



US00D830474S

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

(10) **Patent No.:** **US D830,474 S**  
(45) **Date of Patent:** **\*\* Oct. 9, 2018**

- (54) **MECHANICAL CONNECTION PLAY SYSTEM**
- (71) Applicant: **Heroes Will Rise, Inc.**, Hope, RI (US)
- (72) Inventor: **Cas Holman**, Hope, RI (US)
- (73) Assignee: **Heroes Will Rise, Inc.**, Hope, RI (US)
- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/606,566**
- (22) Filed: **Jun. 6, 2017**
- (51) **LOC (11) Cl.** ..... **21-01**
- (52) **U.S. Cl.**  
USPC ..... **D21/484**
- (58) **Field of Classification Search**  
USPC ..... D21/333, 373, 386, 389, 404, 468, 470,  
D21/471, 475, 484-505; 446/69, 85,  
(Continued)

- (56) **References Cited**  
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*Primary Examiner* — Cynthia M. Chin  
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(57) **CLAIM**  
The ornamental design for a mechanical connection play system, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, front, right isometric view of a first part of the mechanical connection play system;  
FIG. 2 is a front view of FIG. 1, the rear view being a mirror image thereof;  
FIG. 3 is a top view of FIG. 1, the bottom view being a mirror image thereof;  
FIG. 4 is a right view of FIG. 1, the left view being a mirror image thereof;

FIG. 5 is a top, front, right isometric view of a second part of the mechanical connection play system;  
FIG. 6 is a front view of FIG. 5, the rear view being a mirror image thereof;  
FIG. 7 is a top view of FIG. 5, the bottom view being a mirror image thereof;  
FIG. 8 is a right view of FIG. 5, the left view being a mirror image thereof;  
FIG. 9 is a reduced top, front, right isometric view of a third part of the mechanical connection play system;  
FIG. 10 is a front view of FIG. 9, the rear view being a mirror image thereof;  
FIG. 11 is a top view of FIG. 9, the bottom view being a mirror image thereof;  
FIG. 12 is a right view of FIG. 9, the left view being a mirror image thereof;  
FIG. 13 is a reduced top, front, right isometric view of a fourth part of the mechanical connection play system;  
FIG. 14 is a front view of FIG. 13, the rear view being a mirror image thereof;  
FIG. 15 is a top view of FIG. 13, the bottom view being a mirror image thereof;  
FIG. 16 is a right view of FIG. 13, the left view being a mirror image thereof;  
FIG. 17 is a top, front, right isometric view of a fifth part of the mechanical connection play system;  
FIG. 18 is a rear view of FIG. 17;  
FIG. 19 is a top view of FIG. 17, the bottom view being a mirror image thereof;  
FIG. 20 is a left view of FIG. 17;  
FIG. 21 is a reduced top, front, right isometric view of a sixth part of the mechanical connection play system;  
FIG. 22 is a top view of FIG. 21;  
FIG. 23 is a right view of FIG. 21, the left view being a mirror image thereof;  
FIG. 24 is a front view of FIG. 21;  
FIG. 25 is a top, front, right isometric view of a seventh part of the mechanical connection play system;  
FIG. 26 is a top view of FIG. 25;  
FIG. 27 is a right view of FIG. 25, the left view being a mirror image thereof;  
FIG. 28 is a front view of FIG. 25, the rear view being a mirror image thereof;

