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

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(45) **Date of Patent:** **\*\* Dec. 16, 2014**

(54) **LIGHT-EMITTING DIODE**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

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4,466,050	A *	8/1984	Lockard	362/307
5,625,202	A *	4/1997	Chai	257/94
6,657,238	B2 *	12/2003	Ueda	257/99
D496,007	S *	9/2004	Hoshiba	D13/179
D514,074	S *	1/2006	Kamidoi et al.	D13/182
7,319,044	B2 *	1/2008	Han et al.	438/22
D574,791	S *	8/2008	Shimozawa	D13/180
D590,358	S *	4/2009	Miyashita et al.	D13/180
D597,972	S *	8/2009	Kobayakawa	D13/180
D600,658	S *	9/2009	Takano	D13/180
D601,977	S *	10/2009	Tsuchiya	D13/180
7,696,522	B2 *	4/2010	Ono et al.	257/88
7,781,888	B2 *	8/2010	Kobayakawa et al.	257/730
D626,922	S *	11/2010	Wada	D13/180
D653,629	S *	2/2012	Miyashita	D13/180
8,242,514	B2 *	8/2012	Joung	257/79
D671,509	S *	11/2012	Moriguchi et al.	D13/180
D676,002	S *	2/2013	Watanabe	D13/180
D694,201	S *	11/2013	Iino	D13/180
2006/0163602	A1 *	7/2006	Isokawa	257/100
2006/0220205	A1 *	10/2006	Hongo et al.	257/680
2007/0075323	A1 *	4/2007	Kanazawa et al.	257/98
2008/0238604	A1 *	10/2008	Sato et al.	338/21
2011/0186870	A1 *	8/2011	Ying et al.	257/88
2012/0187398	A1 *	7/2012	Lim	257/43
2013/0134472	A1 *	5/2013	Zhang	257/99
2013/0240922	A1 *	9/2013	Yamamoto	257/89
2013/0256729	A1 *	10/2013	Chen et al.	257/98
2014/0061682	A1 *	3/2014	Kobayashi et al.	257/88

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

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Dec. 6, 2012	(JP)	2012-029868
Dec. 6, 2012	(JP)	2012-029869

\* cited by examiner

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PLLC

(51) **LOC (10) Cl.** ..... **13-03**

(52) **U.S. Cl.**  
USPC ..... **D13/180**

(58) **Field of Classification Search**  
USPC ..... D13/180; D26/1; 257/79, 80, 81, 88,  
257/89, 95, 98, 99, 100, E33.058; 313/483,  
313/498, 500; 362/555, 800  
See application file for complete search history.

(57) **CLAIM**

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

**DESCRIPTION**

FIG. 1 is a top perspective view of a first embodiment of a light-emitting diode showing an upper surface, a front side surface and a left side surface;

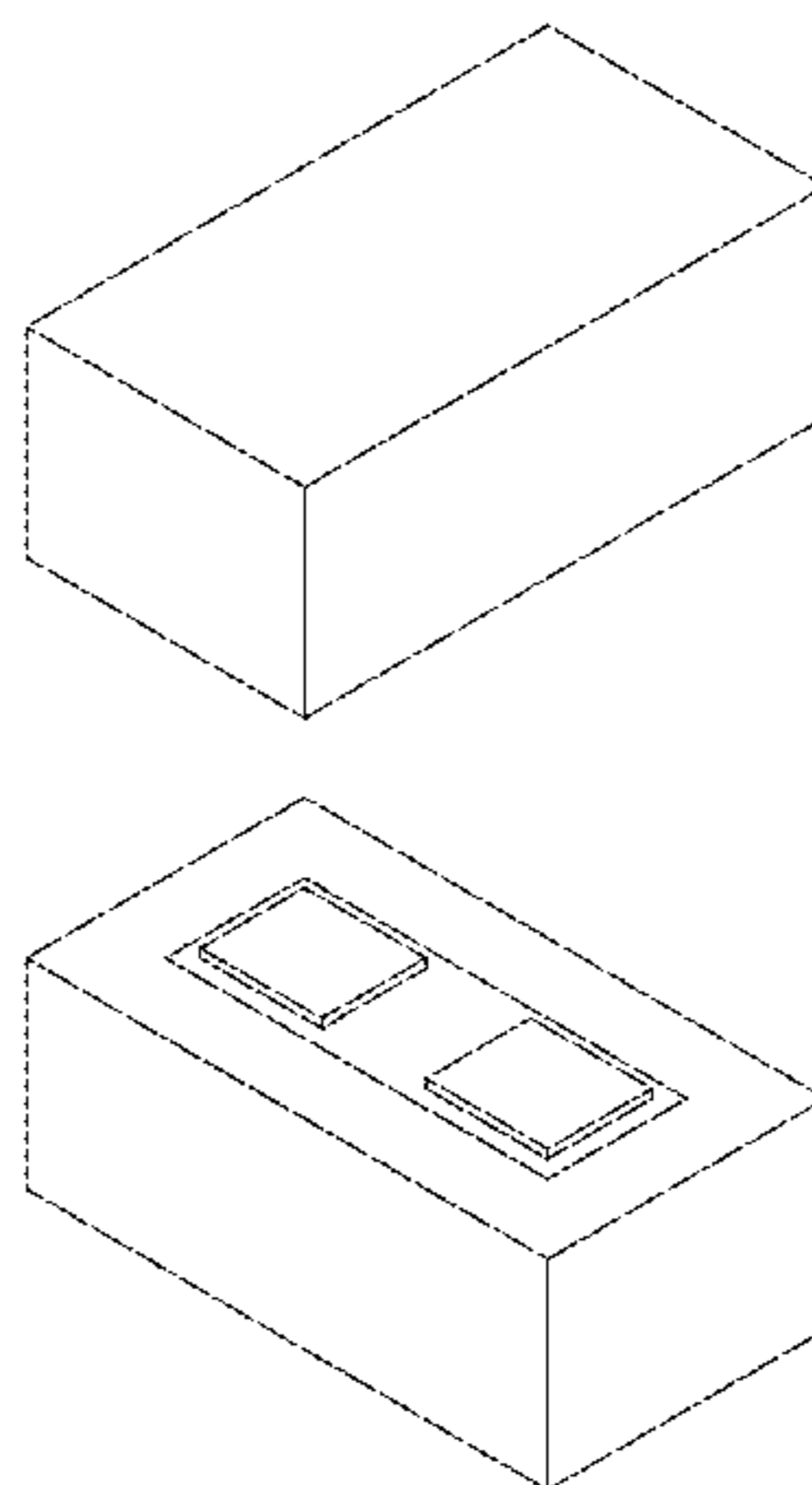


FIG. 2 is a bottom perspective view thereof with a rear side surface and a right side surface;  
FIG. 3 is a front side view thereof, a rear side view opposite the front side view being identical to FIG. 3;  
FIG. 4 is a top plan view thereof;  
FIG. 5 is a bottom plan view thereof;  
FIG. 6 is a left side view thereof, a right side view opposite the left side view being identical to FIG. 6;  
FIG. 7 is a top perspective view of a second embodiment of a light-emitting diode showing an upper surface, a front side surface and a left side surface;  
FIG. 8 is a bottom perspective view thereof with a rear side surface and a right side surface;  
FIG. 9 is a front side view thereof, a rear side view opposite the front side view being identical to FIG. 9;  
FIG. 10 is a top plan view thereof;  
FIG. 11 is a bottom plan view thereof;  
FIG. 12 is a left side view thereof, a right side view opposite the left side view being identical to FIG. 12;  
FIG. 13 is a top perspective view of a third embodiment of a light-emitting diode showing an upper surface, a front side surface and a left side surface;  
FIG. 14 is a bottom perspective view thereof with a rear side surface and a right side surface;  
FIG. 15 is a front side view thereof, a rear side view opposite the front side view being identical to FIG. 15;  
FIG. 16 is a top plan view thereof;  
FIG. 17 is a bottom plan view thereof;  
FIG. 18 is a left side view thereof, a right side view opposite the left side view being identical to FIG. 18;  
FIG. 19 is a top perspective view of a fourth embodiment of a light-emitting diode showing an upper surface, a front side surface and a left side surface;

FIG. 20 is a bottom perspective view thereof with a rear side surface and a right side surface;  
FIG. 21 is a front side view thereof, a rear side view opposite the front side view being identical to FIG. 21;  
FIG. 22 is a top plan view thereof;  
FIG. 23 is a bottom plan view thereof;  
FIG. 24 is a left side view thereof, a right side view opposite the left side view being identical to FIG. 24;  
FIG. 25 is a top perspective view of a fifth embodiment of a light-emitting diode showing an upper surface, a front side surface and a left side surface;  
FIG. 26 is a bottom perspective view thereof with a rear side surface and a right side surface;  
FIG. 27 is a front side view thereof, a rear side view opposite the front side view being identical to FIG. 27;  
FIG. 28 is a top plan view thereof;  
FIG. 29 is a bottom plan view thereof;  
FIG. 30 is a left side view thereof, a right side view opposite the left side view being identical to FIG. 30;  
FIG. 31 is a top perspective view of a sixth embodiment of a light-emitting diode showing an upper surface, a front side surface and a left side surface;  
FIG. 32 is a bottom perspective view thereof with a rear side surface and a right side surface;  
FIG. 33 is a front side view thereof, a rear side view opposite the front side view being identical to FIG. 33;  
FIG. 34 is a top plan view thereof;  
FIG. 35 is a bottom plan view thereof; and,  
FIG. 36 is a left side view thereof, a right side view opposite the left side view being identical to FIG. 36.

