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

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(45) **Date of Patent:** **\*\* \*Apr. 23, 2019**

(54) **SOLAR CELL**

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(US)

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(\* ) Notice: This patent is subject to a terminal disclaimer.

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

(21) Appl. No.: **29/566,655**

(22) Filed: **Jun. 1, 2016**

**Related U.S. Application Data**

(62) Division of application No. 29/476,182, filed on Dec. 11, 2013, now Pat. No. Des. 765,590.

(51) **LOC (11) Cl.** ..... **13-02**

(52) **U.S. Cl.**  
USPC ..... **D13/102**

(58) **Field of Classification Search**  
USPC ..... D13/102, 101, 103, 118, 119, 184, 199;  
126/561, 667; 136/206, 244, 251, 291,  
136/292; 438/597

(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D652,375 S \* 1/2012 Kannou ..... D13/102  
D670,239 S \* 11/2012 Kannou ..... D13/102

(Continued)

*Primary Examiner* — Derrick E Holland  
*Assistant Examiner* — Jennifer O King

(57) **CLAIM**

The ornamental design for a solar cell, as shown and described.

**DESCRIPTION**

This application is related to U.S. patent application Ser. No. 29/566,648, filed simultaneously herewith.

This application is also related to U.S. patent application Ser. No. 29/476,181, filed Dec. 11, 2013, now U.S. Pat. No. D765,024.

FIG. 1 is a top perspective view of a solar cell showing our new design;

FIG. 2 is a top plan view thereof;

FIG. 3 is a cross-sectional view through the 3-3 plane shown in FIG. 2;

FIG. 4 is a cross-sectional view through the 4-4 plane section in FIG. 2;

FIG. 5 is a cross-sectional view through the 5-5 plane shown in FIG. 2;

FIG. 6 is a cross-sectional view through the 6-6 plane shown in FIG. 2;

FIG. 7 is a cross-sectional view through the 7-7 plane shown in FIG. 2;

FIG. 8 is a cross-sectional view through the 8-8 plane shown in FIG. 2;

FIG. 9 is a cross-sectional view through the 9-9 plane shown in FIG. 2;

FIG. 10 is a cross-sectional view through the 10-10 plane shown in FIG. 2;

FIG. 11 is a cross-sectional view through the 11-11 plane shown in FIG. 2;

FIG. 12 is a bottom plan view thereof;

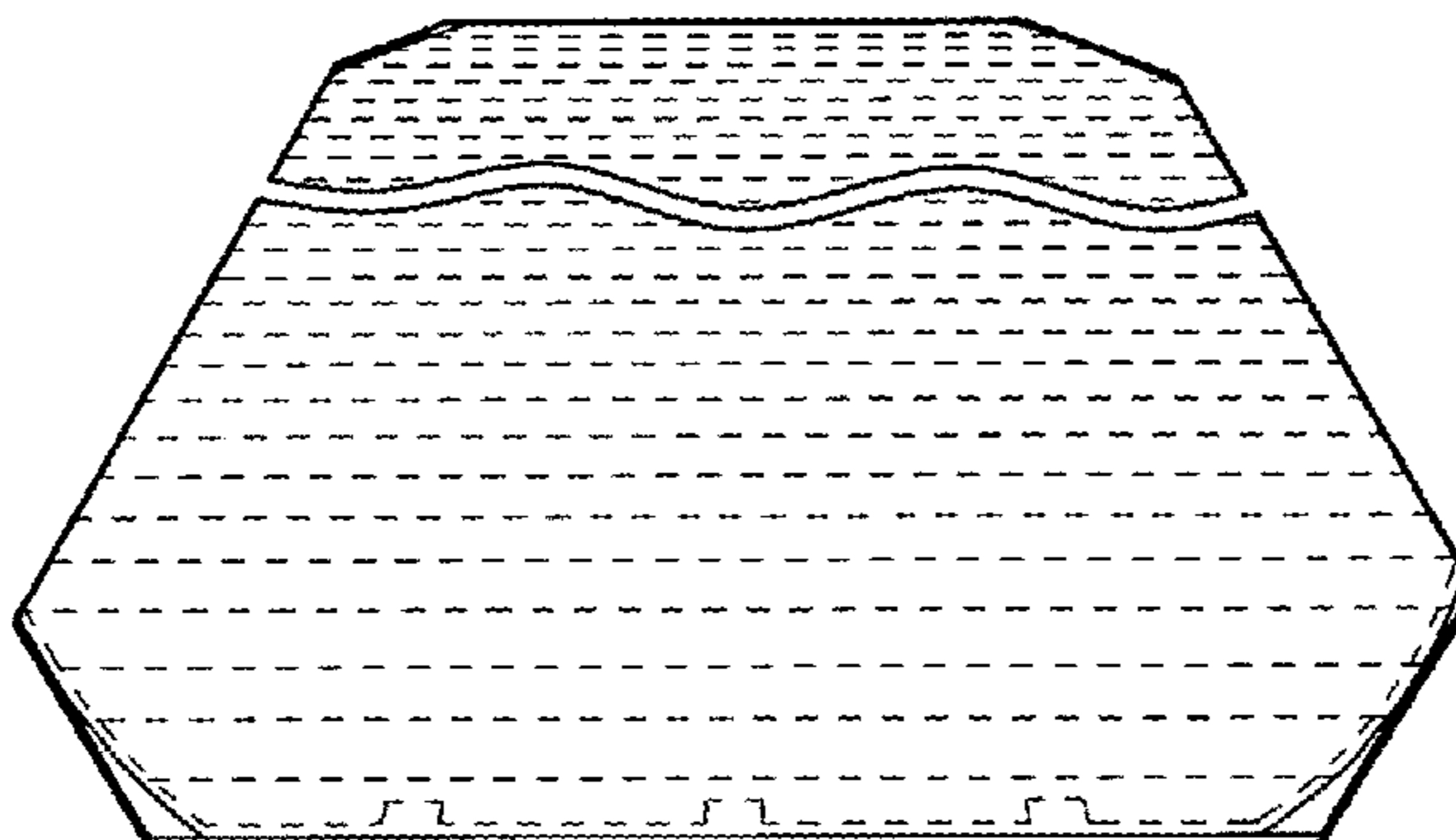
FIG. 13 is a front side elevation view thereof;

FIG. 14 is a left side elevation view thereof;

FIG. 15 is a front side elevation view thereof; and,

FIG. 16 is a right side elevation view thereof.

**1 Claim, 5 Drawing Sheets**



(58) **Field of Classification Search**

CPC ..... Y02E 10/47; Y02E 10/50; Y02E 10/52;  
H02S 20/00; F24J 2/5237; H01L 31/00;  
H01L 31/02002; H01L 31/02008; H01L  
31/042; H01L 31/0508

See application file for complete search history.

