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

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- (54) **LIGHT-EMITTING DIODE**
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- (30) **Foreign Application Priority Data**
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- (51) **LOC (10) Cl.** **13-03**
- (52) **U.S. Cl.**
USPC **D13/180**
- (58) **Field of Classification Search**
CPC ... H01L 25/167; H01L 25/0753; H01L 33/08;
H01L 33/10; H01L 33/20; H01L 33/38;
H01L 33/42; H01L 33/52; H01L 33/54;
H01L 33/60; H01L 33/62; H01L 33/382;
H01L 33/486; H01L 33/642
USPC D13/180; D26/1; 257/79, 80, 81, 88,
257/89, 95, 98, 99, 100, E33.058; 362/555,
362/800
See application file for complete search history.

- (56) **References Cited**
U.S. PATENT DOCUMENTS
5,760,422 A * 6/1998 Ishinaga 257/94
6,657,238 B2 * 12/2003 Ueda 257/99
D514,074 S * 1/2006 Kamidoi et al. D13/182
7,696,522 B2 * 4/2010 Ono et al. 257/88
7,750,361 B2 * 7/2010 Watanabe 257/99

- 7,781,888 B2 * 8/2010 Kobayakawa et al. 257/730
- D653,629 S * 2/2012 Miyashita D13/180
- 8,242,514 B2 * 8/2012 Joung 257/79
- D672,731 S * 12/2012 Bergmann et al. D13/180
- D676,002 S * 2/2013 Watanabe D13/180
- D682,225 S * 5/2013 Bergmann et al. D13/180
- D689,830 S * 9/2013 Bergmann et al. D13/180
- D694,201 S * 11/2013 Iino D13/180
- 8,648,360 B2 * 2/2014 Chen 257/88
- 2003/0107045 A1 * 6/2003 Eisert et al. 257/80
- 2007/0075323 A1 * 4/2007 Kanazawa et al. 257/98
- 2008/0165539 A1 * 7/2008 Hsu et al. 362/309
- 2010/0096644 A1 * 4/2010 Kong 257/88
- 2012/0032203 A1 * 2/2012 Urano 257/88
- 2013/0134472 A1 * 5/2013 Zhang 257/99
- 2013/0193474 A1 * 8/2013 Kim et al. 257/99
- 2013/0240922 A1 * 9/2013 Yamamoto 257/89