**1 Claim, 18 Drawing Sheets**

Fig. 1

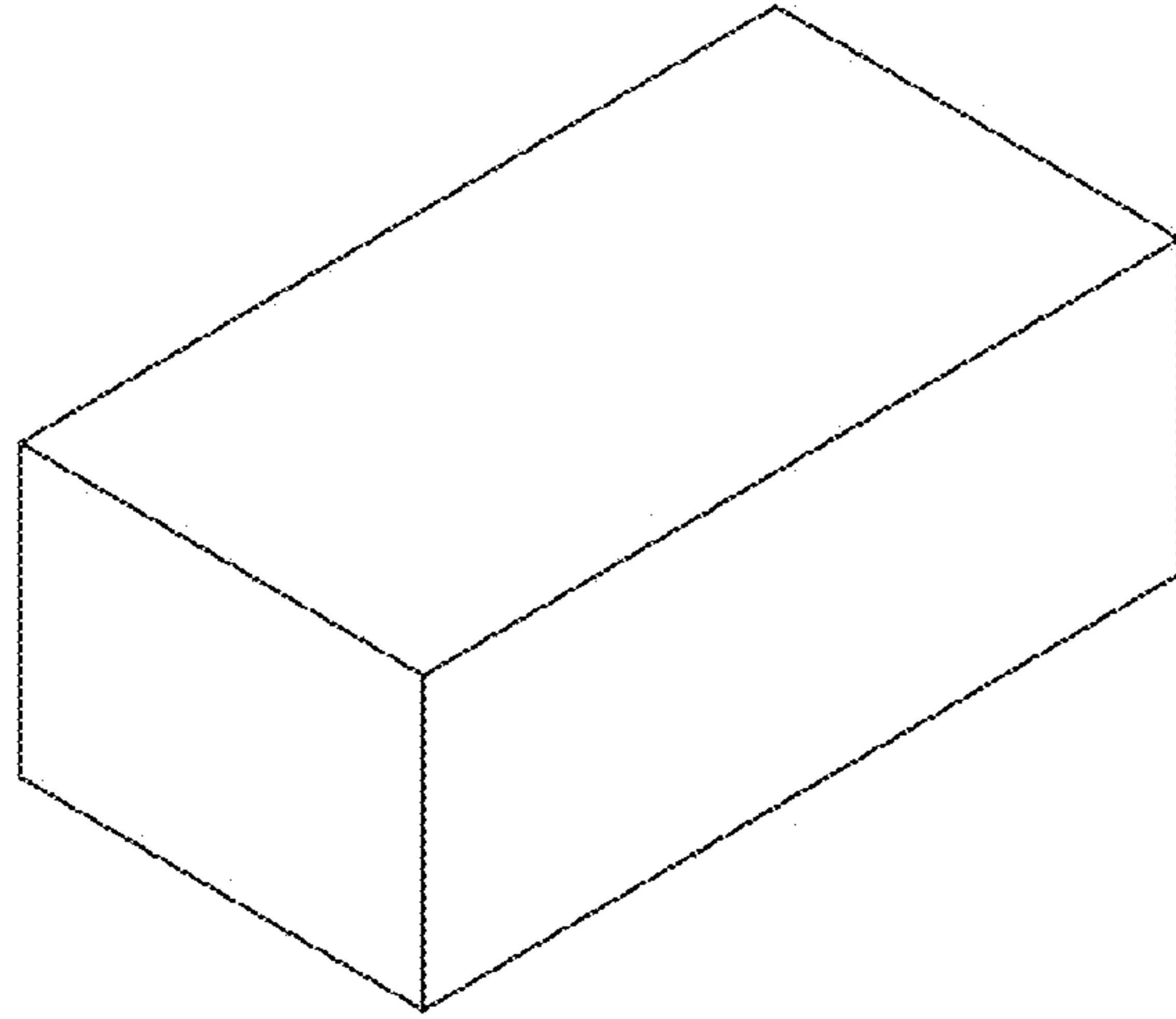


Fig. 2

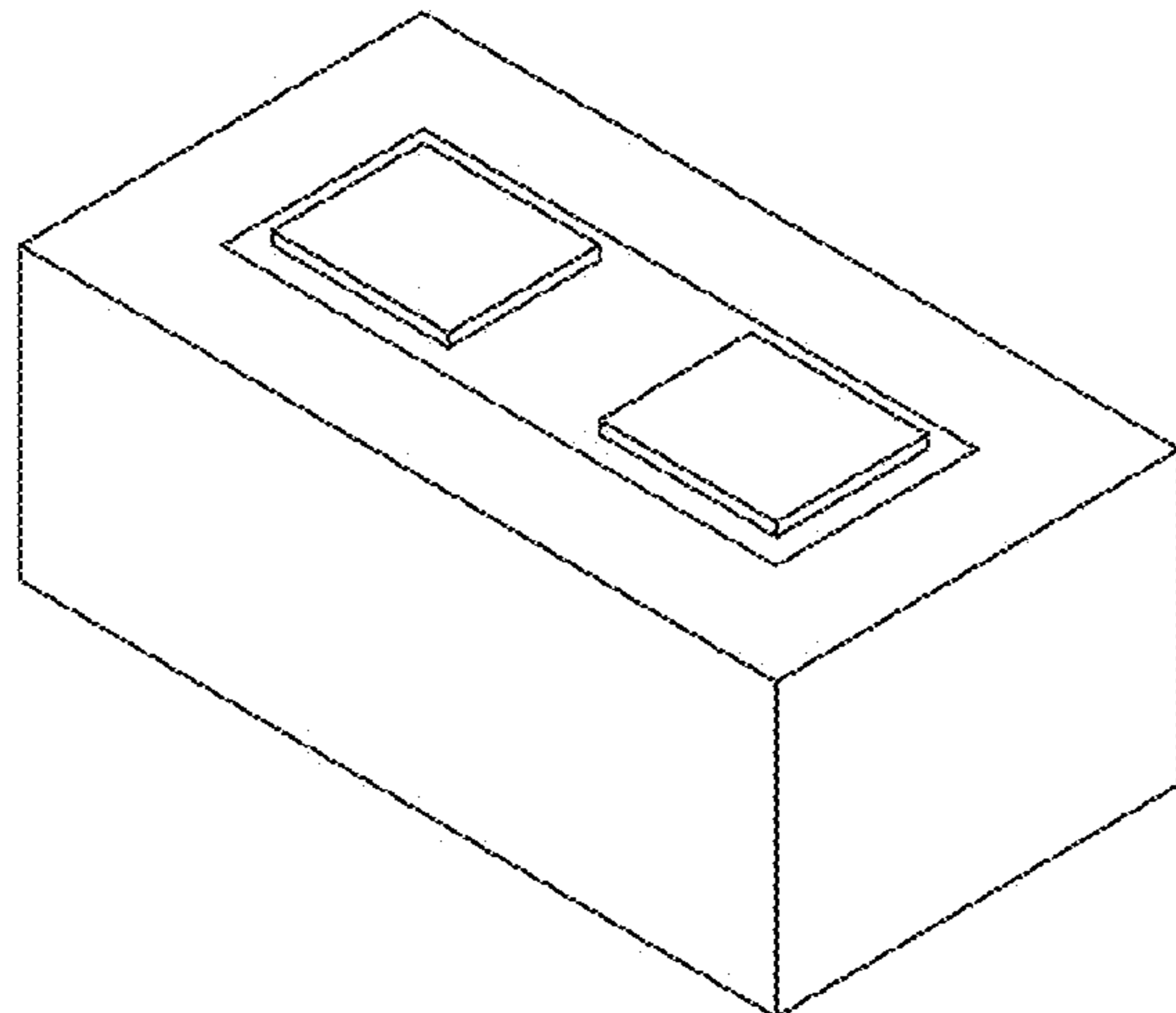


Fig. 3



Fig. 4



Fig. 5

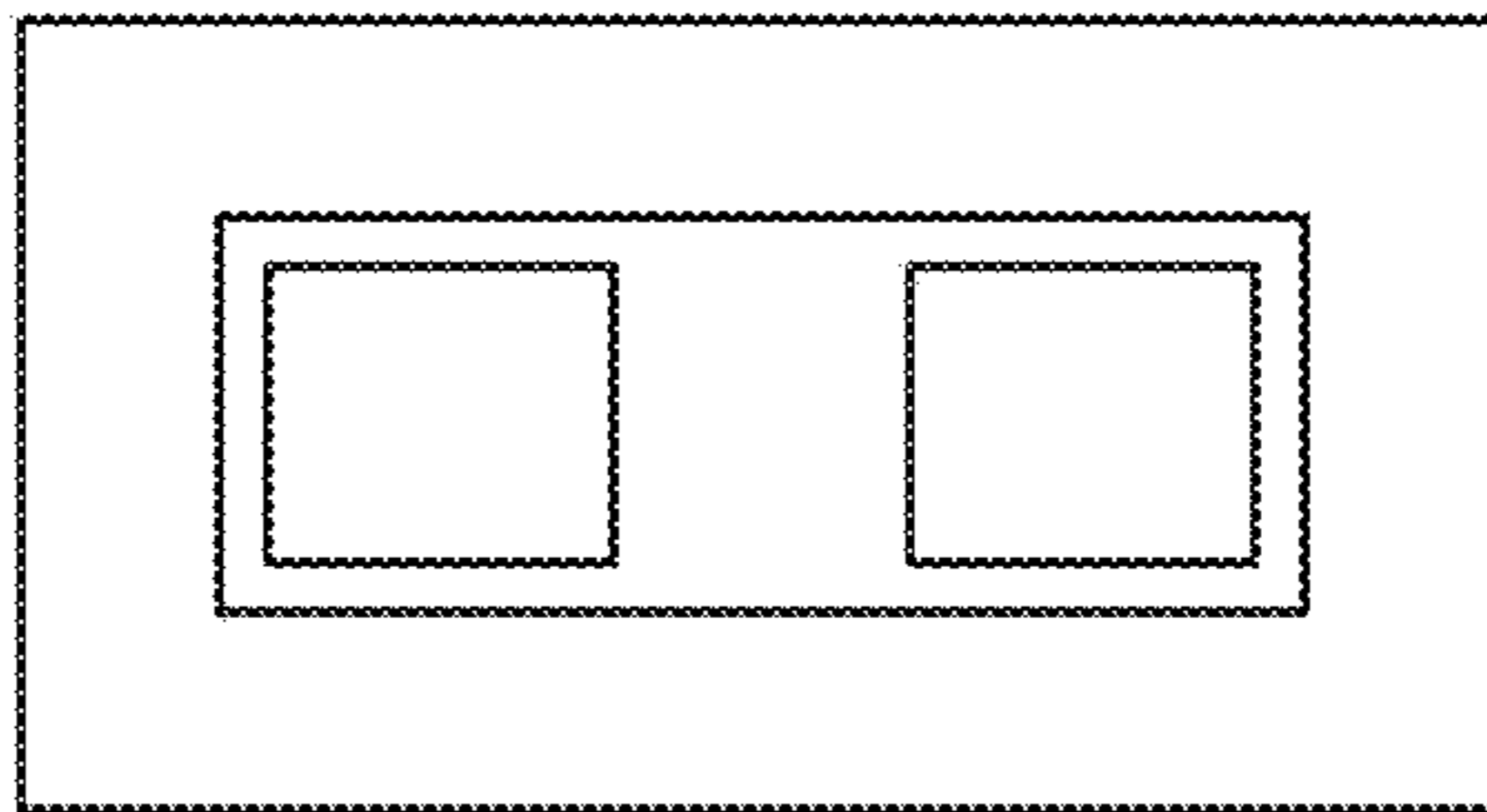