(56)

**References Cited**

U.S. PATENT DOCUMENTS

D712,822 S \* 9/2014 Brusaw ..... D13/102  
D731,408 S \* 6/2015 Ko ..... D13/102  
D742,306 S \* 11/2015 Tohoda ..... D13/102  
D765,024 S \* 8/2016 Crist ..... D13/102  
D765,590 S \* 9/2016 Crist ..... D13/102  
D772,802 S \* 11/2016 Haas ..... D13/102  
D772,803 S \* 11/2016 Haas ..... D13/102  
D784,253 S \* 4/2017 Aiken ..... D13/102  
D784,255 S \* 4/2017 Steinfeldt ..... D13/102

2007/0074756 A1\* 4/2007 Yagiura ..... H01L 31/03528  
136/244  
2013/0019919 A1\* 1/2013 Hoang ..... H01L 31/02243  
136/244  
2013/0276859 A1\* 10/2013 Mishima ..... H01L 31/02242  
136/244  
2013/0284232 A1\* 10/2013 Fukumochi ..... H01L 31/0201  
136/244  
2014/0041707 A1\* 2/2014 Kitaura ..... H01L 31/02244  
136/244  
2015/0194551 A1\* 7/2015 Crist ..... H01L 31/0504  
136/244  
2016/0093757 A1\* 3/2016 Pass ..... H01L 31/0682  
136/244  
2016/0104810 A1\* 4/2016 Adachi ..... H01L 31/02242  
136/244  
2016/0118609 A1\* 4/2016 Takayama ..... H01L 51/445  
136/244  
2016/0380132 A1\* 12/2016 Sewell ..... H01L 31/0516  
136/244