FOREIGN PATENT DOCUMENTS

KR 3001843110000 9/1996

* cited by examiner

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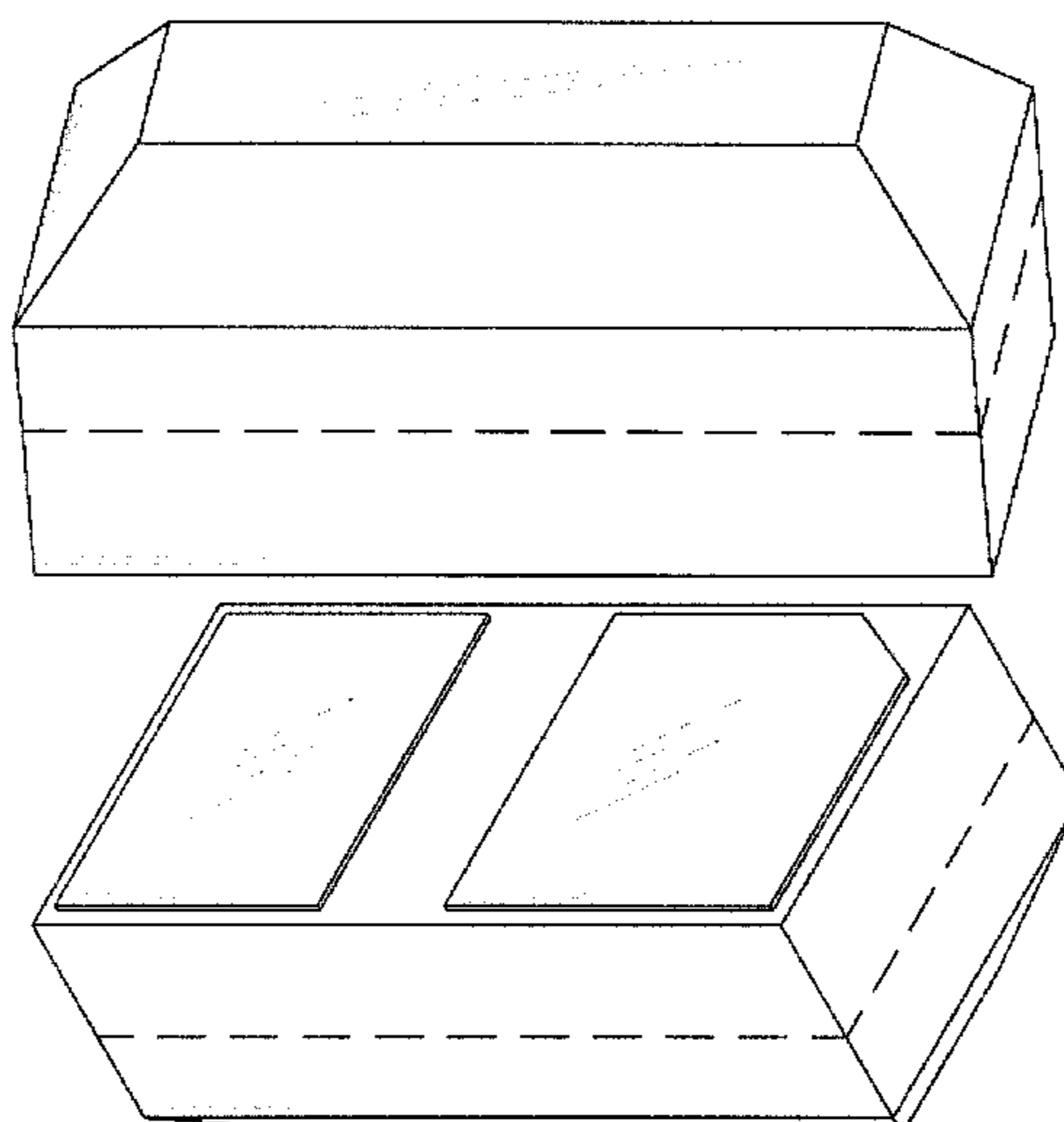
(57) **CLAIM**

We 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 our new design;
 FIG. 2 is another perspective view thereof;
 FIG. 3 is a front elevation view thereof;
 FIG. 4 is a rear elevation view thereof;
 FIG. 5 is a right side elevation view thereof;
 FIG. 6 is a left side elevation view thereof;
 FIG. 7 is a top plan view thereof; and,
 FIG. 8 is a bottom plan view thereof.
 The broken lines are directed to unclaimed features. The broken lines form no part of the claimed design.