Fig. 6

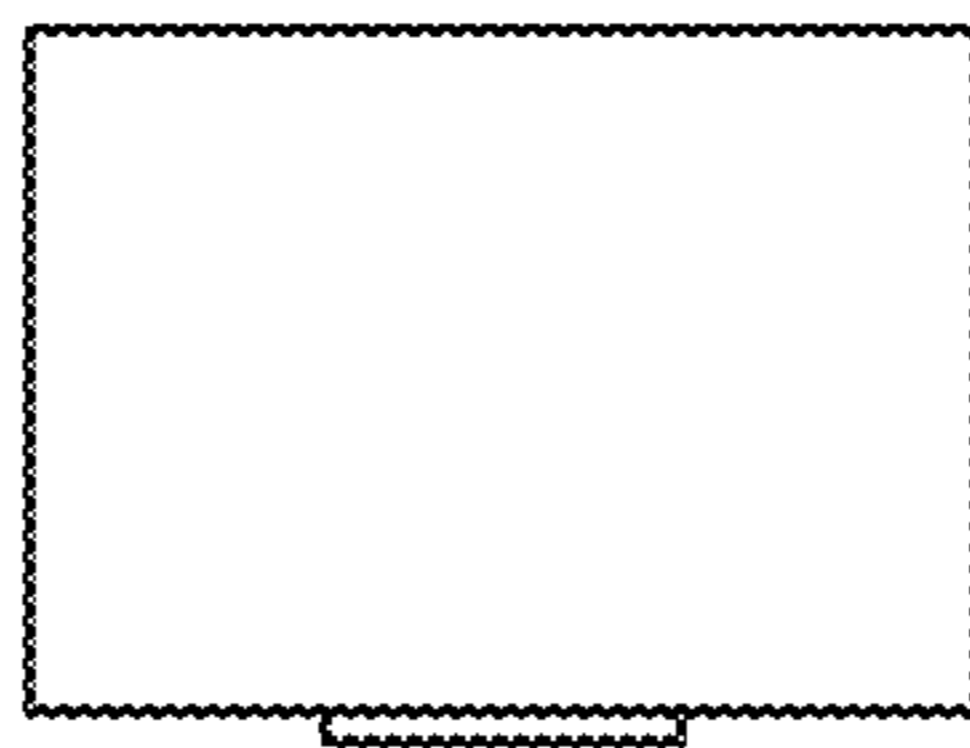


Fig. 7

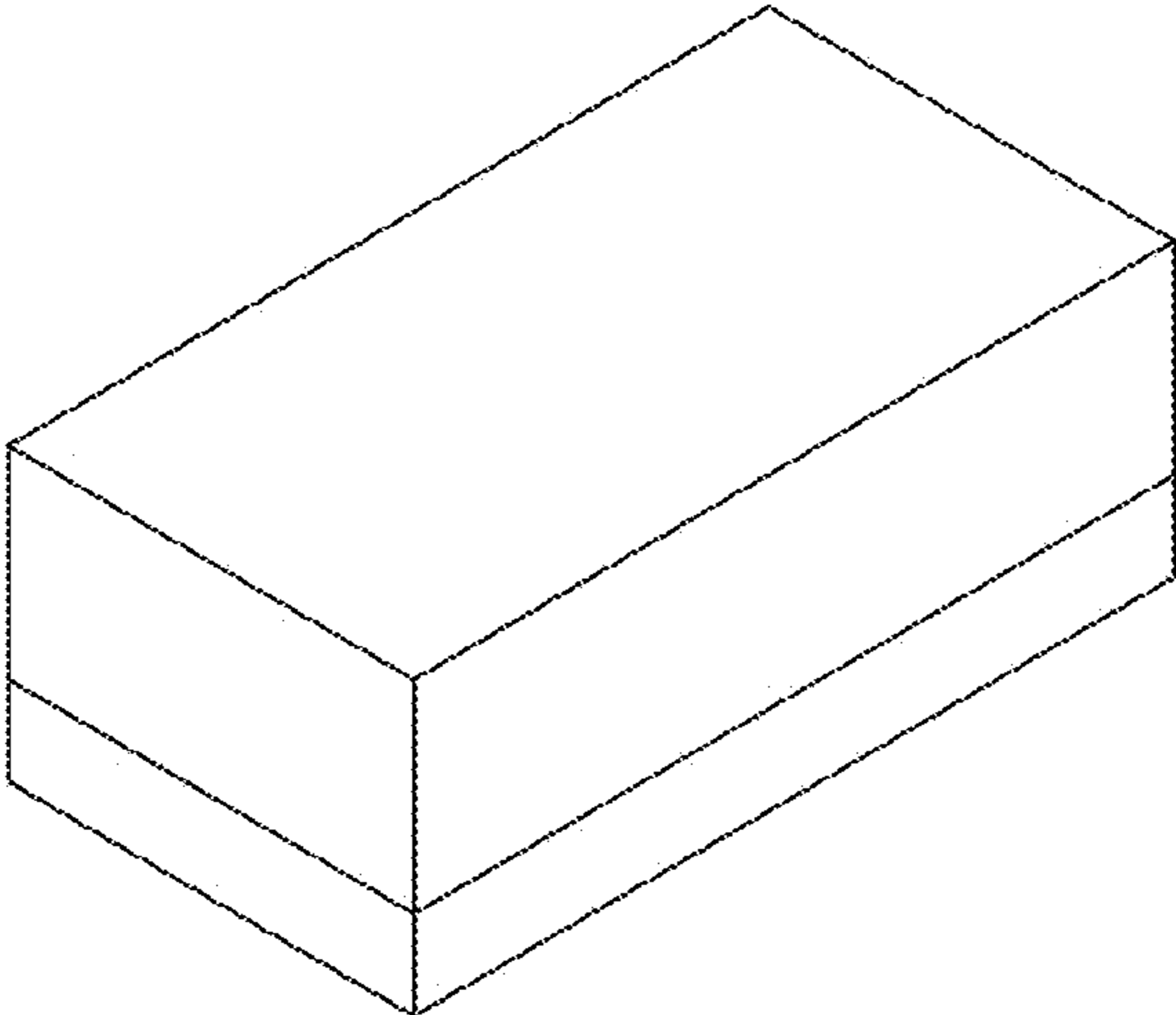


Fig. 8

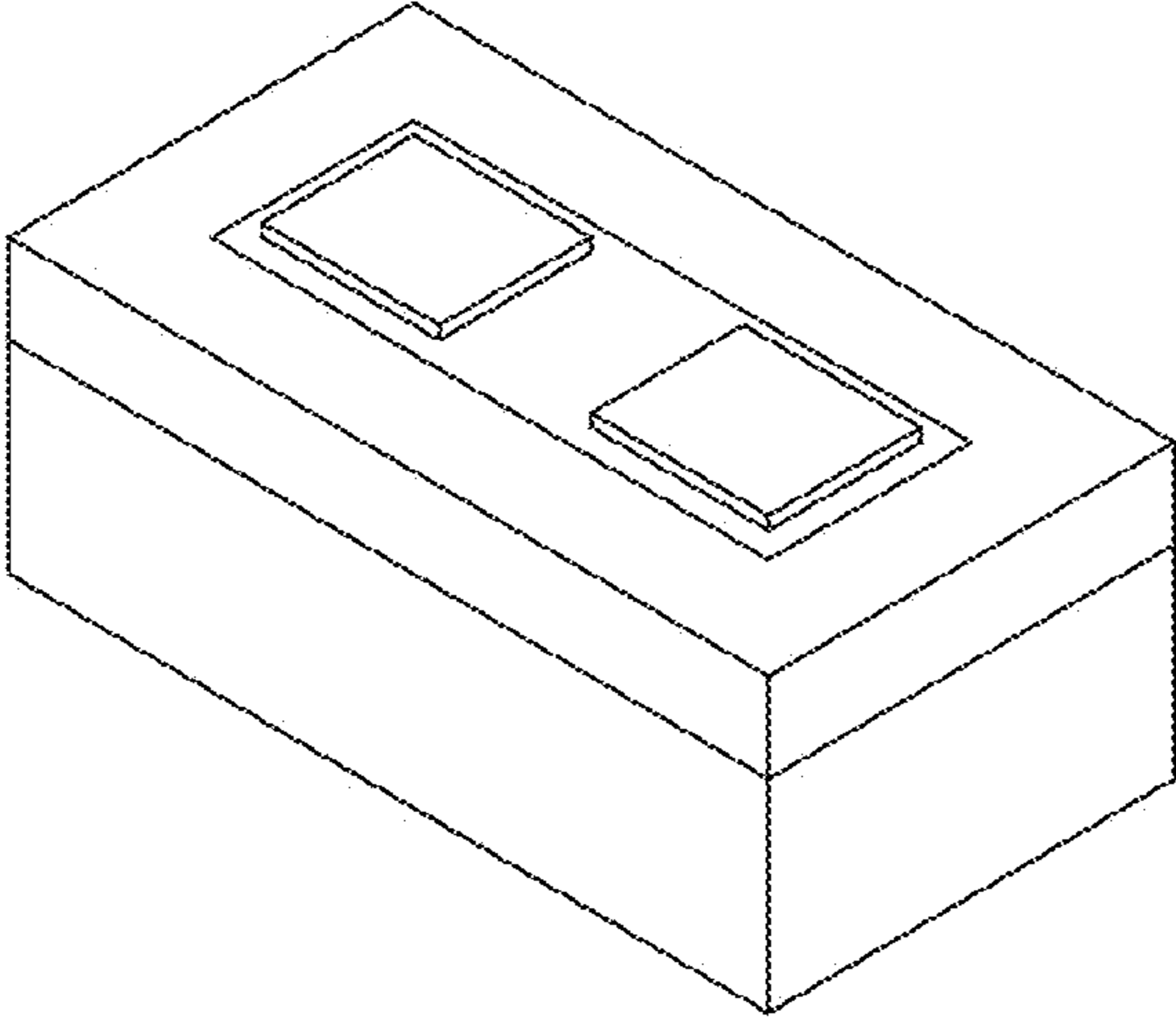


Fig. 9

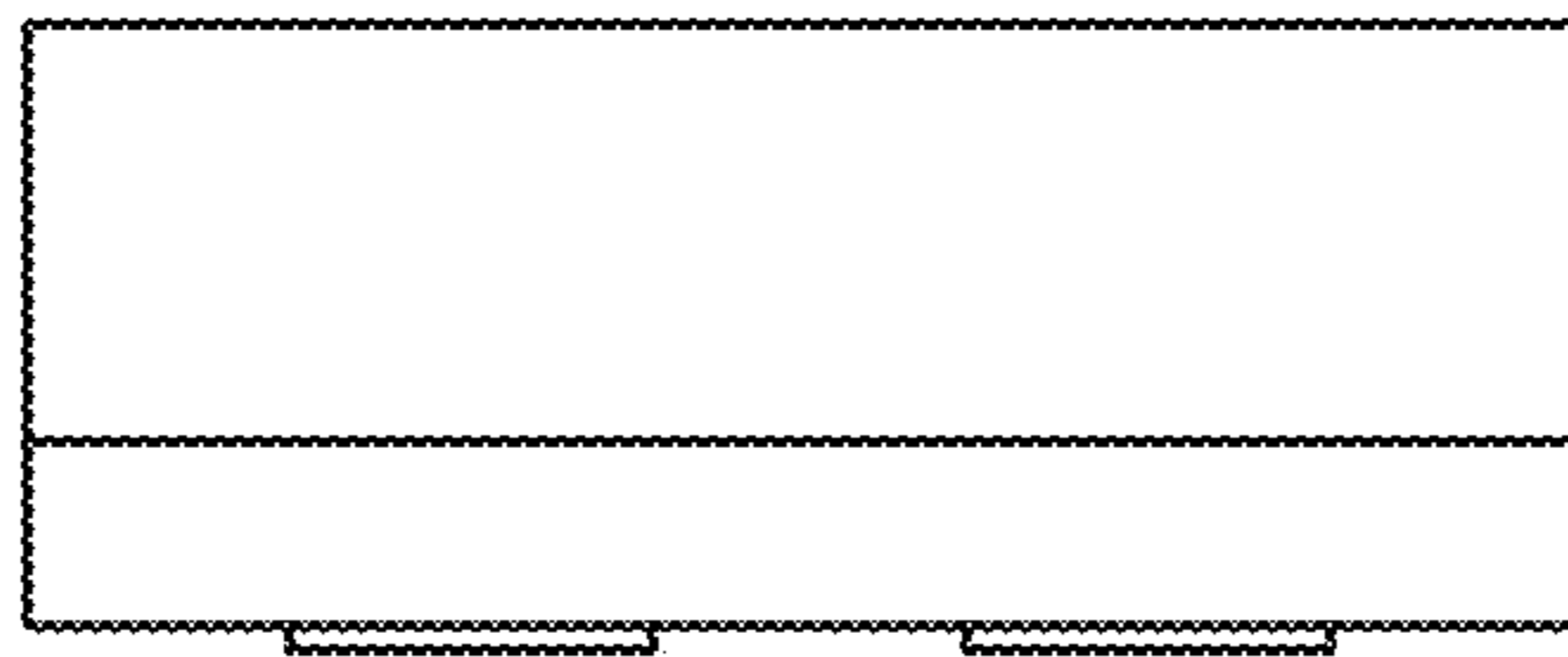


