



US00D352511S

United States Patent [19]

[11] Patent Number: **Des. 352,511**

Niebauer et al.

[45] Date of Patent: **** Nov. 15, 1994**

[54] CUTTING TOOL INSERT

DESCRIPTION

[75] Inventors: **Kenneth L. Niebauer; Earl L. Griffin,** both of Raleigh, N.C.

[73] Assignee: **Kennametal Inc.,** Latrobe, Pa.

[**] Term: **14 Years**

[21] Appl. No.: **697,479**

[22] Filed: **May 8, 1991**

[52] U.S. Cl. **D15/139**

[58] Field of Search 407/114, 115, 116, 117, 407/118, 119; D15/138, 139

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Primary Examiner—Alan P. Douglas

Assistant Examiner—Antoine D. Davis

Attorney, Agent, or Firm—James G. Porcelli

[57] CLAIM

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

FIG. 1 is a top and left side perspective view of a cutting tool insert showing our new design;

FIG. 2 is a top plan view;

FIG. 3 is a right side elevational view;

FIG. 4 is a bottom plan view;

FIG. 5 is a cross sectional view taken along line V—V in FIG. 2;

FIG. 6 is a cross sectional view taken along line VI—VI in FIG. 2;

FIG. 7 is a top and left side perspective view of a second embodiment of the cutting tool insert of FIG. 1 showing our new design;

FIG. 8 is a top plan view;

FIG. 9 is a right side elevational view;

FIG. 10 is a bottom plan view;

FIG. 11 is a cross sectional view taken along line XI—XI in FIG. 8;

FIG. 12 is a cross sectional view taken along line XII—XII in FIG. 8;

FIG. 13 is a top and left side perspective view of a third embodiment of the cutting tool insert of FIG. 1 showing our new design;

FIG. 14 is a top plan view;

FIG. 15 is a right side elevational view;

FIG. 16 is a bottom plan view;

FIG. 17 is a cross sectional view taken along line XVII—XVII in FIG. 14;

FIG. 18 is a cross sectional view taken along line XVIII—XVIII in FIG. 14;

FIG. 19 is a top and left side perspective view of a fourth embodiment of the cutting tool insert of FIG. 1 showing our new design;

FIG. 20 is a top plan view;

FIG. 21 is right side elevational view;

FIG. 22 is a bottom plan view;

FIG. 23 is a cross sectional view taken along line XXIII—XXIII in FIG. 20;

FIG. 24 is a top and left side perspective view of a fifth embodiment of the cutting tool insert of FIG. 1 showing our new design;

FIG. 25 is a top plan view;

FIG. 26 is a right side elevational view;

FIG. 27 is a bottom plan view;

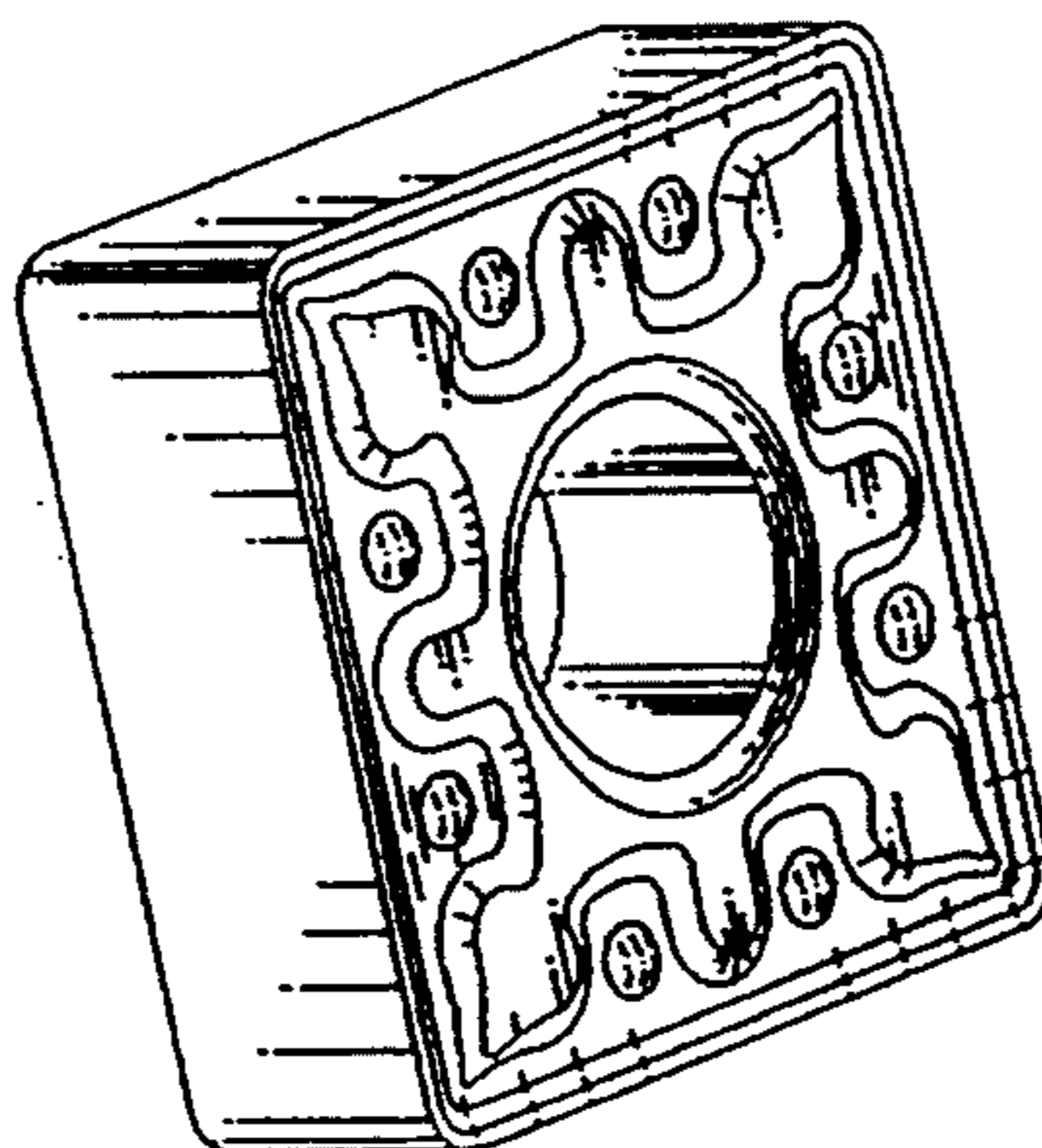


FIG. 28 is a cross sectional view taken along line XXVIII—XXVIII in FIG. 25;

FIG. 29 is a fragmented sectional view of FIG. 2;

FIG. 30 is a fragmented sectional view of FIG. 2;

FIG. 31 is a fragmented sectional view of FIG. 8;

FIG. 32 is a fragmented sectional view of FIG. 8;

FIG. 33 is a fragmented sectional view of FIG. 14;

FIG. 34 is a fragmented sectional view of FIG. 14;

FIG. 35 is a fragmented sectional view of FIG. 20;

FIG. 36 is a fragmented sectional view of FIG. 20;

FIG. 37 is a fragmented sectional view of FIG. 25; and,

FIG. 38 is a fragmented sectional view of FIG. 25.

