



US00D847883S

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

(10) **Patent No.:** **US D847,883 S**

(45) **Date of Patent:** **** May 7, 2019**

(54) **CUTTING INSERT**

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(73) Assignee: **Mitsubishi Hitachi Tool Engineering, Ltd., Tokyo (JP)**

(**) Term: **15 Years**

(21) Appl. No.: **29/604,504**

(22) Filed: **May 18, 2017**

(30) **Foreign Application Priority Data**

Nov. 25, 2016 (JP) 2016-025669

Nov. 25, 2016 (JP) 2016-025670

(51) **LOC (11) Cl.** **15-03**

(52) **U.S. Cl.**
USPC **D15/139**

(58) **Field of Classification Search**

USPC D15/124-144; D8/70, 90, 98, 120

CPC B23C 2200/0411; B23C 2200/0416; B23C

2200/0433; B23C 2200/164; B23C

2200/361; B23C 2210/0457; B23C 5/006;

B23C 2200/168; B23C 2210/163; B23C

2226/125; B23C 5/10; B23C 2200/081;

B23C 2200/087; B23C 2200/161; B23C

2200/206; B23C 2210/02; B23C 2210/03;

B23C 2210/166; B23C 2210/50; B23C

2226/315; B23C 5/2208; B23C 5/2472;

B23C 2200/0477; B23C 2200/0483;

B23C 2200/083; B23C 2200/121; B23C

2200/362; B23C 2210/0428; B23C

2210/0435; B23C 2210/16; B23C

2220/36; B23C 2220/44; B23C 2240/08;

B23C 2250/12; B23C 2270/06; B23C

5/2204;

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,145,295 A * 9/1992 Satran B23C 5/2213

407/113

D342,269 S * 12/1993 Arai D15/139

(Continued)

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(57) **CLAIM**

The ornamental design for a cutting insert, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of a cutting insert.

FIG. 2 is a perspective view thereof.

FIG. 3 is a perspective view thereof.

FIG. 4 is a perspective view thereof.

FIG. 5 is a front elevation view thereof. A rear elevation view is identical to the front view.

FIG. 6 is a top plan view thereof.

FIG. 7 is a bottom plan view thereof.

FIG. 8 is a right side elevation view thereof. A left side elevation view is identical to the right side elevation view.

FIG. 9 is a perspective view of a second embodiment of a cutting insert.

FIG. 10 is a perspective view thereof.

FIG. 11 is a perspective view thereof.

FIG. 12 is a perspective view thereof.

FIG. 13 is a front elevation view thereof.

FIG. 14 is a rear elevation view thereof.

FIG. 15 is a top plan view thereof.

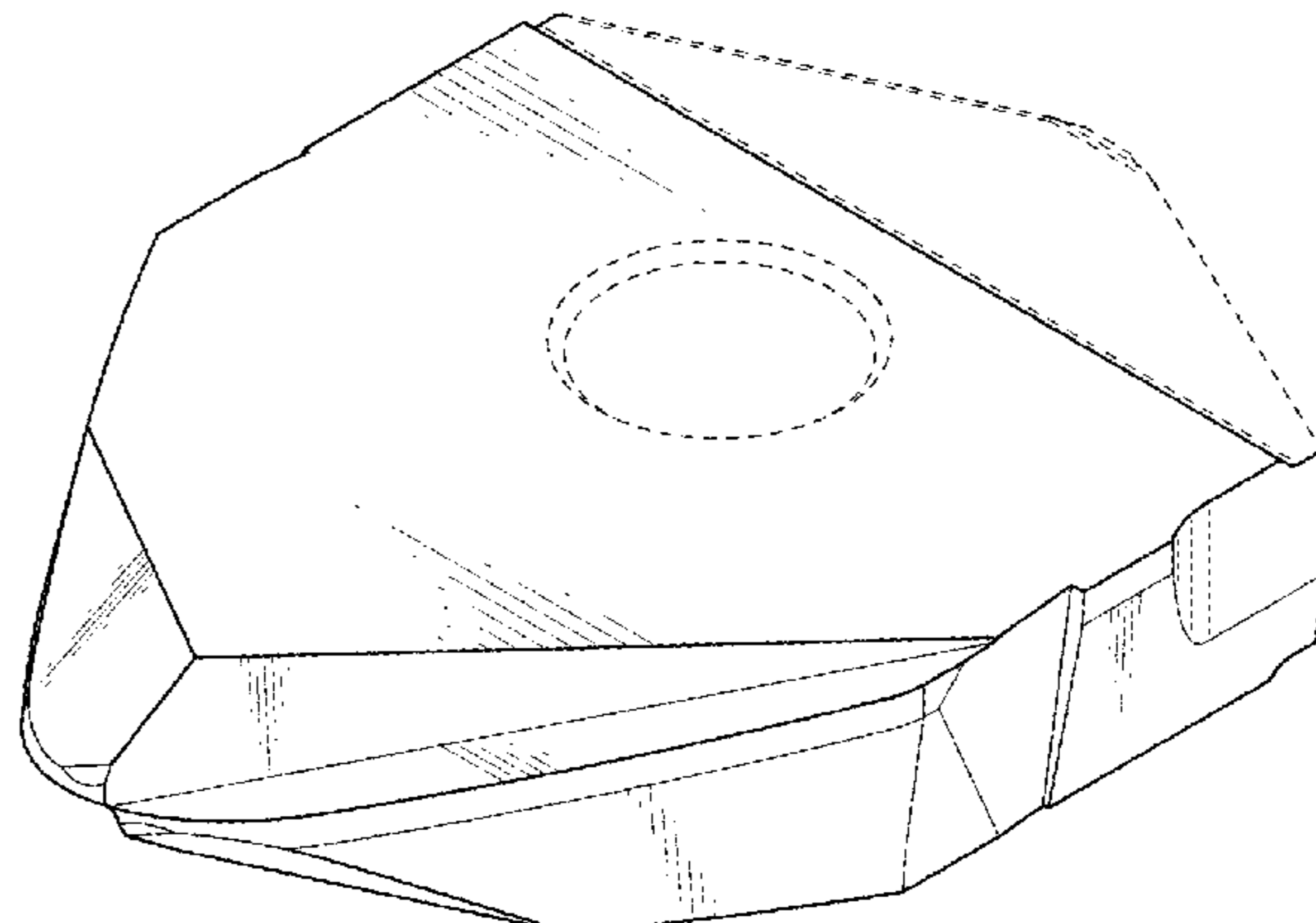
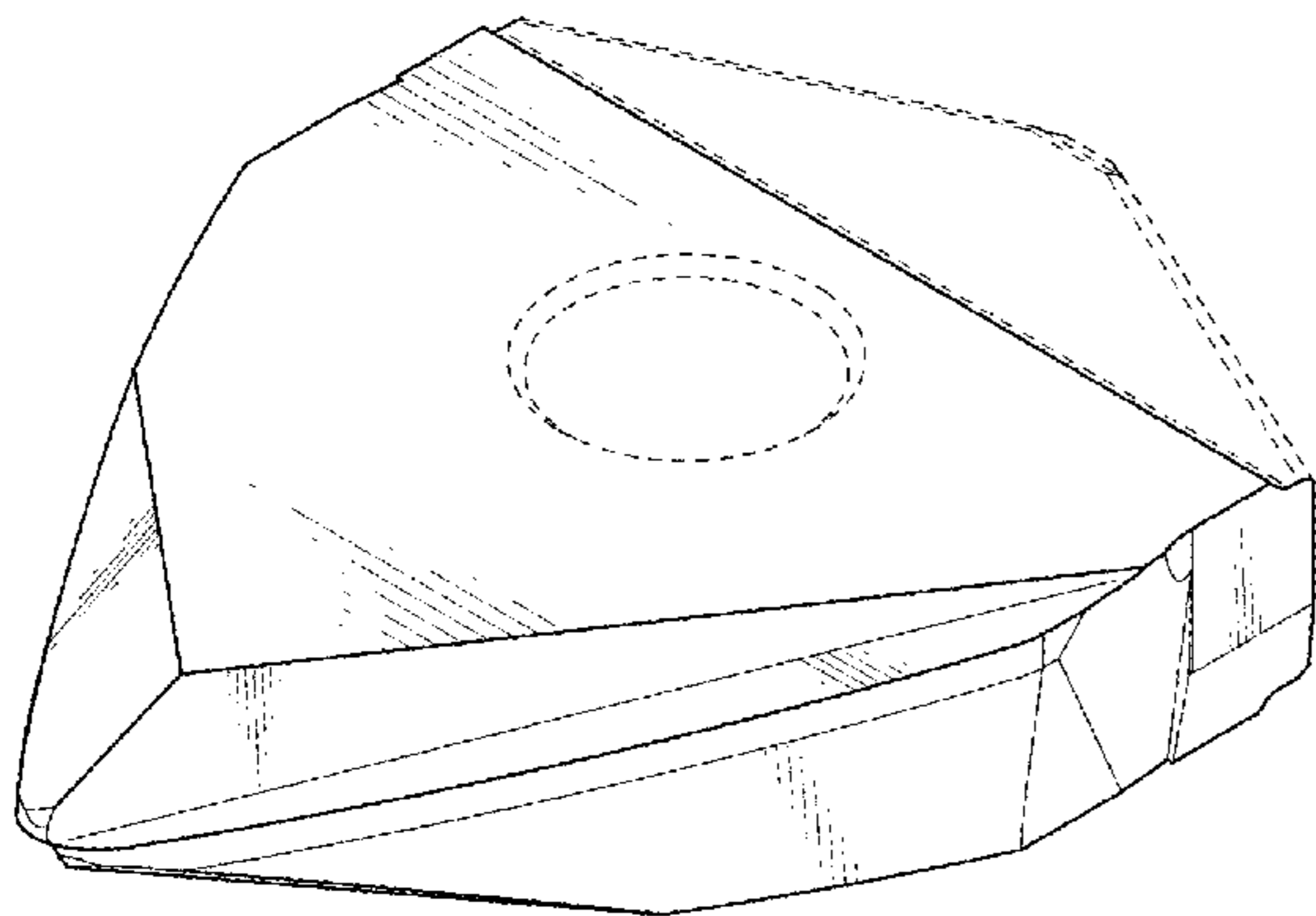
FIG. 16 is a bottom plan view thereof.