Fig. 10



Fig. 11

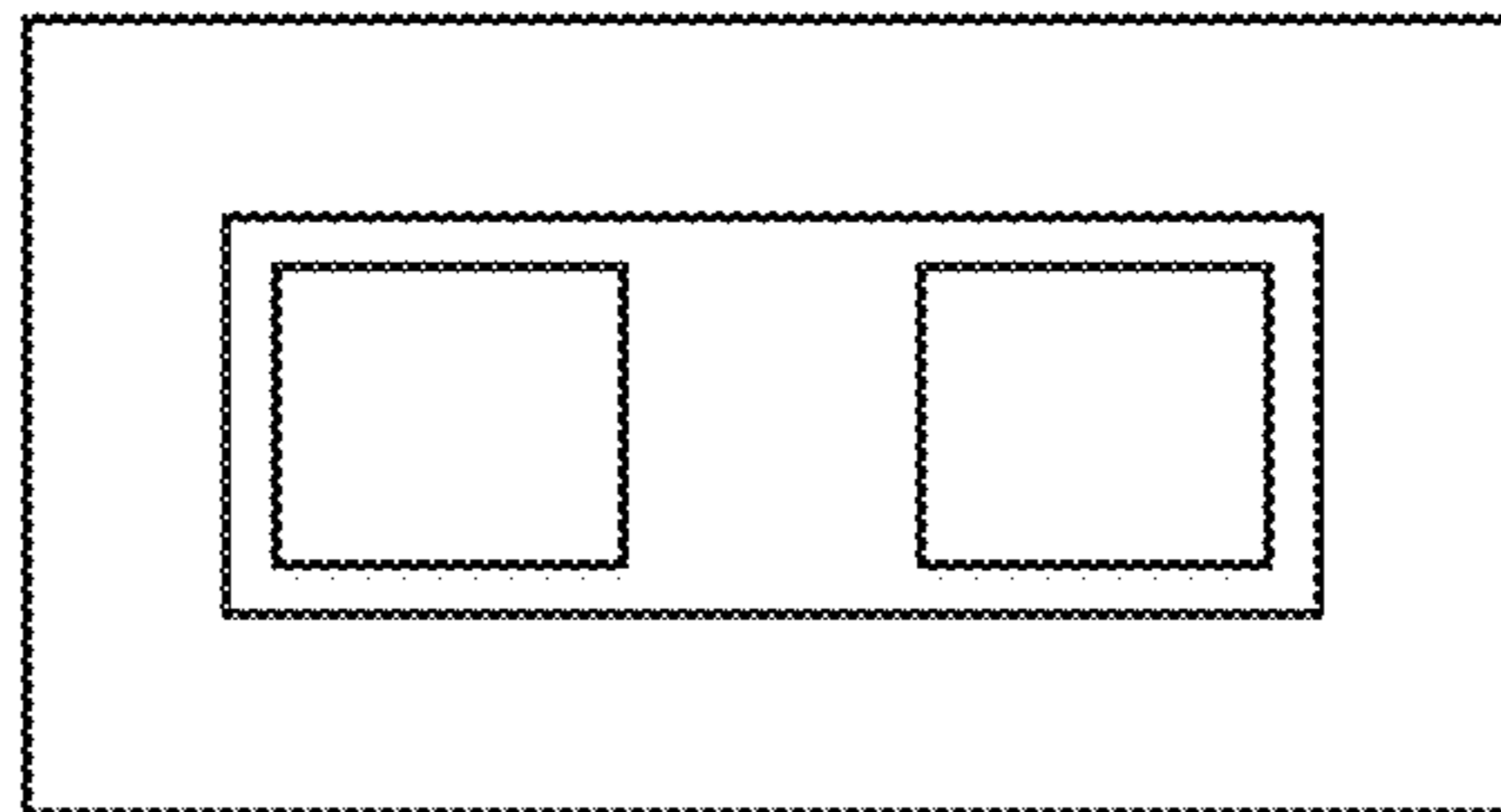


Fig. 12





Fig. 13

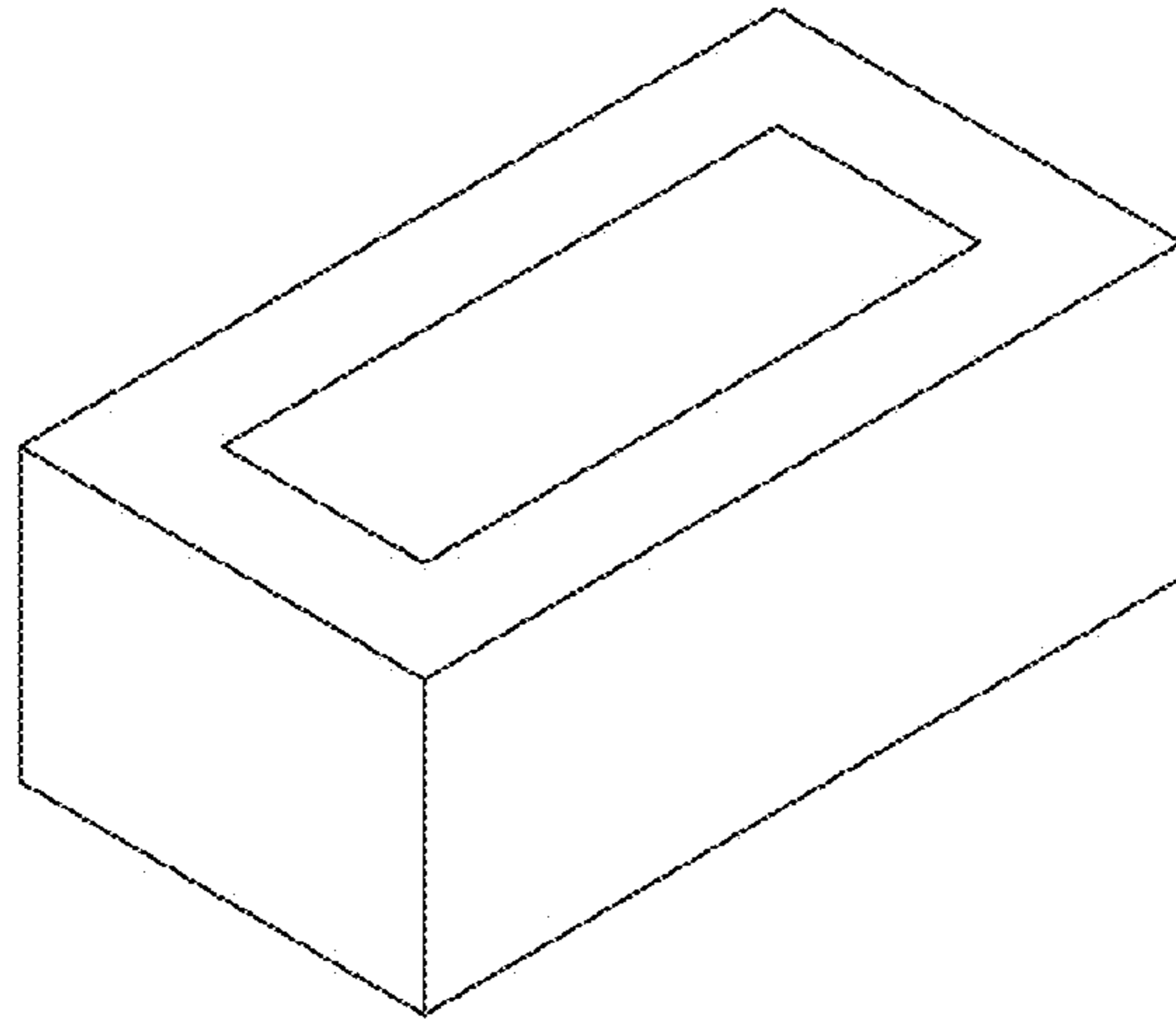


Fig. 14

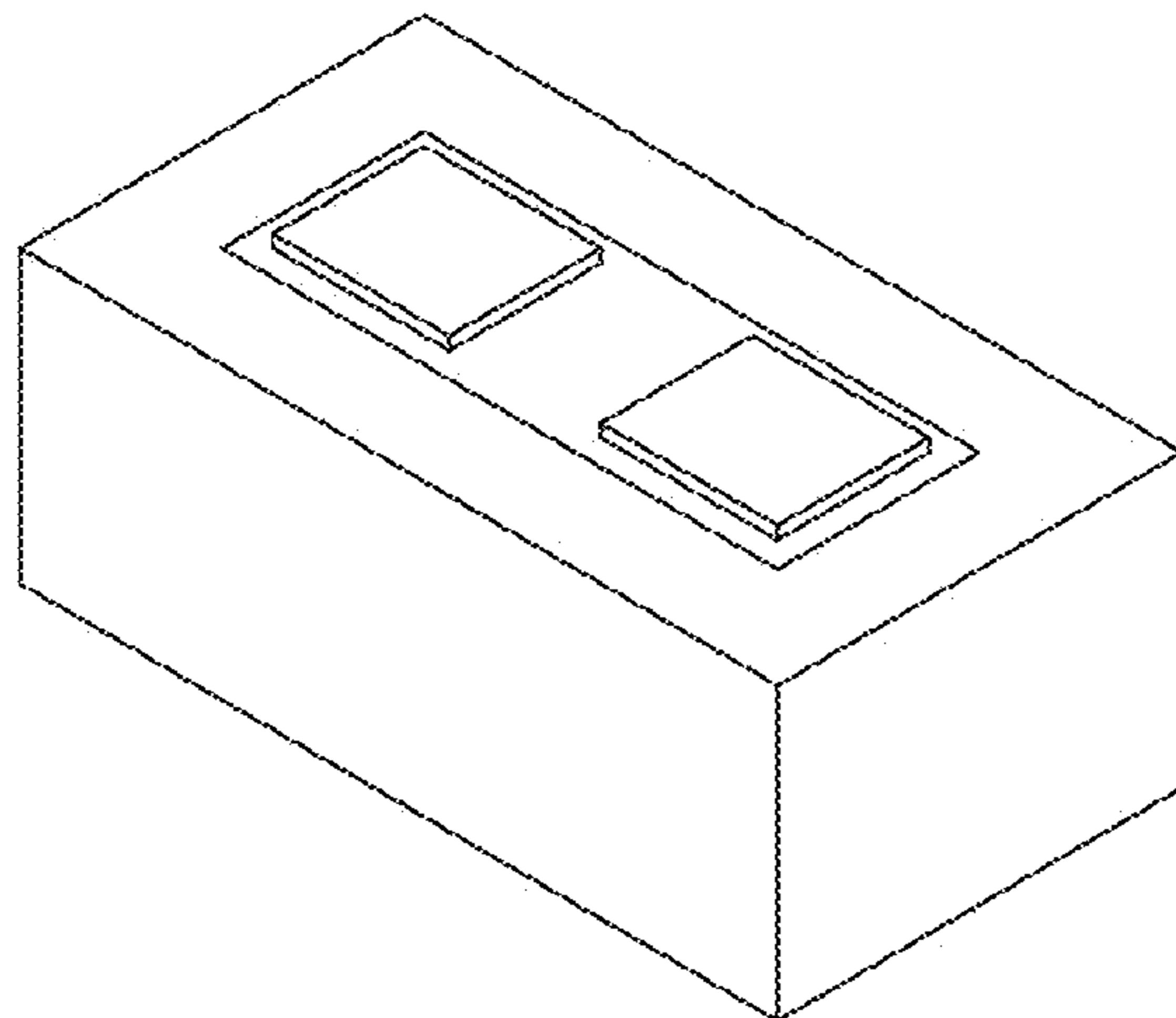


Fig. 15



Fig. 16