1 Claim, 4 Drawing Sheets



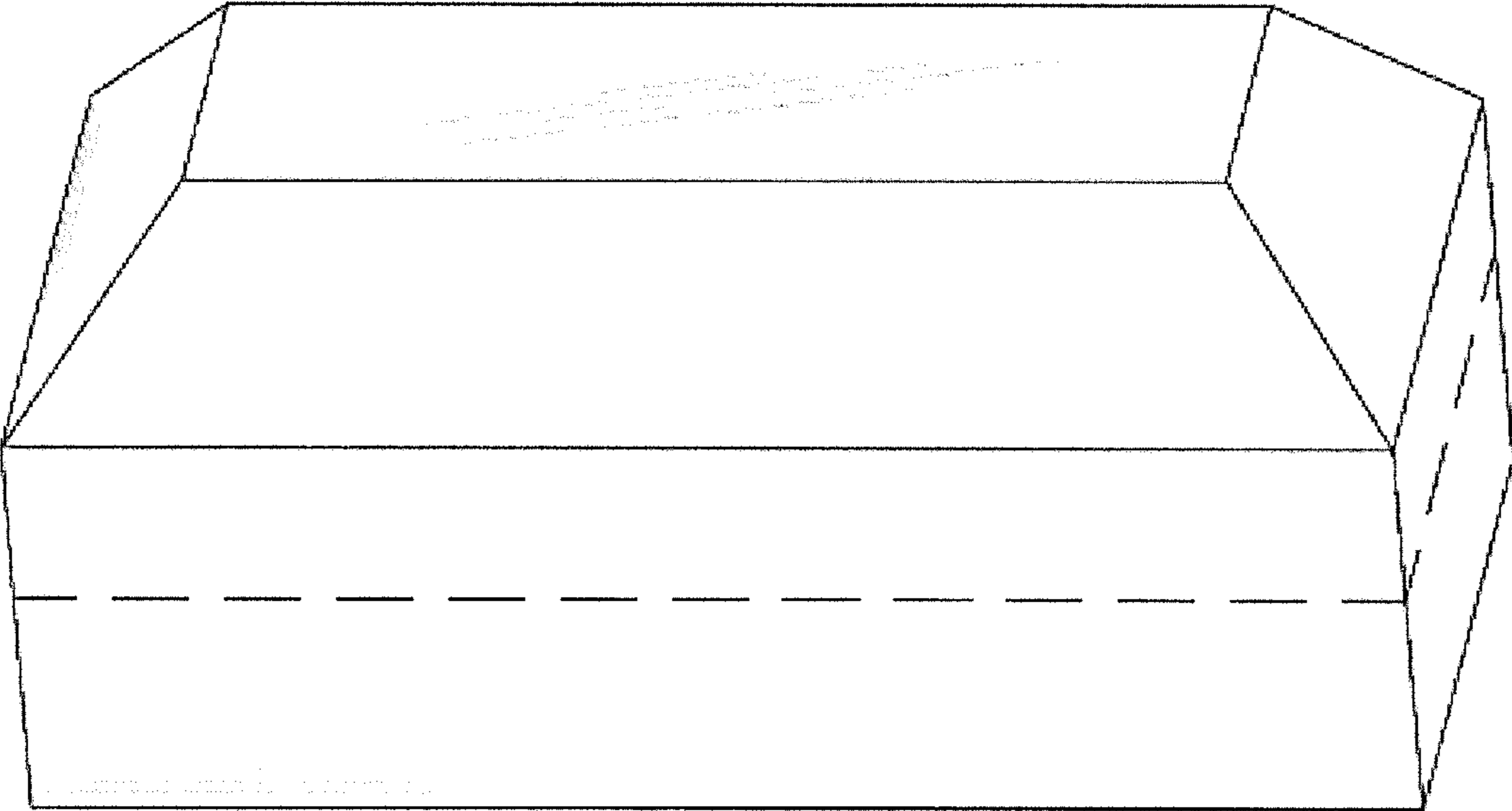