FIG. 17 is a left side elevation view thereof; and,

FIG. 18 is a right side elevation view thereof.

The broken lines shown in the drawings illustrate portions of the cutting insert that form no part of the claimed design.

1 Claim, 18 Drawing Sheets



(58) **Field of Classification Search**

CPC ... B23C 5/2213; B23C 5/2247; B23C 5/2427;
B23C 2200/0422; B23C 2200/08; B23C
2200/086; B23C 2200/123

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D344,276	S *	2/1994	Markusson	.....	D15/139
D345,985	S *	4/1994	Ishikawa	.....	D15/139
D409,633	S *	5/1999	Bernadic	.....	D15/139
D422,608	S *	4/2000	Malaker	.....	D15/139
D425,086	S *	5/2000	Bernadic	.....	D15/139
D487,759	S *	3/2004	Kasperik	.....	D15/139
D488,175	S *	4/2004	Kasperik	.....	D15/139
7,168,512	B2 *	1/2007	Schuffenhauer	.....	B23C 5/207 175/426
D585,467	S *	1/2009	Takanashi	.....	D15/139
D589,542	S *	3/2009	Takanashi	.....	D15/139
D710,917	S *	8/2014	Jung	.....	D15/139
D714,849	S *	10/2014	Choi	.....	D15/139
D744,557	S *	12/2015	Koike	.....	D15/139
D771,726	S *	11/2016	Nam	.....	D15/139
D805,564	S *	12/2017	Lee	.....	D15/139
D822,077	S *	7/2018	Takahashi	.....	D15/139
D822,731	S *	7/2018	Yoshida	.....	D15/139
2015/0202697	A1 *	7/2015	Shiota	.....	B23C 5/109 407/42
2015/0246398	A1 *	9/2015	Kawasaki	.....	B23B 51/048 408/231