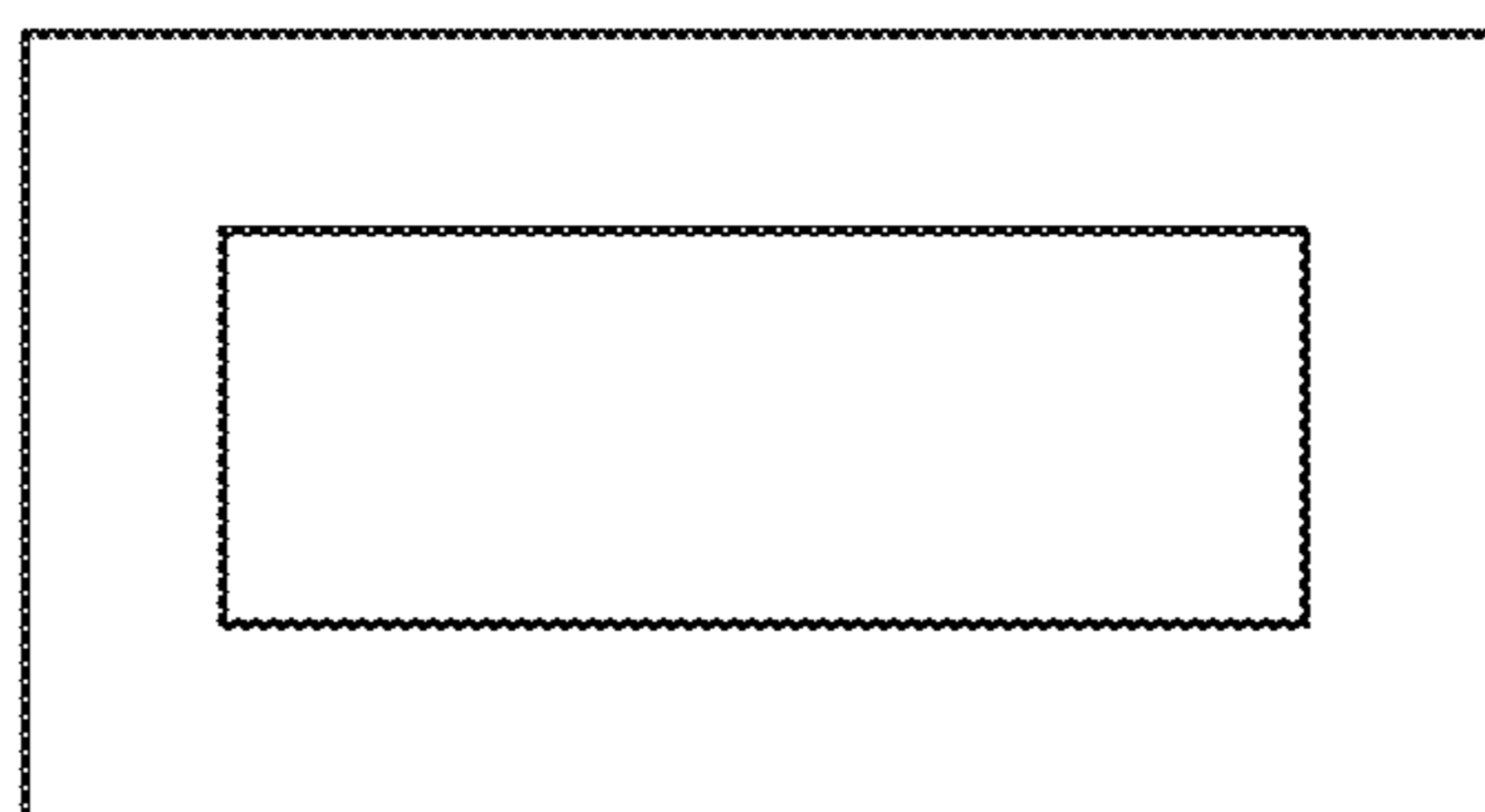


Fig. 17

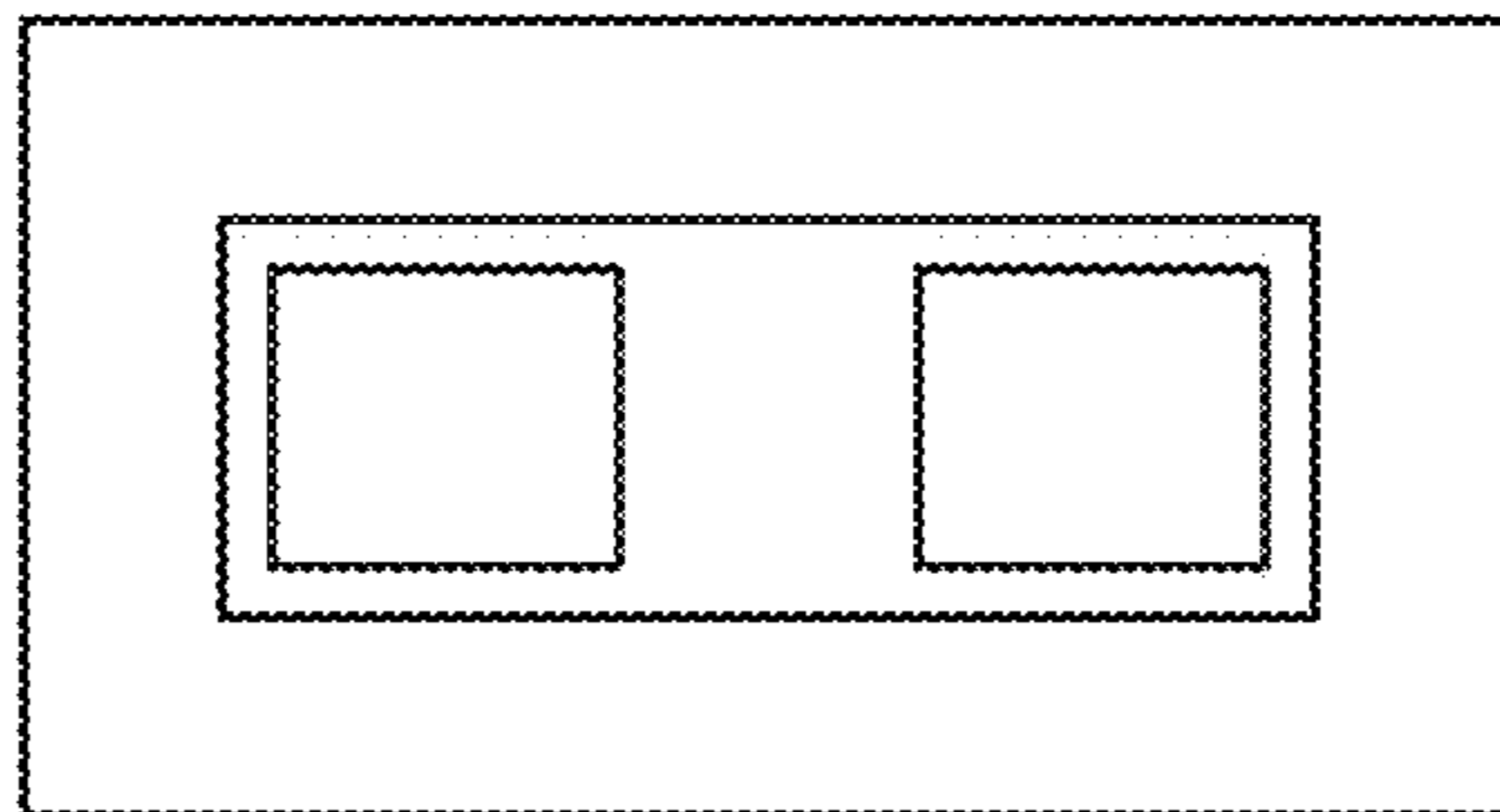


Fig. 18



Fig. 19

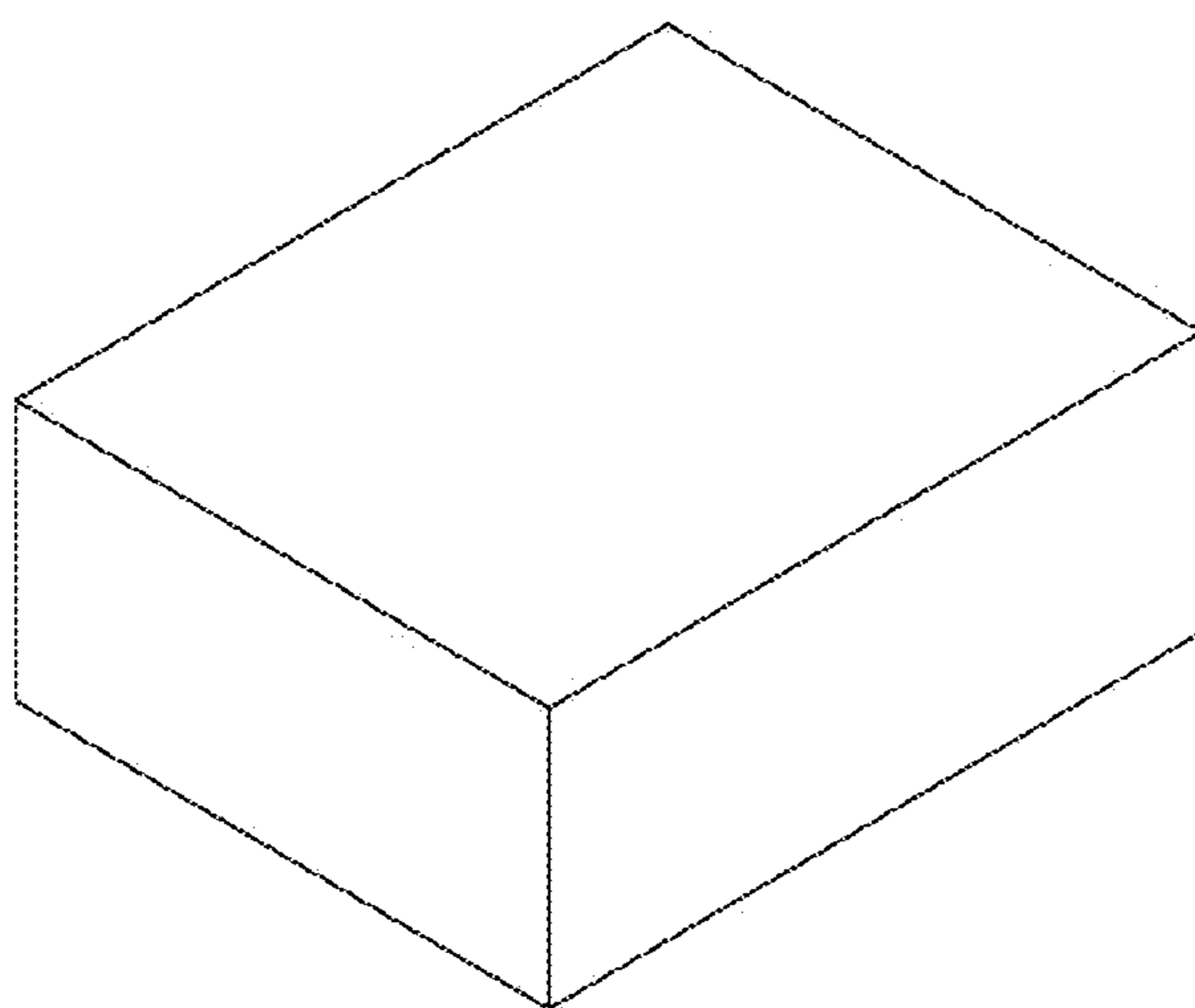


Fig. 20

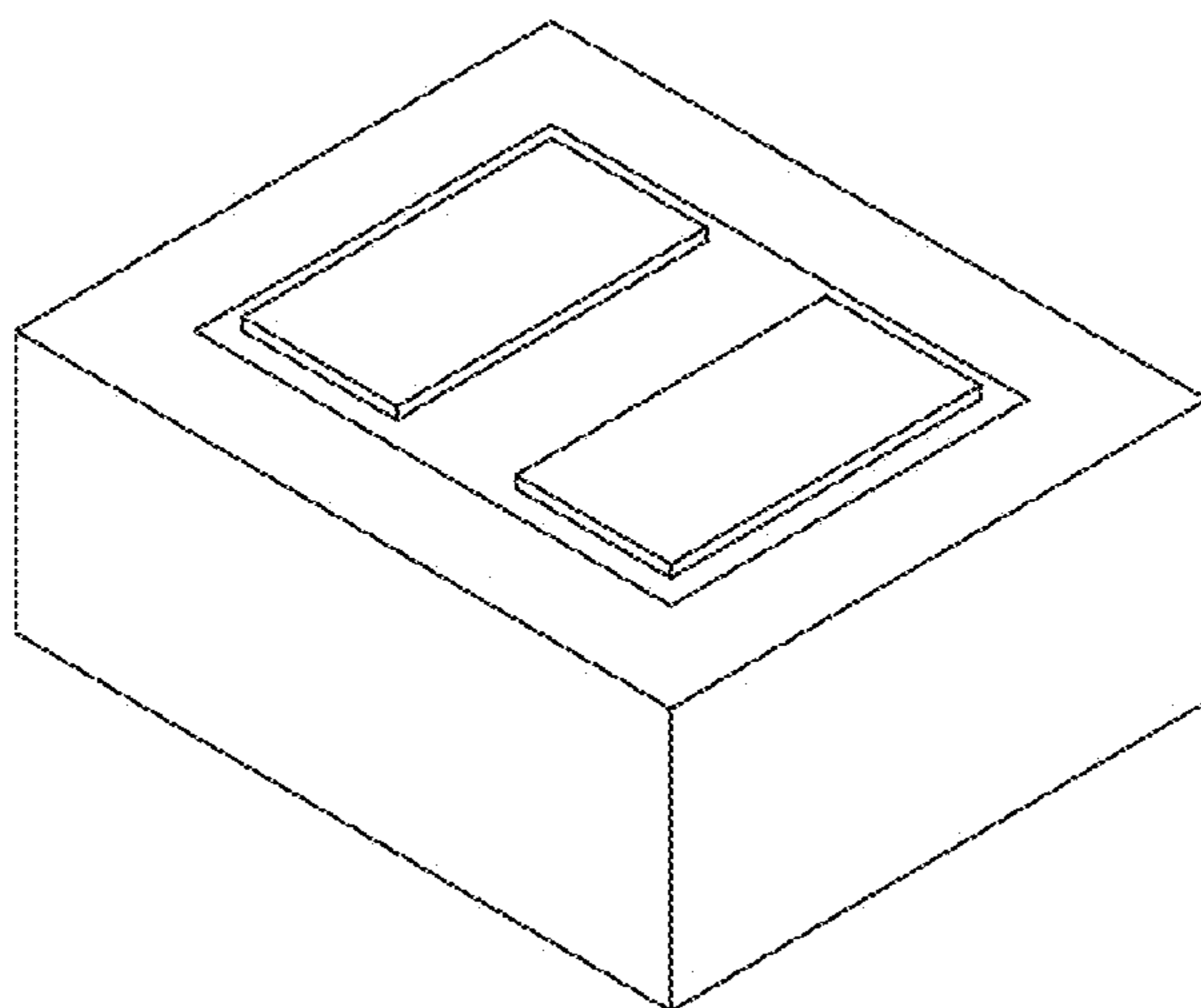


Fig. 21