FIG. 1

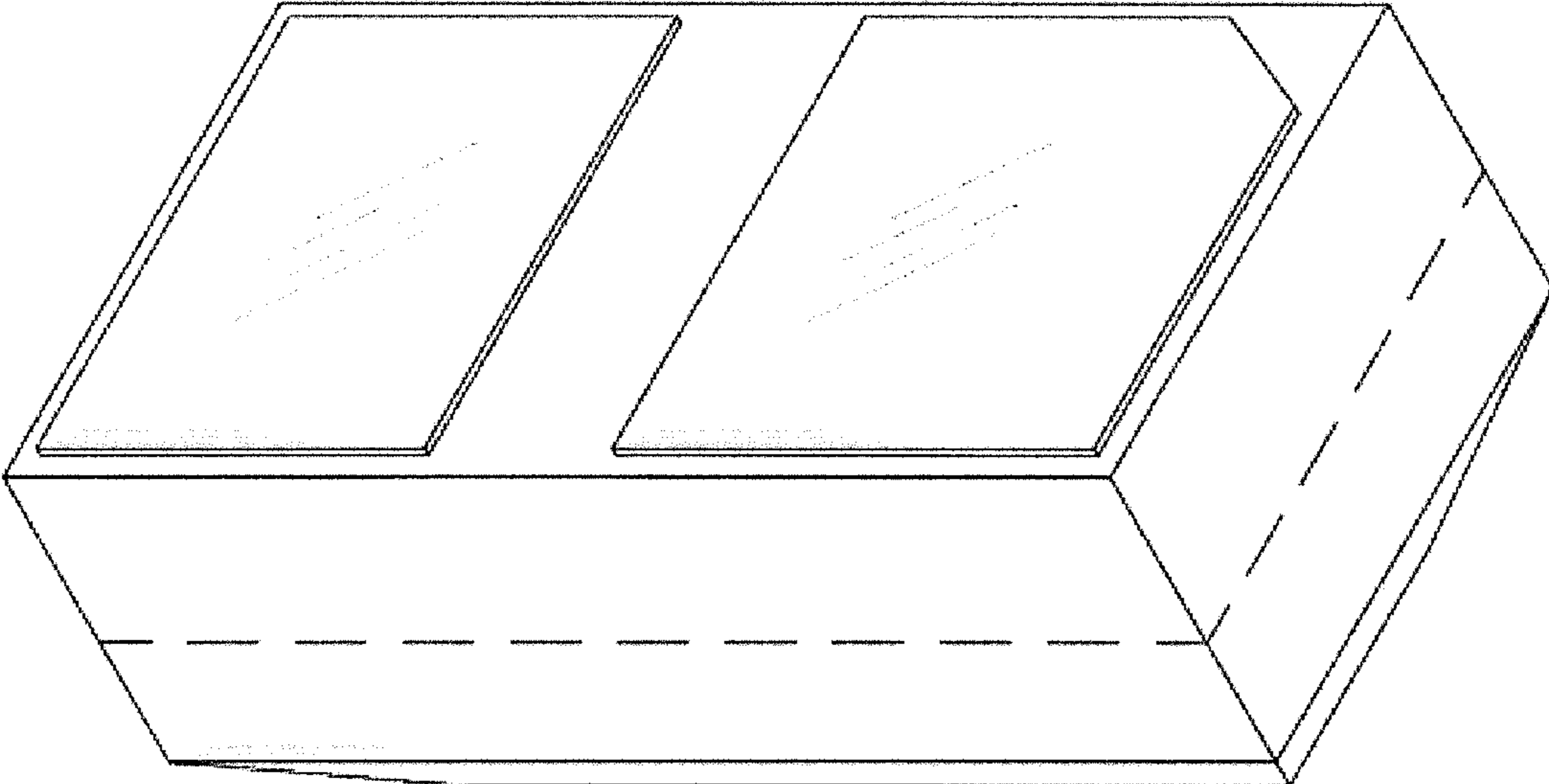


FIG. 2