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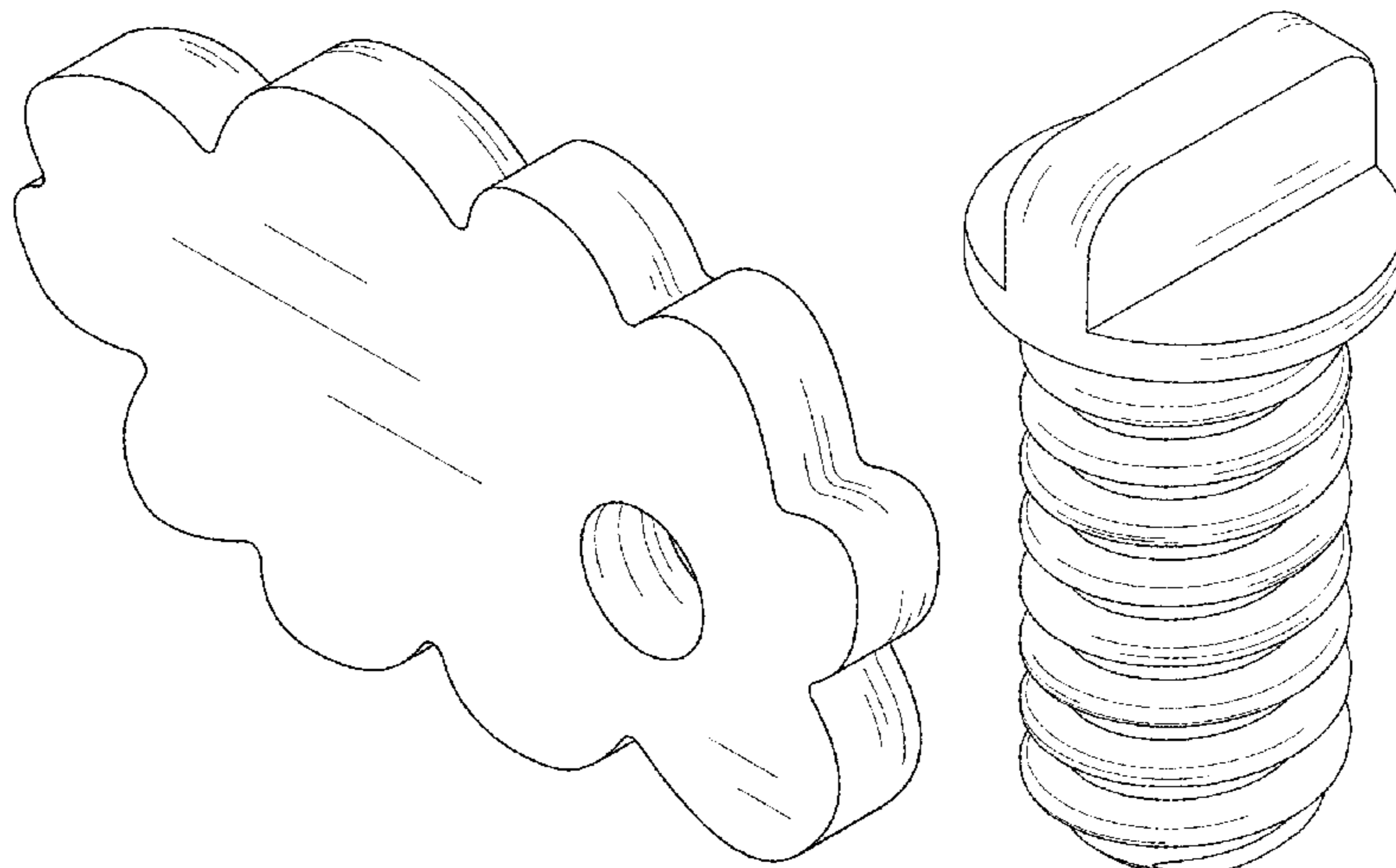


FIG. 29 is a top, front, right isometric view of an eighth part of the mechanical connection play system;  
 FIG. 30 is a front view of FIG. 29, the rear view being a mirror image thereof;  
 FIG. 31 is a right view of FIG. 29, the left view being a mirror image thereof;  
 FIG. 32 is a top view of FIG. 29;  
 FIG. 33 is a top, front, right isometric view of a ninth part of the mechanical connection play system;  
 FIG. 34 is a front view of FIG. 33, the rear view being a mirror image thereof;  
 FIG. 35 is a right view of FIG. 33, the left view being a mirror image thereof;  
 FIG. 36 is a top view of FIG. 33;  
 FIG. 37 is a top, front isometric view of a tenth part of the mechanical connection play system;  
 FIG. 38 is a top view of FIG. 37, the bottom view being a mirror image thereof;  
 FIG. 39 is a front view of FIG. 37, the rear view being a mirror image thereof;  
 FIG. 40 is a top, front, right isometric view of an eleventh part of the mechanical connection play system;  
 FIG. 41 is a top view of FIG. 40;  
 FIG. 42 is a right view of FIG. 40, the left view being a mirror image thereof;  
 FIG. 43 is a front view of FIG. 40, the rear view being a mirror image thereof;  
 FIG. 44 is a reduced top, front, right isometric view of a twelfth part of the Mechanical Connection Play System;  
 FIG. 45 is a top view of FIG. 44;  
 FIG. 46 is a right view of FIG. 44, the left view being a mirror image thereof;  
 FIG. 47 is a front view of FIG. 44;  
 FIG. 48 is a top, front, right isometric view of a thirteenth part of the mechanical connection play system;  
 FIG. 49 is a top view of FIG. 48;  
 FIG. 50 is a right view of FIG. 48, the left view being a mirror image thereof;  
 FIG. 51 is a front view of FIG. 48;  
 FIG. 52 is a top, front, right isometric view of a fourteenth part of the mechanical connection play system;  
 FIG. 53 is a top view of FIG. 52;  
 FIG. 54 is a right view of FIG. 52, the left view being a mirror image thereof;  
 FIG. 55 is a bottom view of FIG. 52;  
 FIG. 56 is a top, front, right isometric view of a fifteenth part of the mechanical connection play system;  
 FIG. 57 is a front view of FIG. 56;  
 FIG. 58 is a right view of FIG. 56, the left view being a mirror image thereof;  
 FIG. 59 is a top view of FIG. 56;  
 FIG. 60 is a top, front, right isometric view of a sixteenth part of the mechanical connection play system;  
 FIG. 61 is a front view of FIG. 60, the rear view being a mirror image thereof;  
 FIG. 62 is a right view of FIG. 60, the left view being a mirror image thereof;  
 FIG. 63 is a top view of FIG. 60, the bottom view being a mirror image thereof;  
 FIG. 64 is an enlarged top, front, right isometric view of a seventeenth part of the mechanical connection play system;  
 FIG. 65 is a top view of FIG. 64;  
 FIG. 66 is a right view of FIG. 64, the left view being a mirror image thereof;  
 FIG. 67 is a front view of FIG. 64;  
 FIG. 68 is a top, front, right isometric view of an eighteenth part of the mechanical connection play system;  
 FIG. 69 is a front view of FIG. 68; the rear view being a mirror image thereof;

