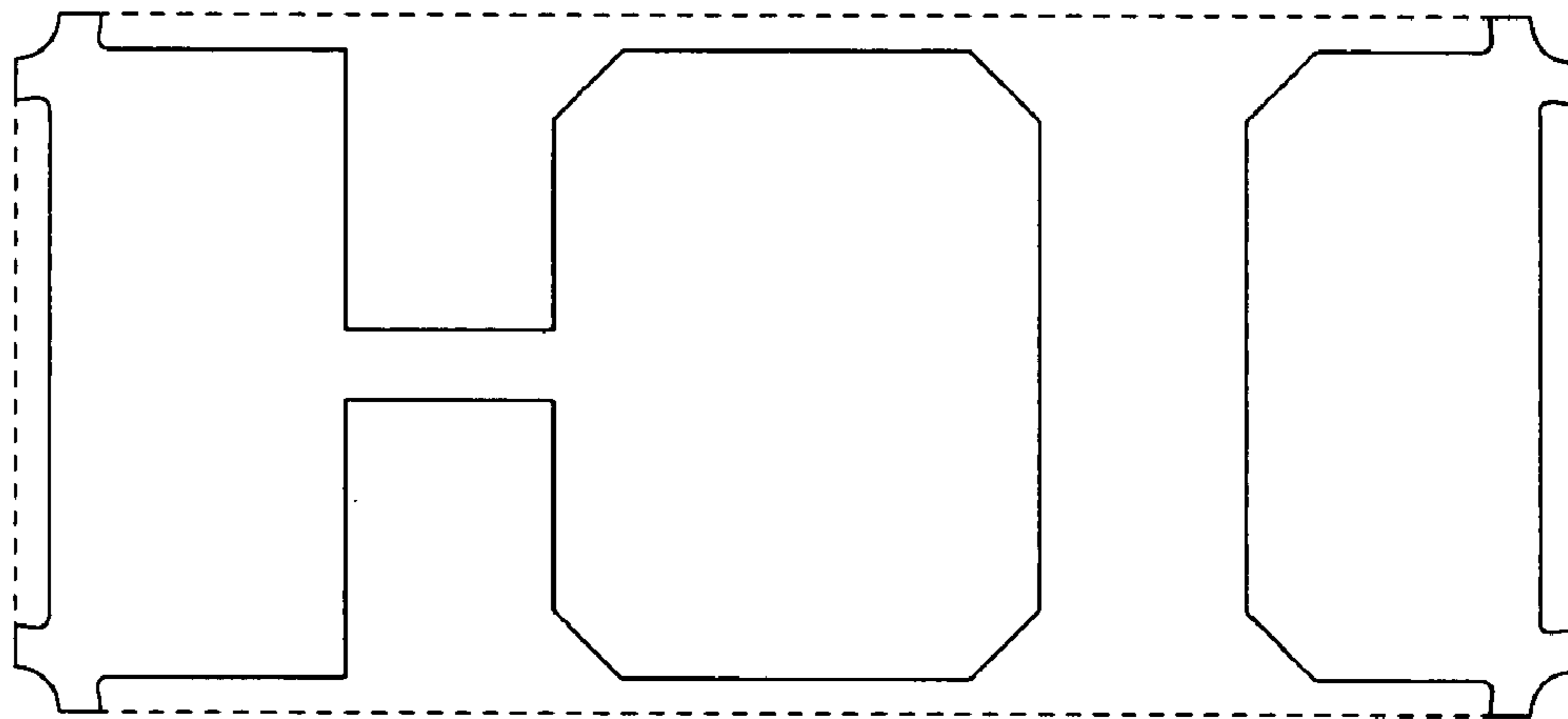


FIG. 5

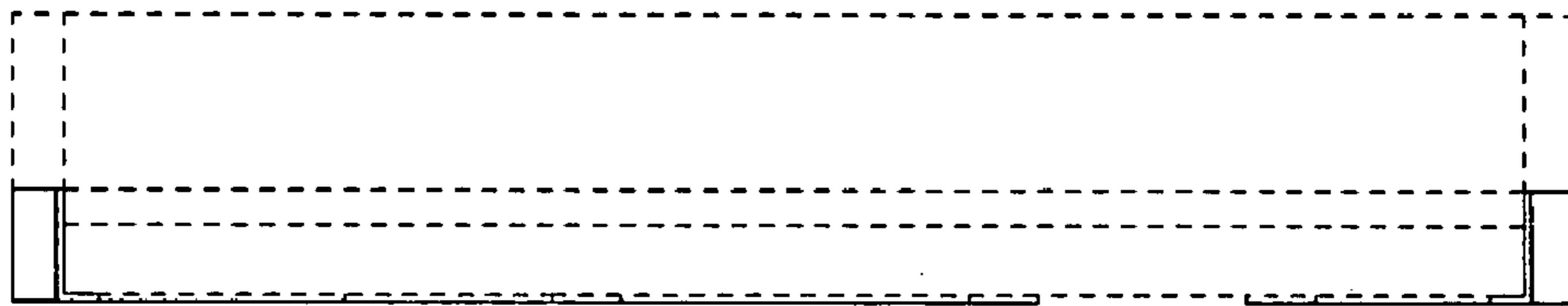


FIG. 6