\* cited by examiner

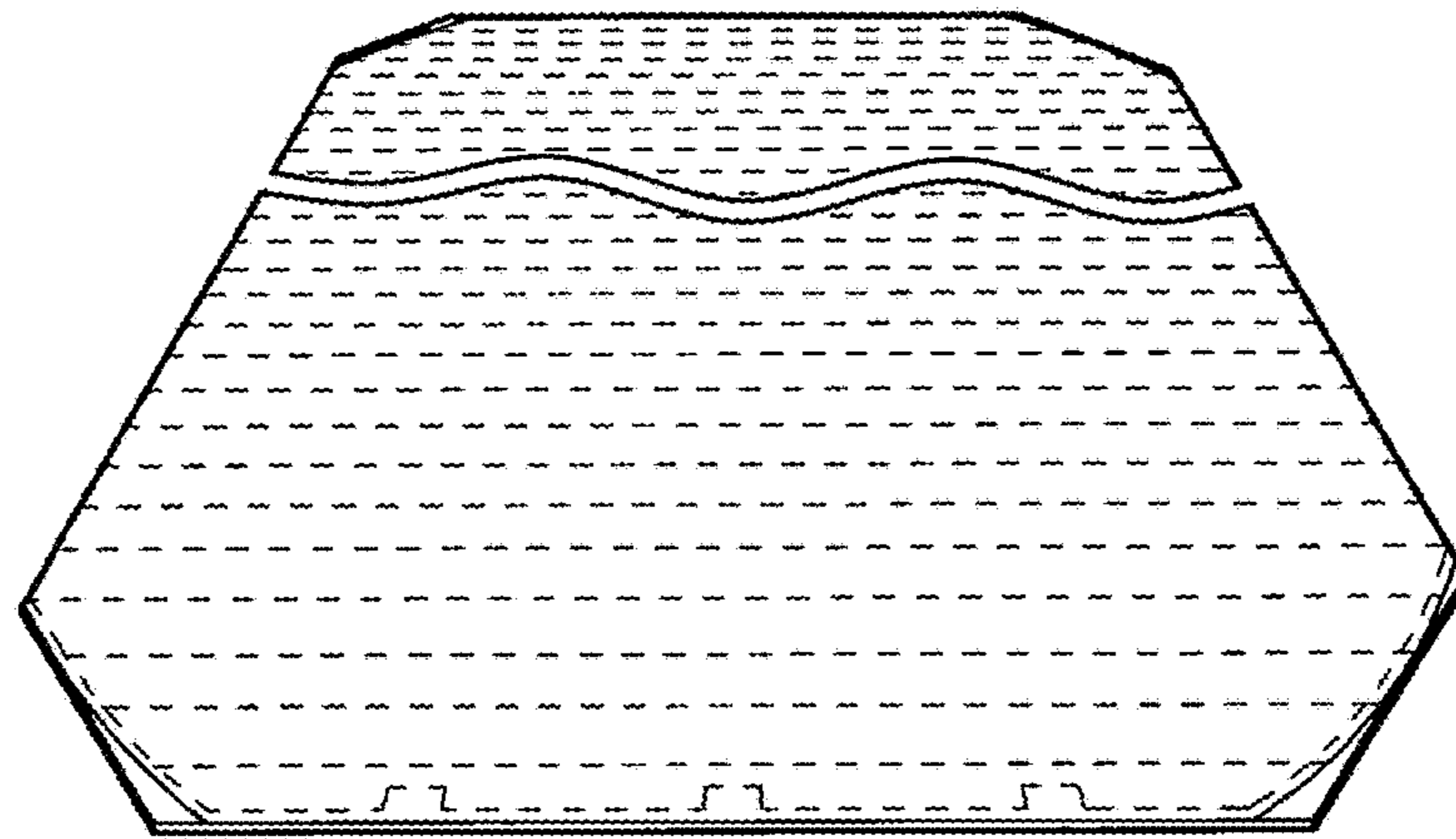


FIG. 1

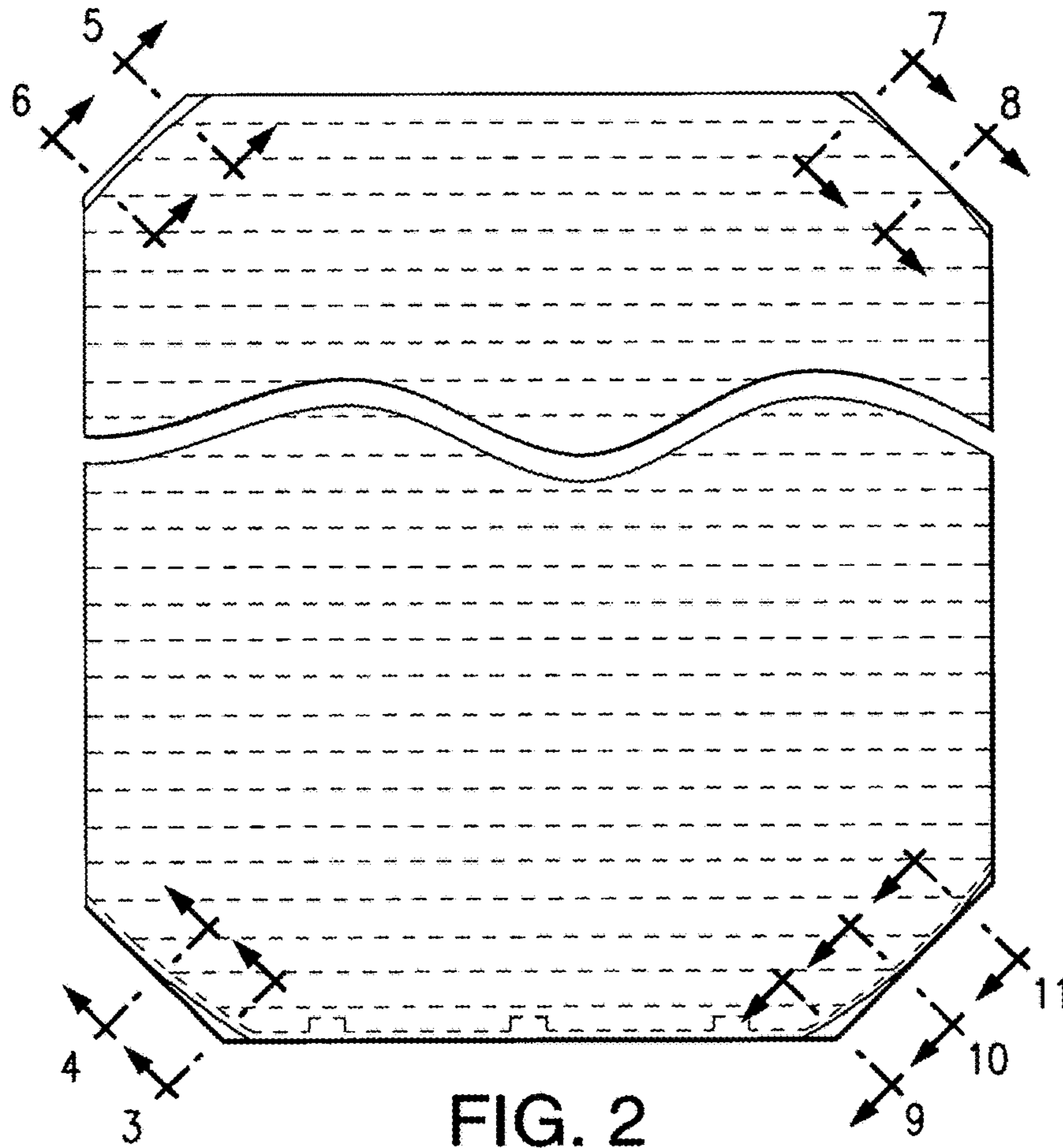