FIG. 70 is a right view of FIG. 68, the left view being a mirror image thereof;  
 FIG. 71 is a top view of FIG. 68;  
 FIG. 72 is a top, front, right isometric view of a nineteenth part of the mechanical connection play system;  
 FIG. 73 is a top view of FIG. 72;  
 FIG. 74 is a right view of FIG. 72, the left view being a mirror image thereof;  
 FIG. 75 is a front view of FIG. 72, the rear view being a mirror image thereof;  
 FIG. 76 is a top, front, right isometric view of a twentieth part of the mechanical connection play system;  
 FIG. 77 is a top view of FIG. 76;  
 FIG. 78 is a right view of FIG. 76, the left view being a mirror image thereof;  
 FIG. 79 is a front view of FIG. 76, the rear view being a mirror image thereof;  
 FIG. 80 is a top, front, left isometric view of a twenty-first part of the mechanical connection play system;  
 FIG. 81 is a top view of FIG. 80;  
 FIG. 82 is a right view of FIG. 80;  
 FIG. 83 is a front view of FIG. 80, the rear view being a mirror image thereof;  
 FIG. 84 is a left view of FIG. 80;  
 FIG. 85 is a reduced top, front, right isometric view of a twenty-second part of the mechanical connection play system;  
 FIG. 86 is a top view of FIG. 85;  
 FIG. 87 is a right view of FIG. 85, the left view being a mirror image thereof;  
 FIG. 88 is a front view of FIG. 85;  
 FIG. 89 is an enlarged top, front, right isometric view of a twenty-third part of the mechanical connection play system;  
 FIG. 90 is a top view of FIG. 89;  
 FIG. 91 is a right view of FIG. 89, the left view being a mirror image thereof;  
 FIG. 92 is a front view of FIG. 89, the rear view being a mirror image thereof;  
 FIG. 93 is a top, front, right isometric view of a twenty-fourth part of the mechanical connection play system;  
 FIG. 94 is a rear view of FIG. 93;  
 FIG. 95 is a right view of FIG. 93, the left view being a mirror image thereof;  
 FIG. 96 is a top view of FIG. 93;  
 FIG. 97 is a top, front, right isometric view of a twenty-fifth part of the mechanical connection play system;  
 FIG. 98 is a front view of FIG. 97, the rear, top and bottom views being mirror images thereof;  
 FIG. 99 is a right view of FIG. 97, the left view being a mirror image thereof;  
 FIG. 100 is a top, front, right isometric view of a twenty-sixth part of the mechanical connection play system;  
 FIG. 101 is a front view of FIG. 100, the left view being a mirror image thereof;  
 FIG. 102 is a rear view of FIG. 100, the right view being a mirror image thereof;  
 FIG. 103 is a top view of FIG. 100, the bottom view being a mirror image thereof;  
 FIG. 104 is an enlarged top, front, right isometric view of a twenty-seventh part of the mechanical connection play system;  
 FIG. 105 is a front view of FIG. 104;  
 FIG. 106 is a top view of FIG. 104, the bottom view being a mirror image thereof;  
 FIG. 107 is an enlarged top, front, right isometric view of a twenty-eighth part of the mechanical connection play system;