Fig. 22

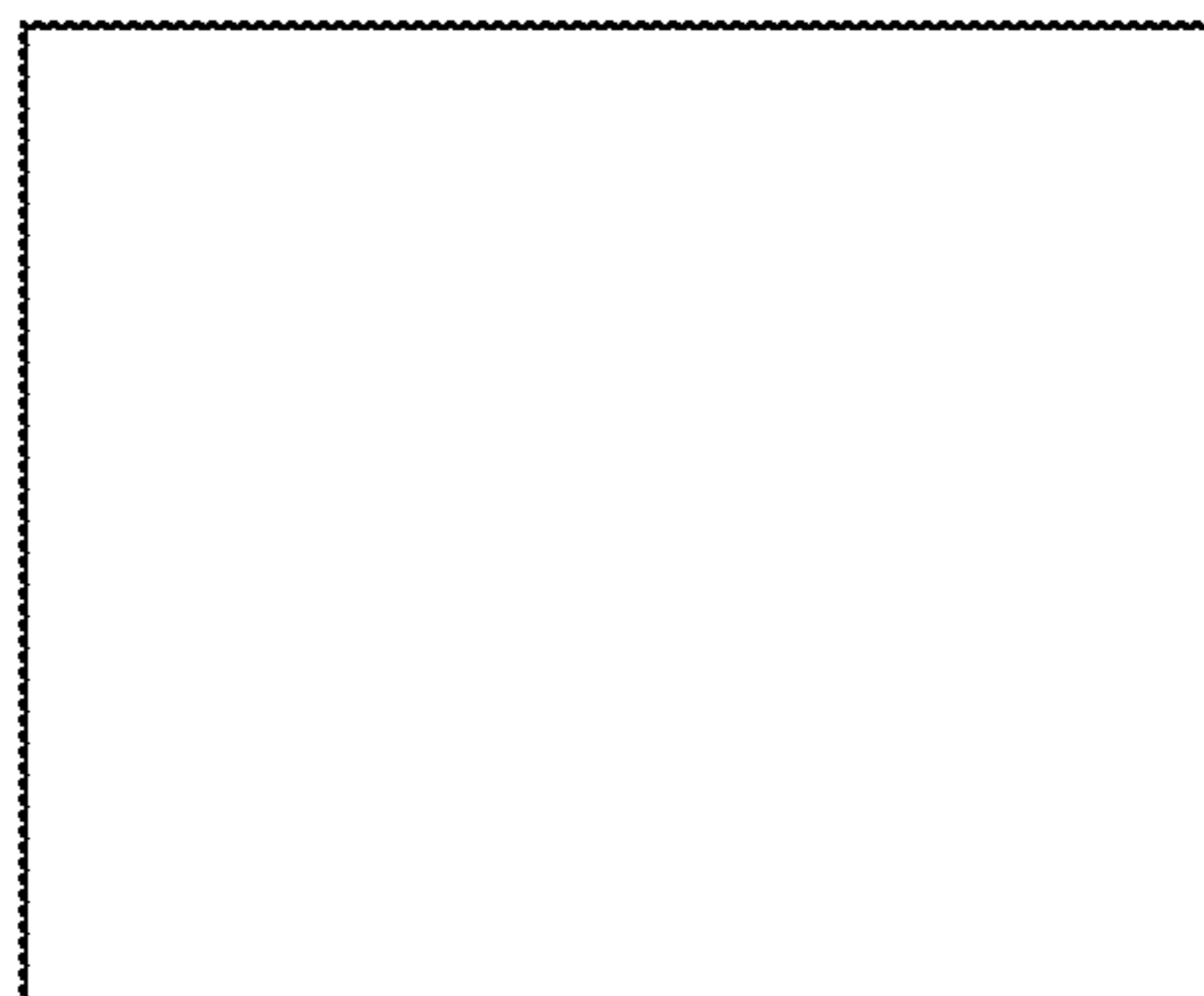


Fig. 23

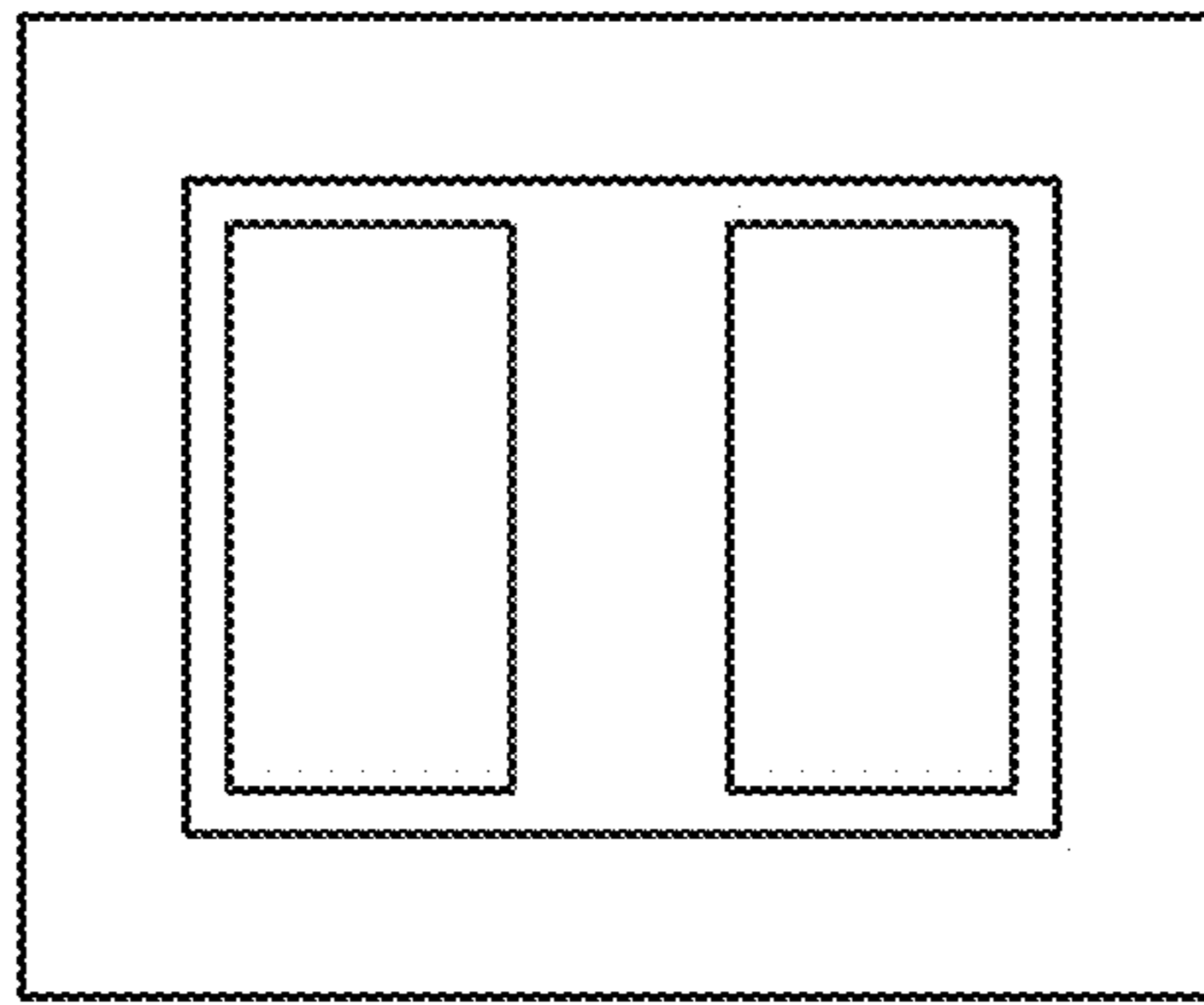


Fig. 24



Fig. 25

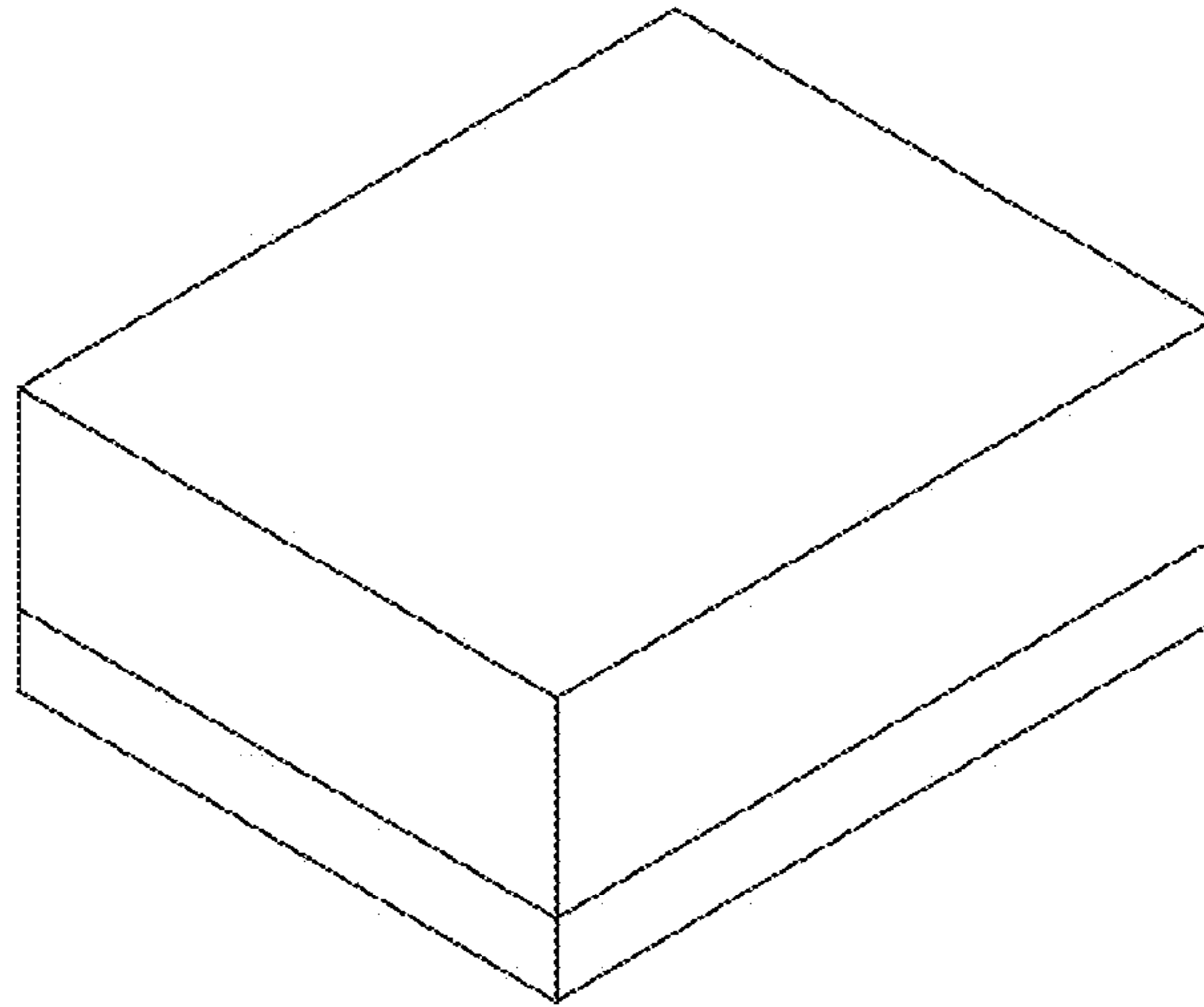


Fig. 26

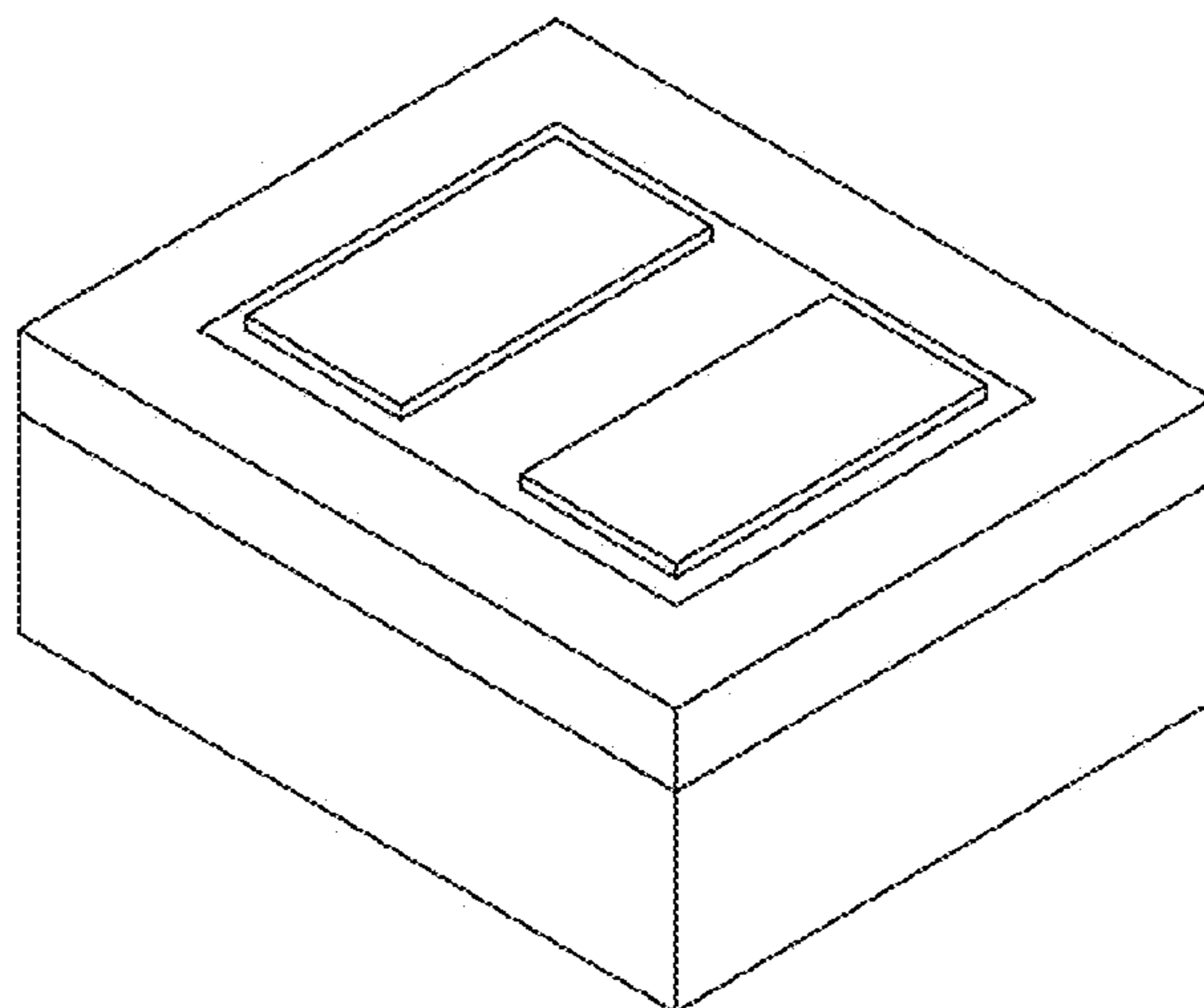