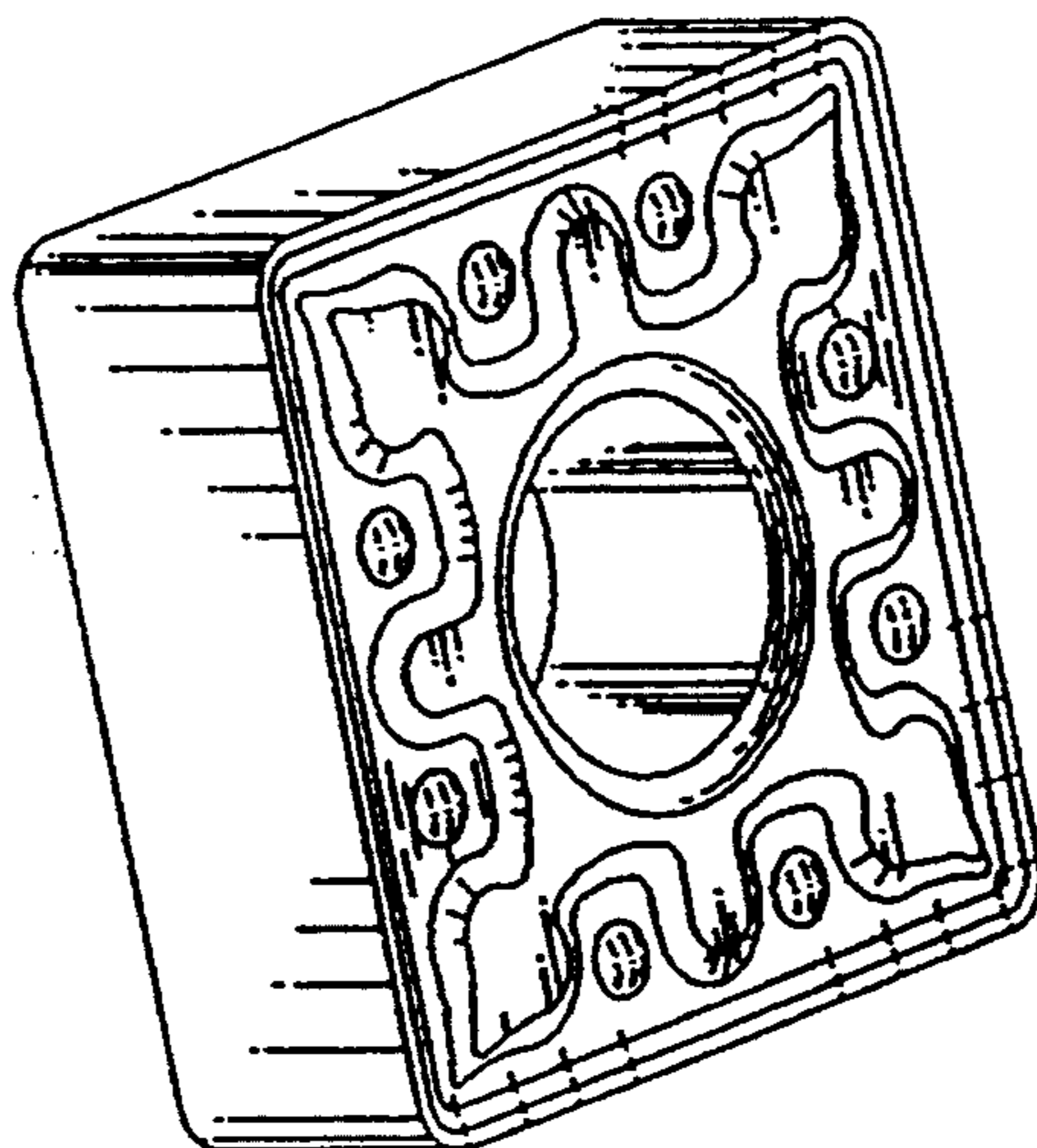


FIG. 1

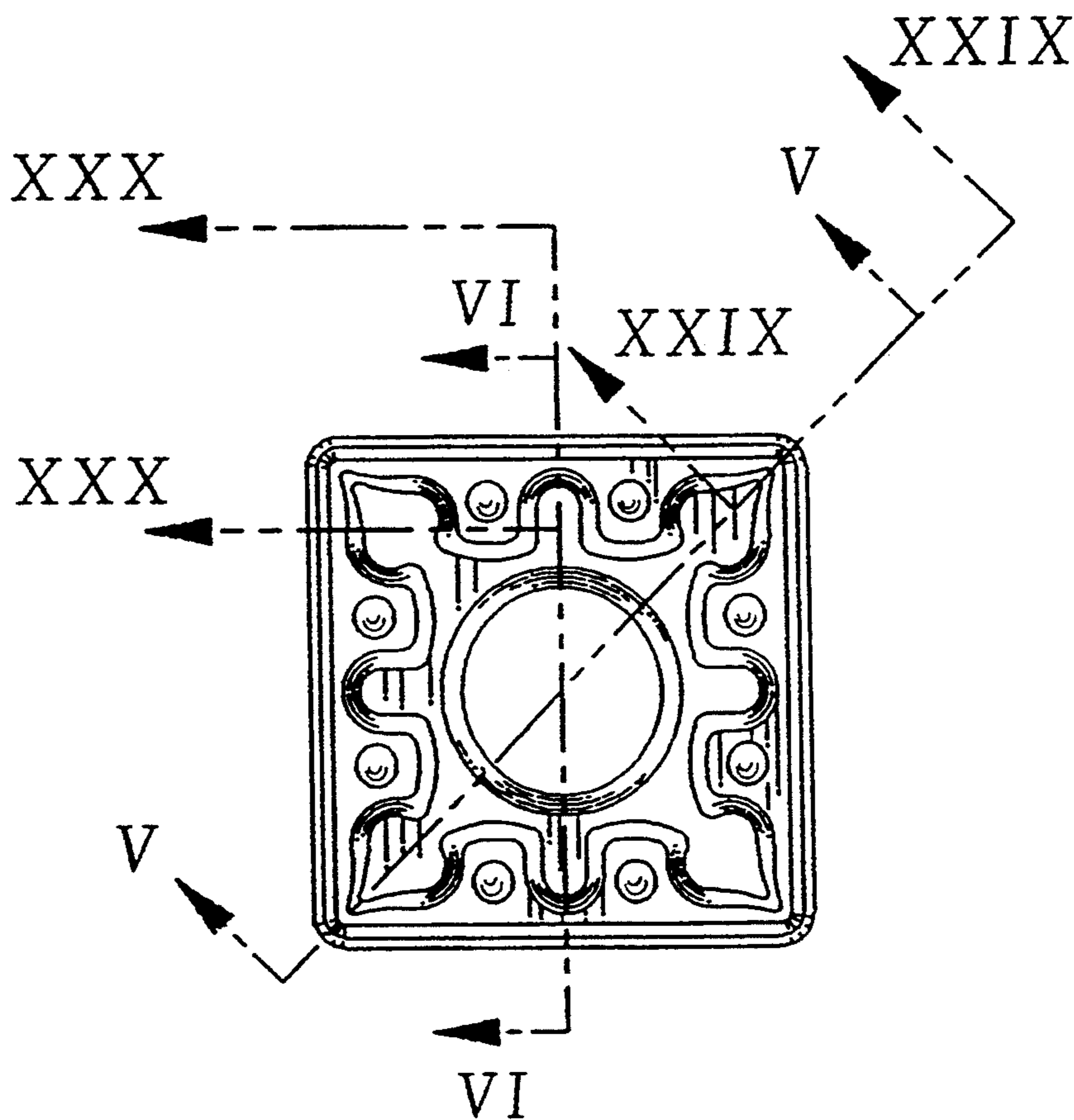


FIG. 2

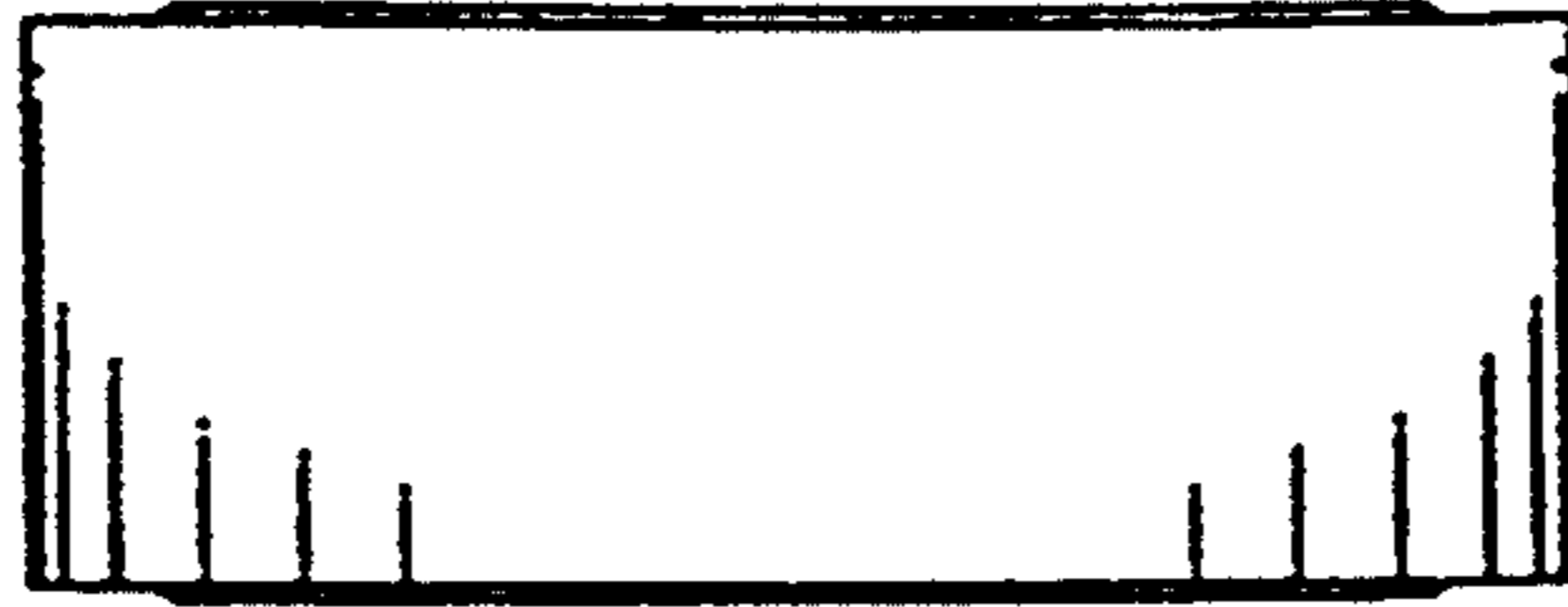


FIG. 3

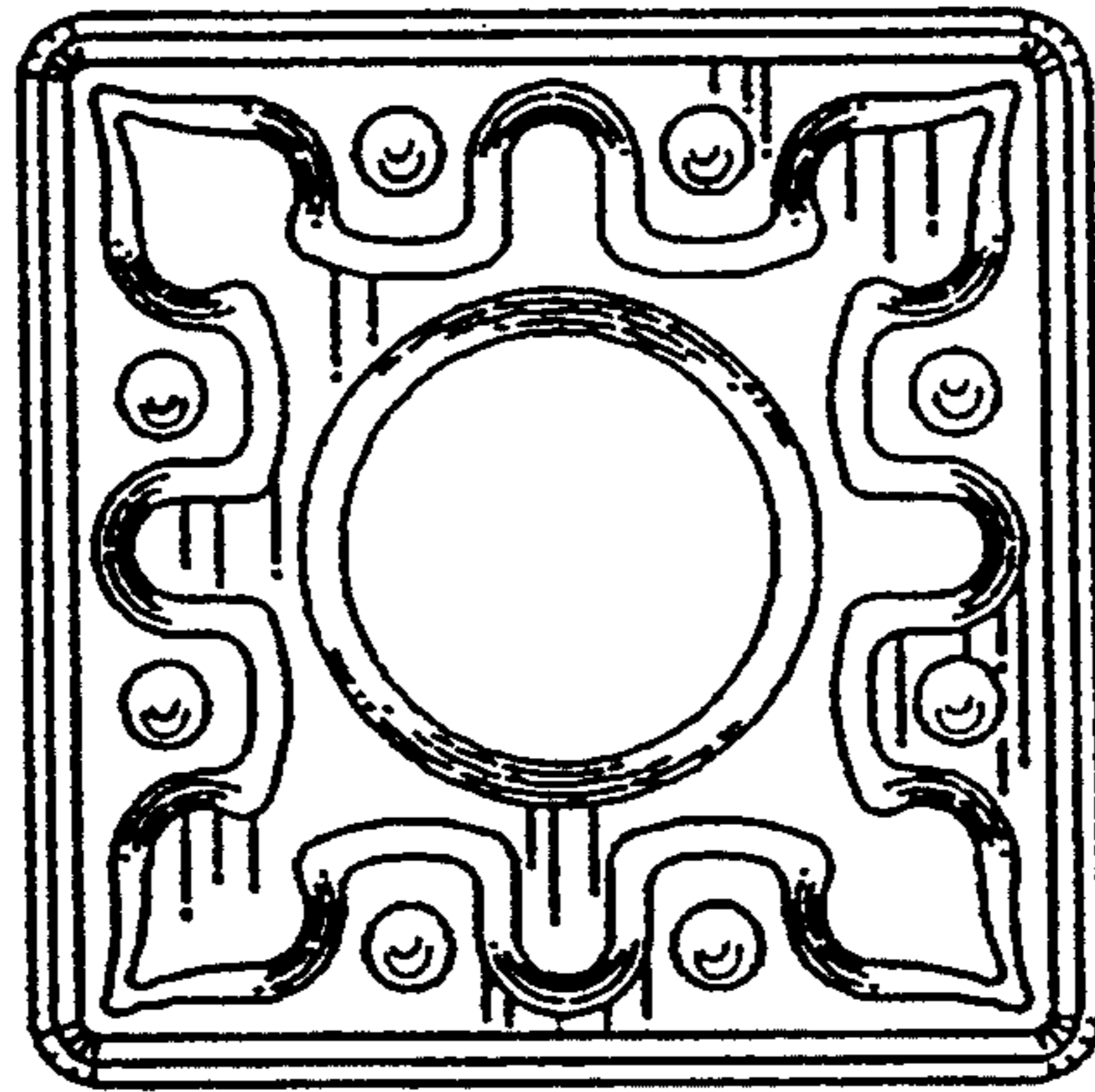


FIG. 4

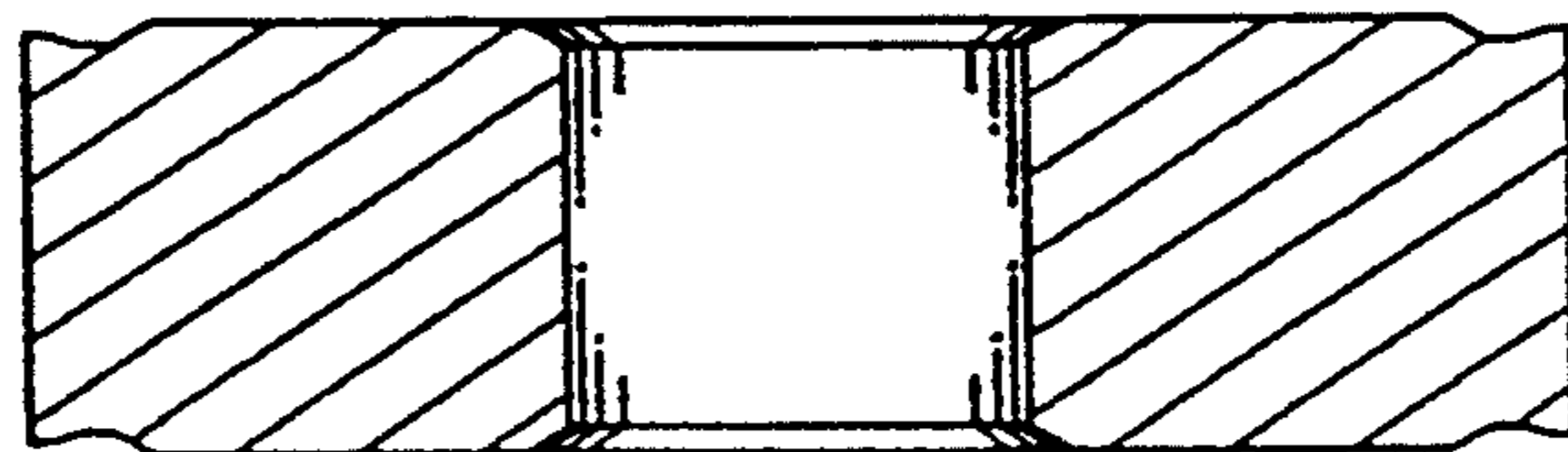


FIG. 5