FIG. 2

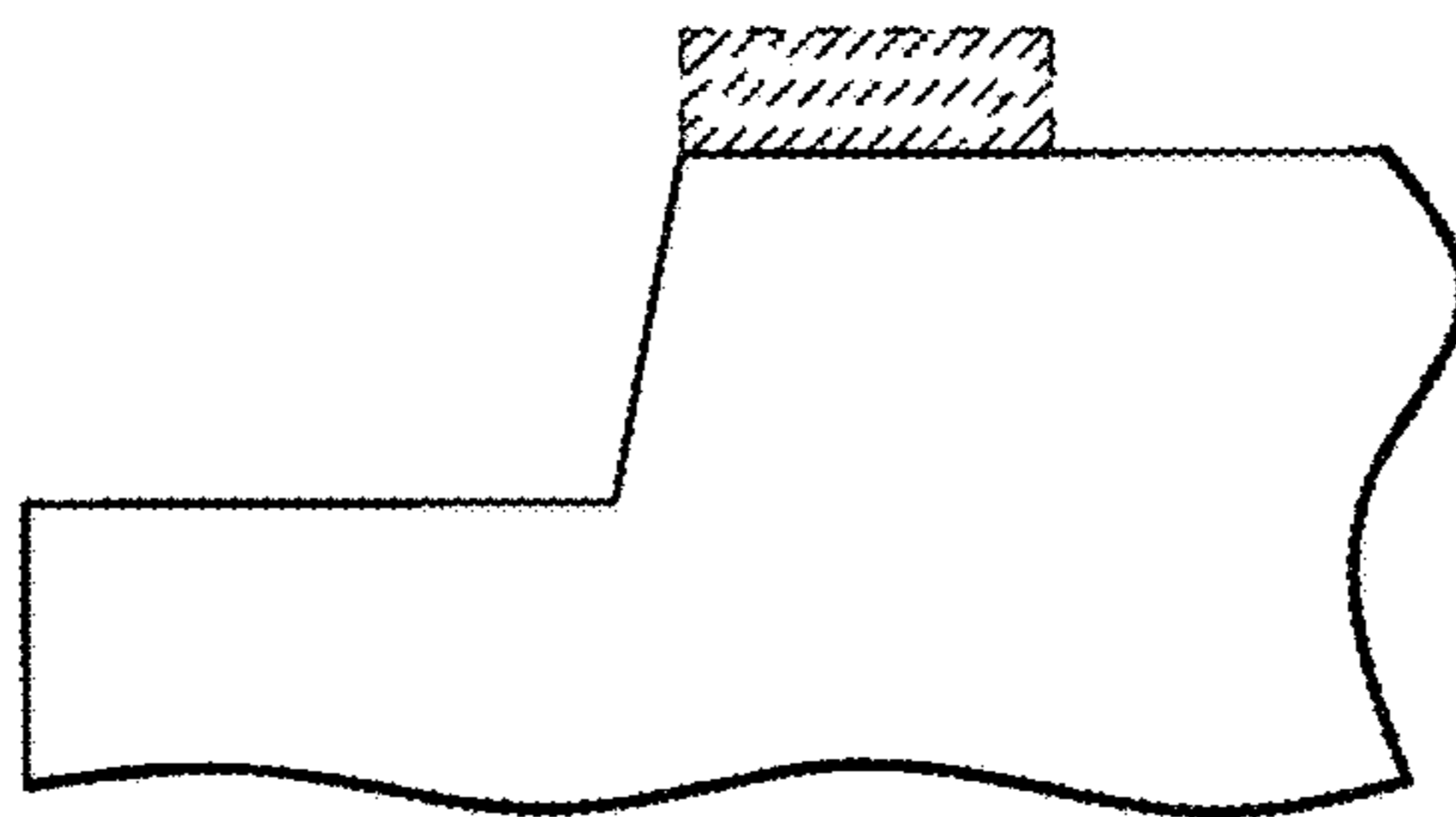


FIG. 3

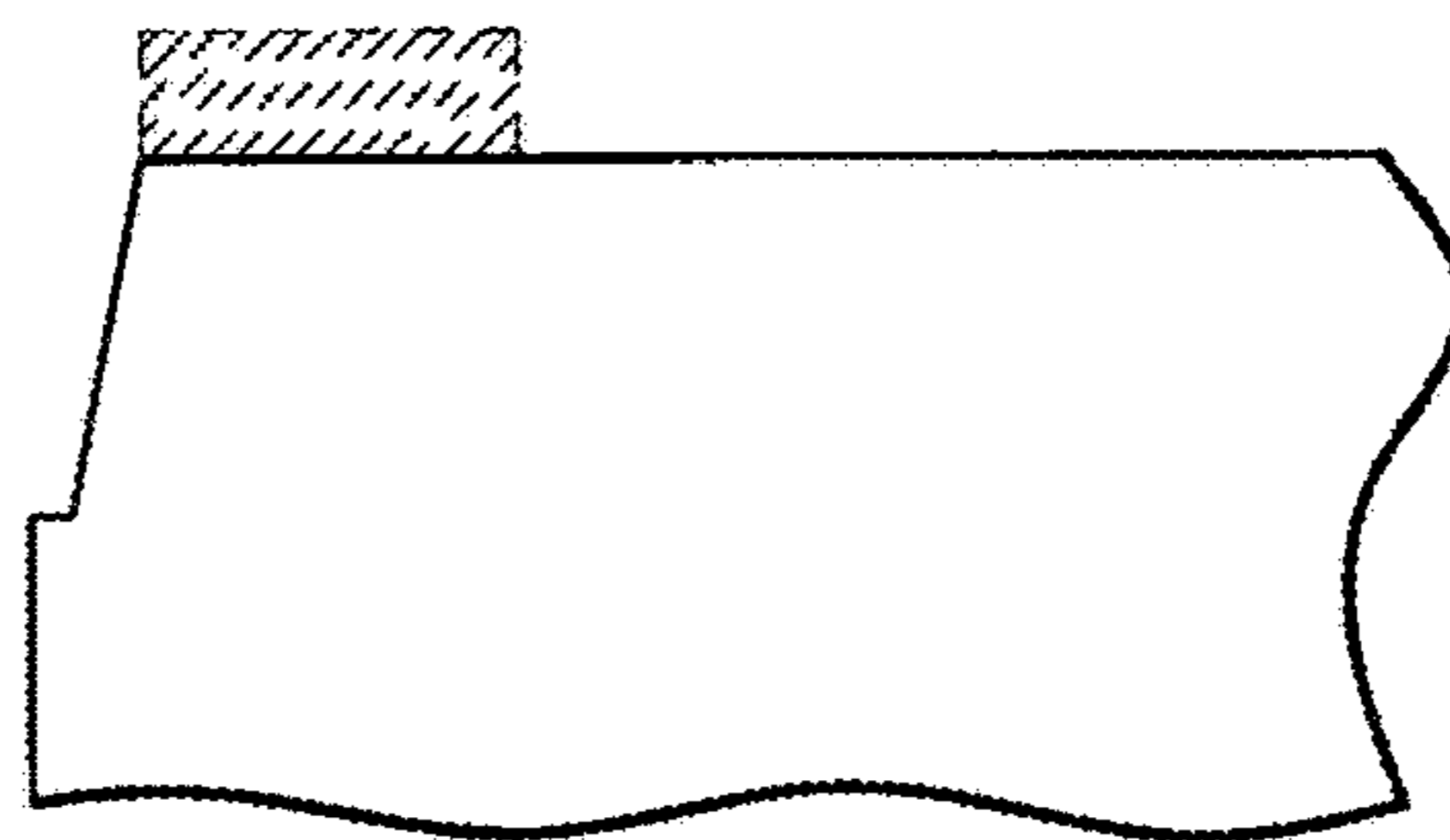


FIG. 4