FIG. 108 is a top view of FIG. 107;  
 FIG. 109 is a front view of FIG. 107;  
 FIG. 110 is a left view of FIG. 107;  
 FIG. 111 is a bottom view of FIG. 107. The portions of the article shown in broken lines form no part of the claimed design;  
 FIG. 112 is an enlarged top, front, right isometric view of a twenty-ninth part of the mechanical connection play system;  
 FIG. 113 is a top view of FIG. 112;  
 FIG. 114 is a front view of FIG. 112;  
 FIG. 115 is a left view of FIG. 112;  
 FIG. 116 is a bottom view of FIG. 112;  
 FIG. 117 is a top, front, right isometric view of a thirtieth part of the mechanical connection play system;  
 FIG. 118 is a front view of FIG. 117;  
 FIG. 119 is a top view of FIG. 117;  
 FIG. 120 is an isometric view of the sixth part of the mechanical connection play system shown in an exemplary assembly. The broken lines represent the environment in which the article resides and forms no part of the claim. The thirty parts from the mechanical connection play system are shown separately, and enlarged or reduced where appropriate, for ease and clarity of illustration.

**1 Claim, 60 Drawing Sheets**

(58) **Field of Classification Search**

USPC ..... 446/102–128; 434/167, 208, 259, 403;  
 273/153, 156, 160  
 CPC ..... A63H 33/04; A63H 33/06; A63H 33/062;  
 A63H 33/08; A63H 33/086; A63H  
 33/088; A63H 33/10; A63H 33/101;

A63H 33/108; A63H 33/12; A63F 9/12;  
 A63F 9/1224

See application file for complete search history.

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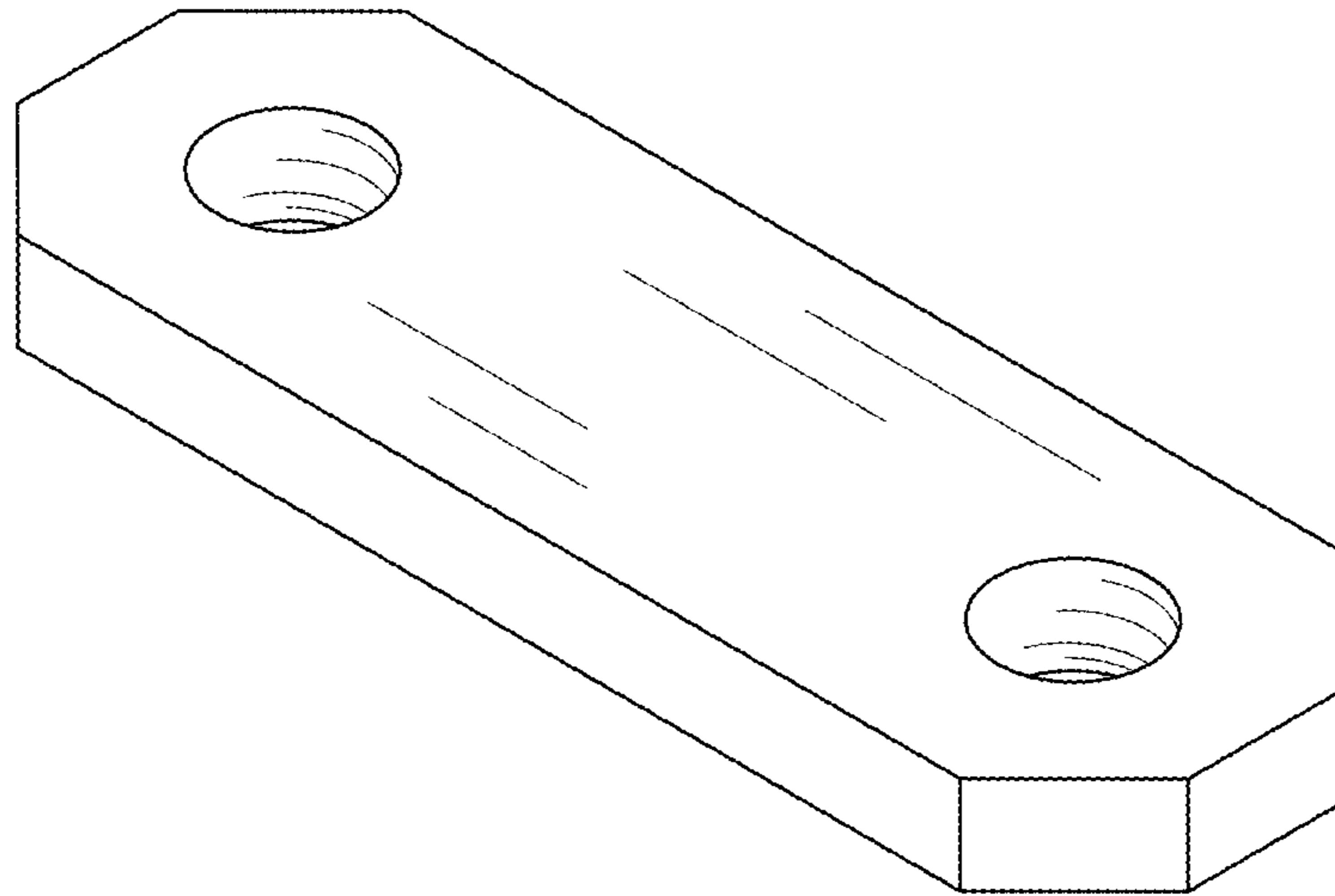