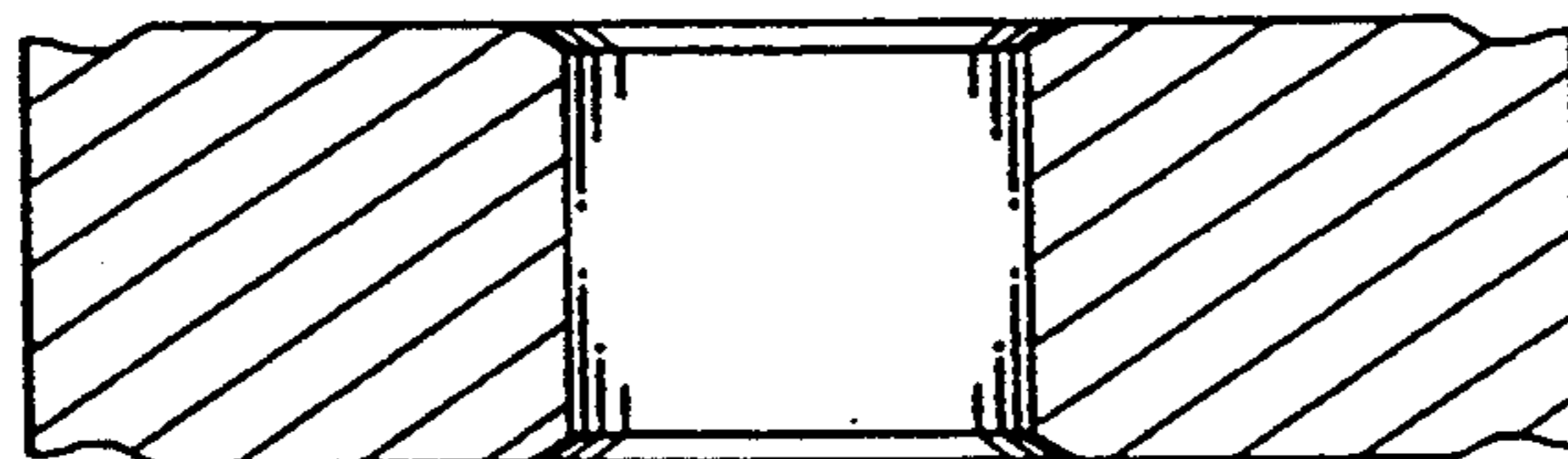


FIG. 6

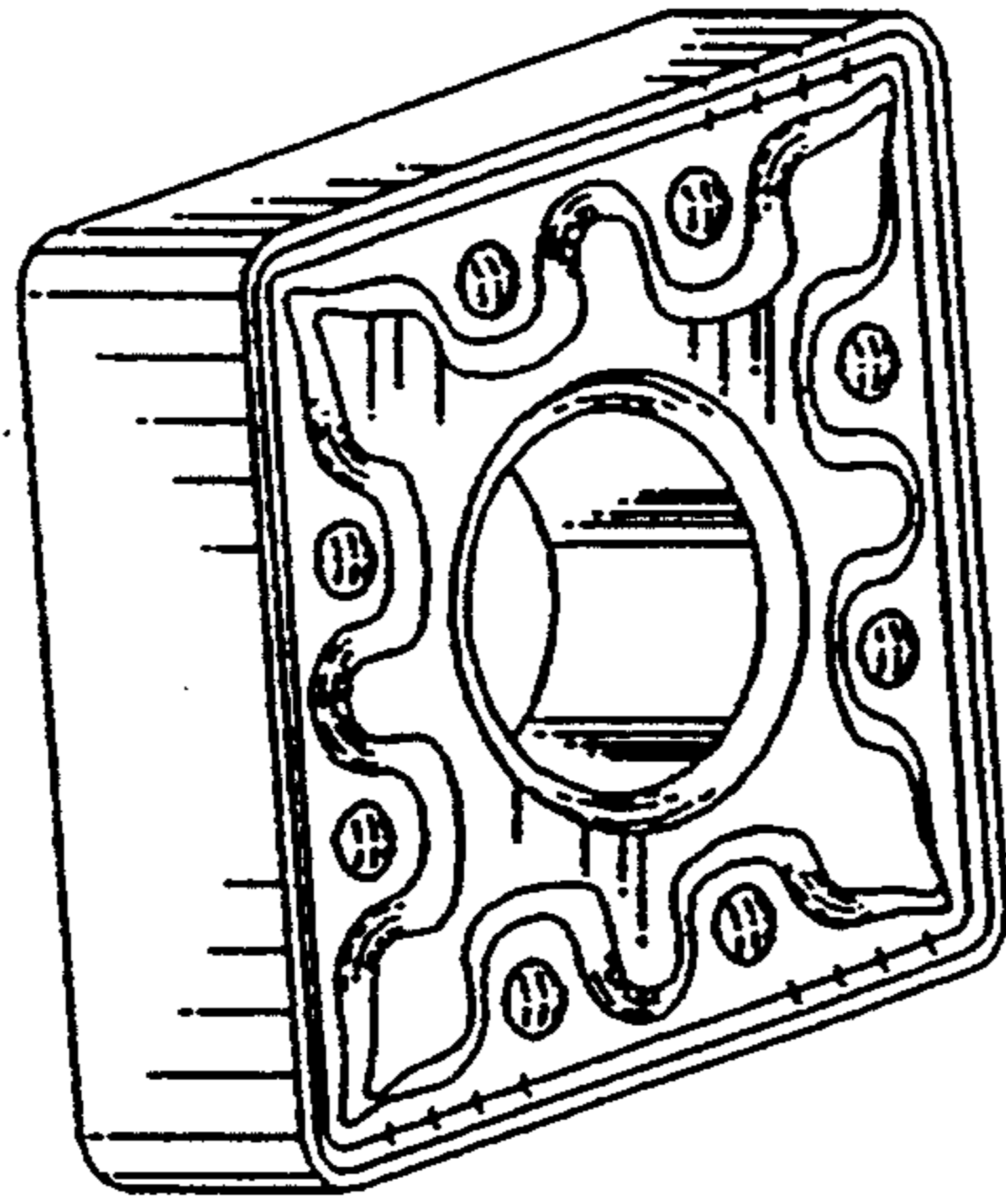


FIG. 7

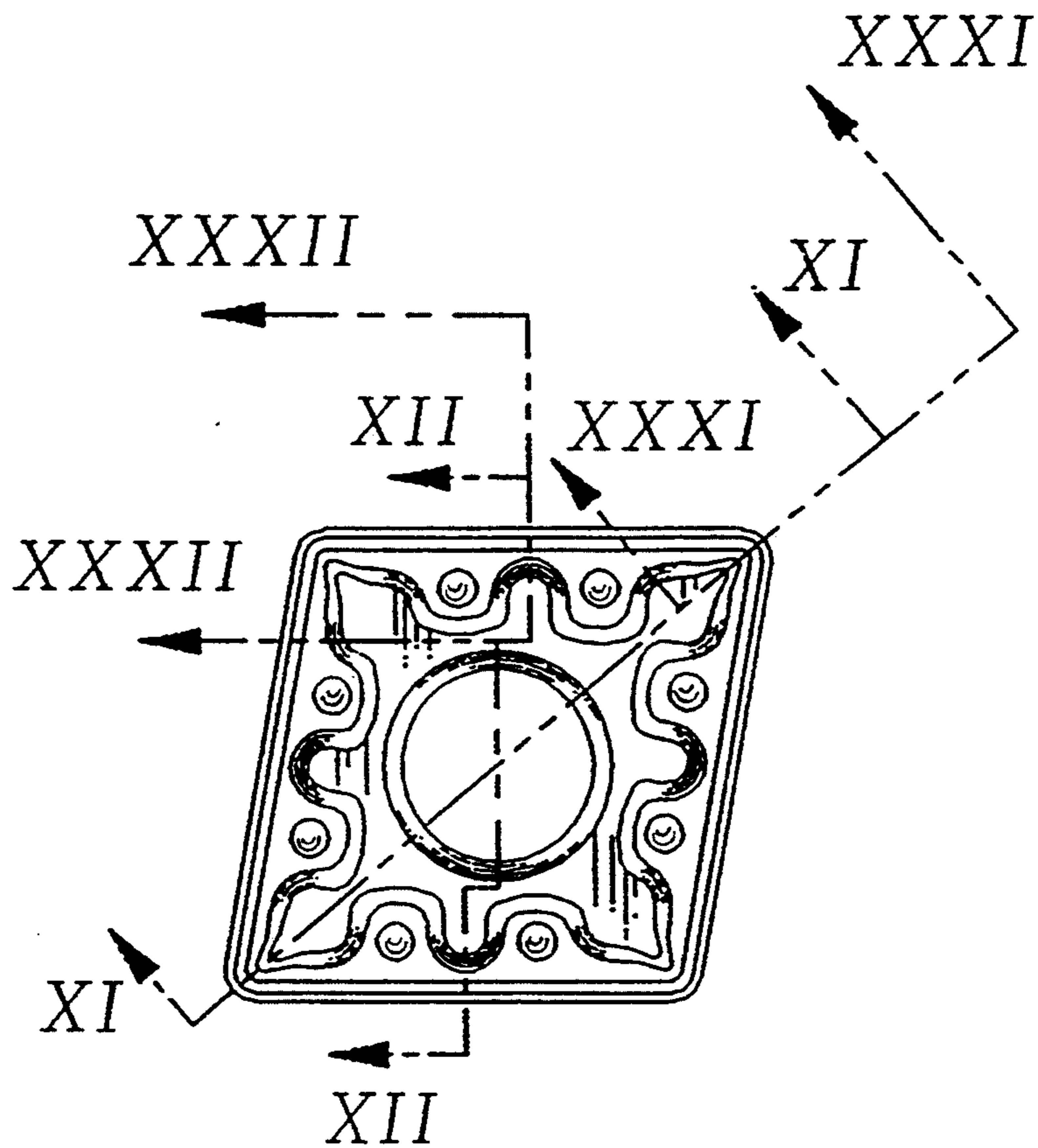


FIG. 8

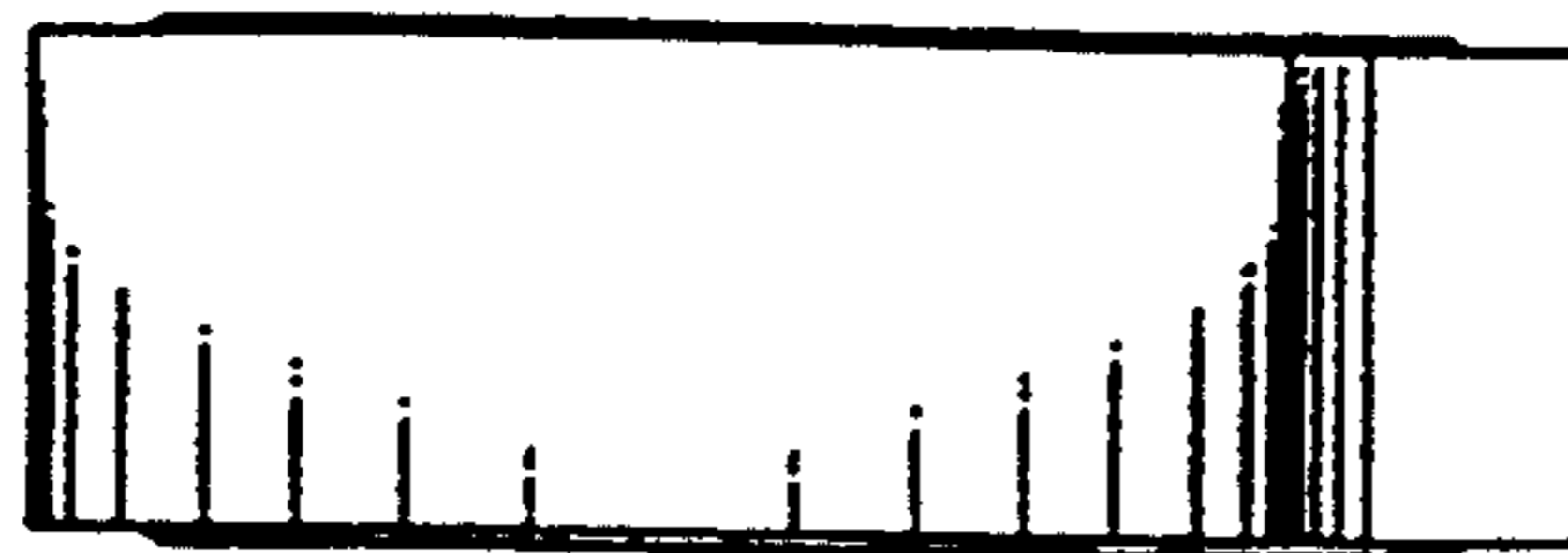


FIG. 9

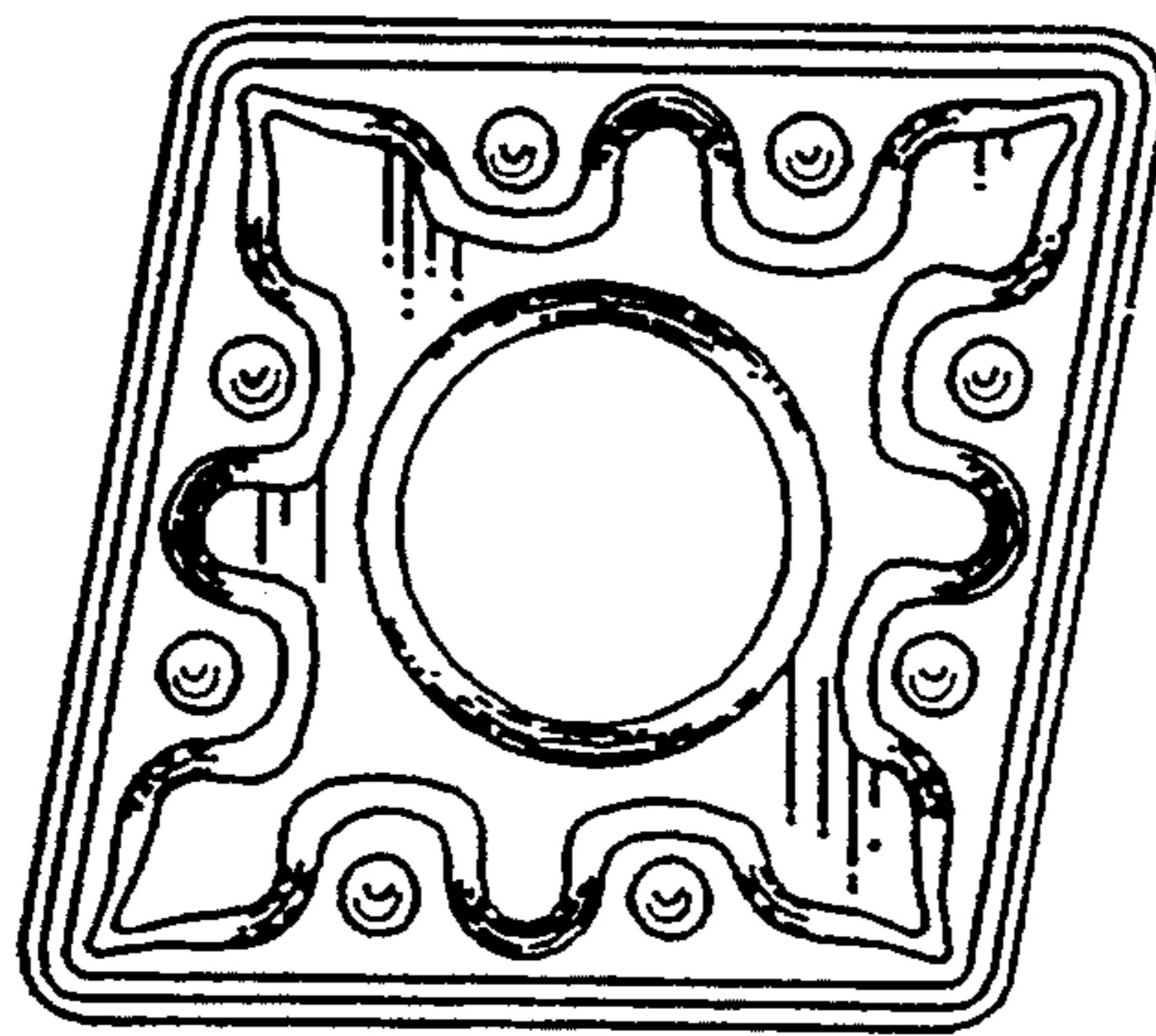


FIG. 10

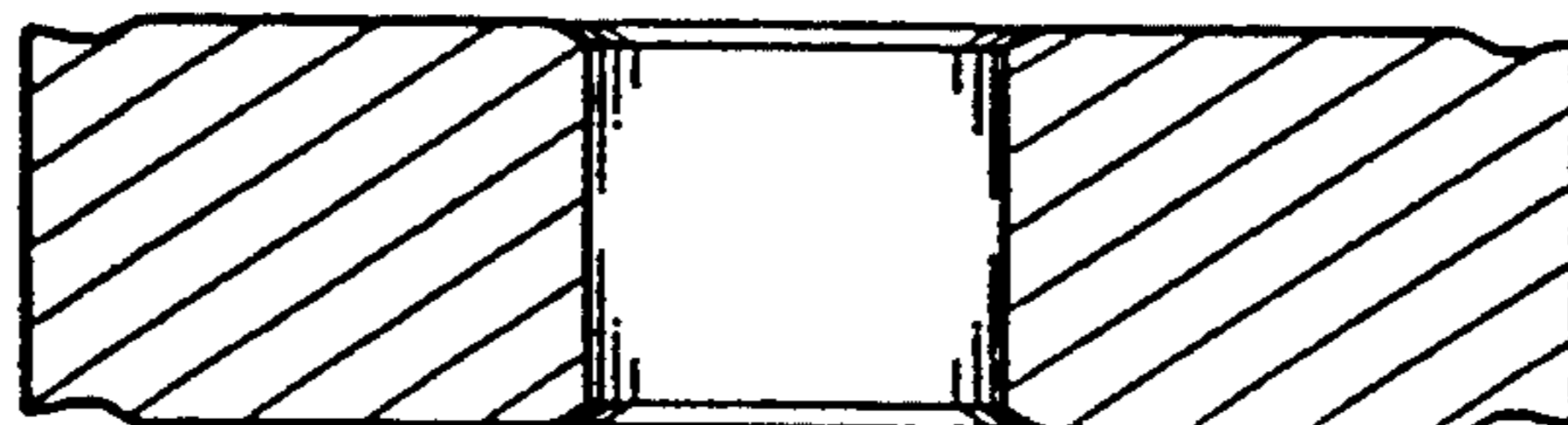