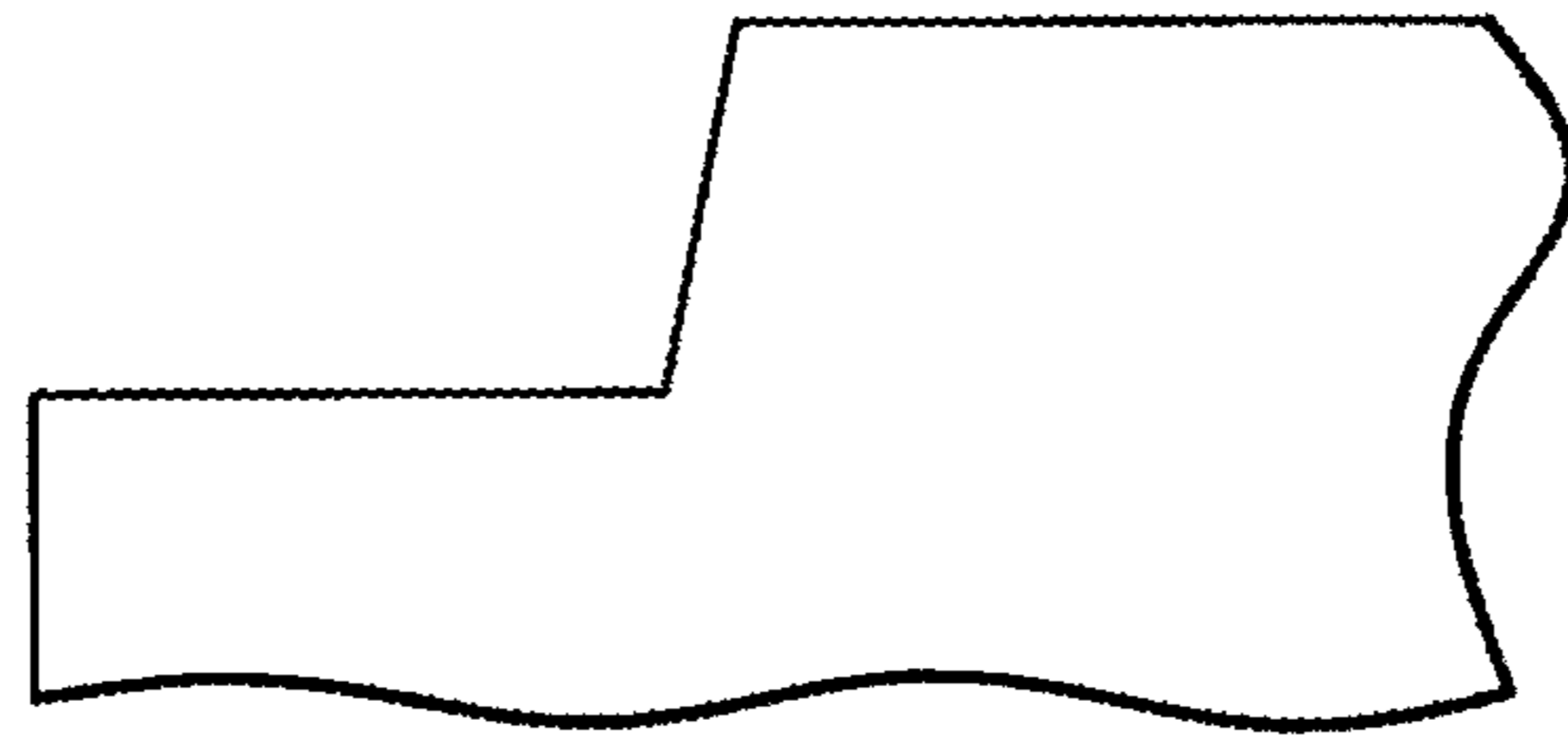


FIG. 5

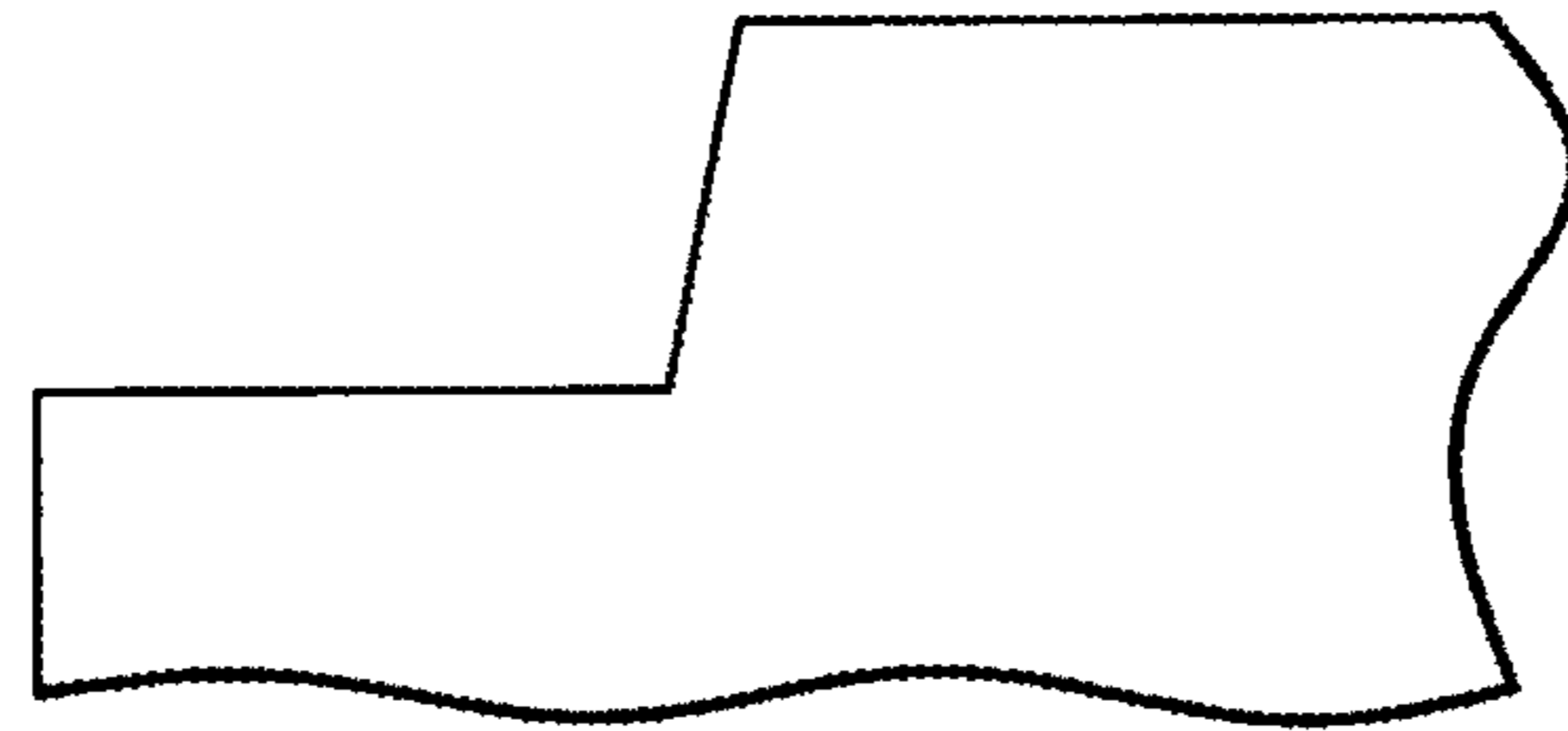


FIG. 6

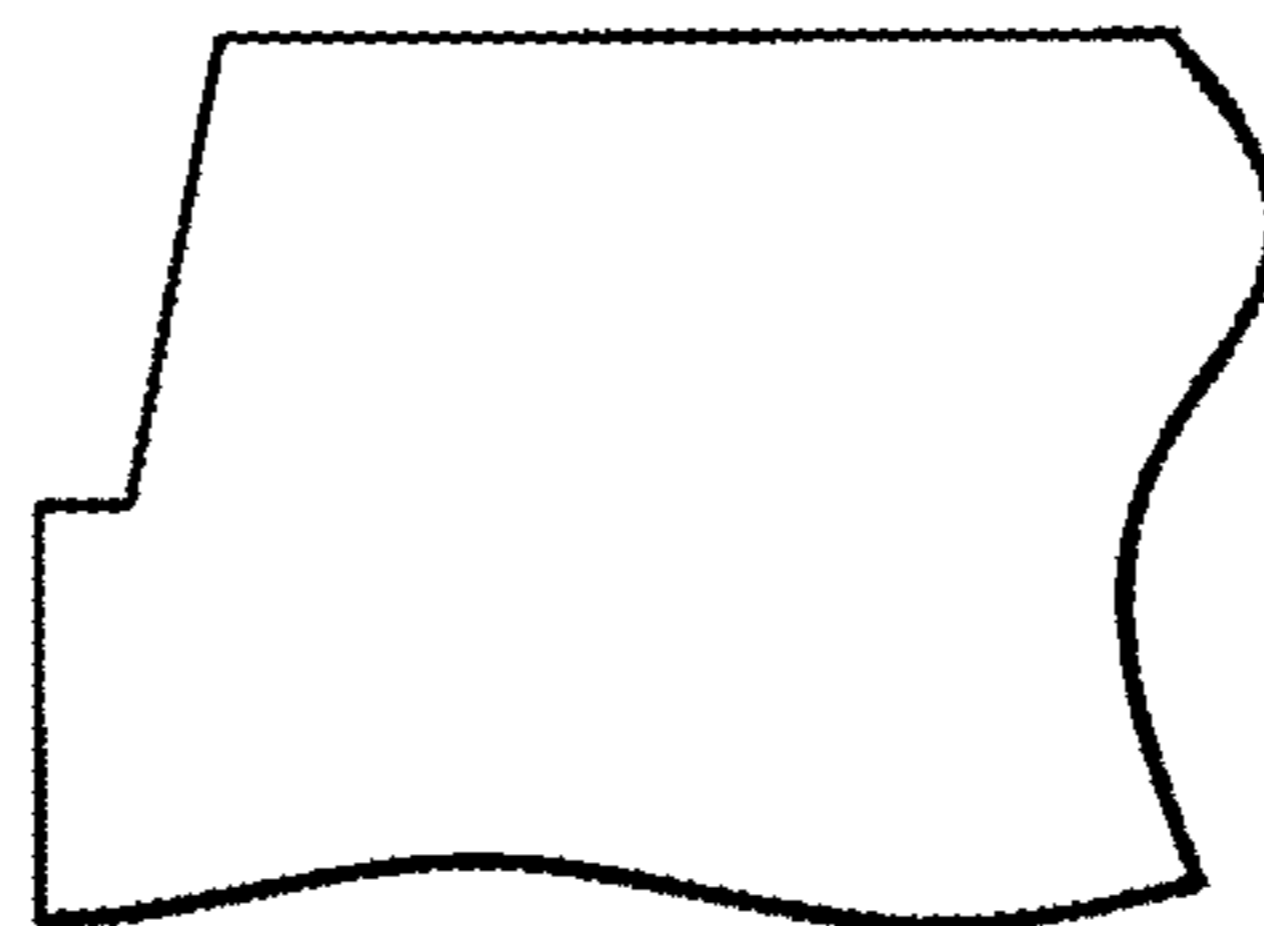