Fig 1

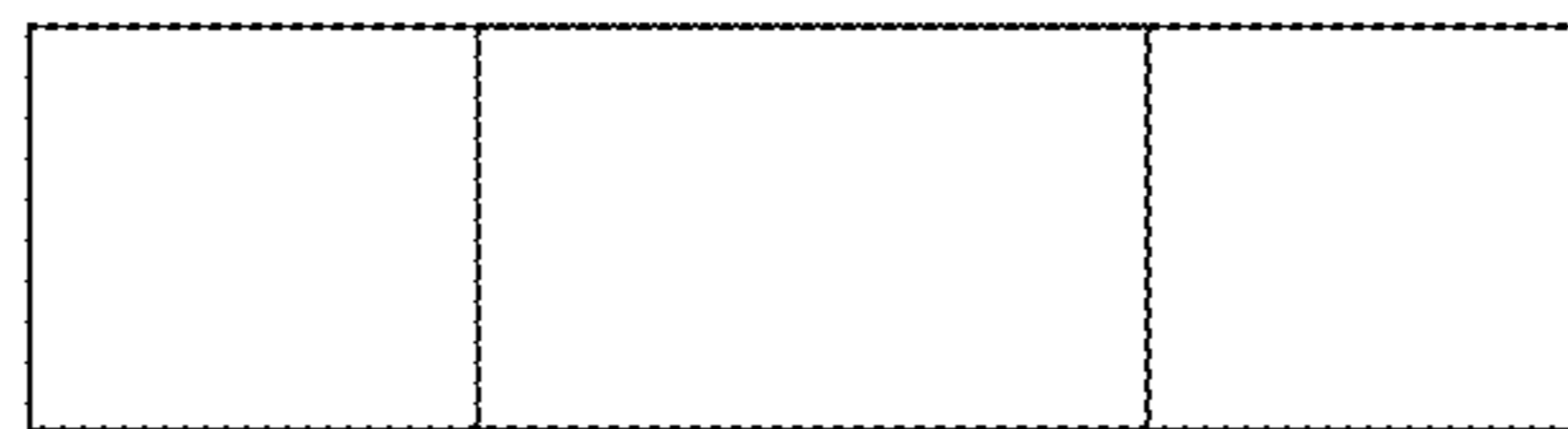


Fig 2

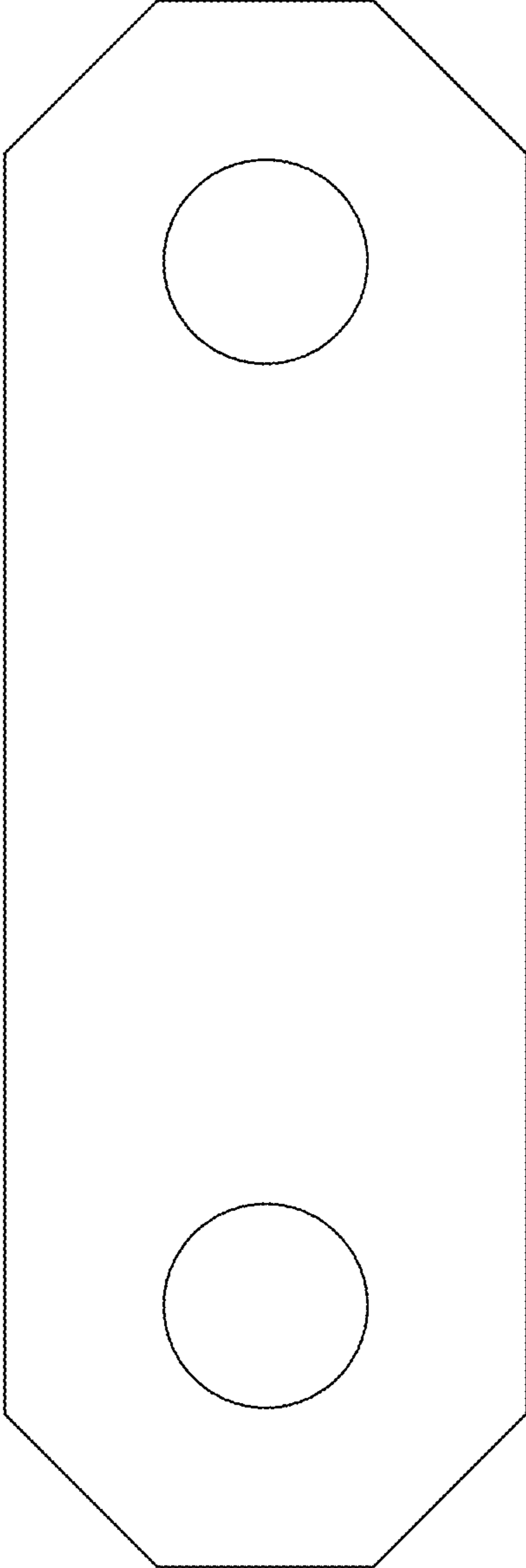