Fig. 27



Fig. 28

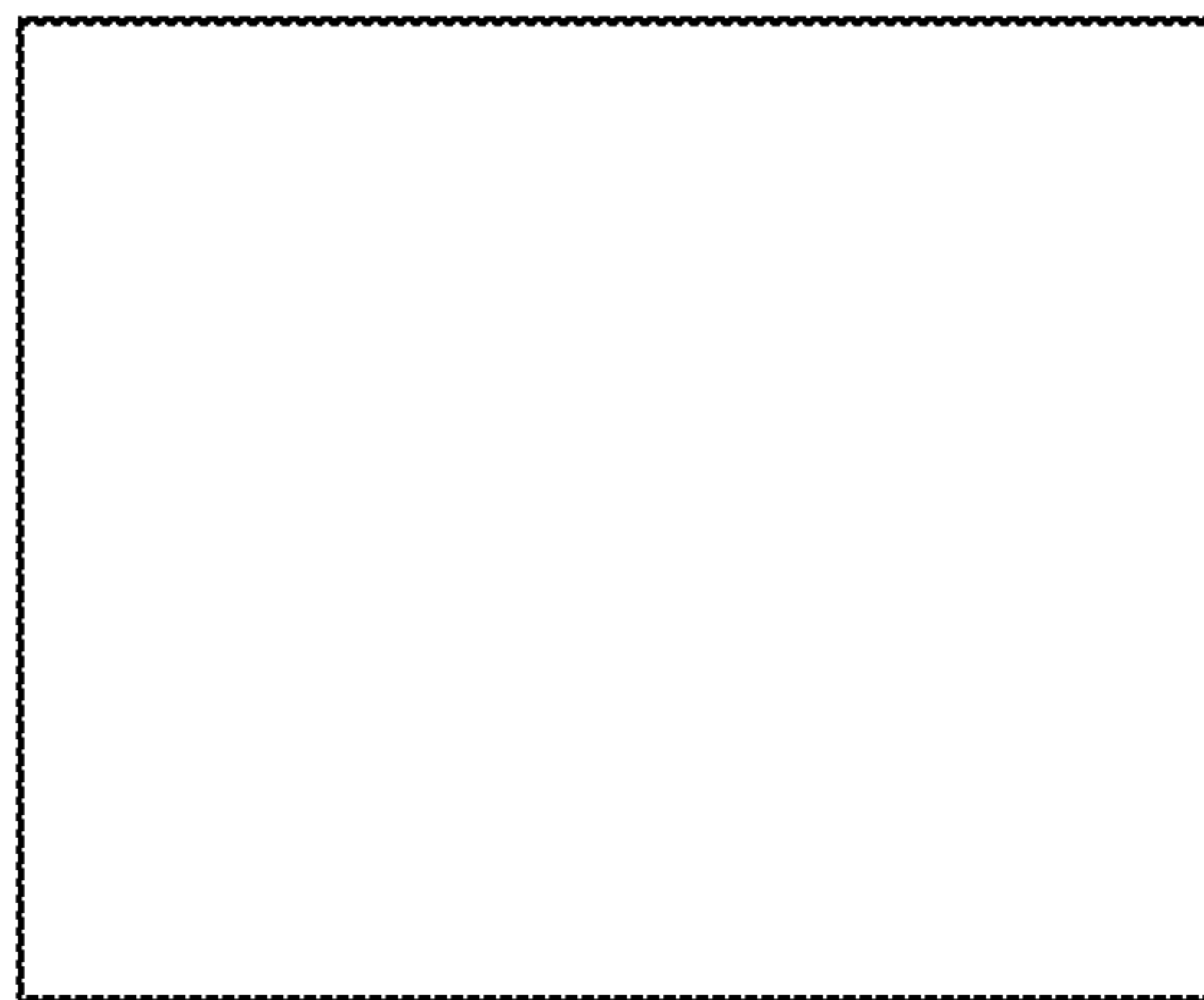




Fig. 29

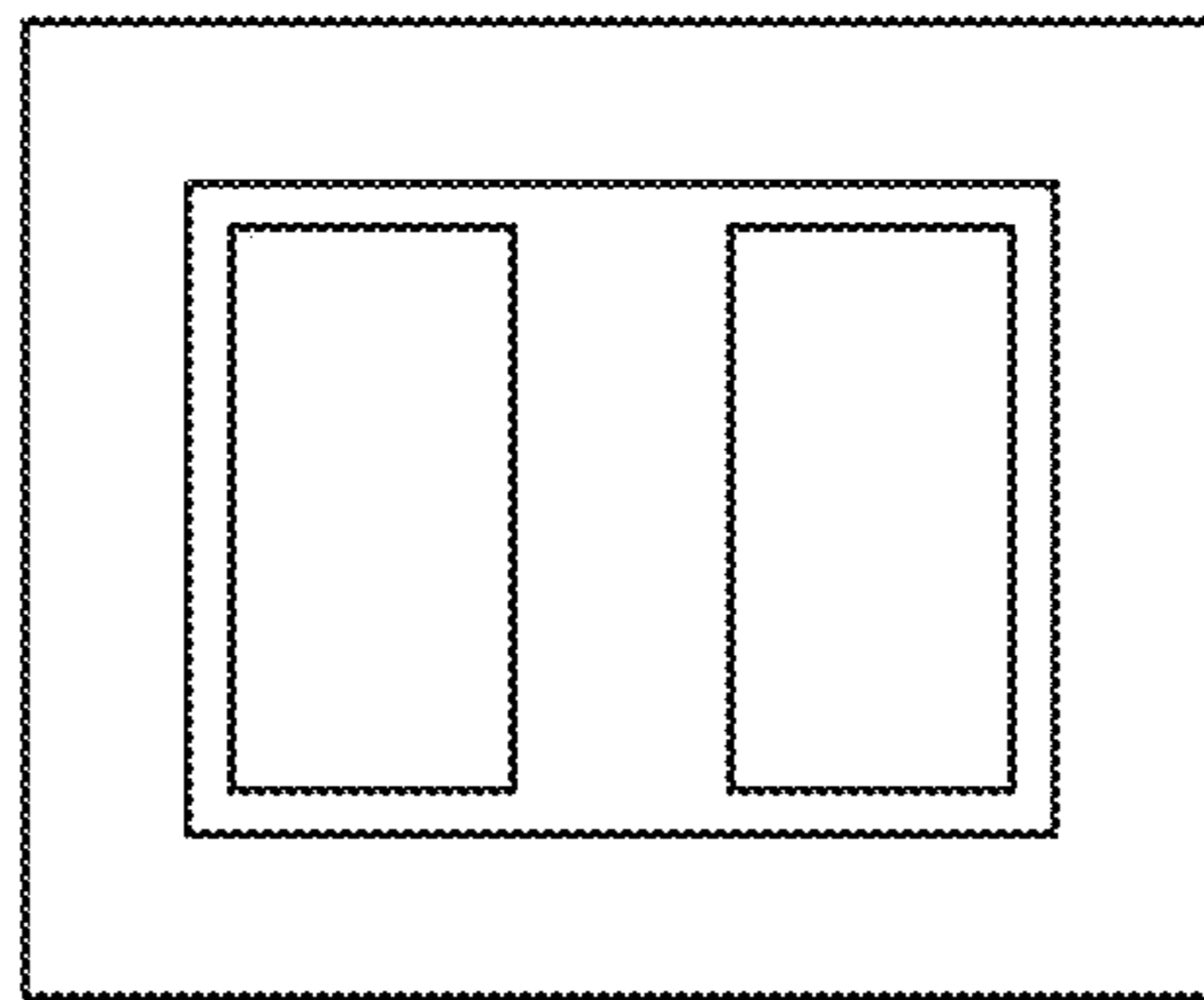


Fig. 30

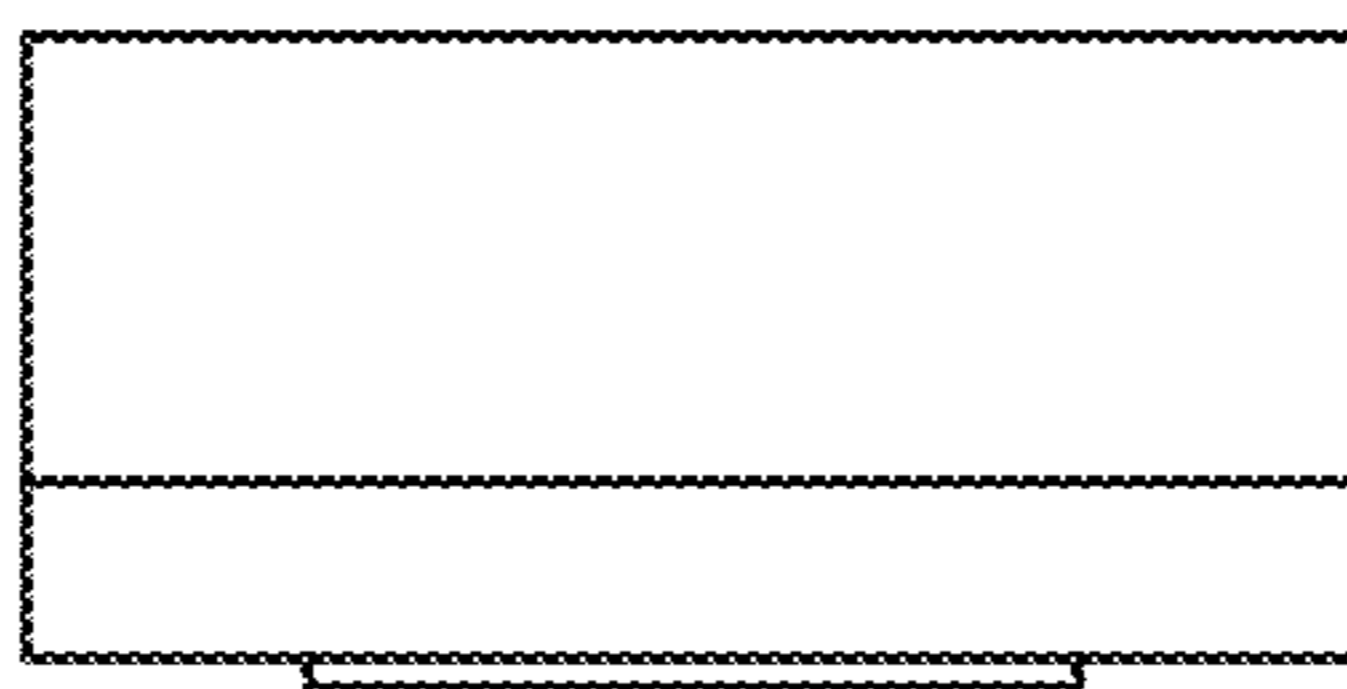


Fig. 31