FIG. 7

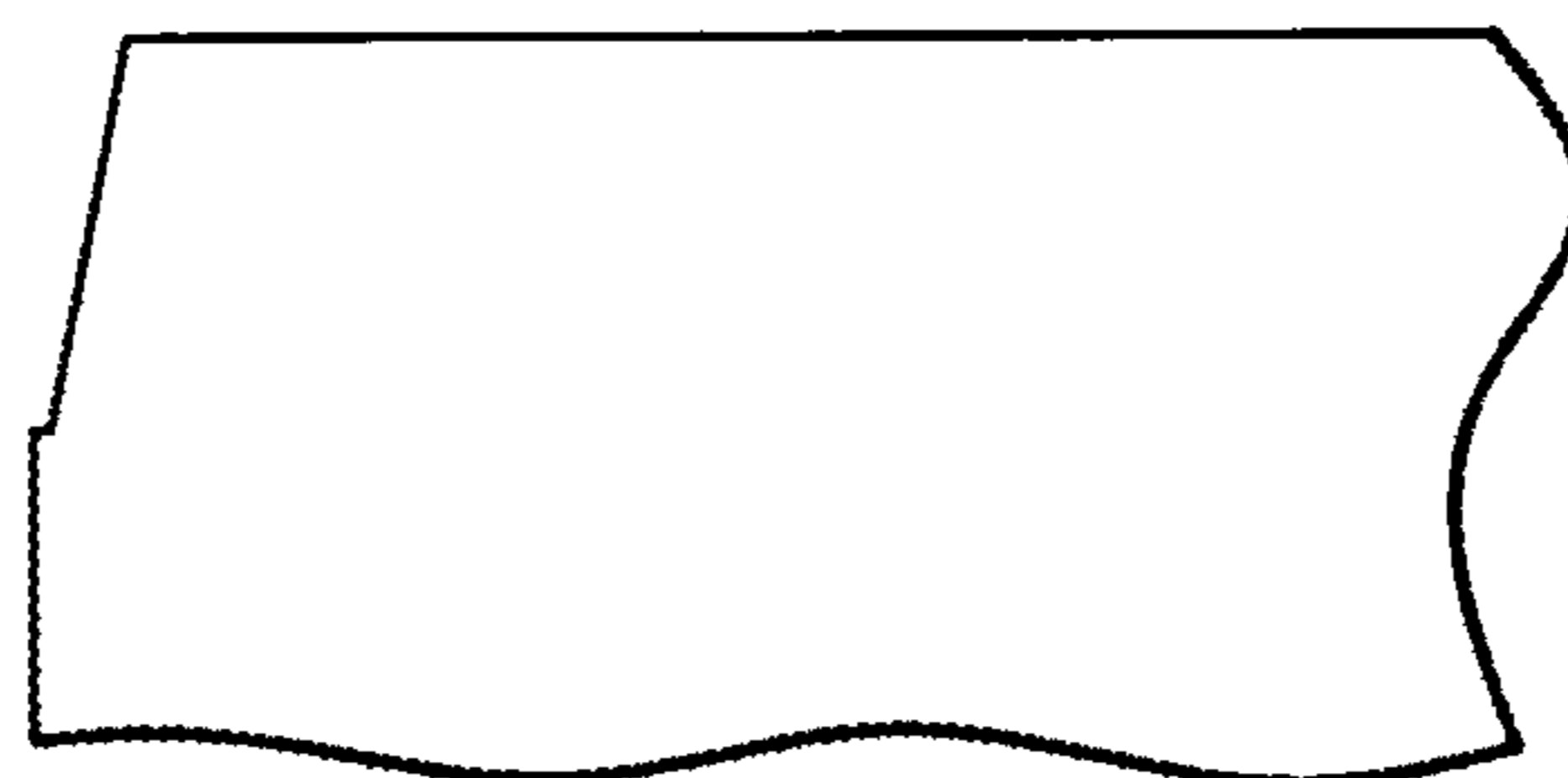


FIG. 8

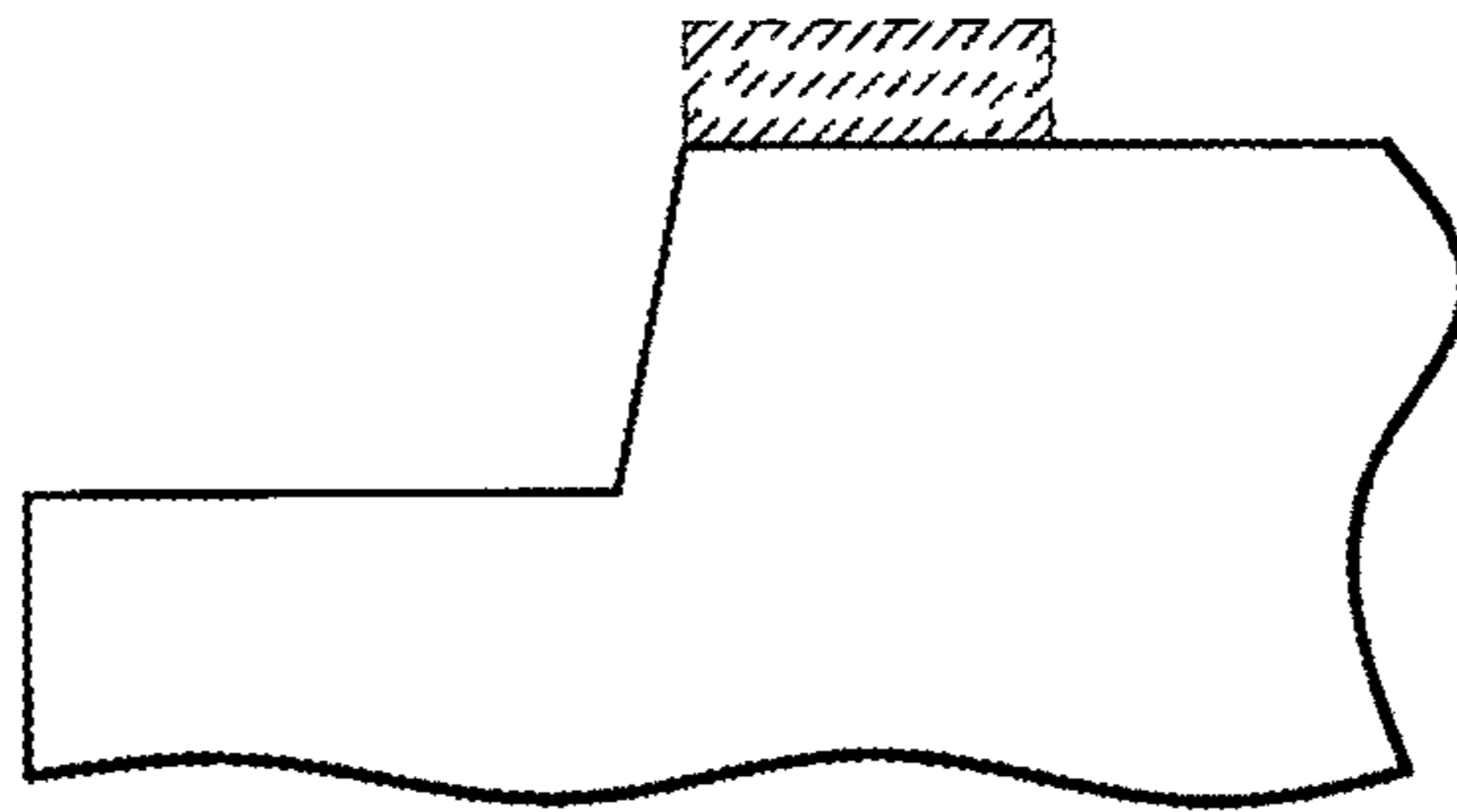


FIG. 9