FIG. 11

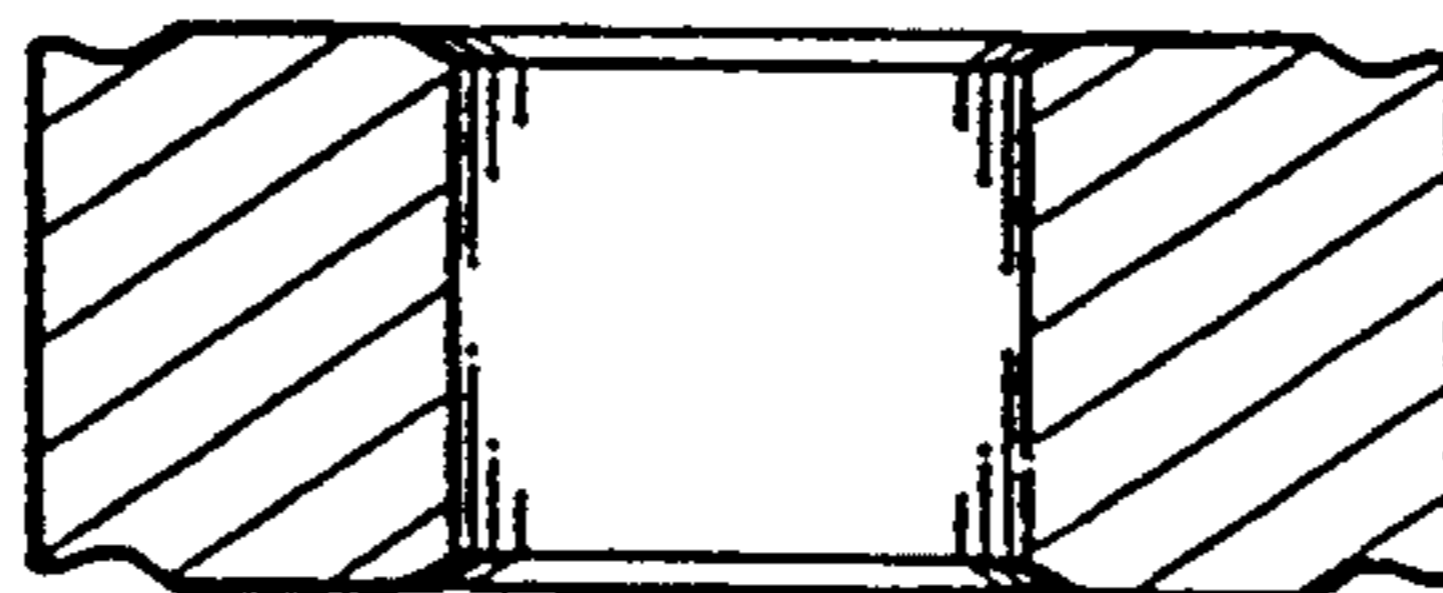


FIG. 12

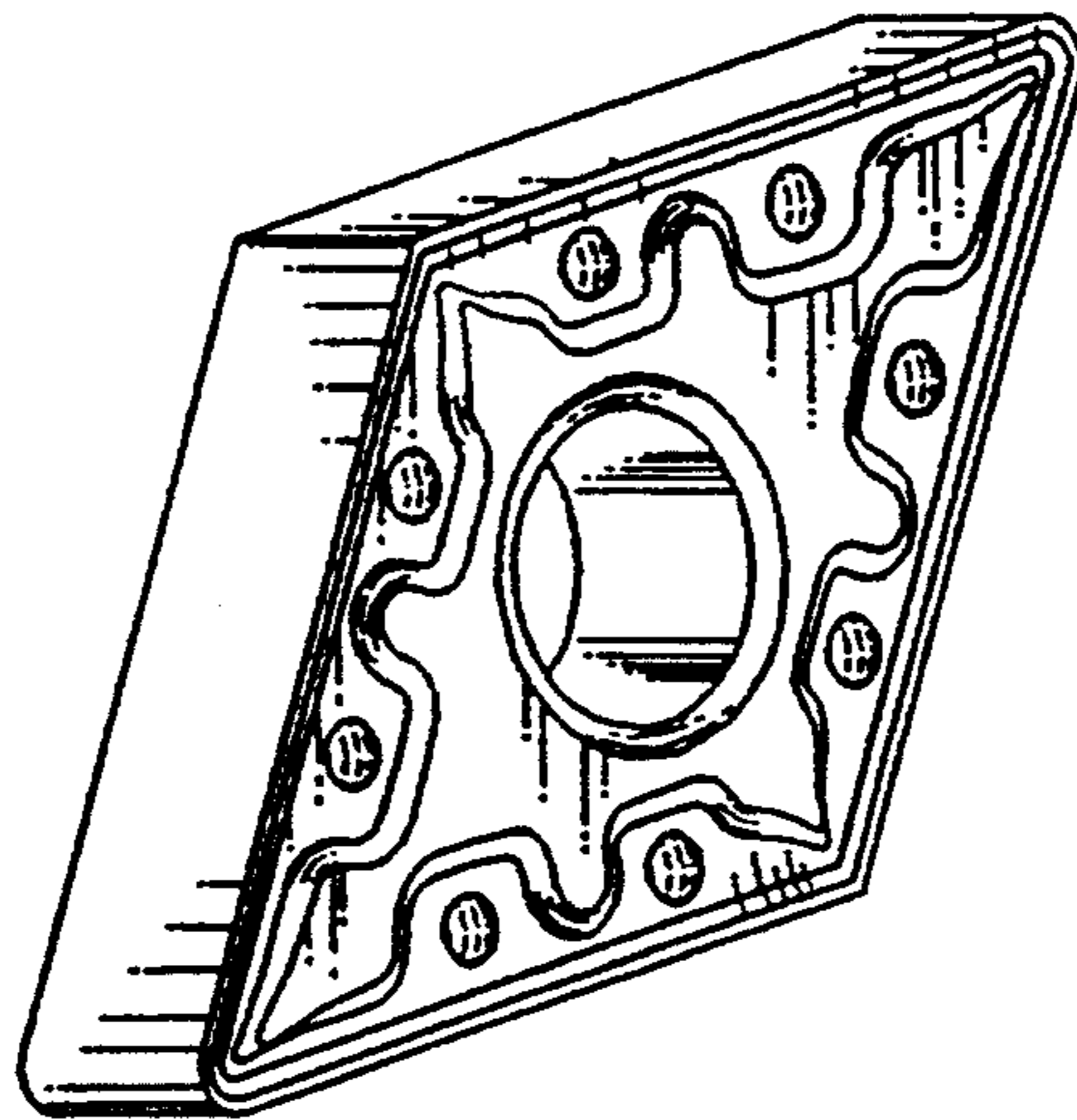


FIG. 13

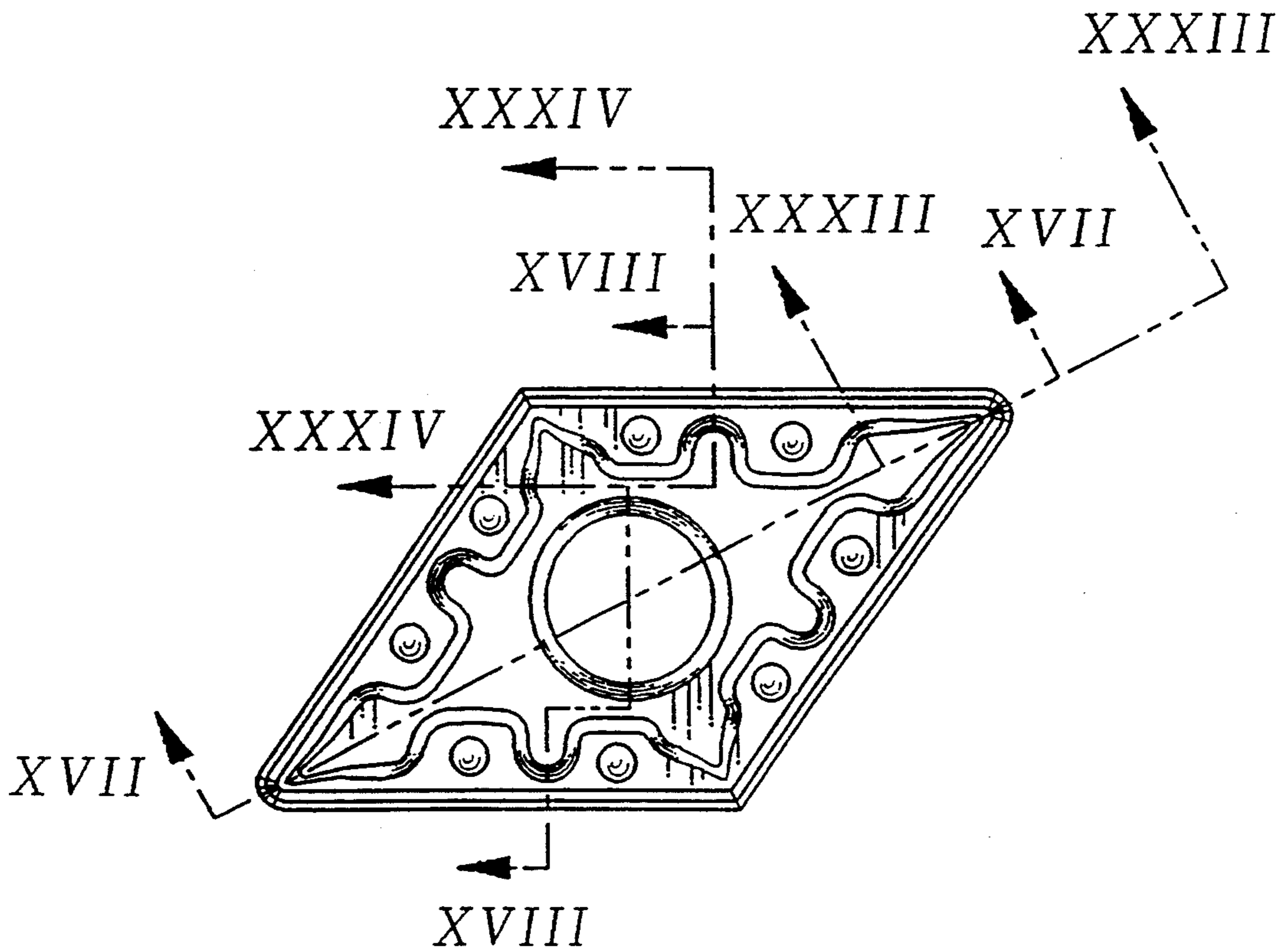


FIG. 14

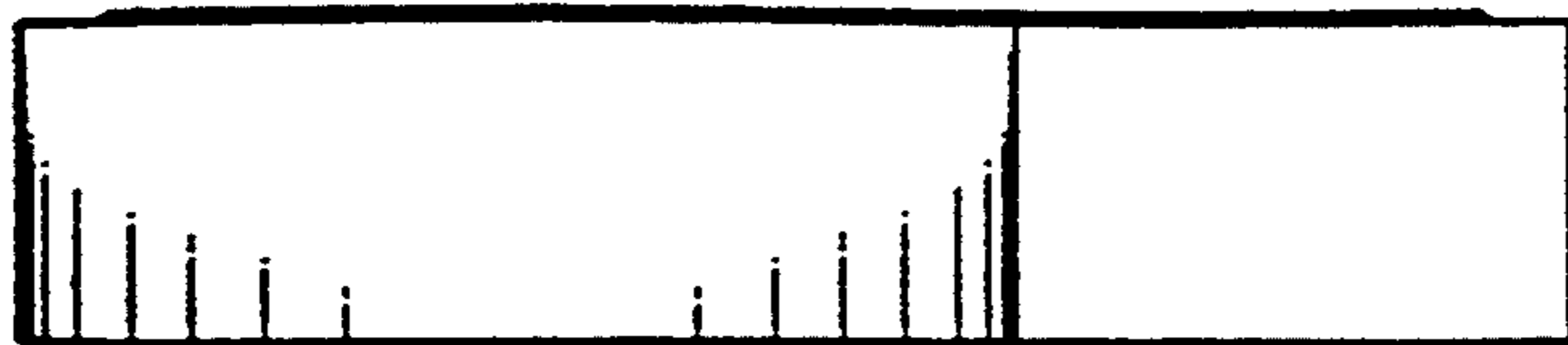


FIG. 15

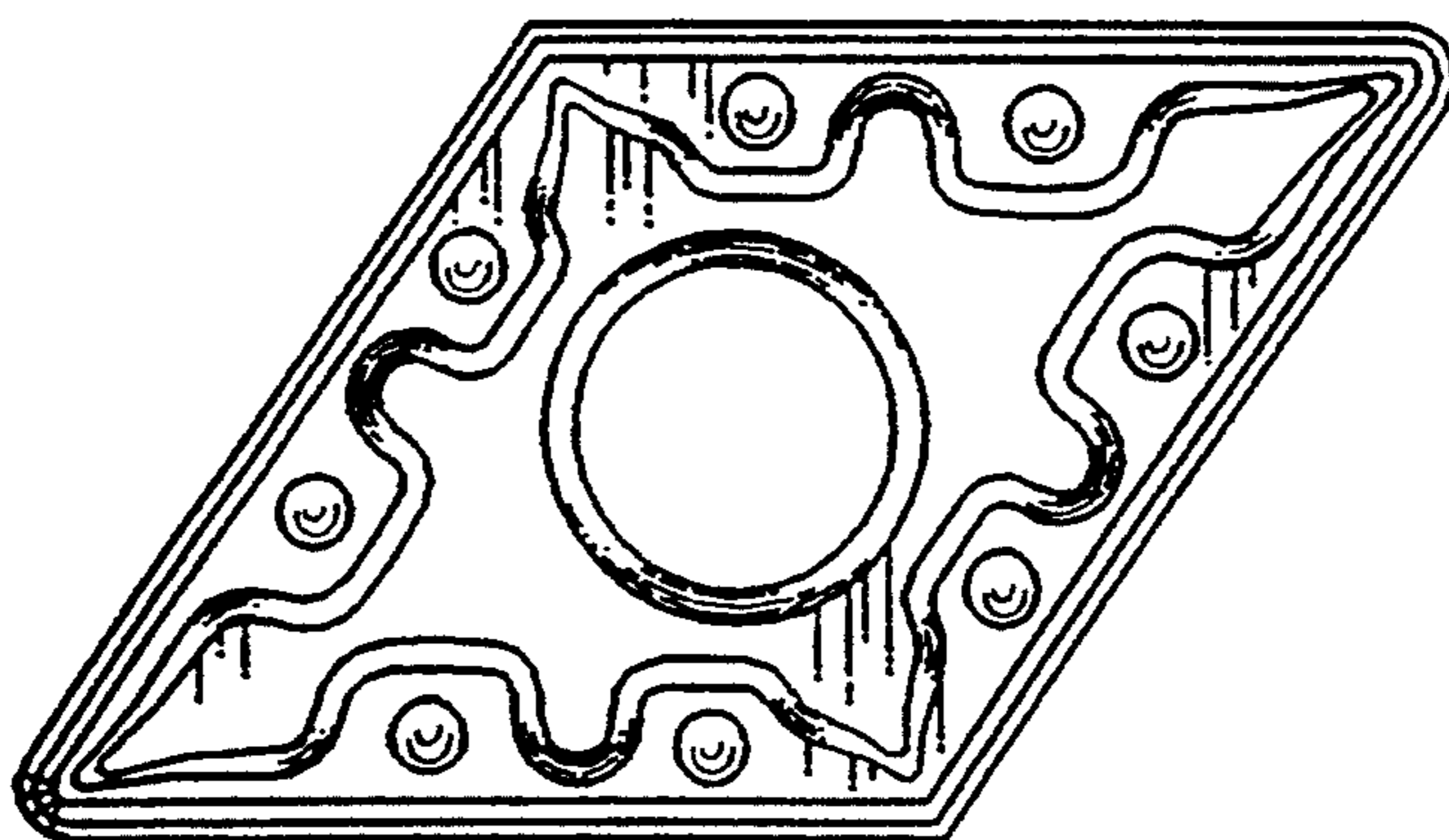


FIG. 16