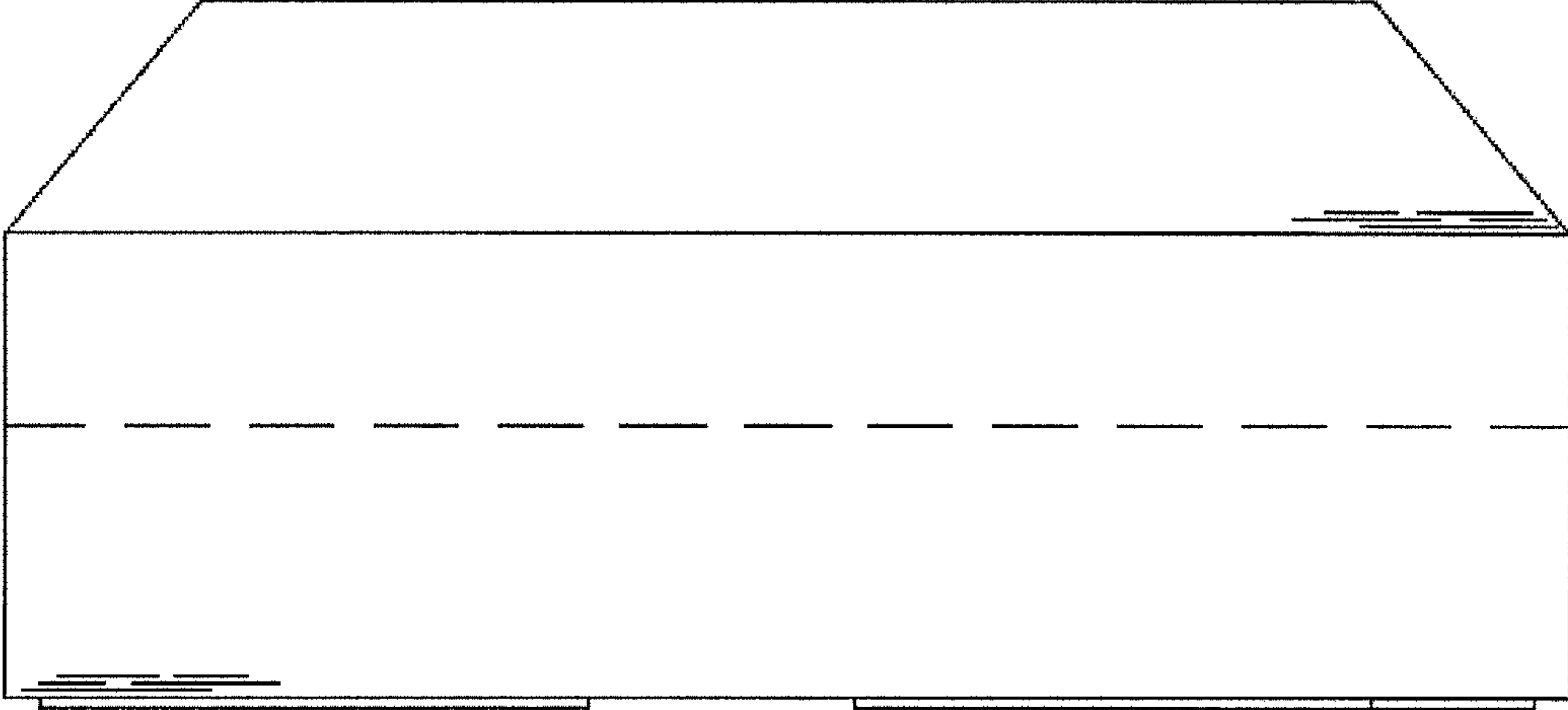


FIG. 3