Fig 3



Fig 4

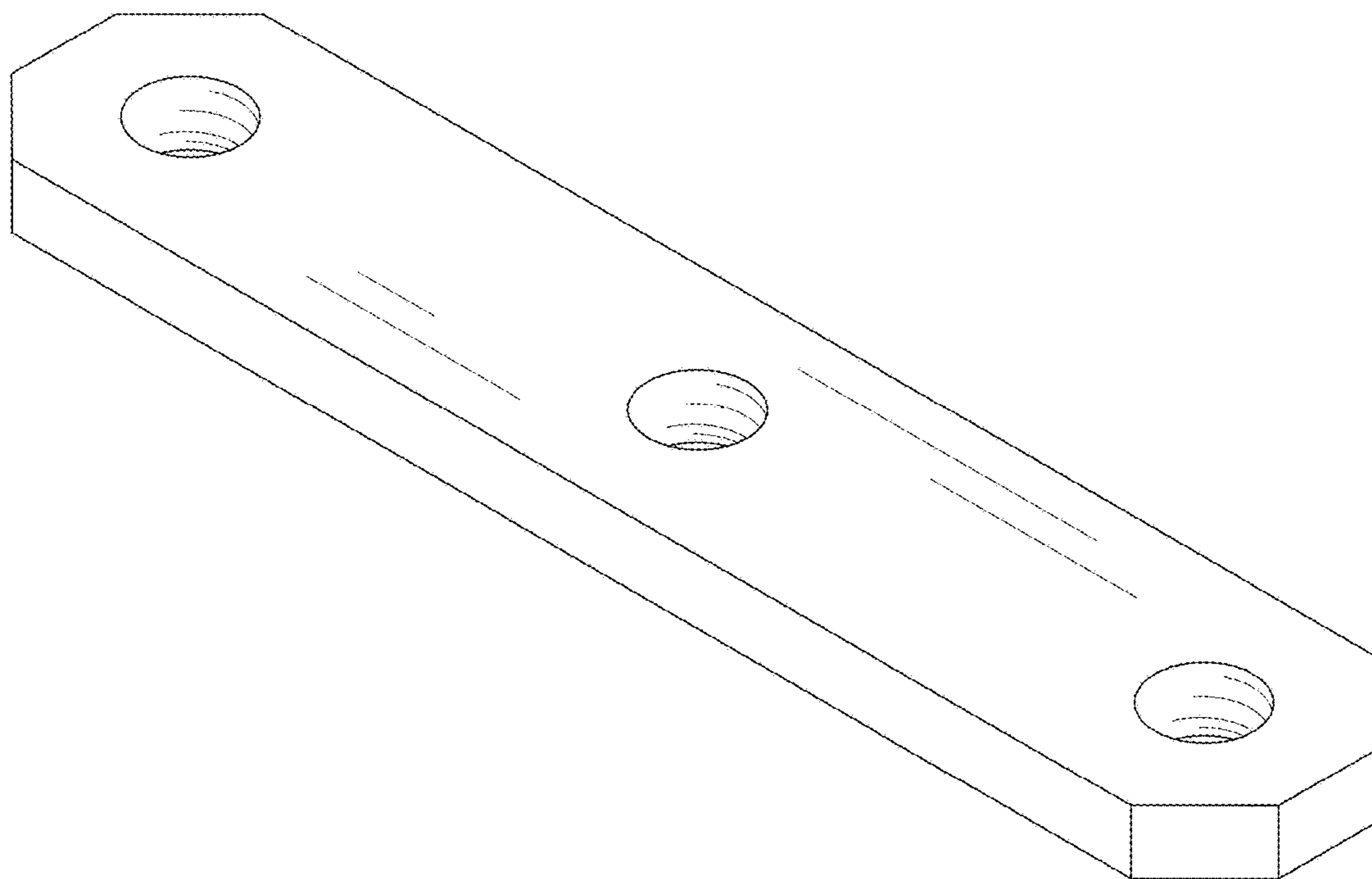


Fig 5



Fig 6