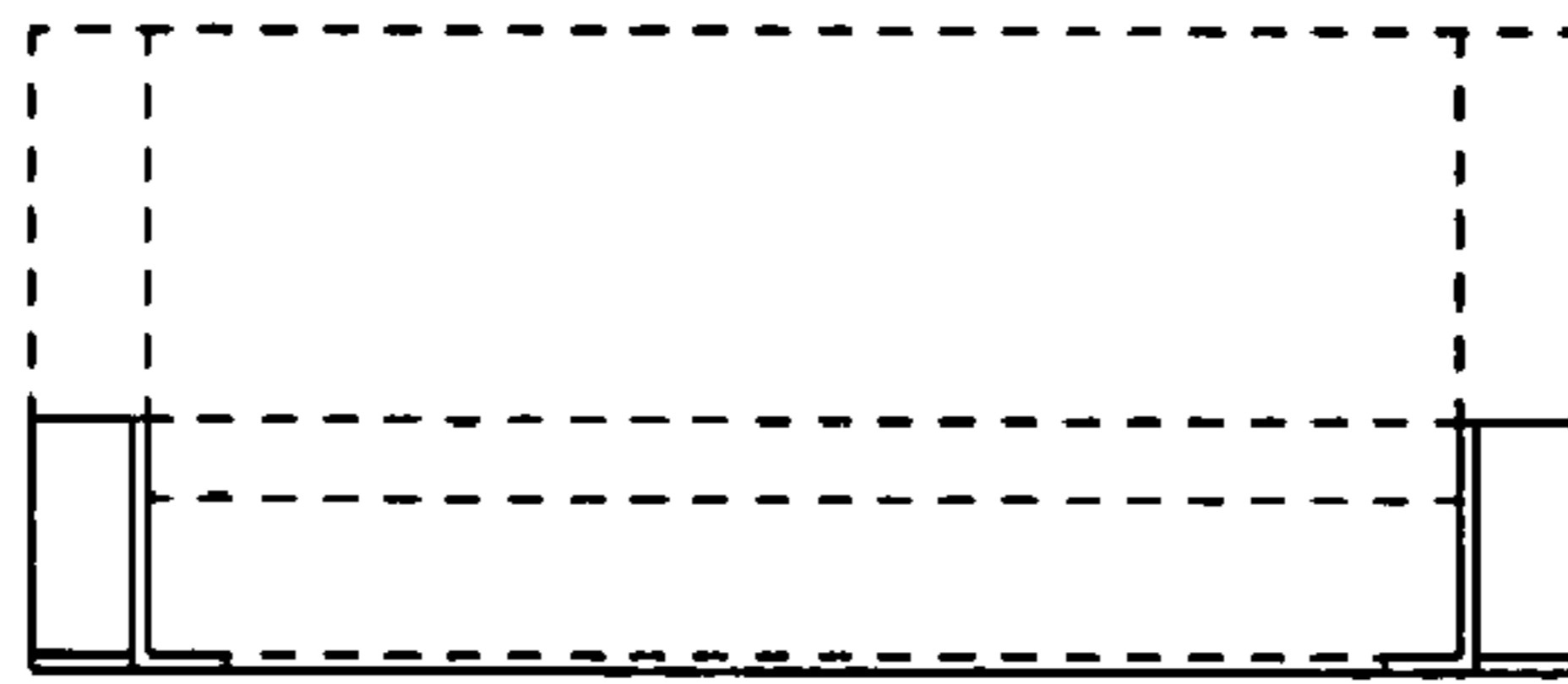


FIG. 7

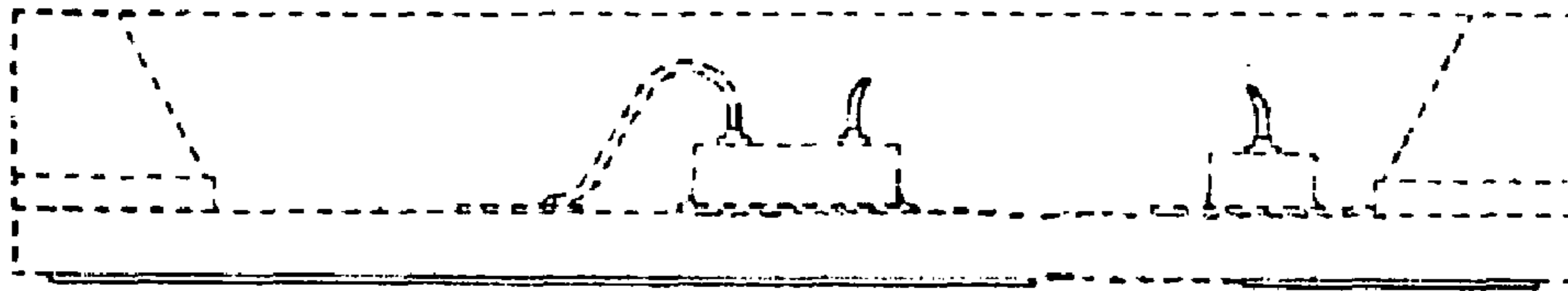


FIG. 8