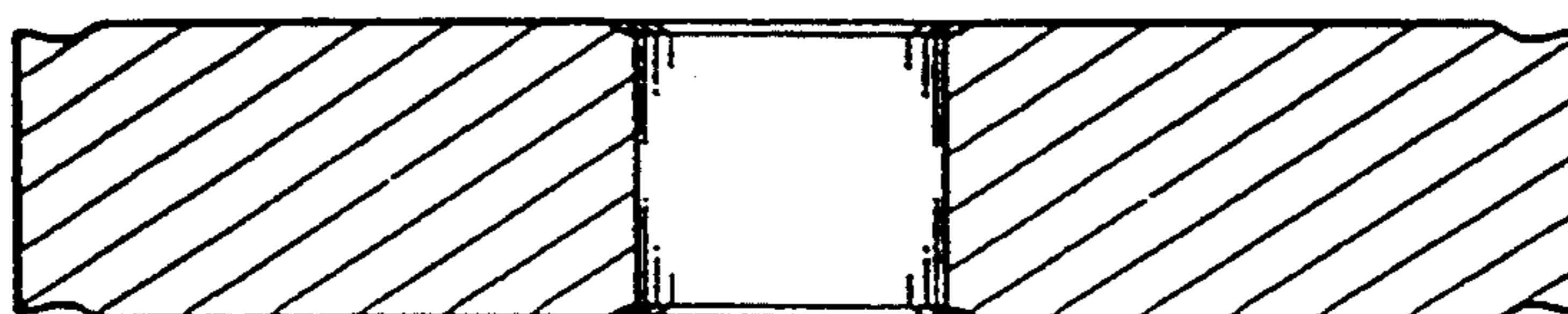


FIG. 17

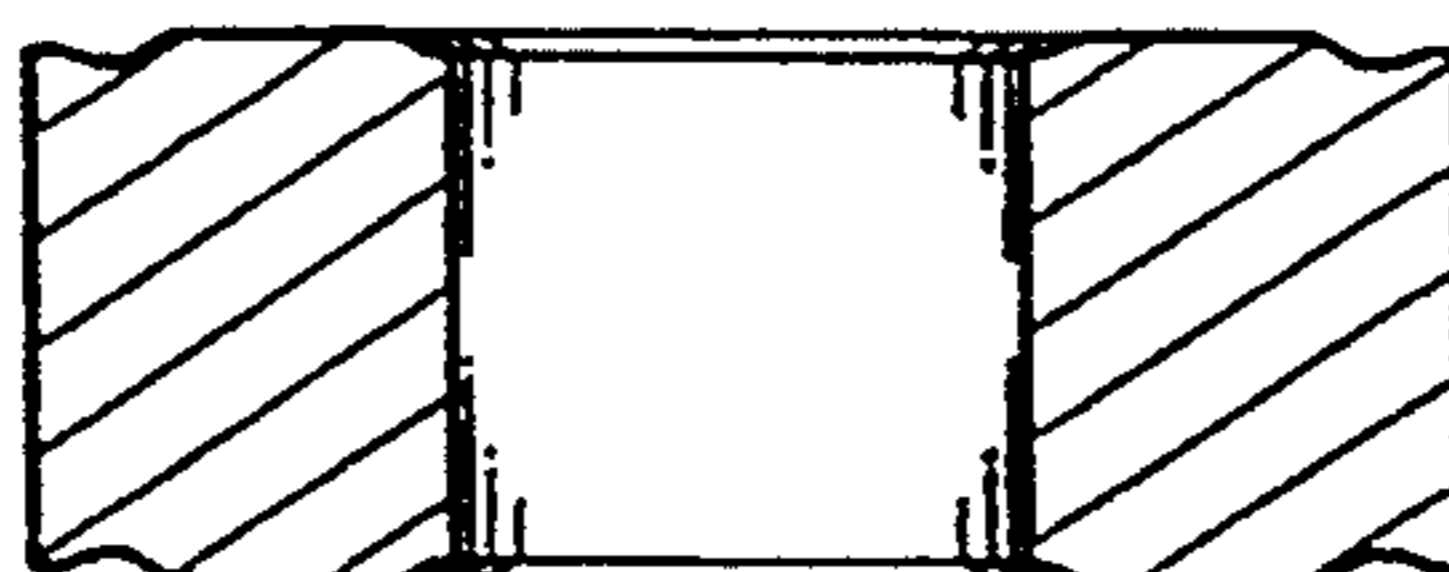


FIG. 18

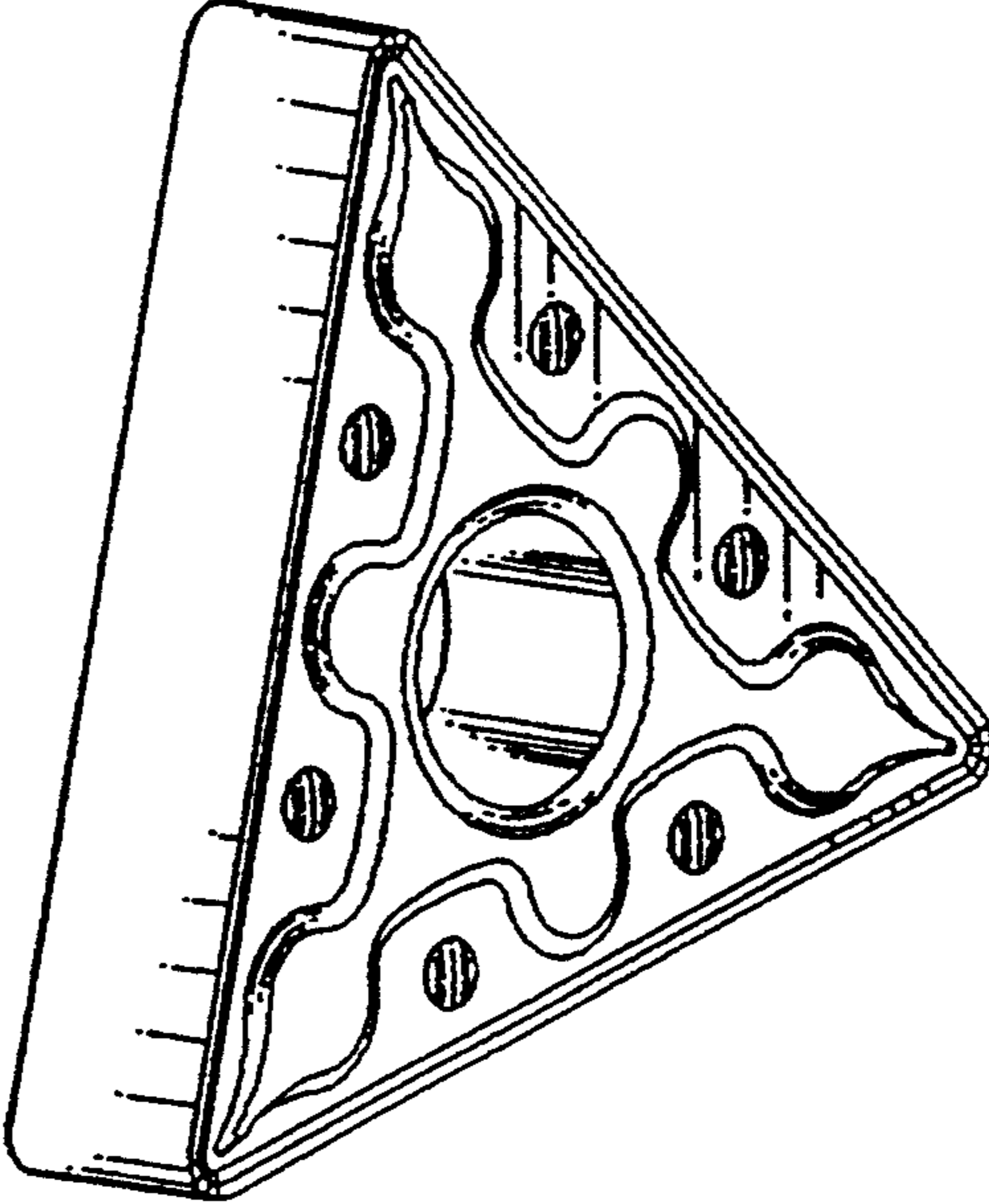


FIG. 19

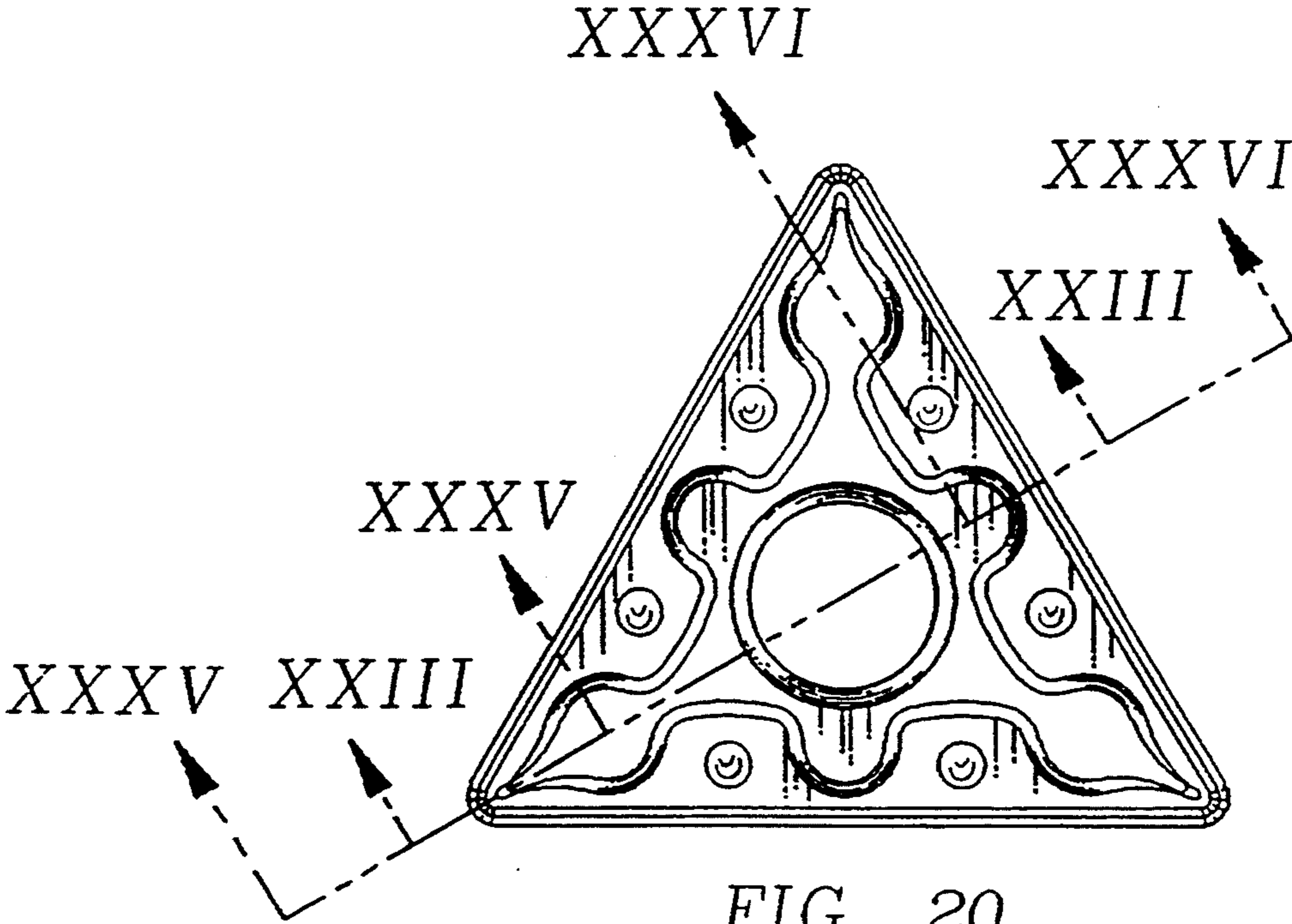


FIG. 20



FIG. 21

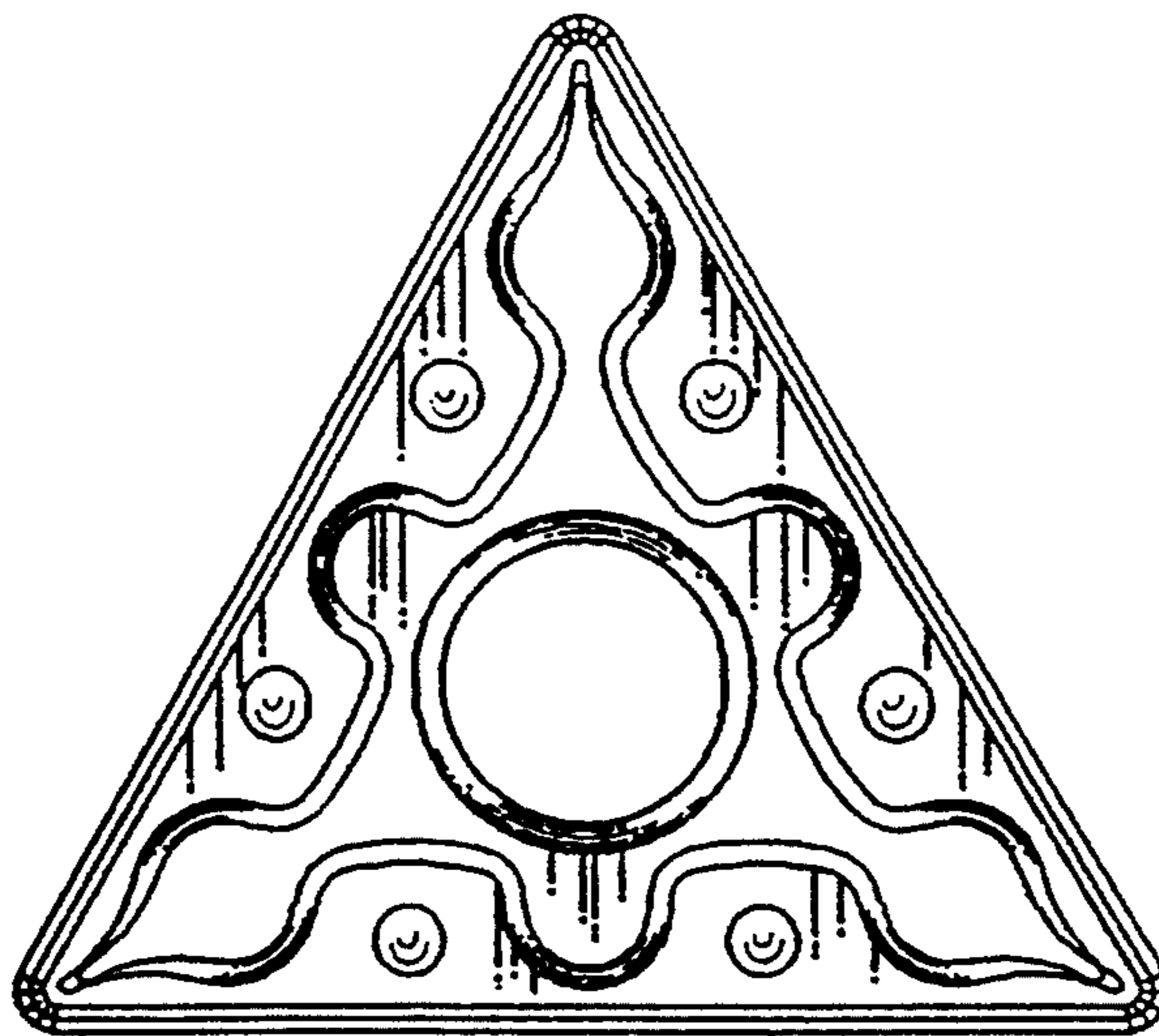


FIG. 22