* cited by examiner

FIG. 1

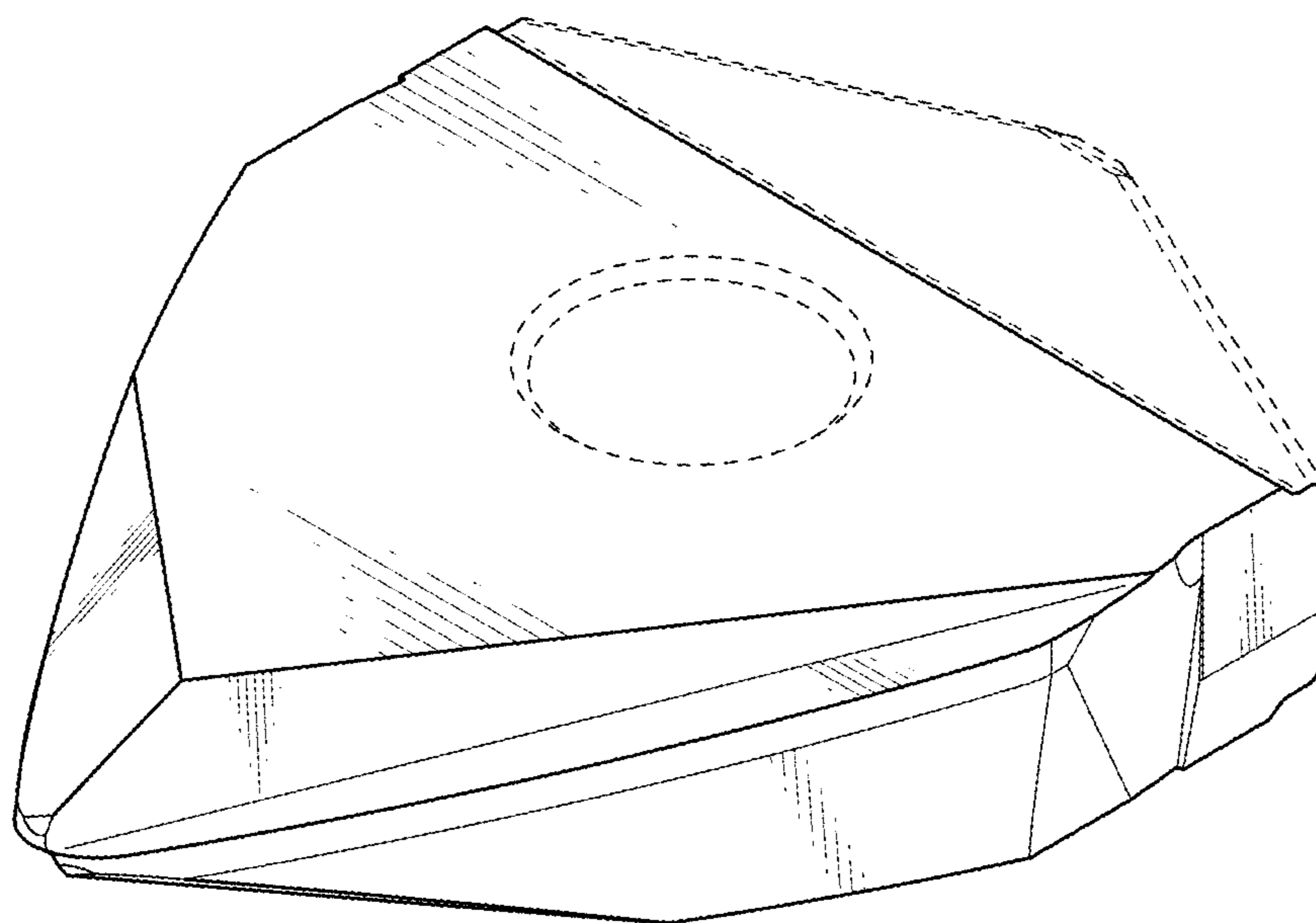


FIG. 2

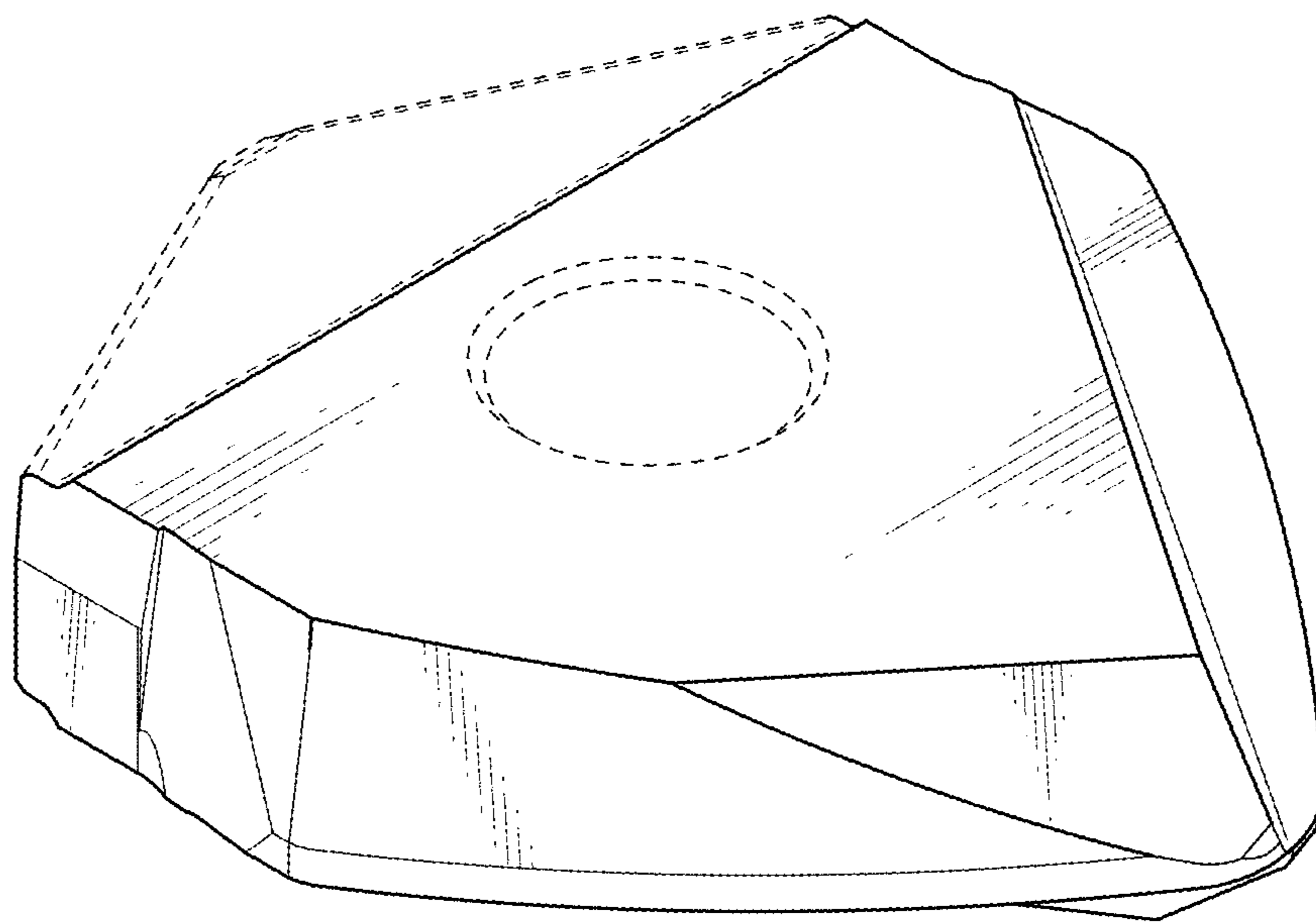


FIG. 3