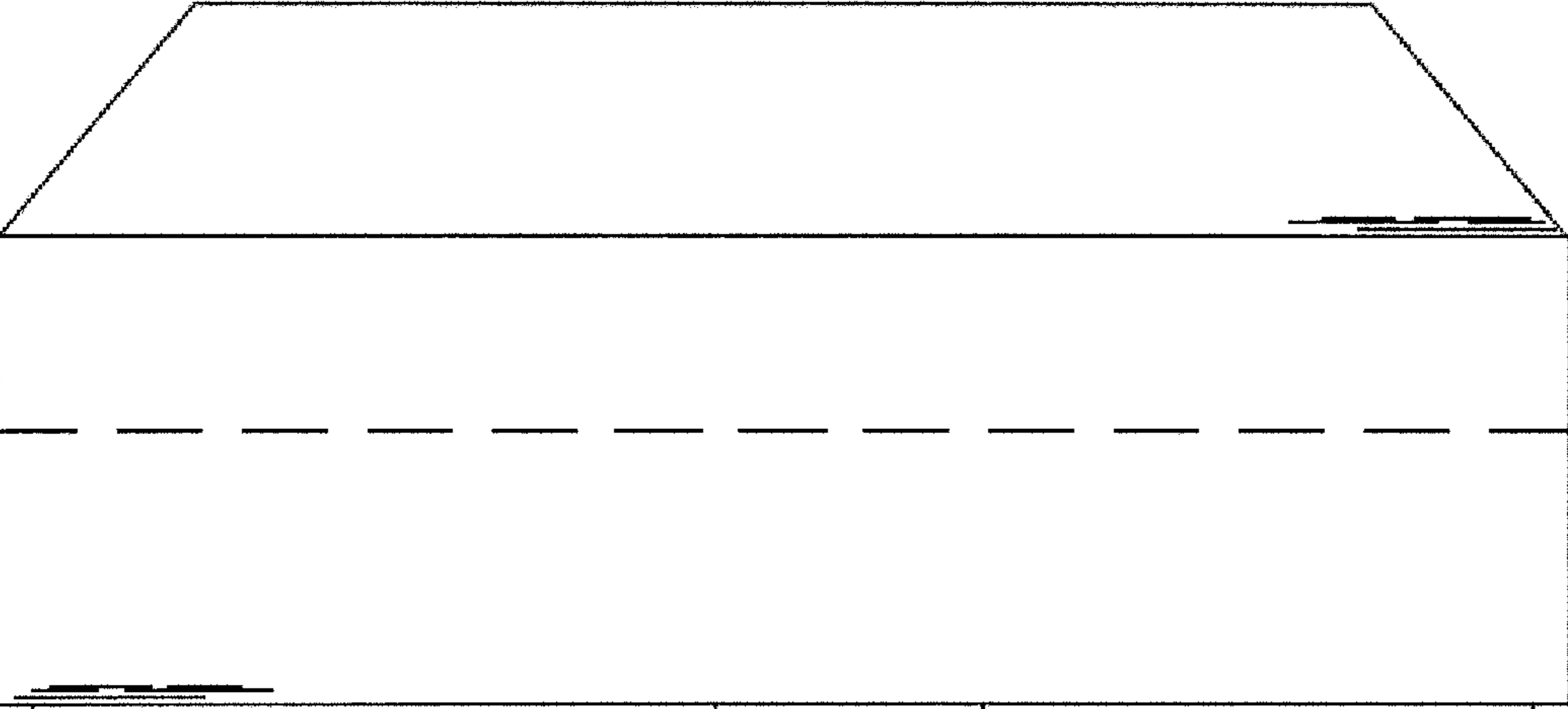


FIG. 4

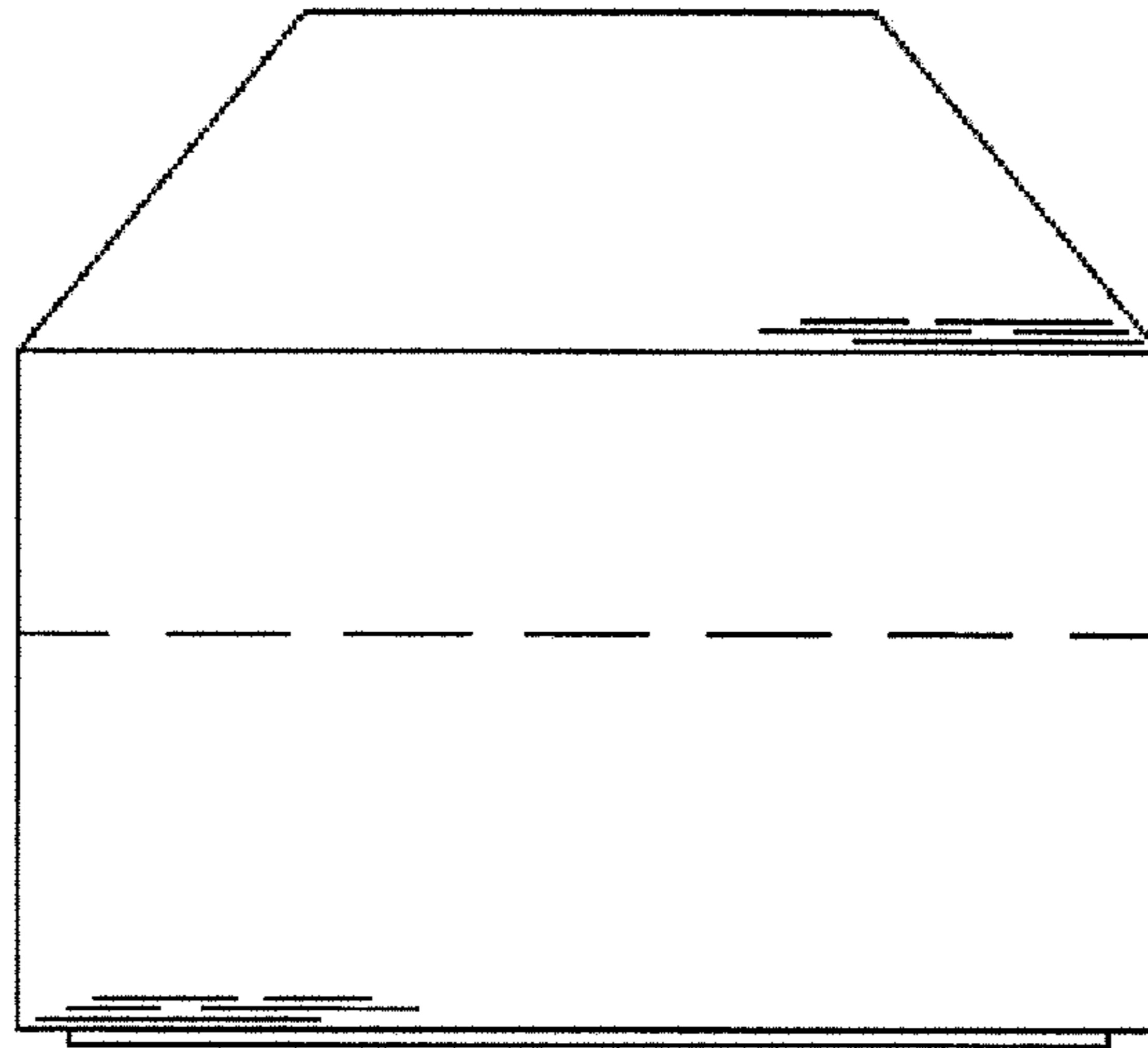