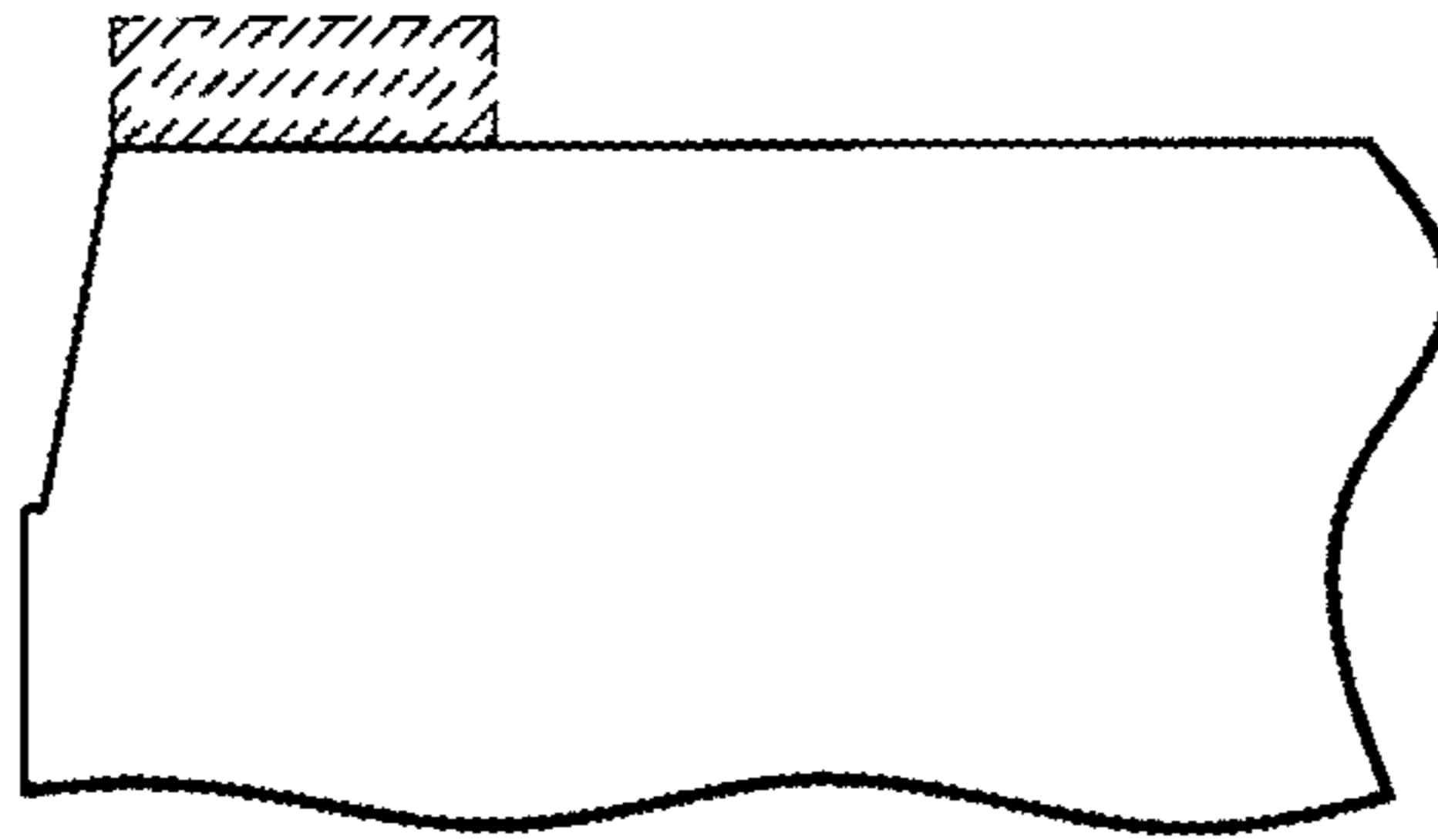


FIG. 10

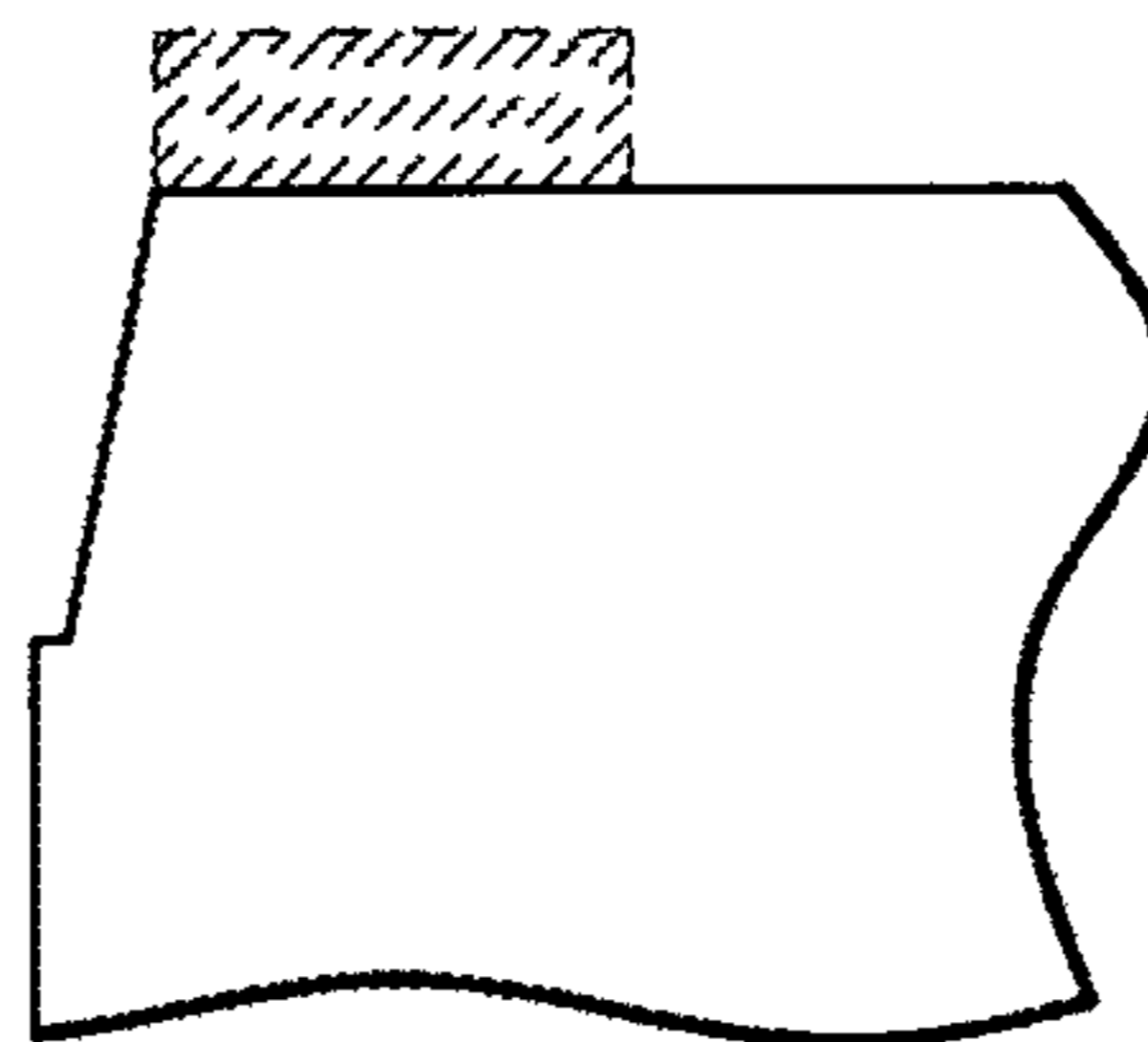


FIG. 11