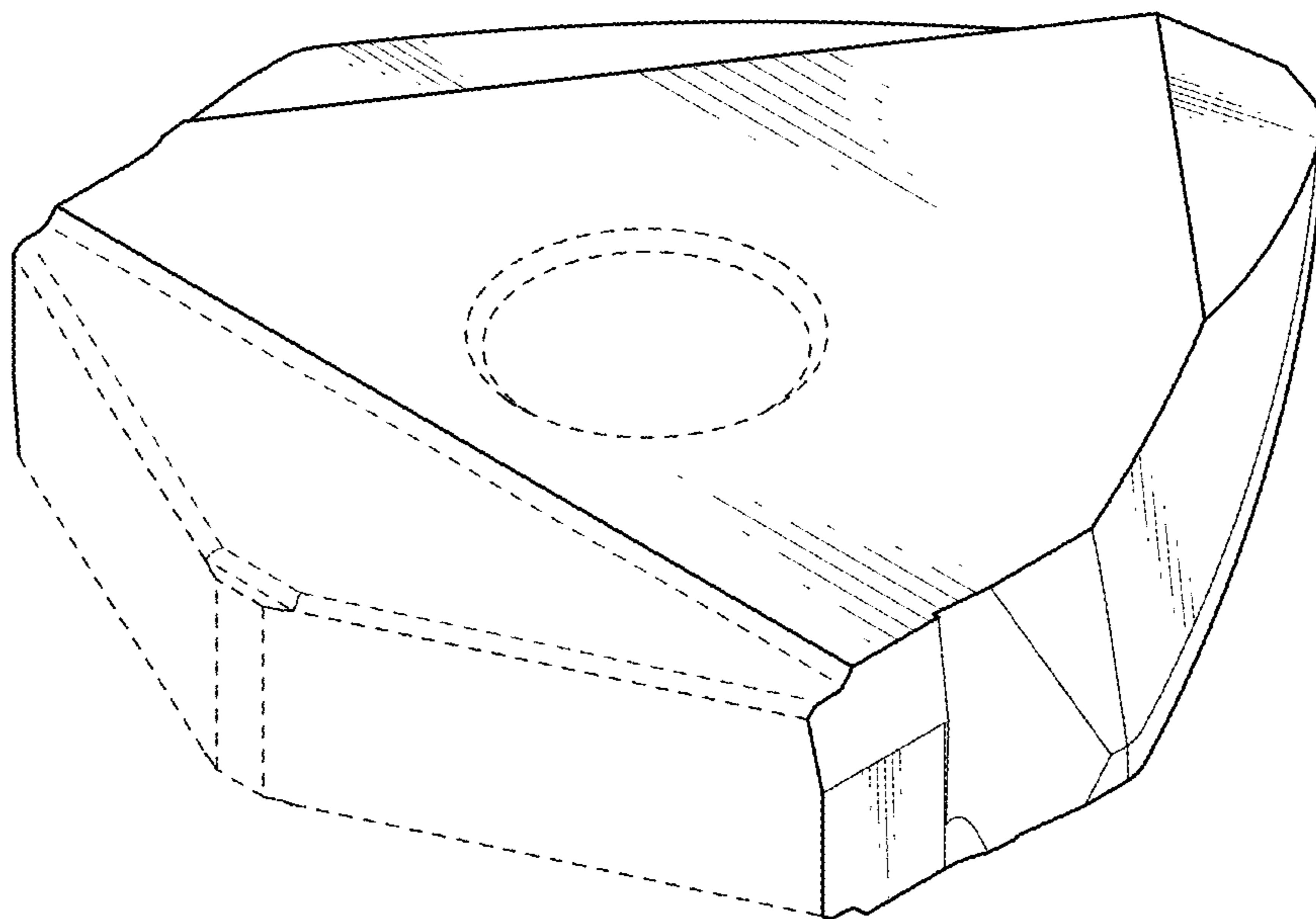


FIG. 4

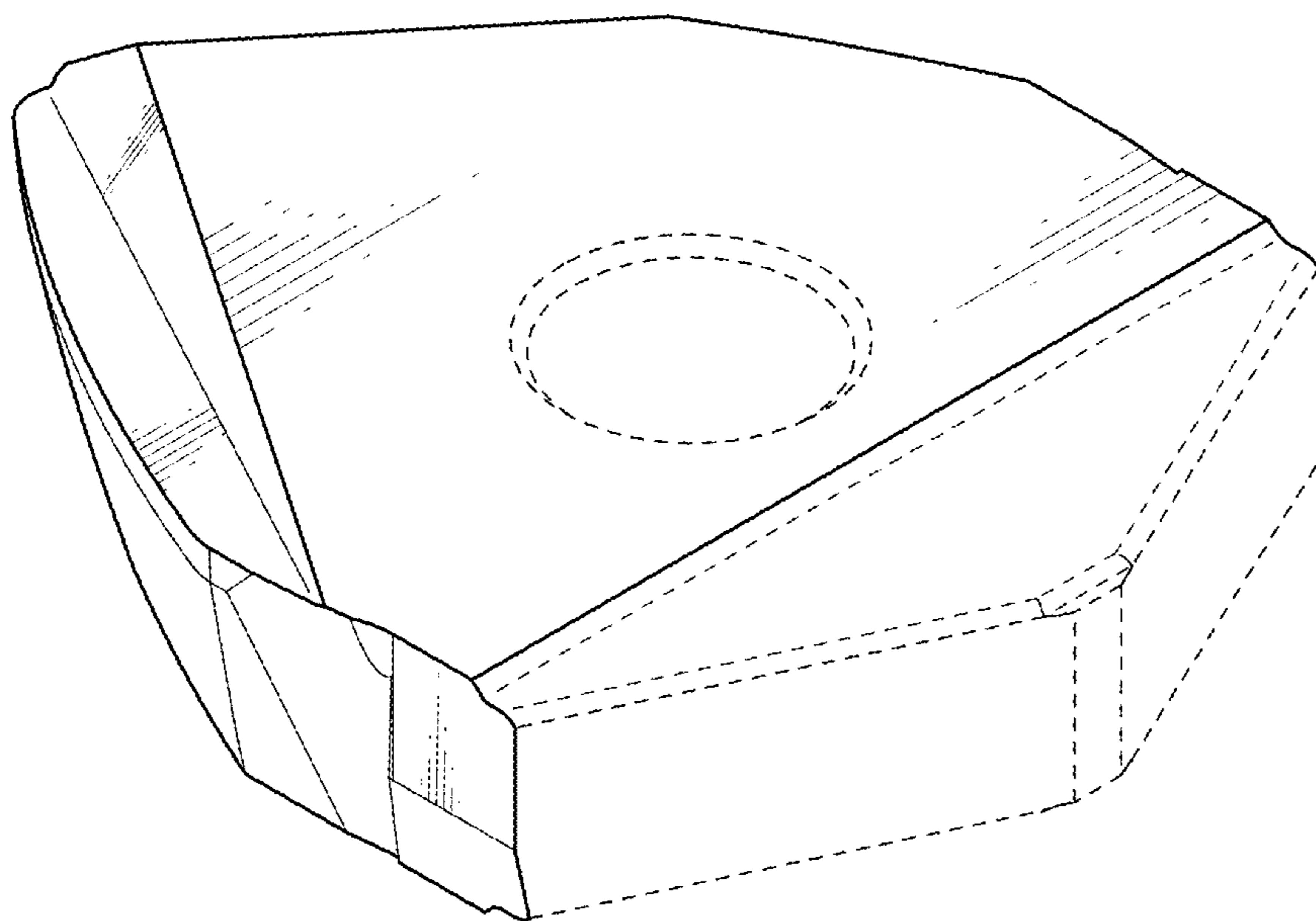


FIG. 5

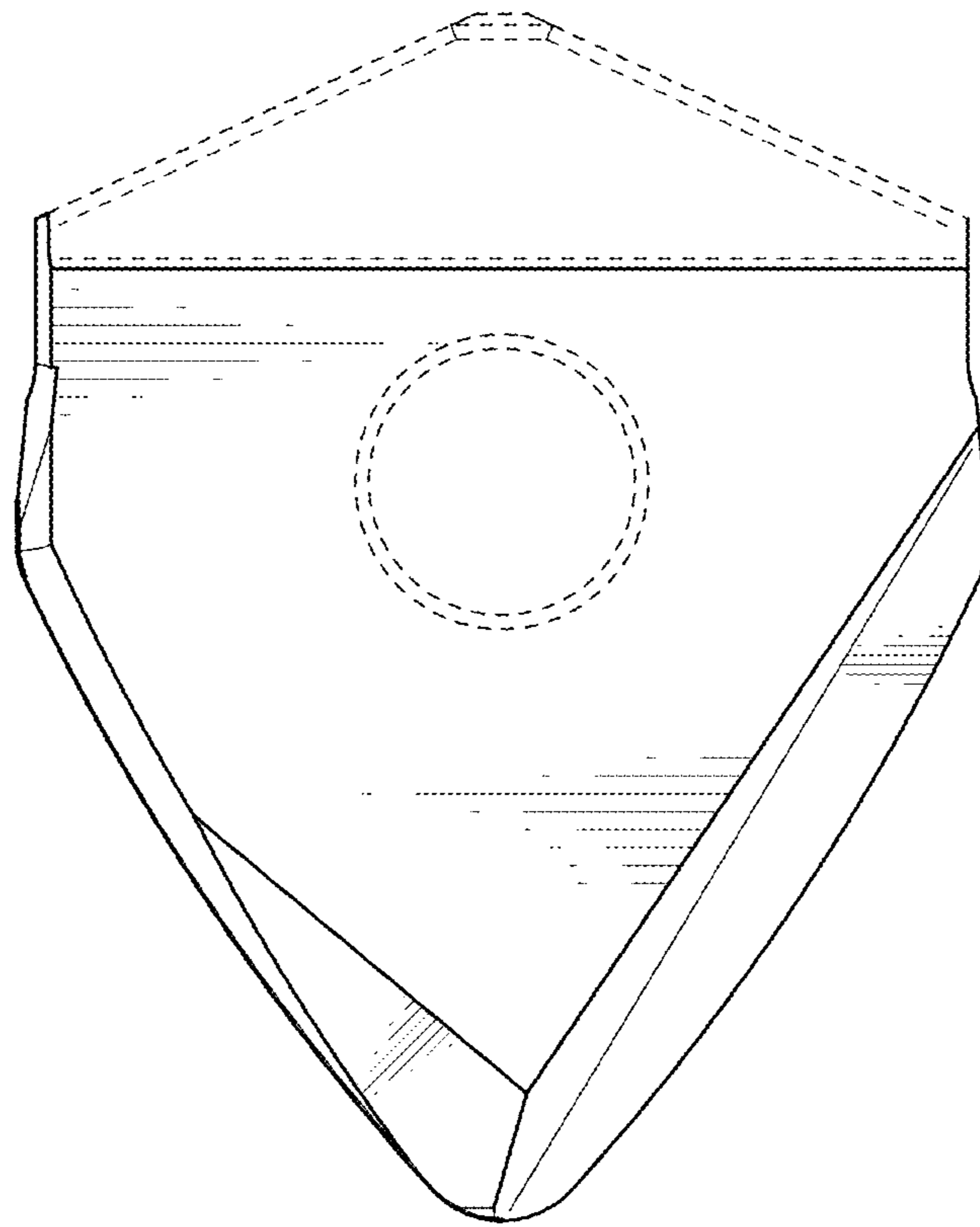


FIG. 6