FIG. 5

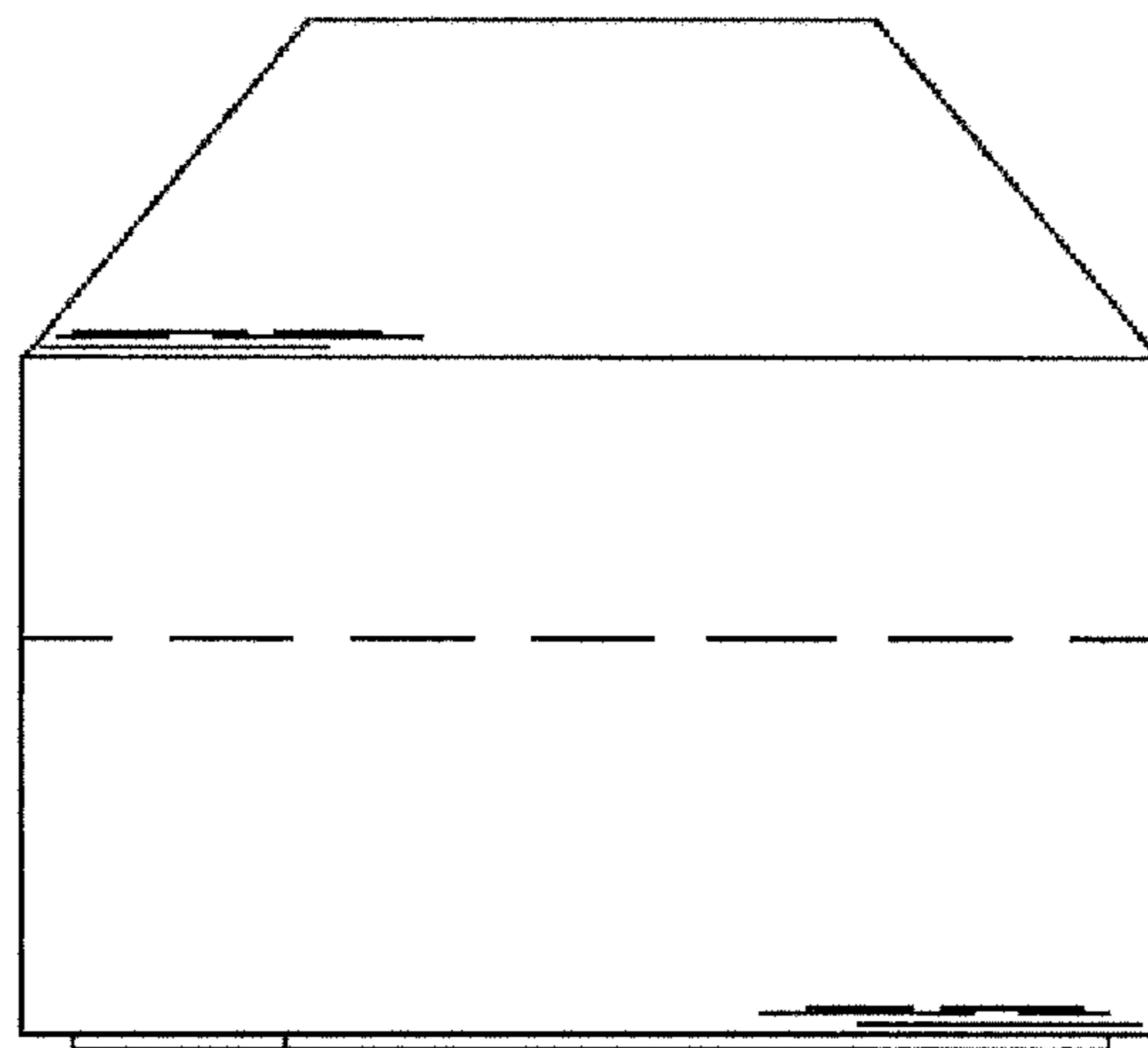