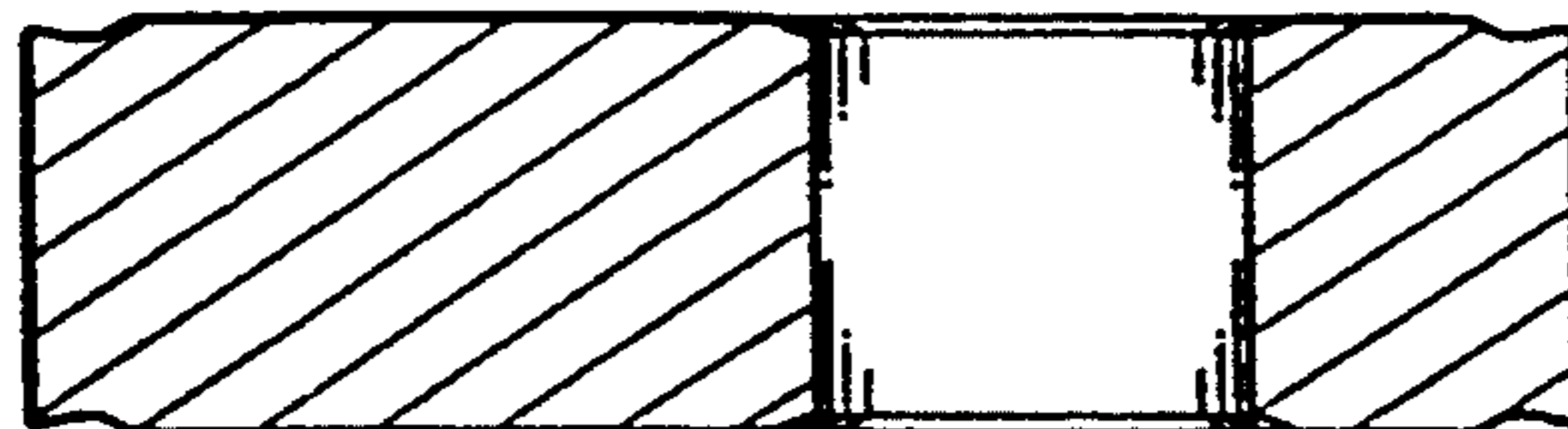


FIG. 23

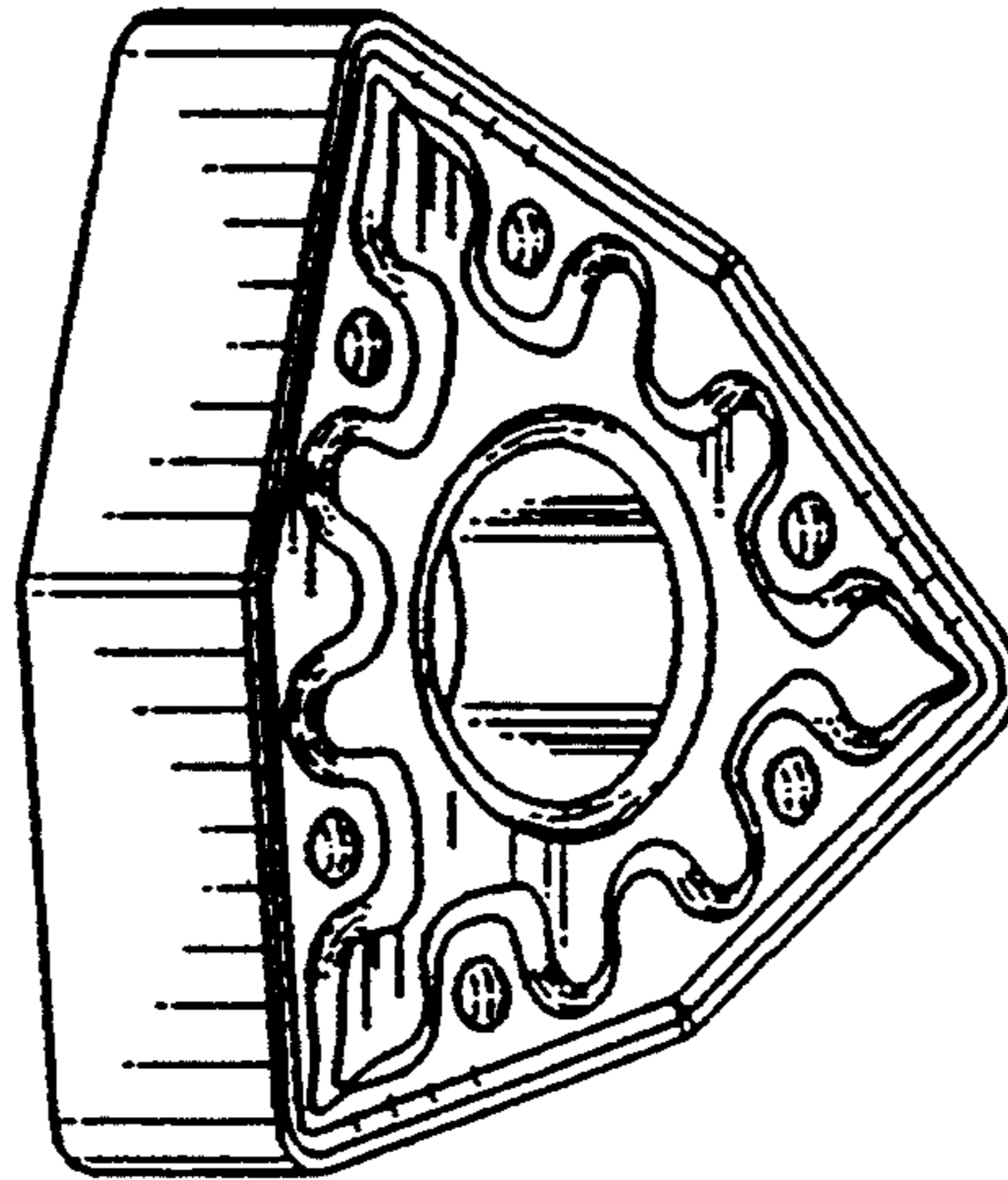


FIG. 24

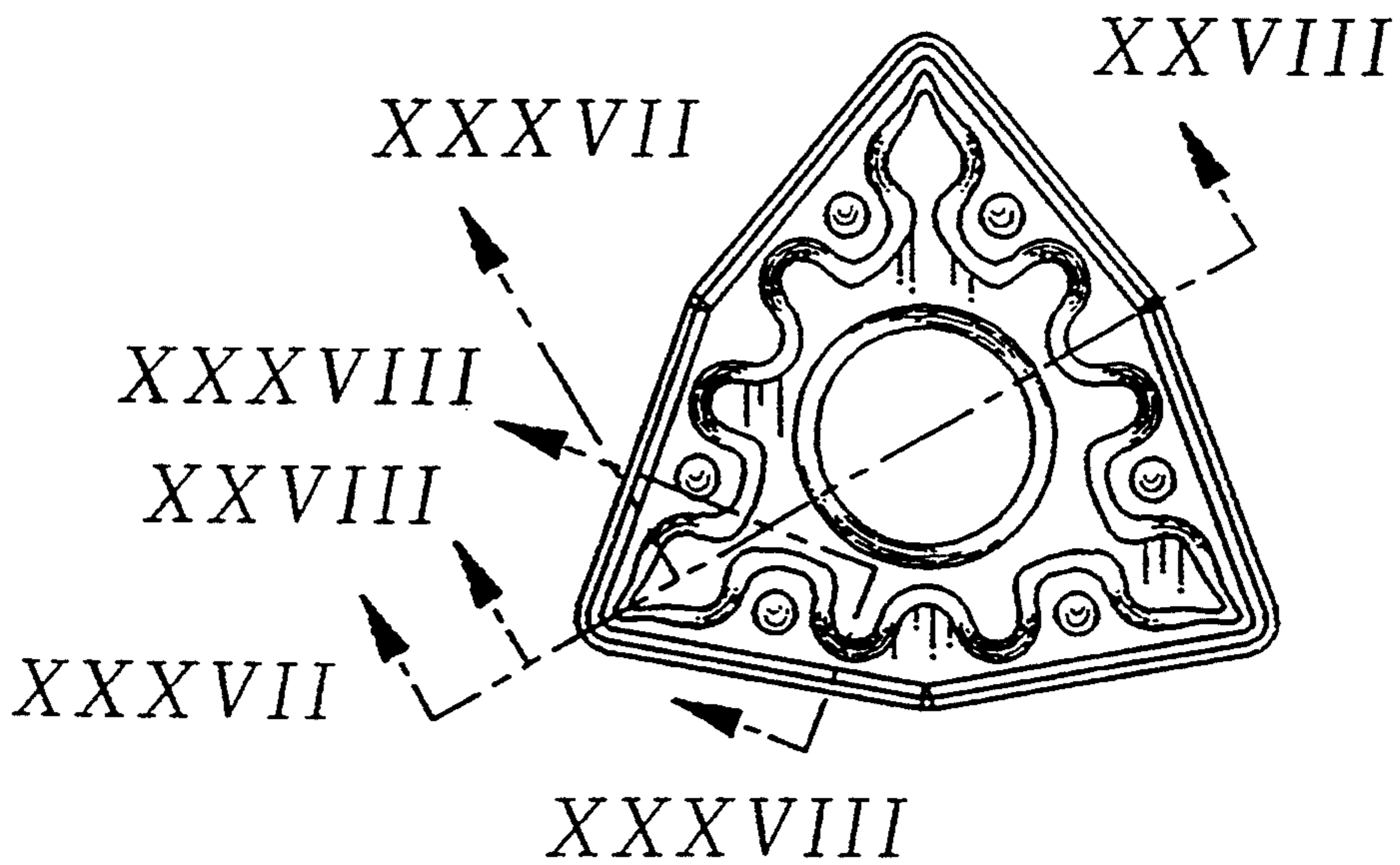


FIG. 25

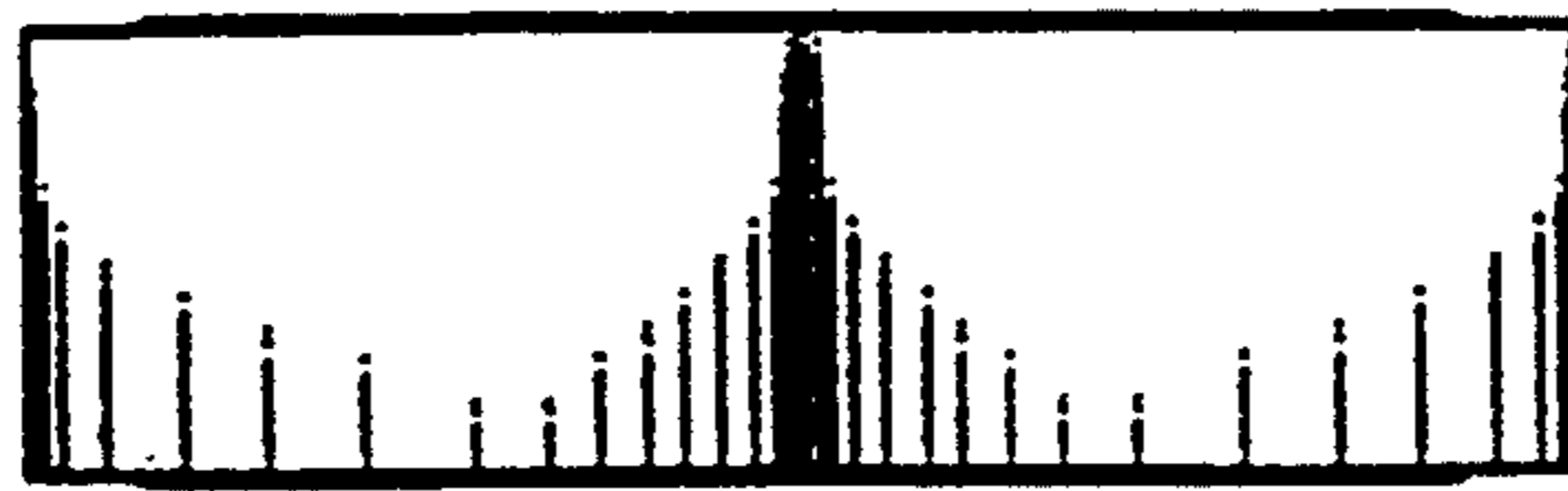


FIG. 26

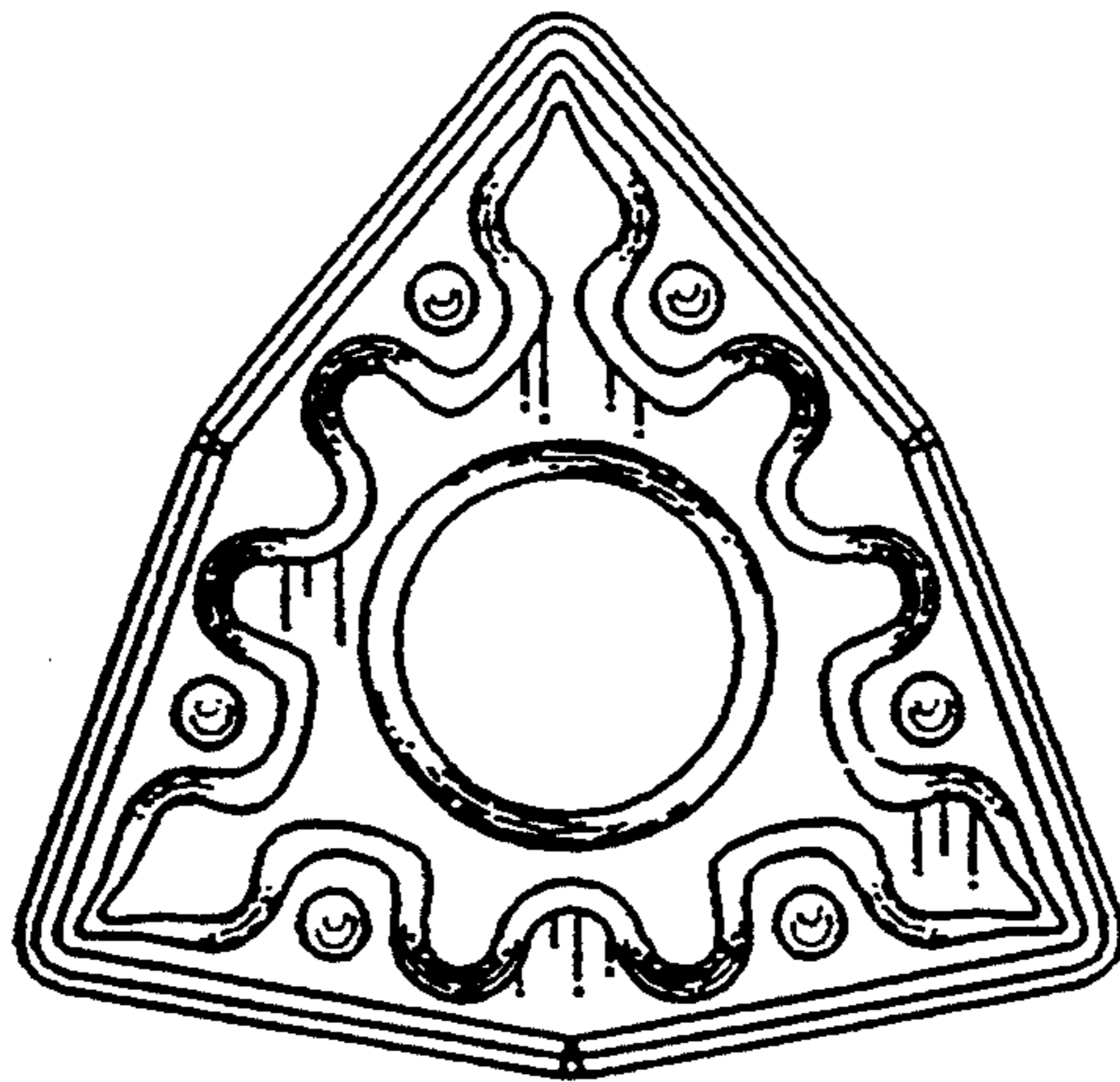


FIG. 27