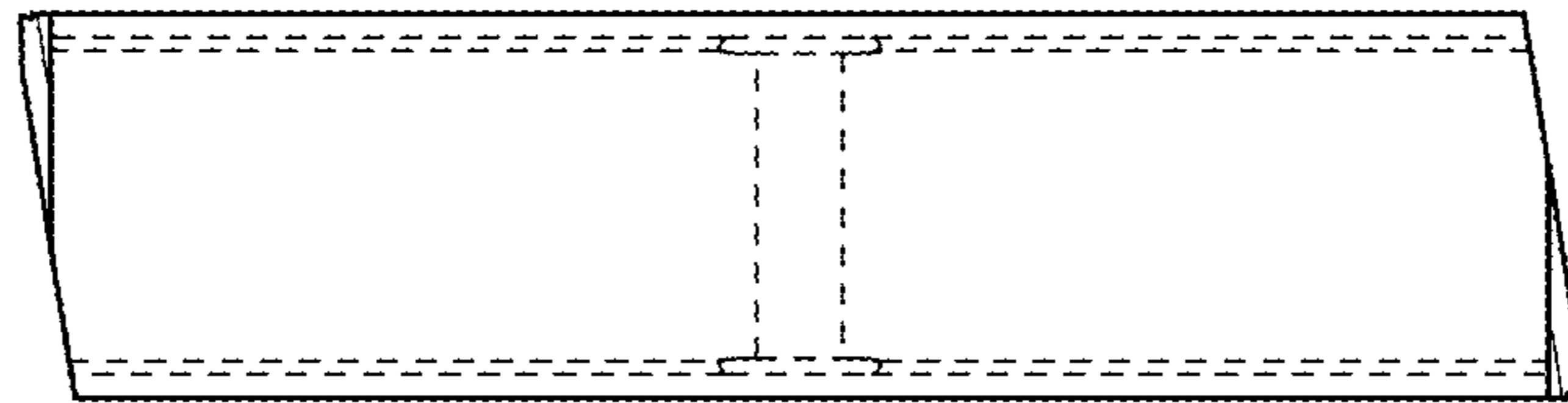


FIG. 7

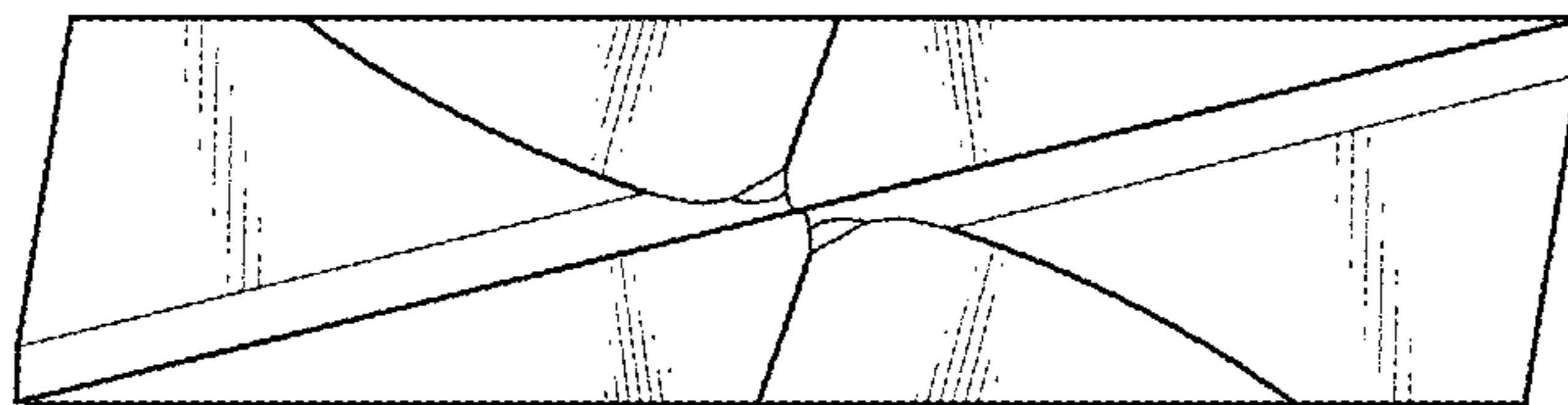


FIG. 8

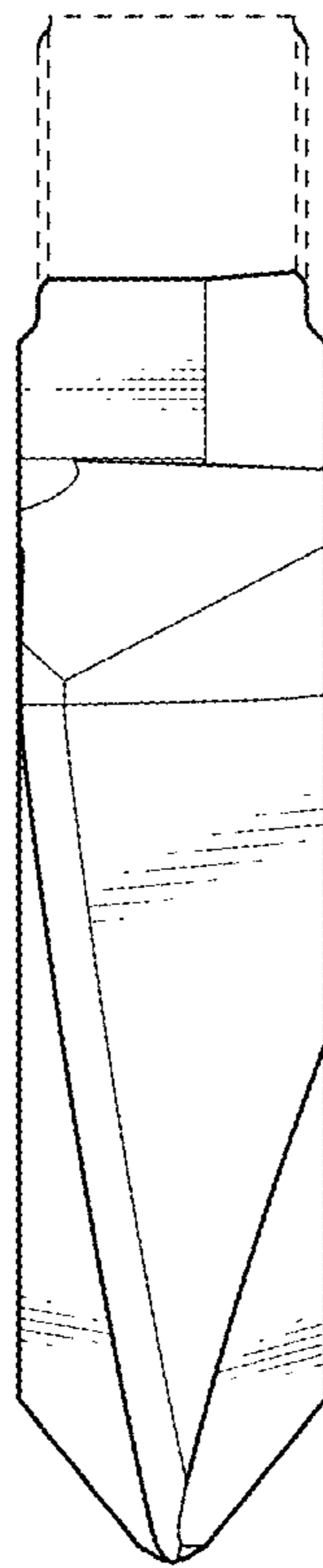


FIG. 9