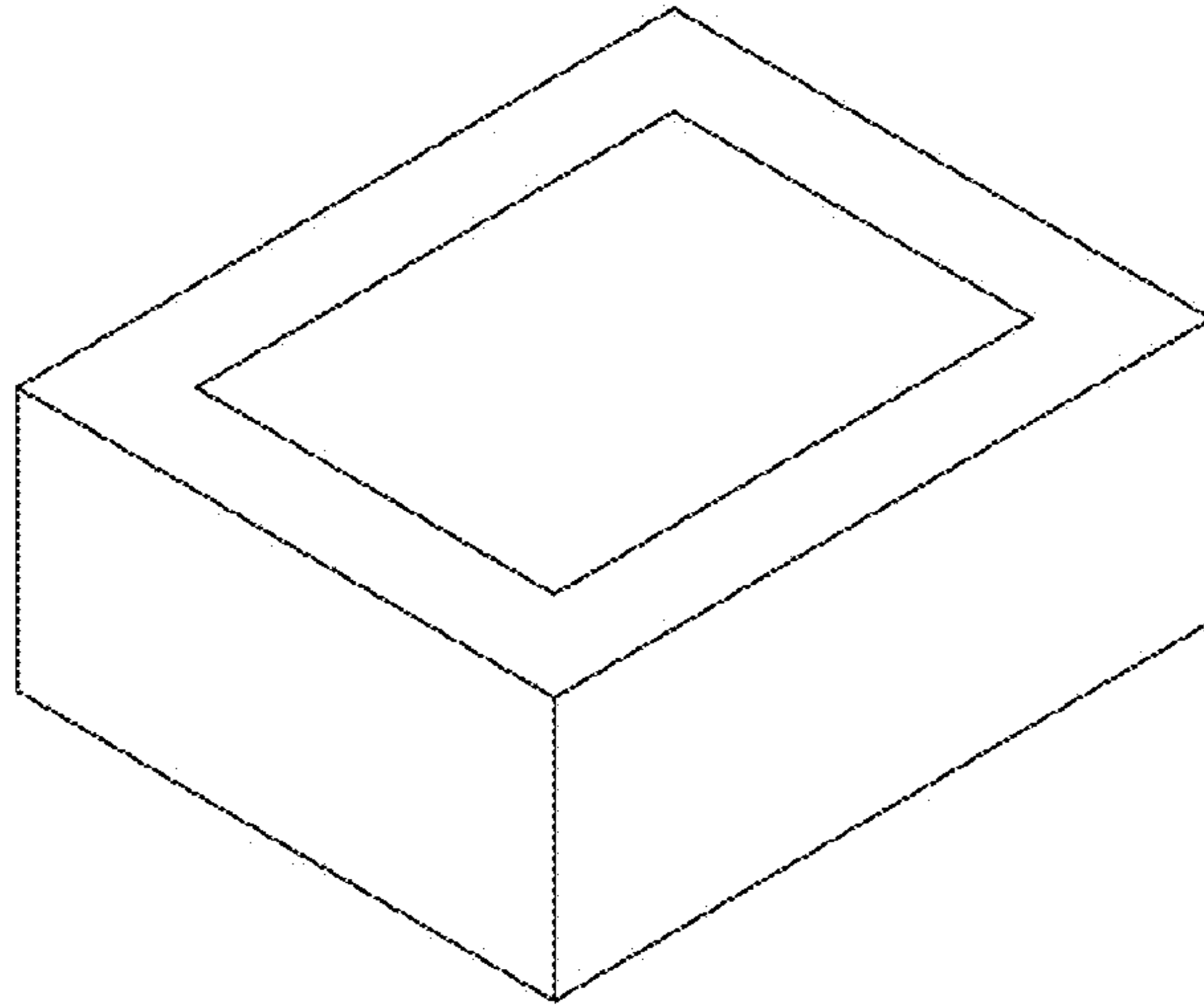


Fig. 32

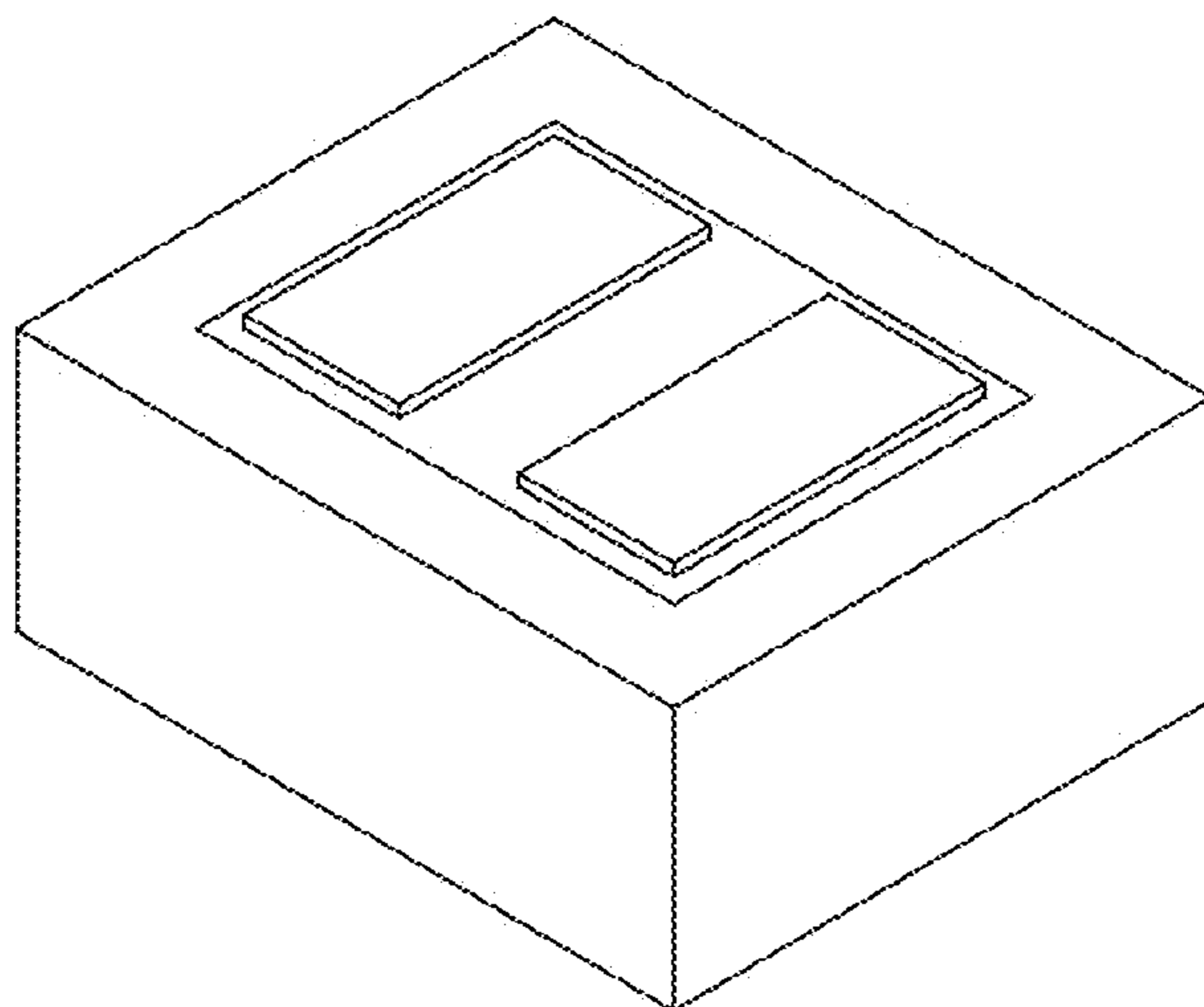


Fig. 33



Fig. 34

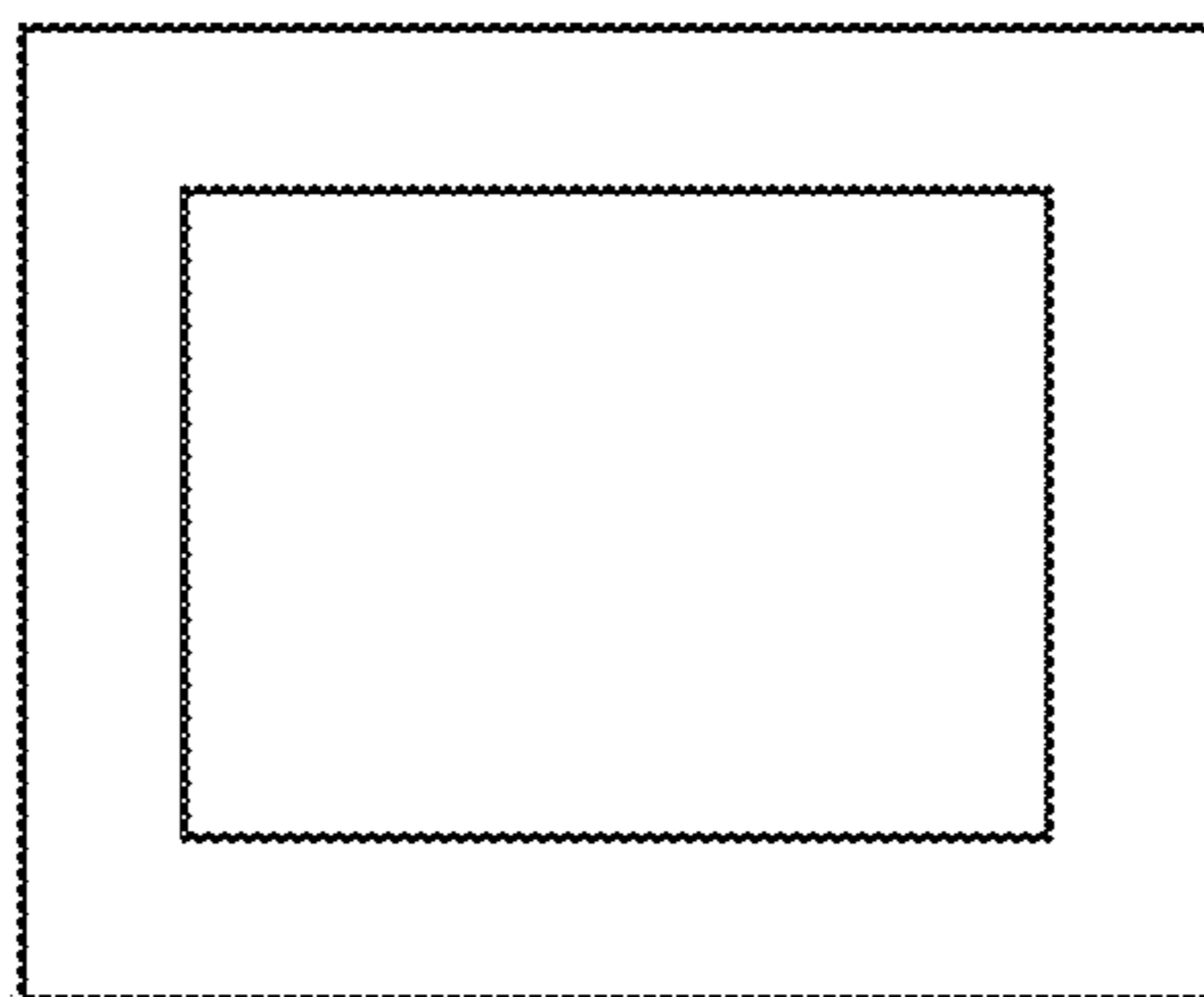


Fig. 35

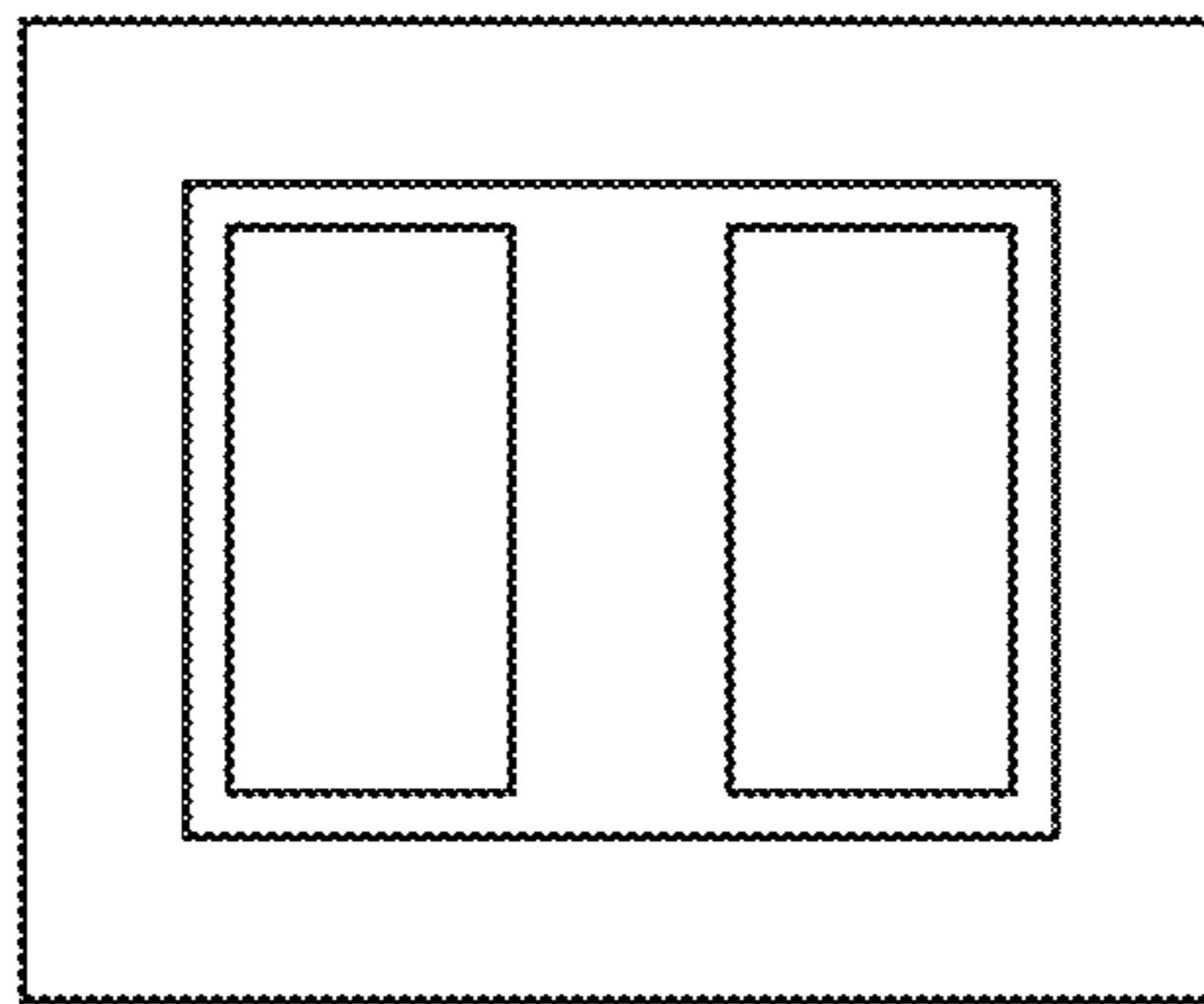


Fig. 36