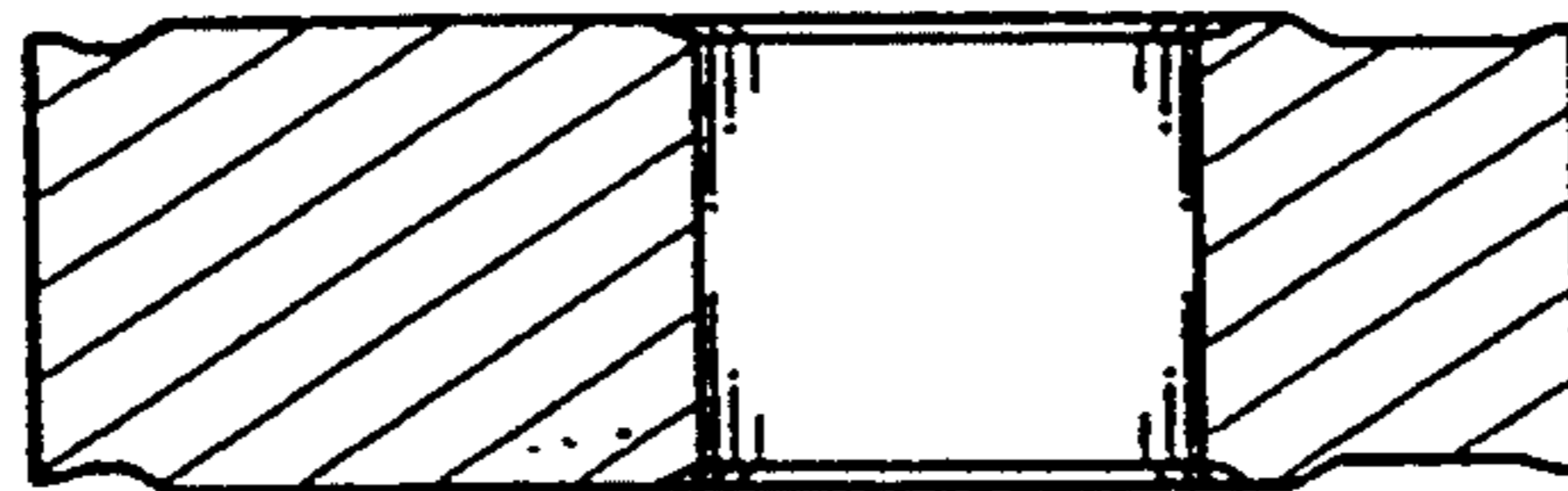


FIG. 28

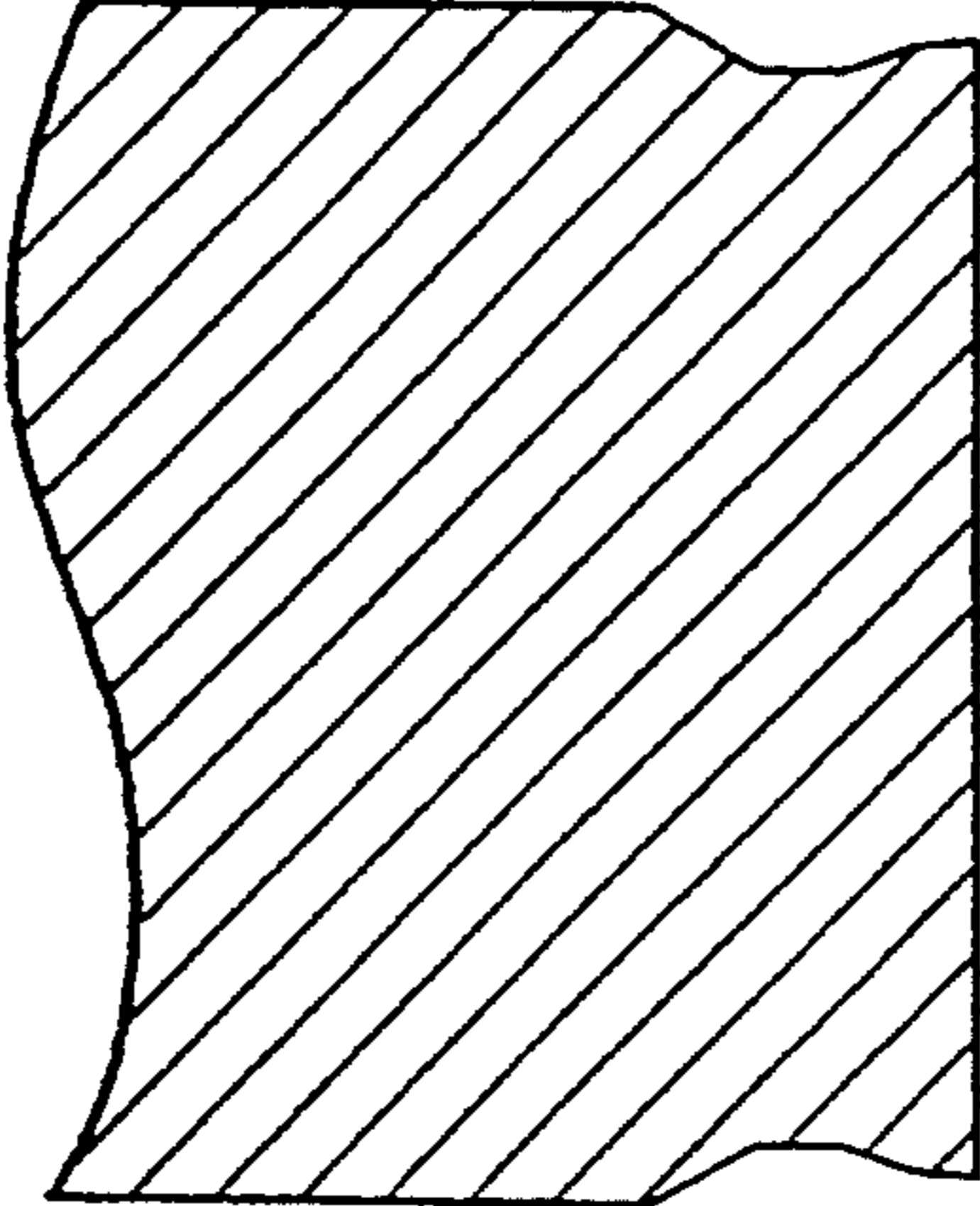


FIG. 29

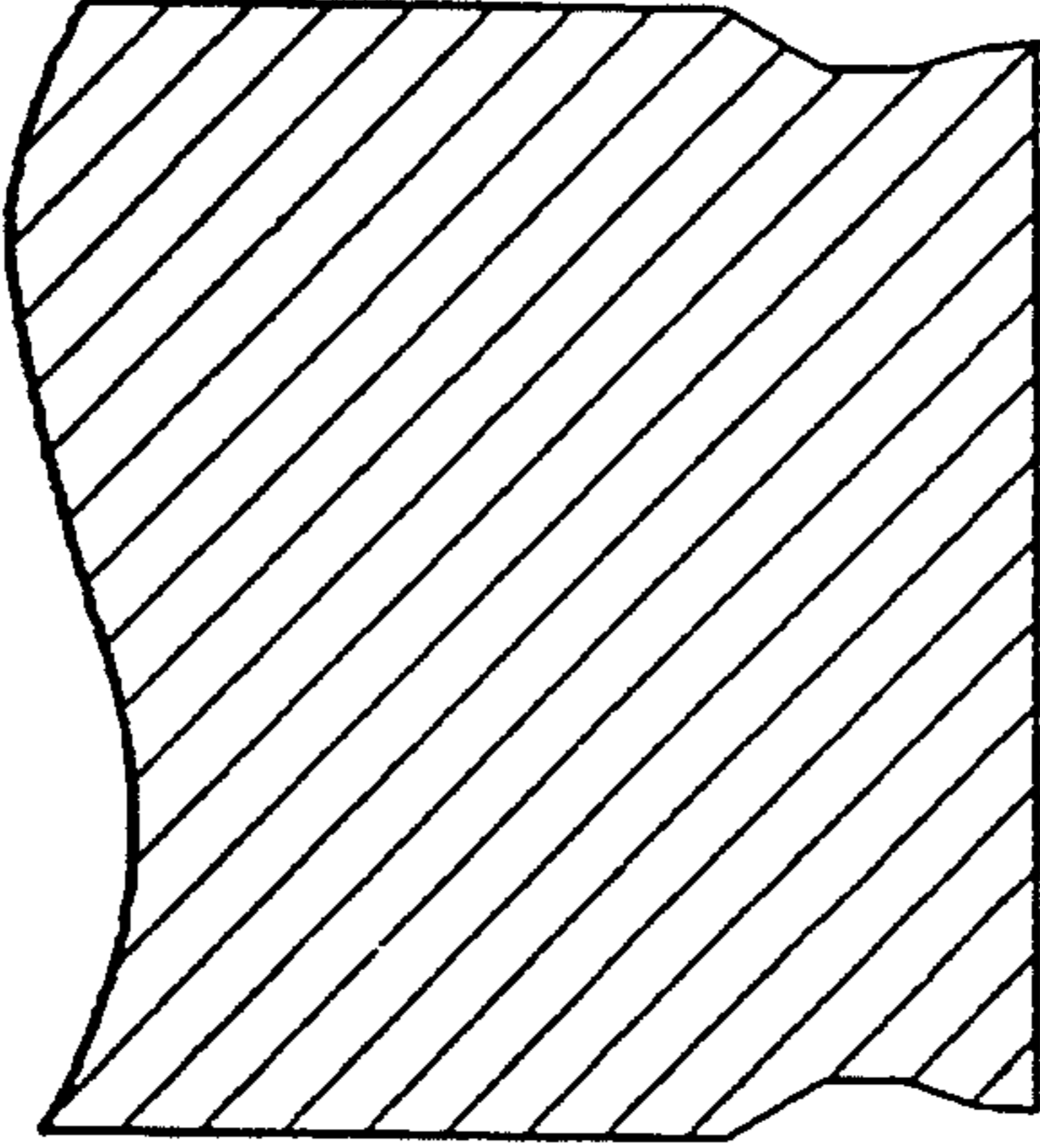


FIG. 30

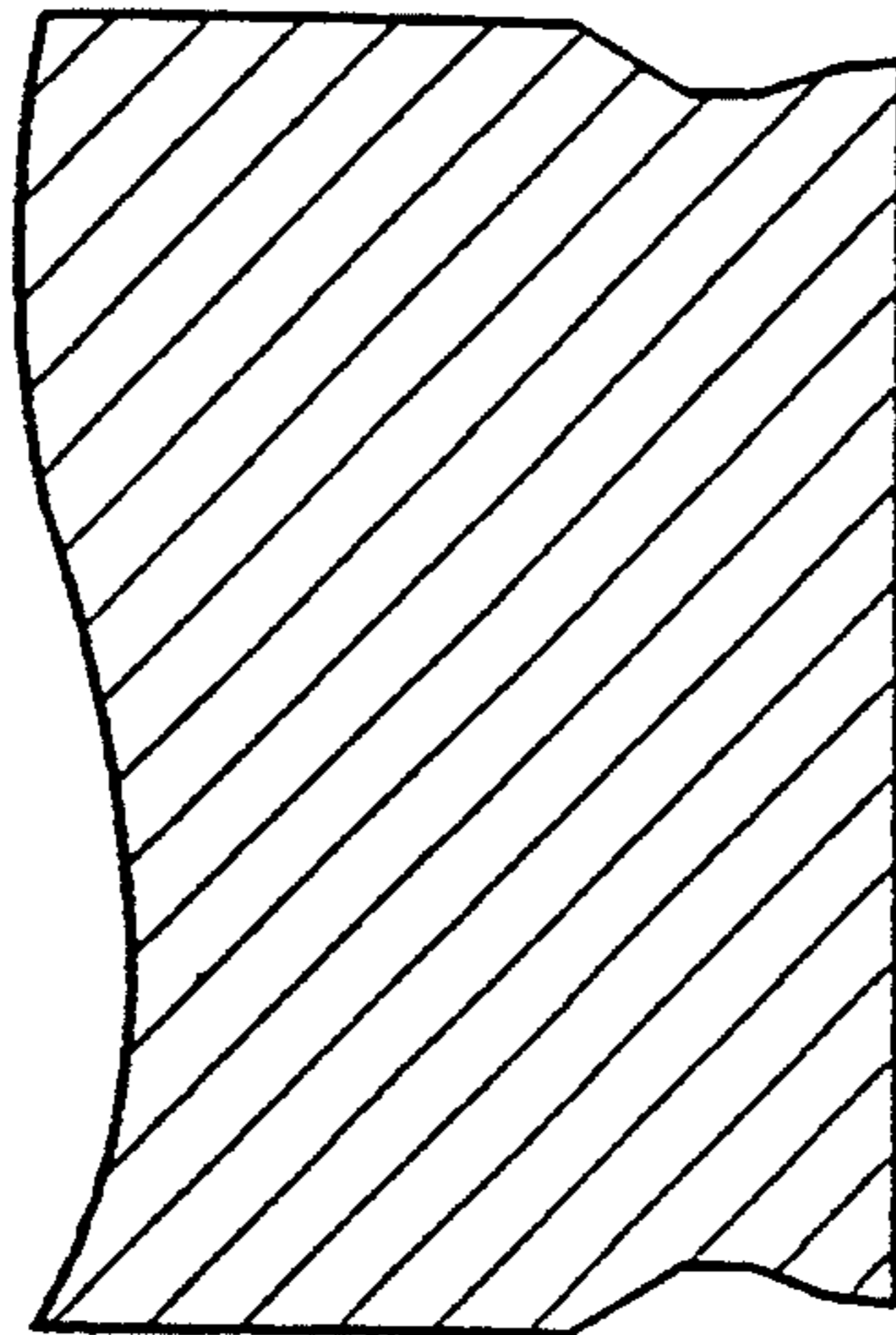


FIG. 31

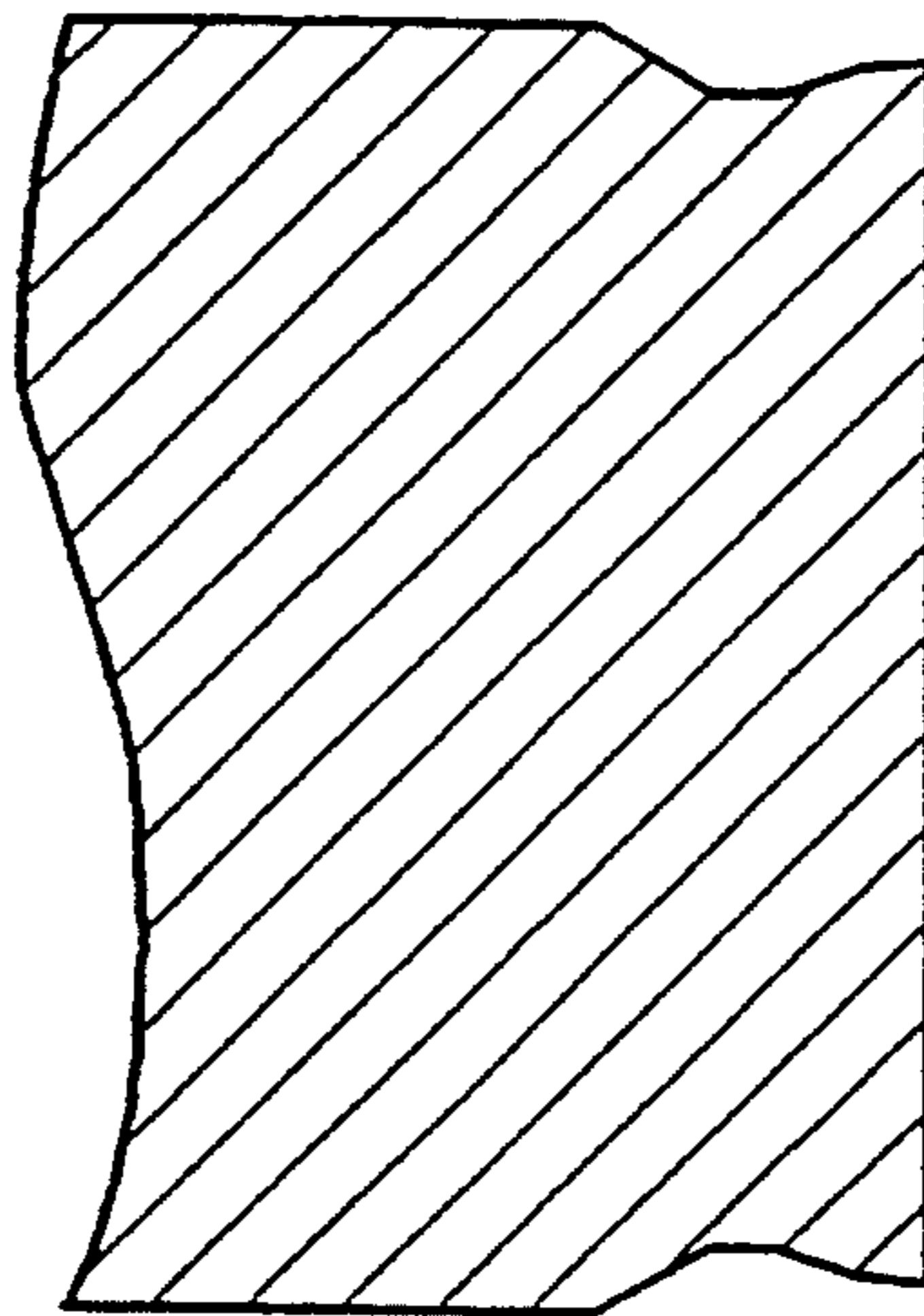


FIG. 32

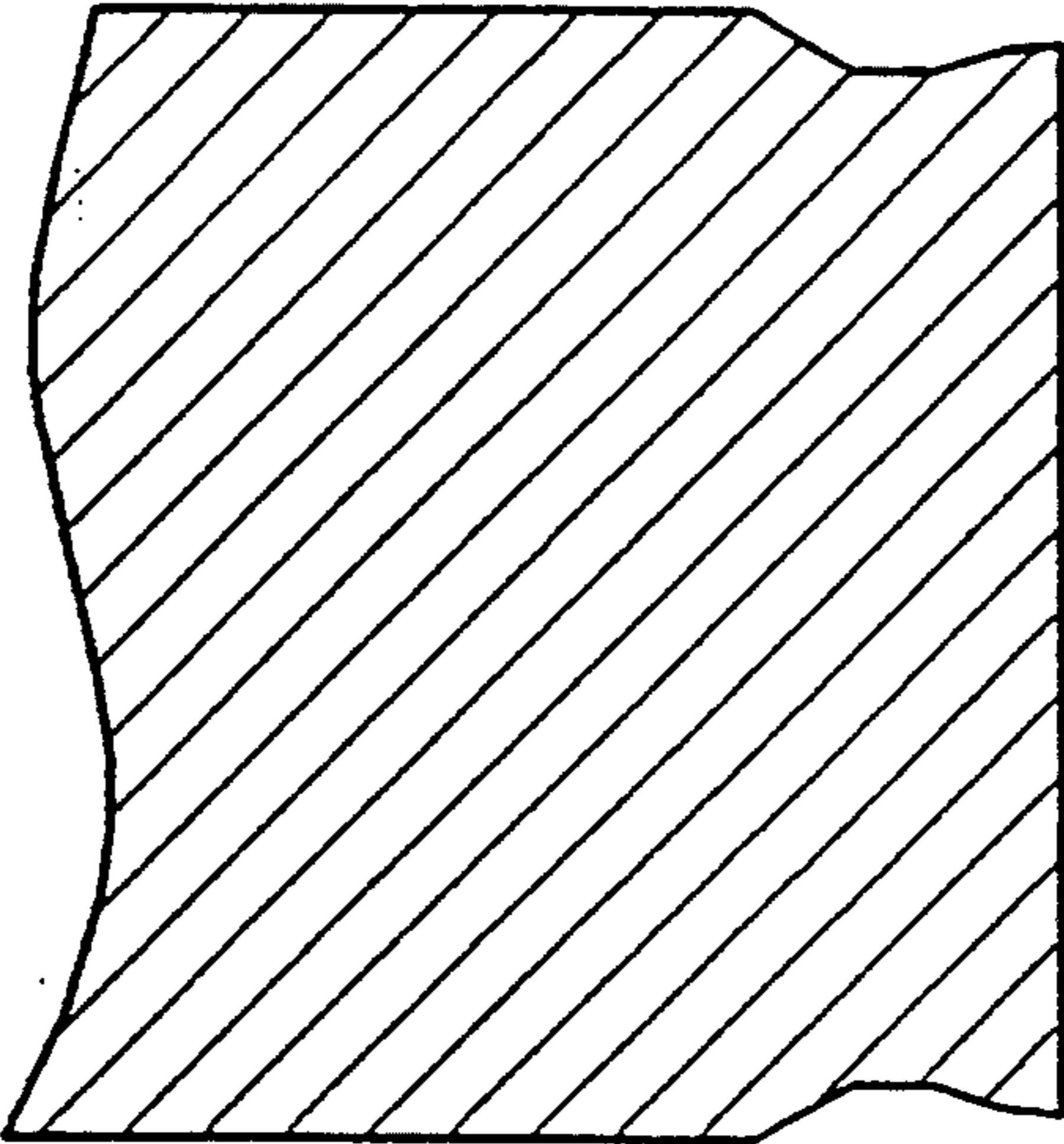