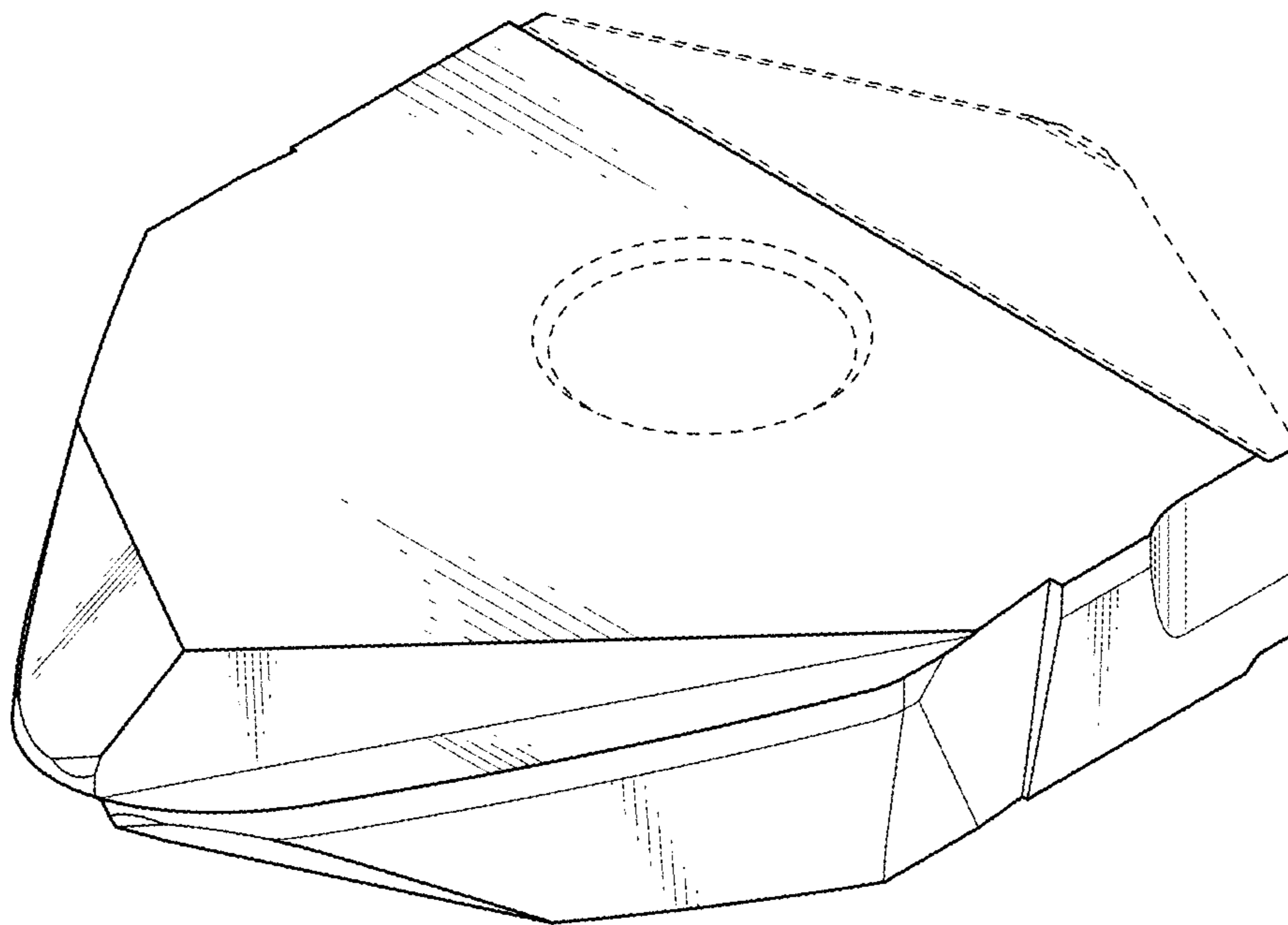


FIG. 10

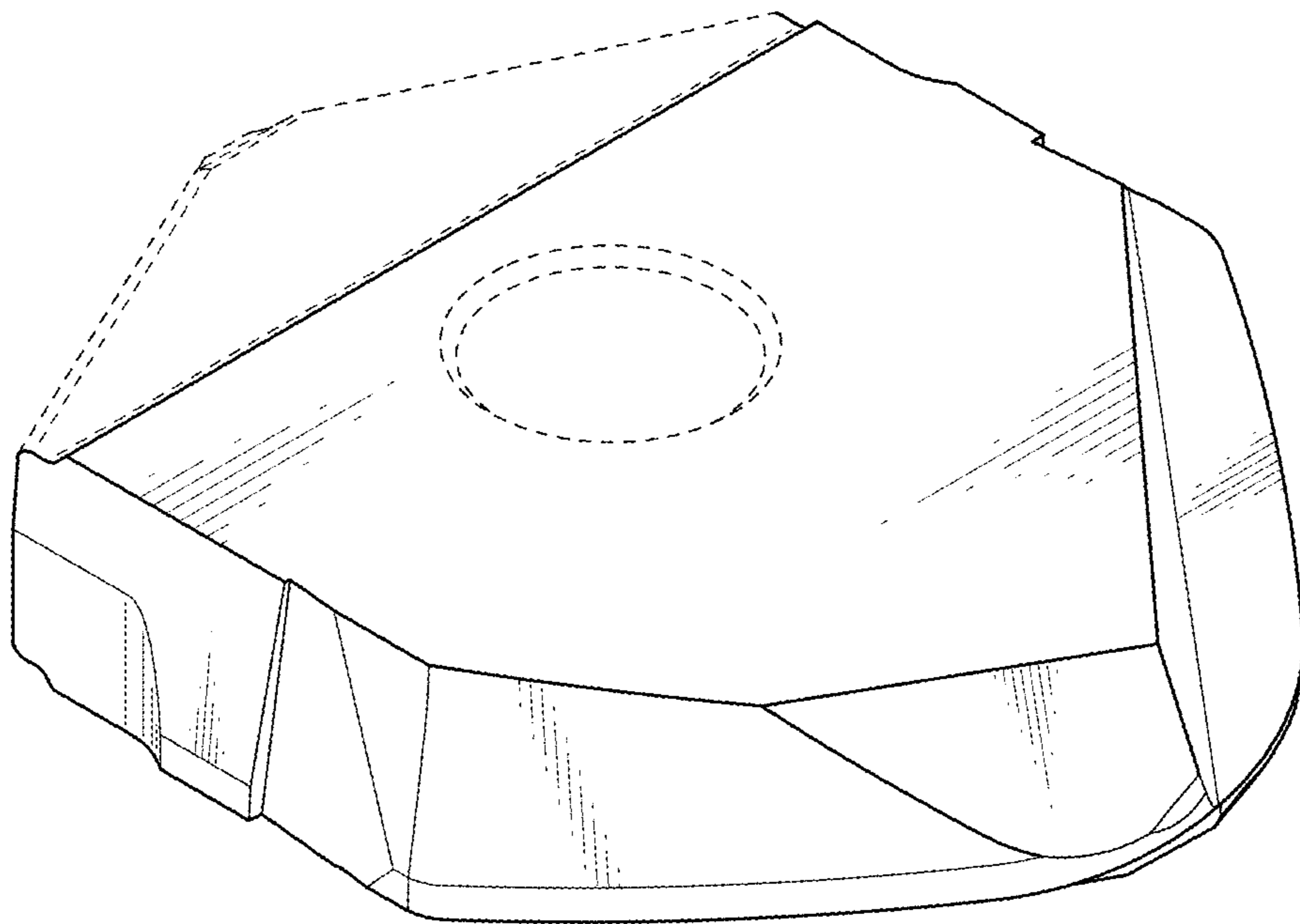


FIG. 11

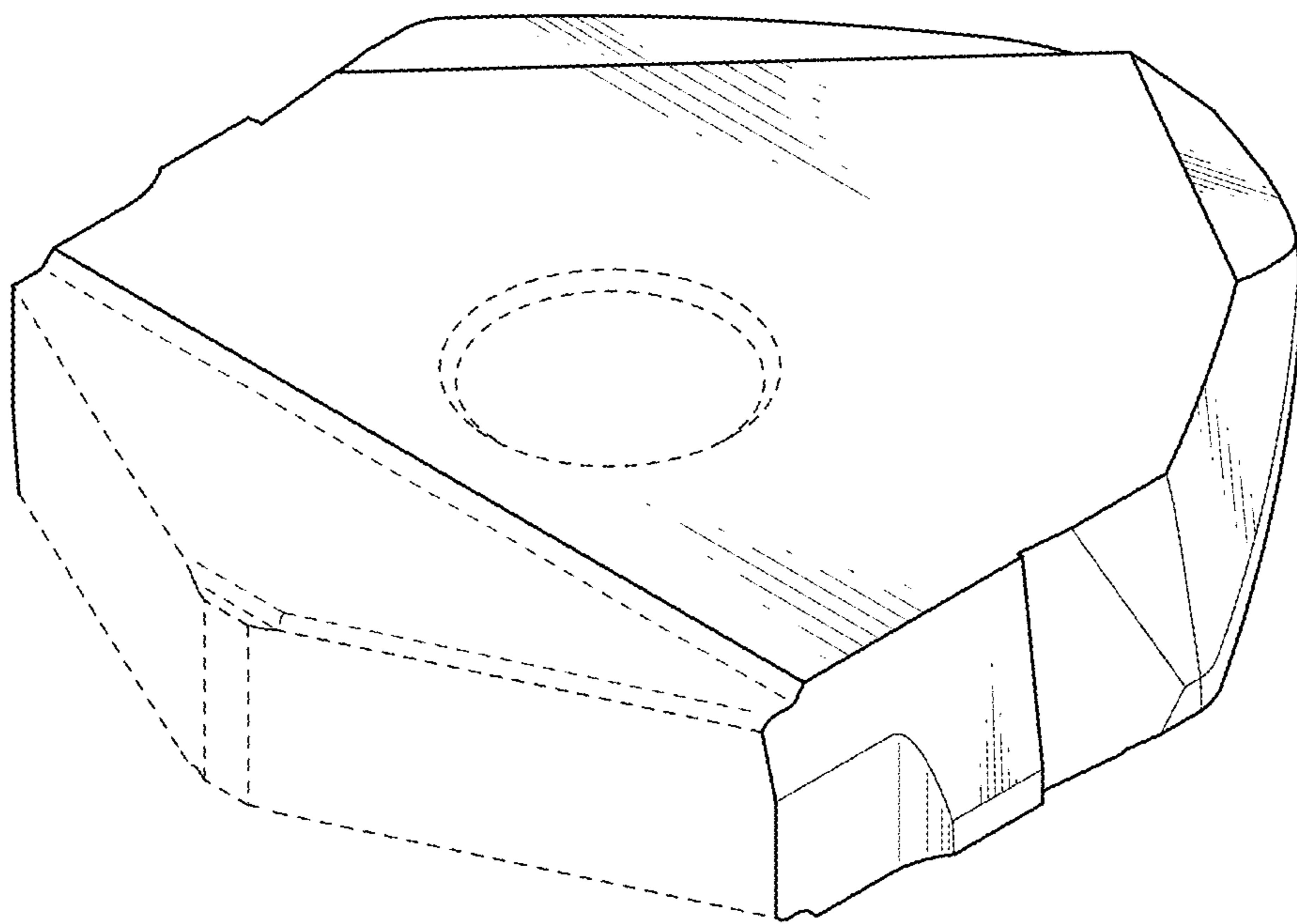


FIG. 12