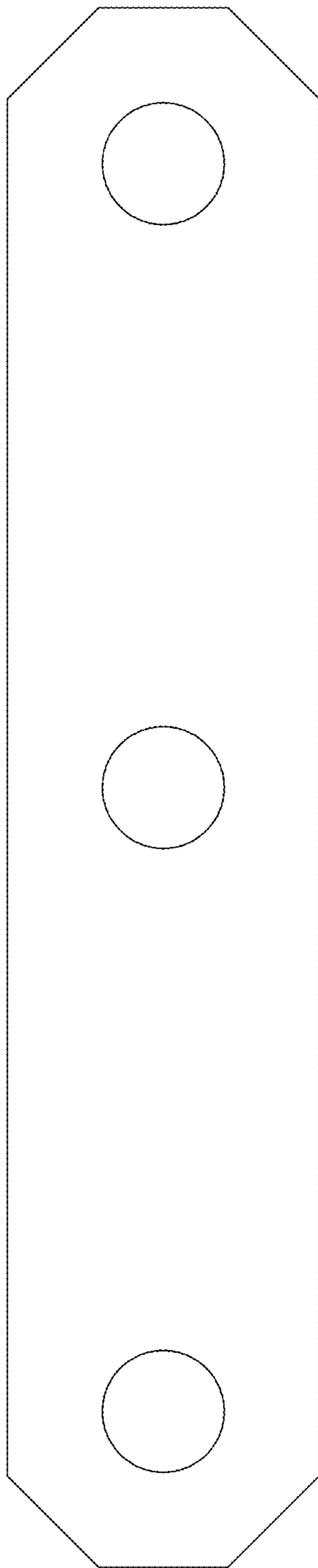


Fig 7

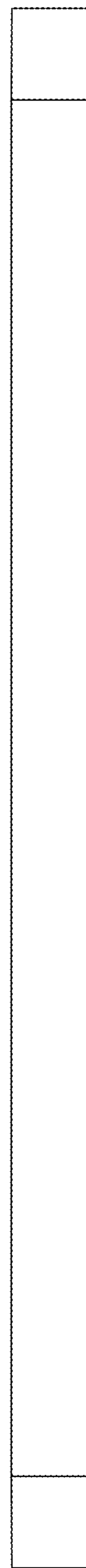


Fig 8