FIG. 33

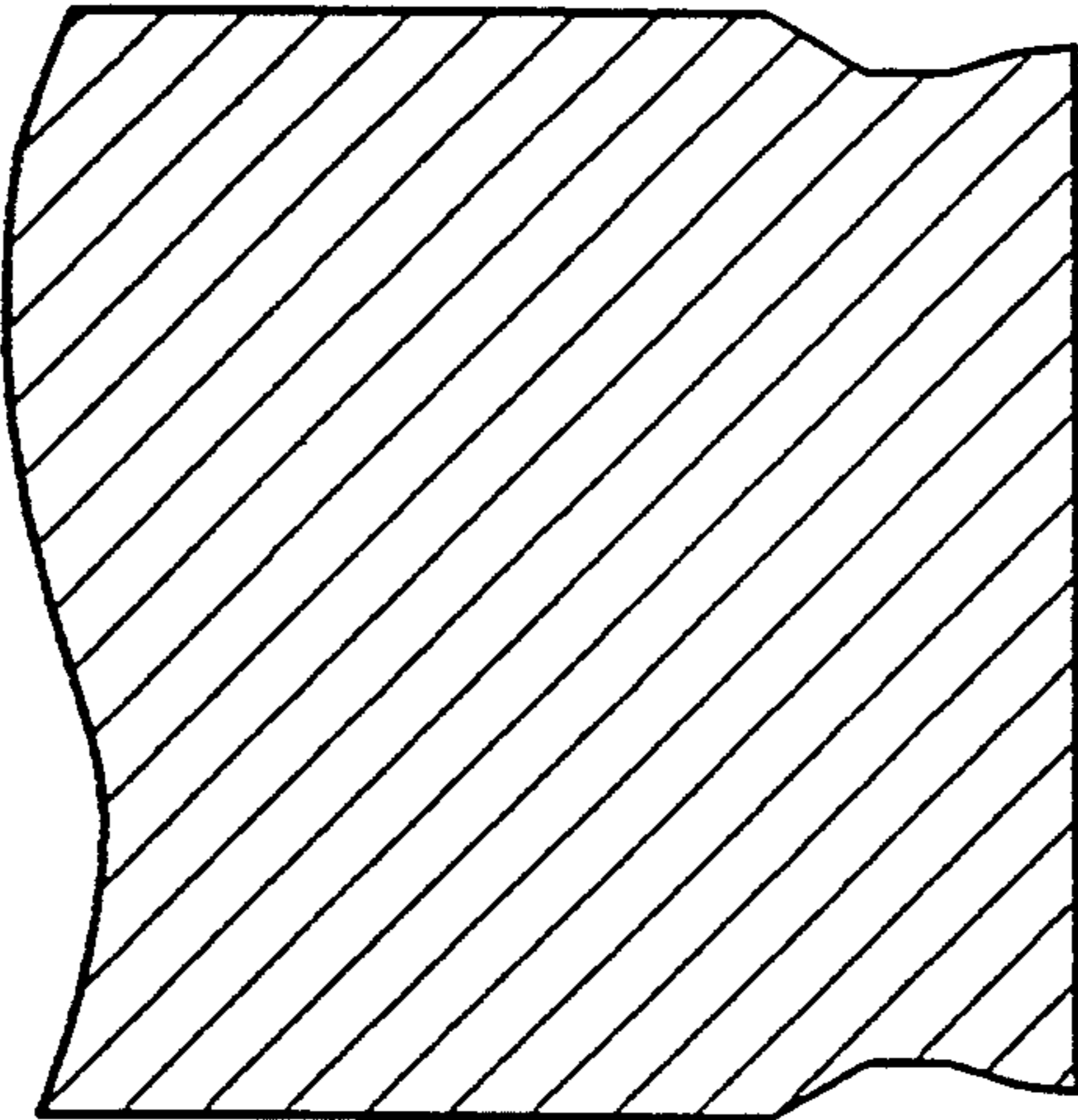


FIG. 34

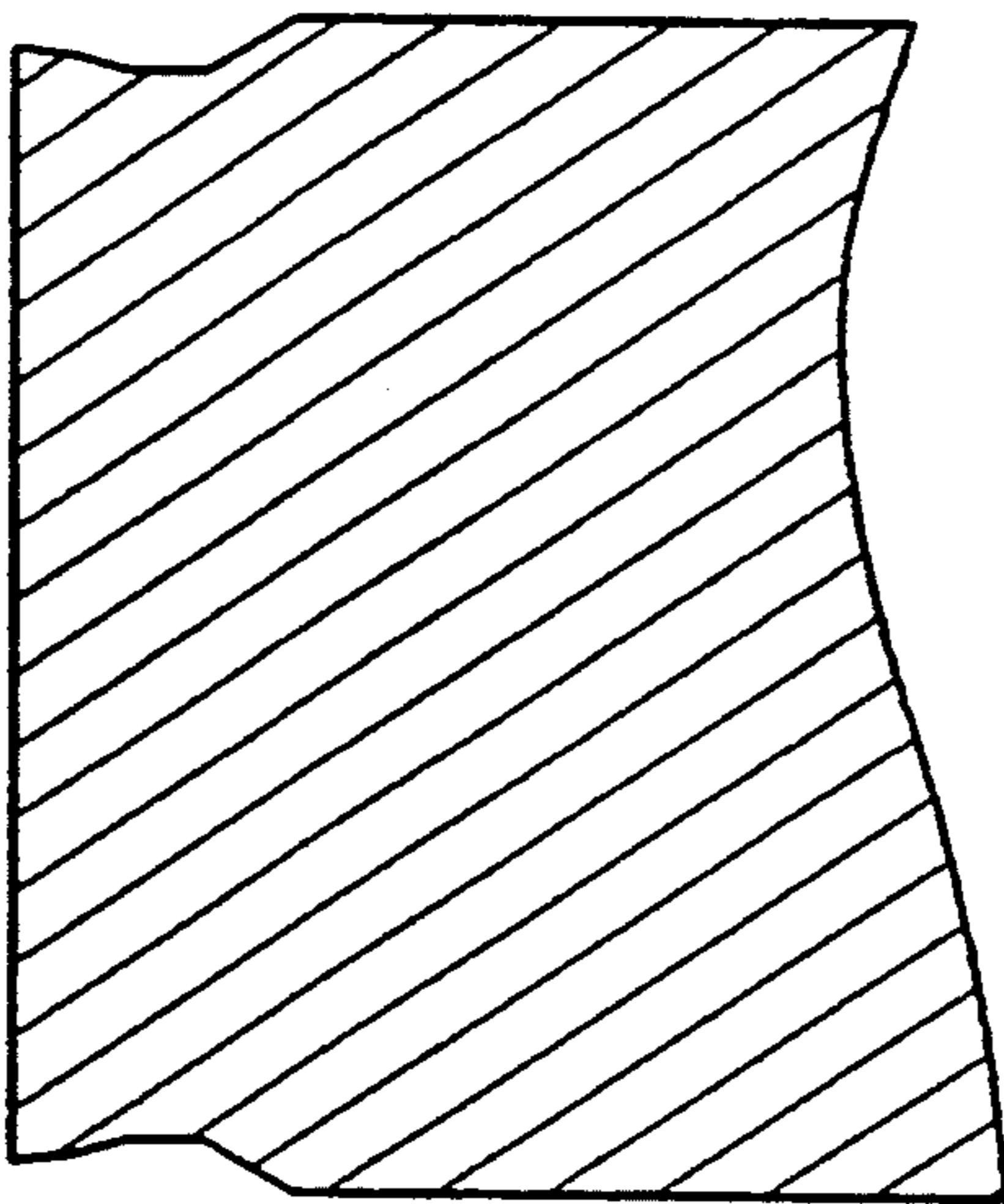


FIG. 35

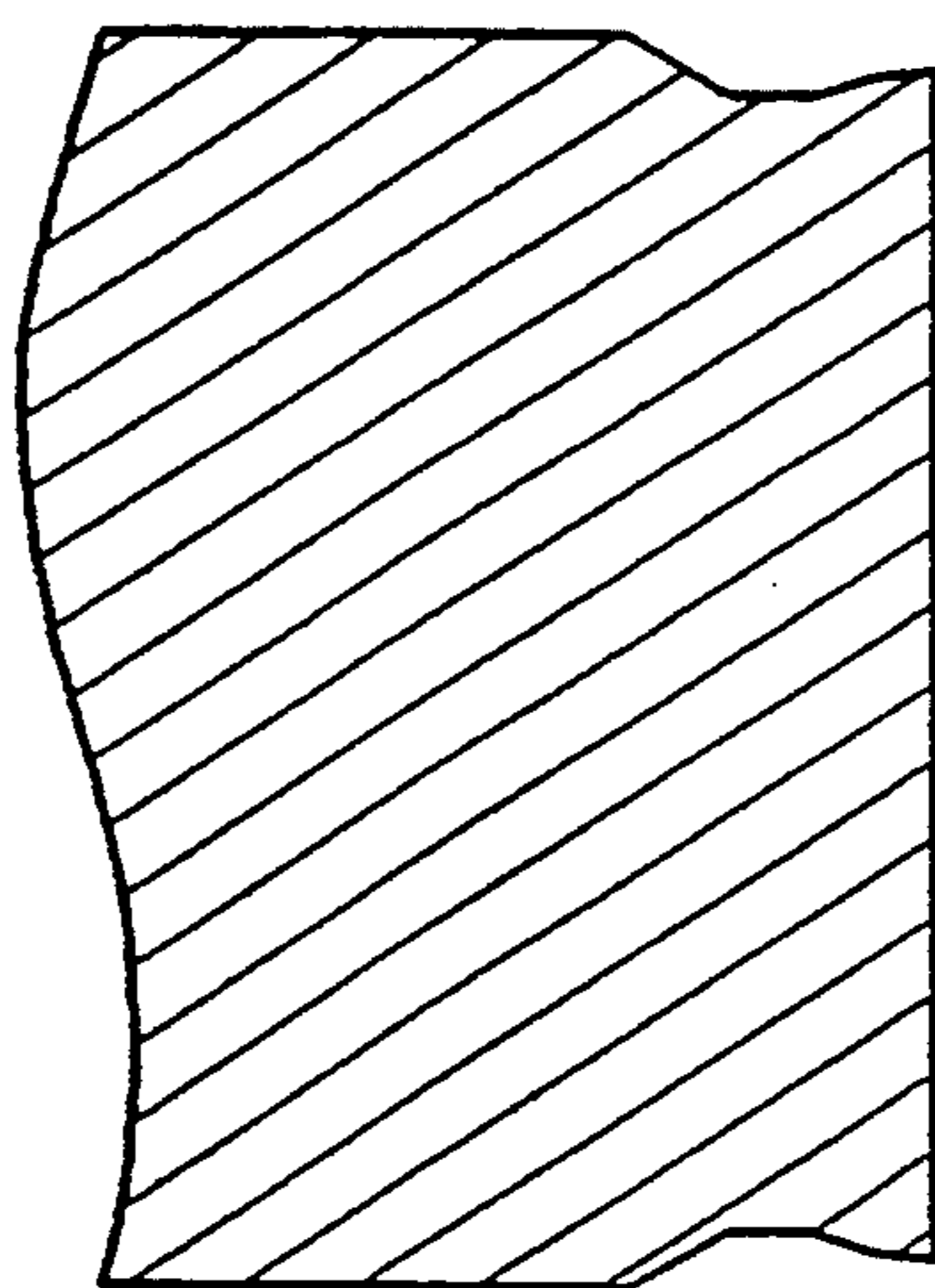


FIG. 36

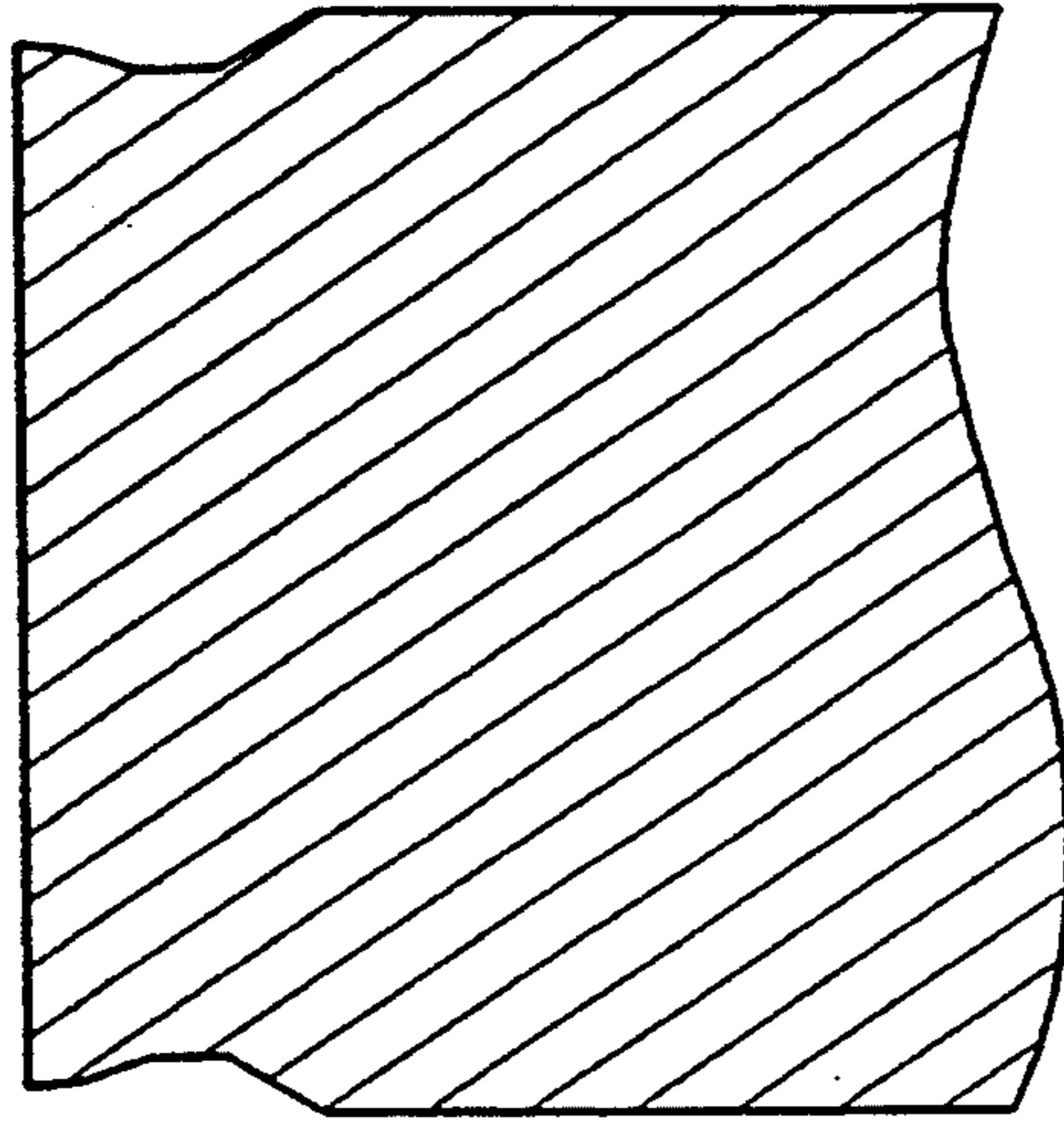


FIG. 37

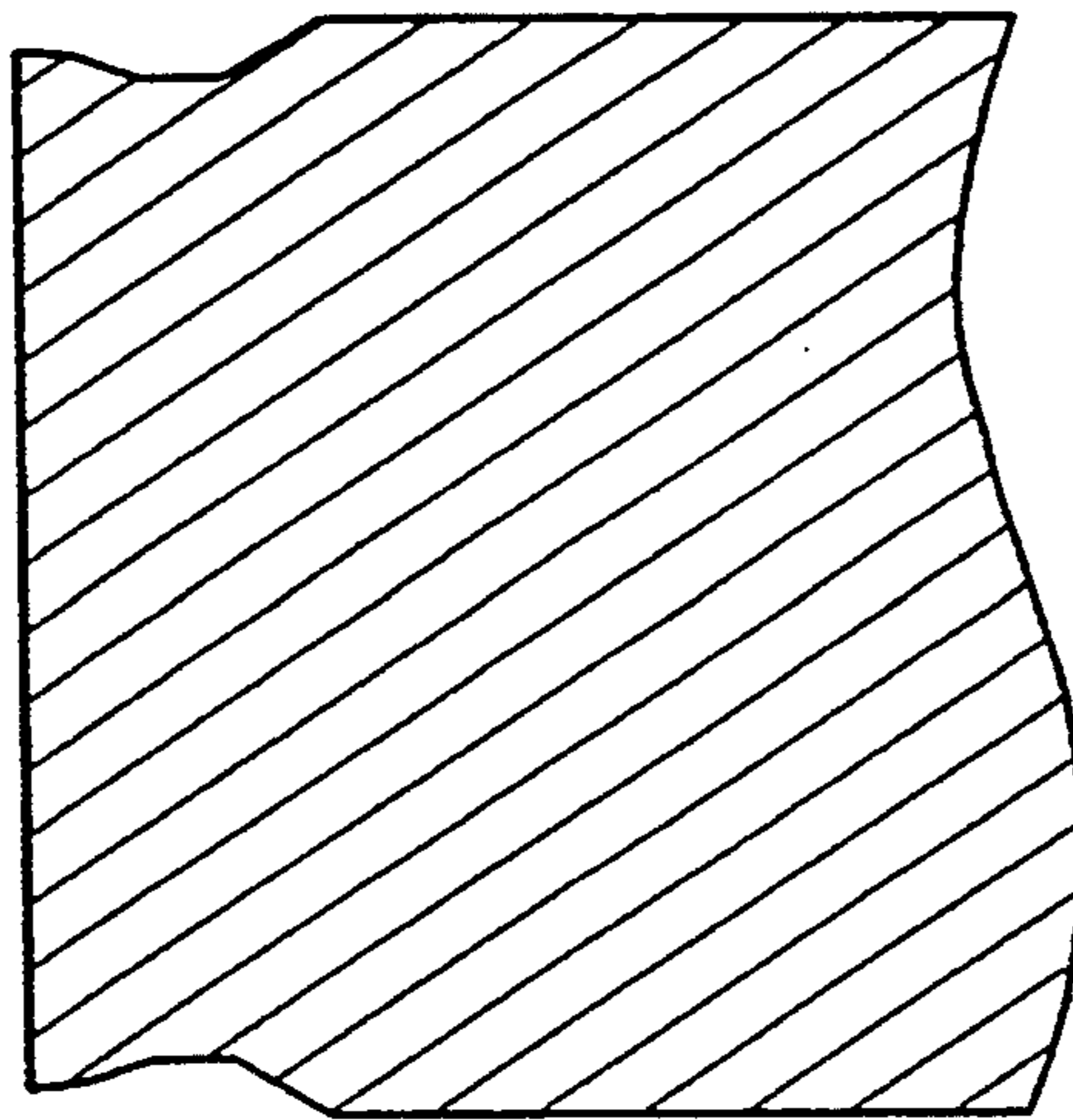


FIG. 38