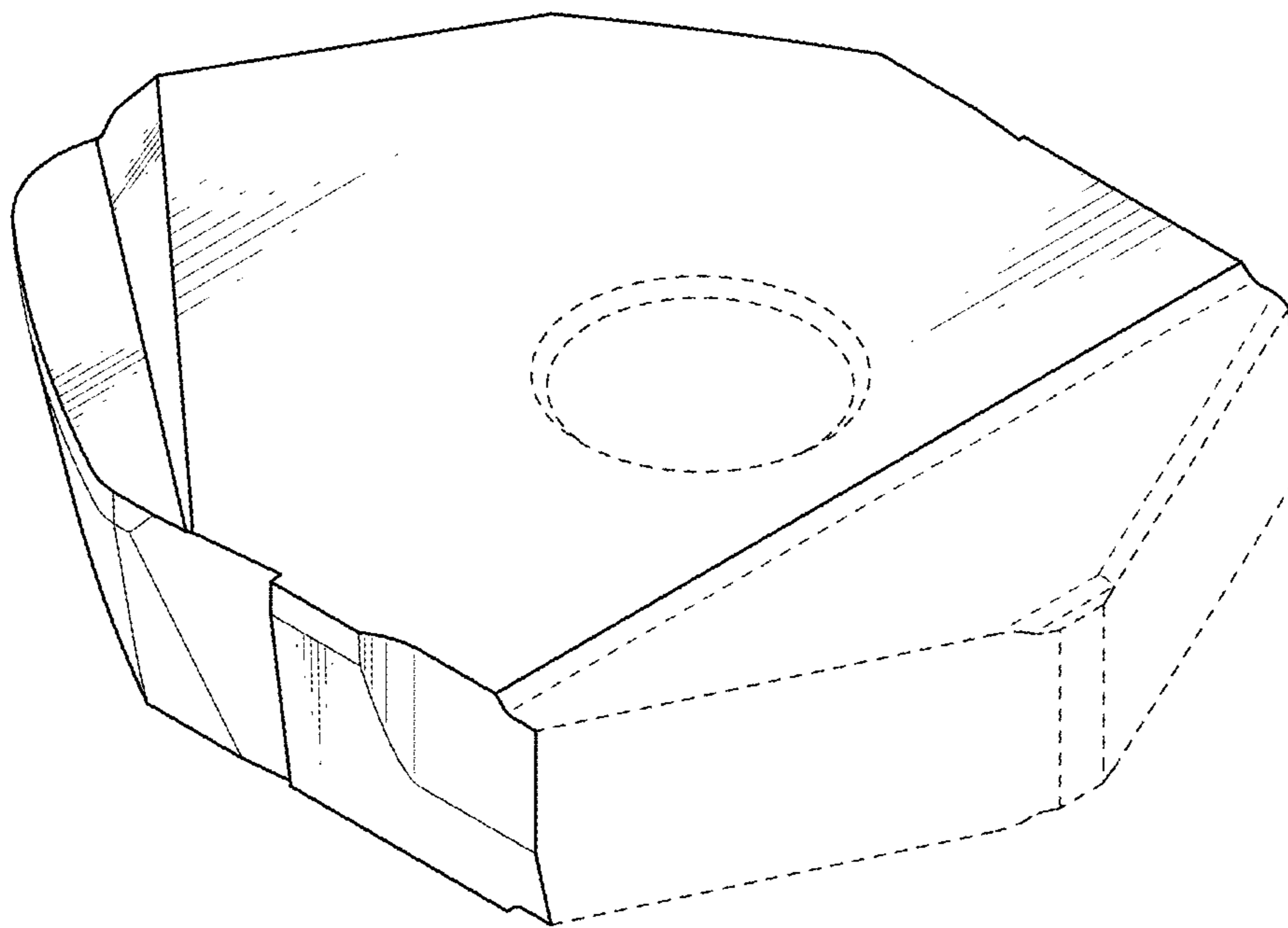


FIG. 13

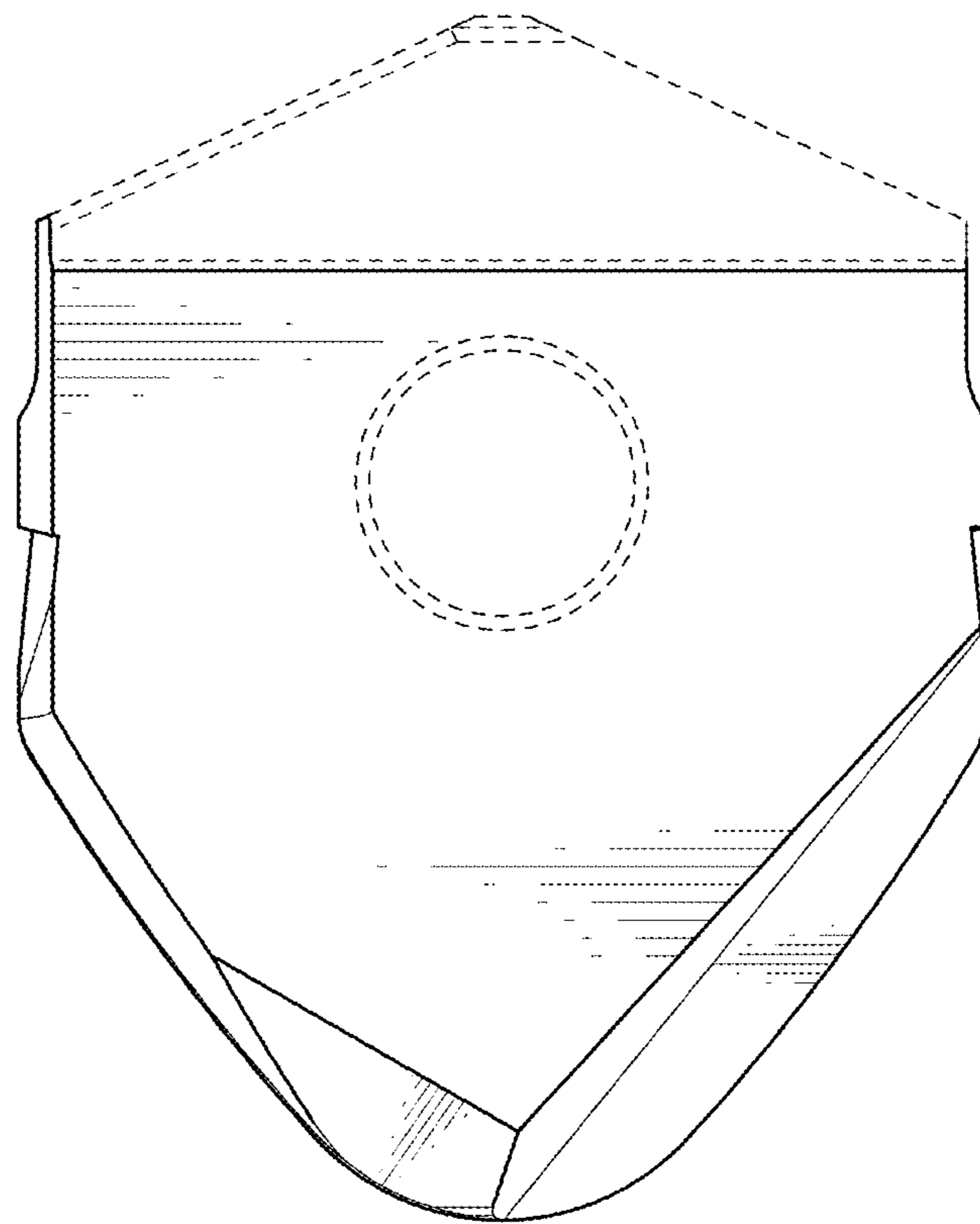


FIG. 14

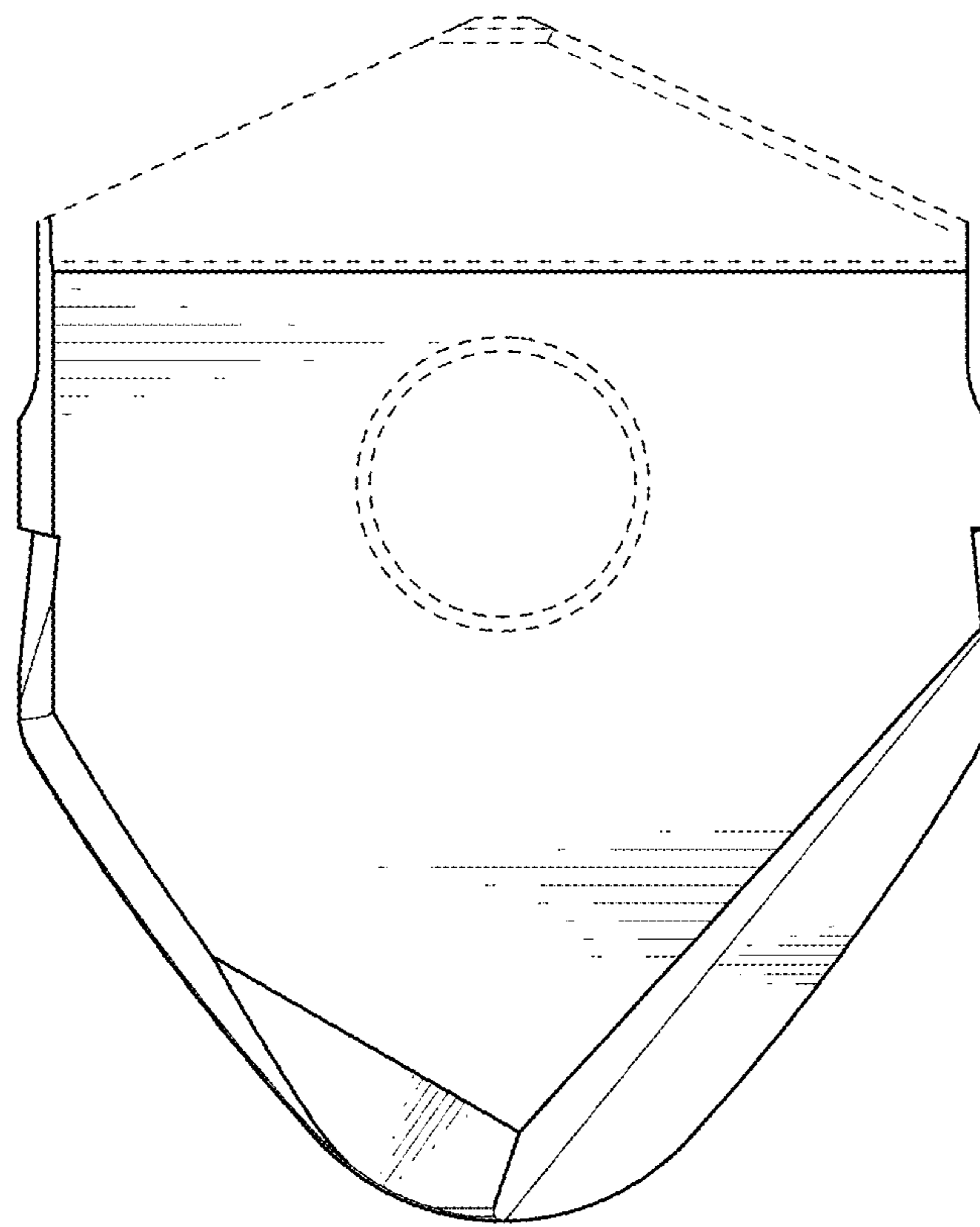


FIG. 15