FIG. 6



FIG. 7

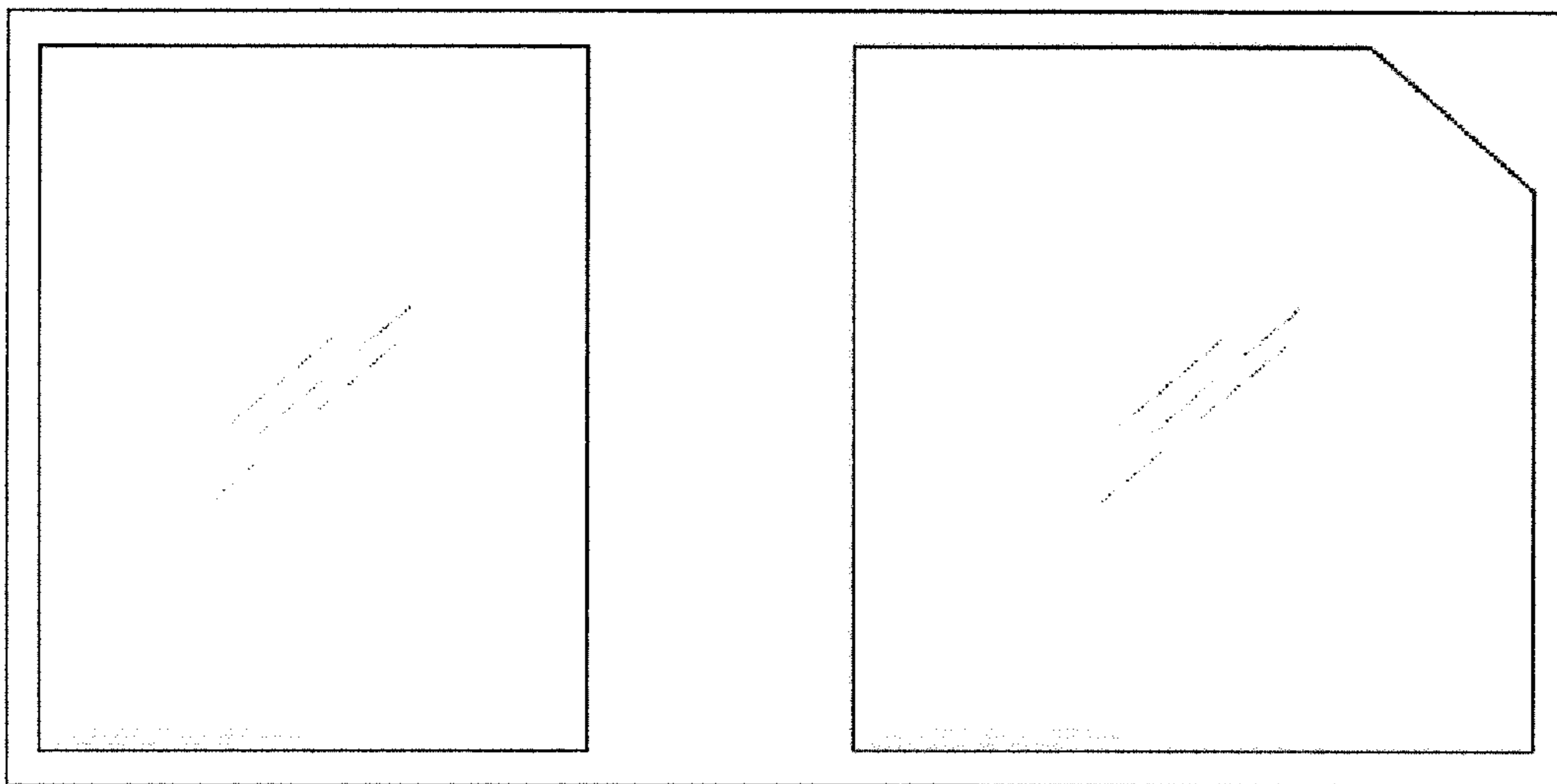


FIG. 8