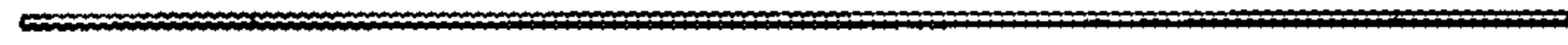


FIG. 13

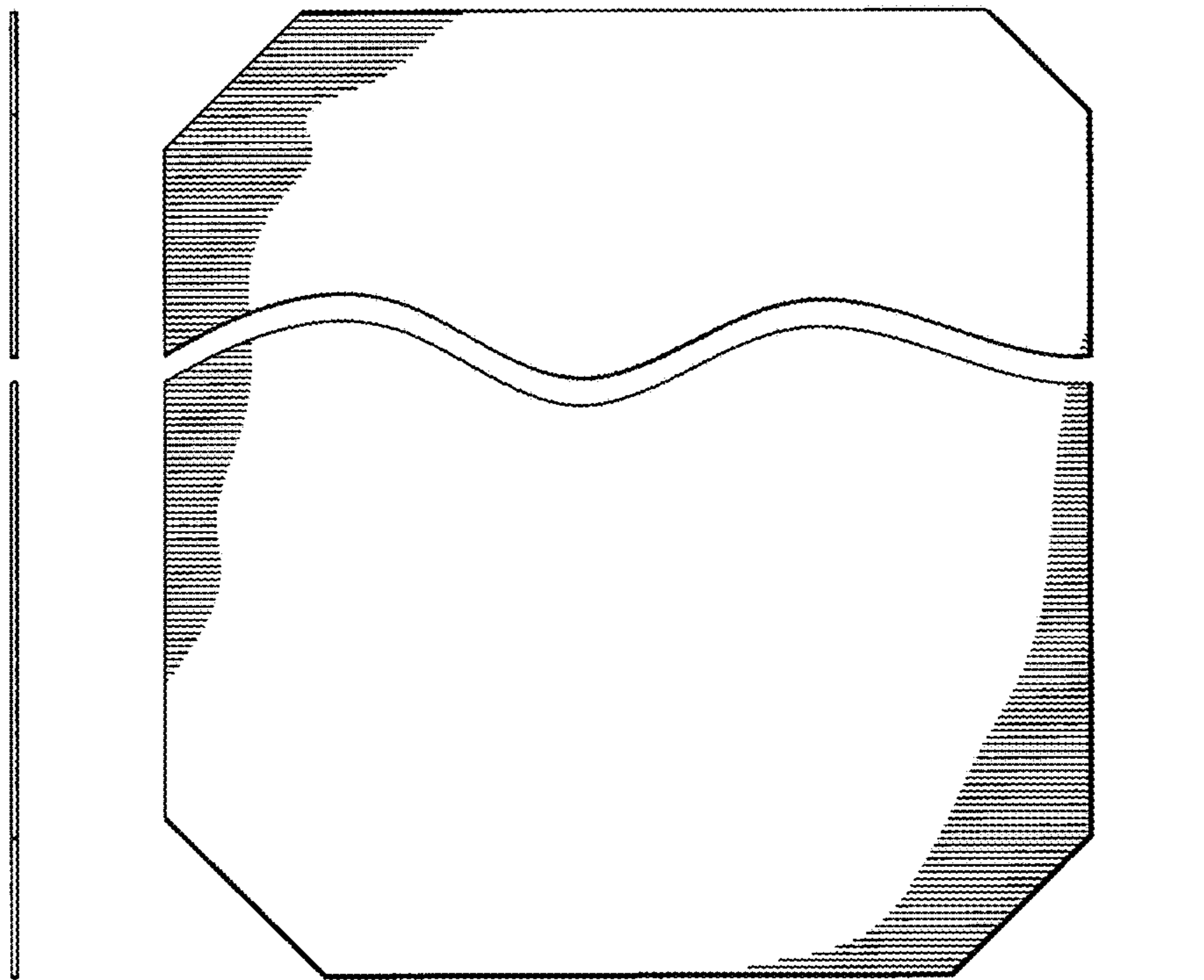


FIG. 14

FIG. 12

FIG. 16



FIG. 15