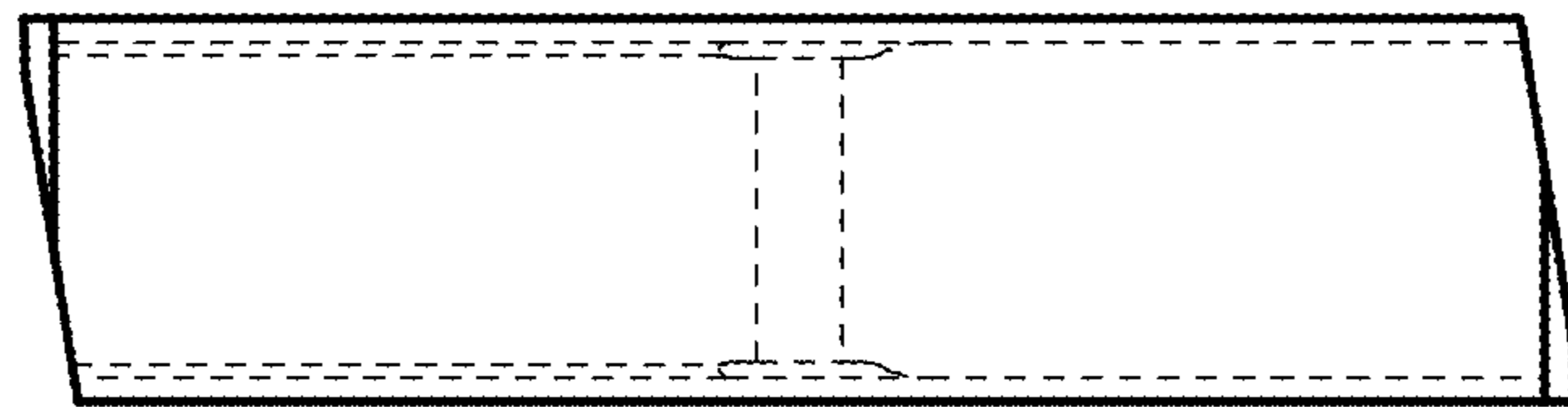


FIG. 16

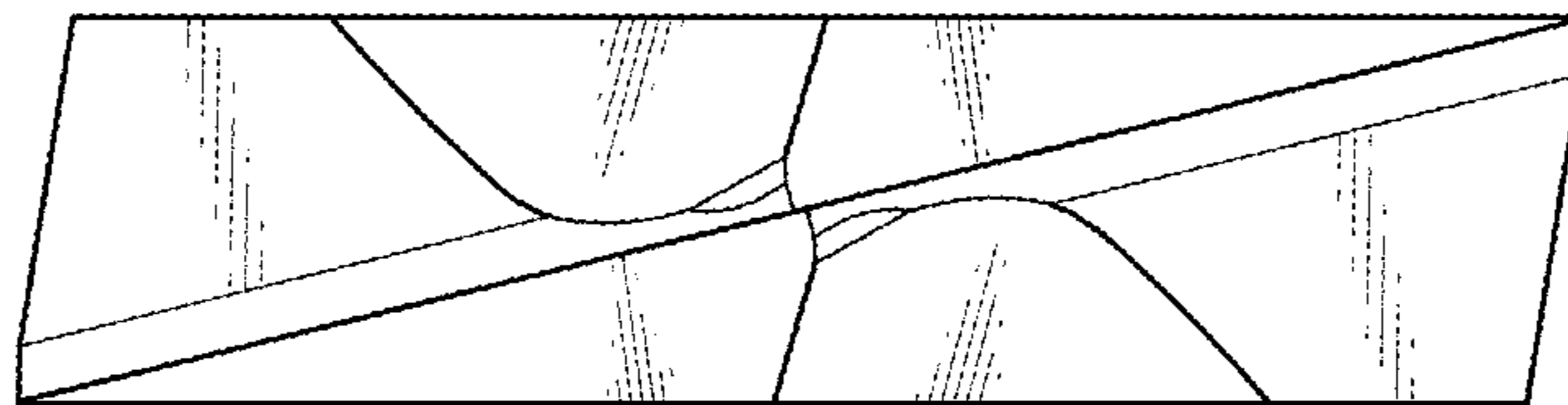


FIG. 17

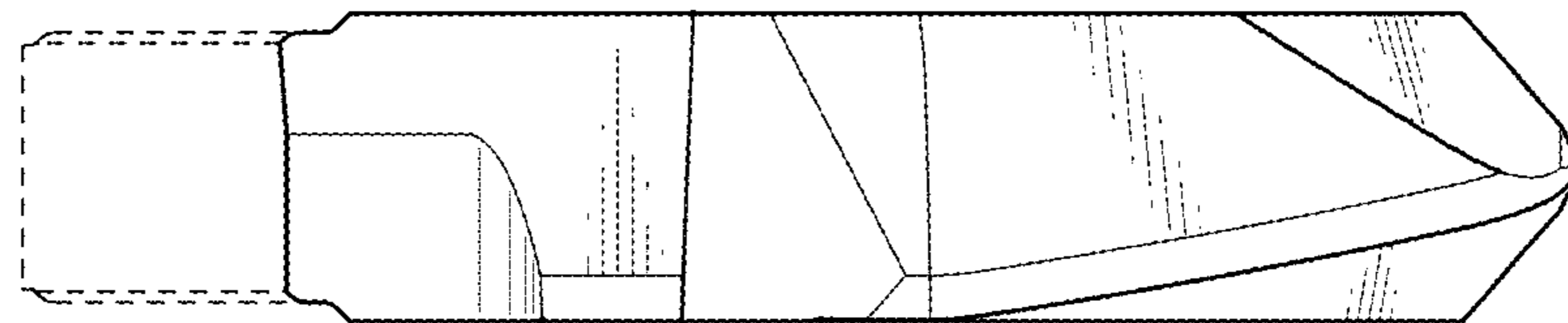


FIG. 18