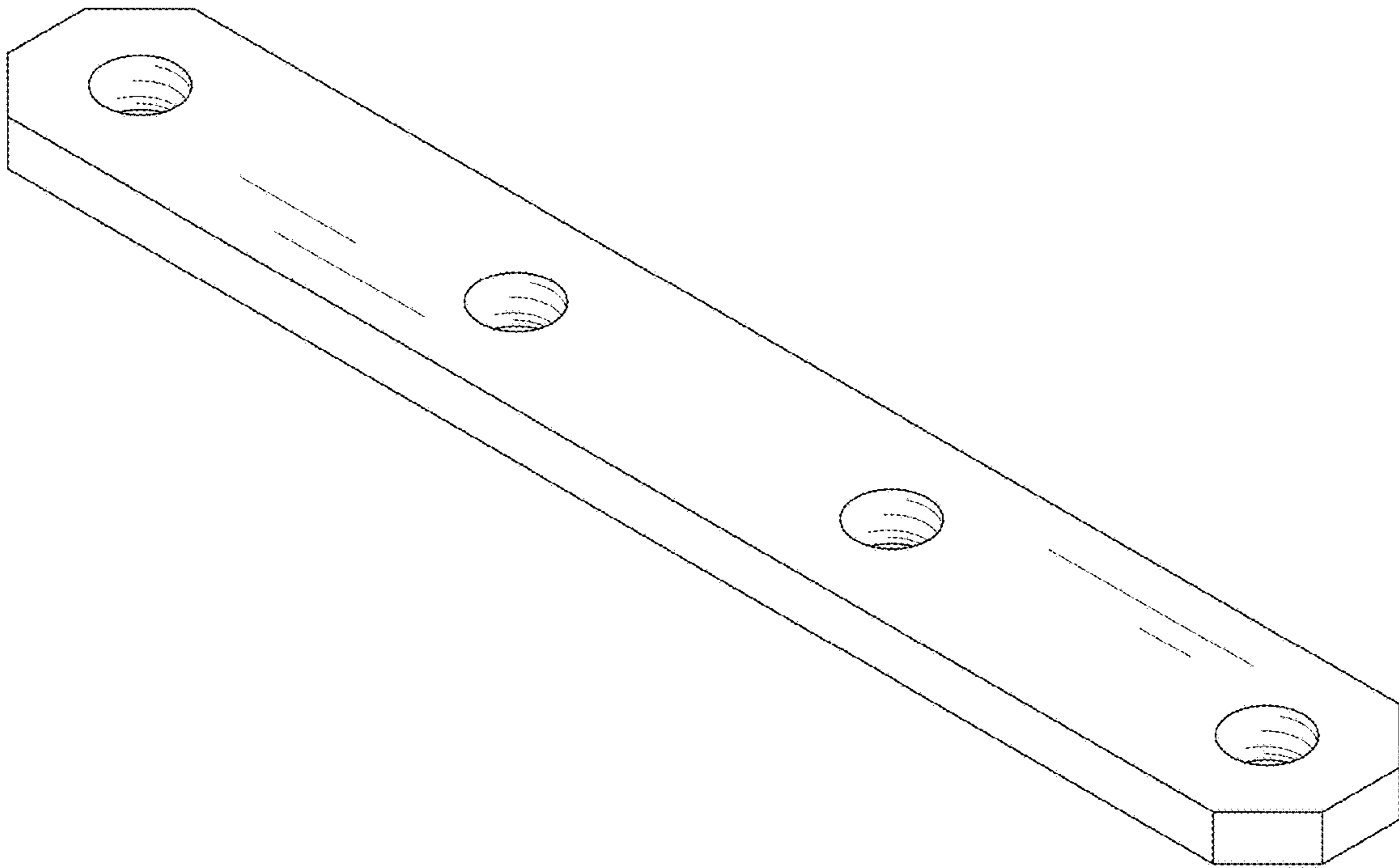


Fig 9

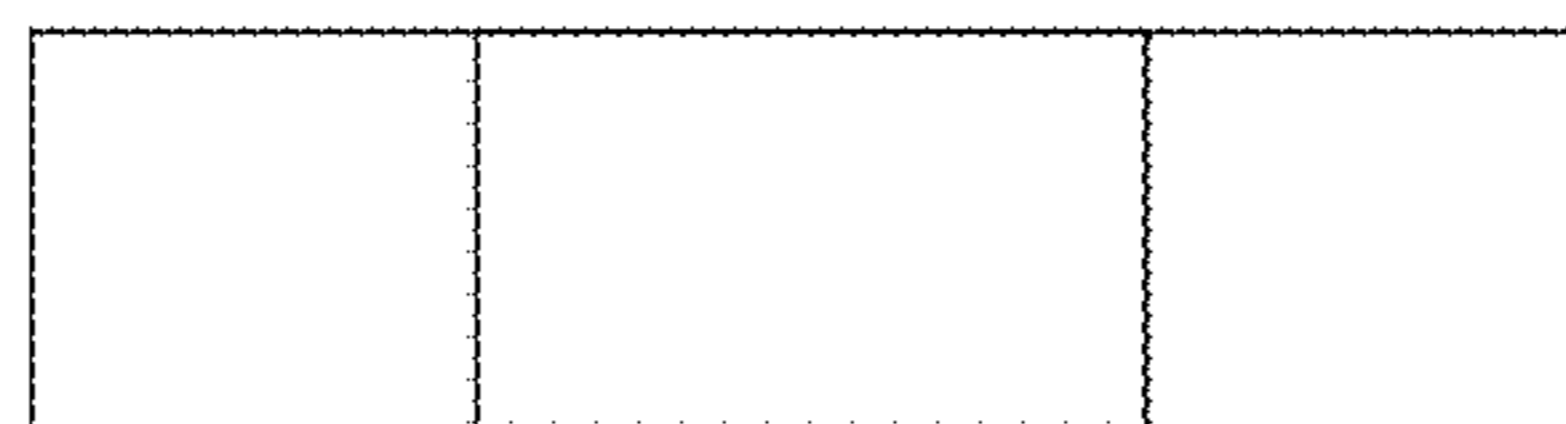


Fig 10



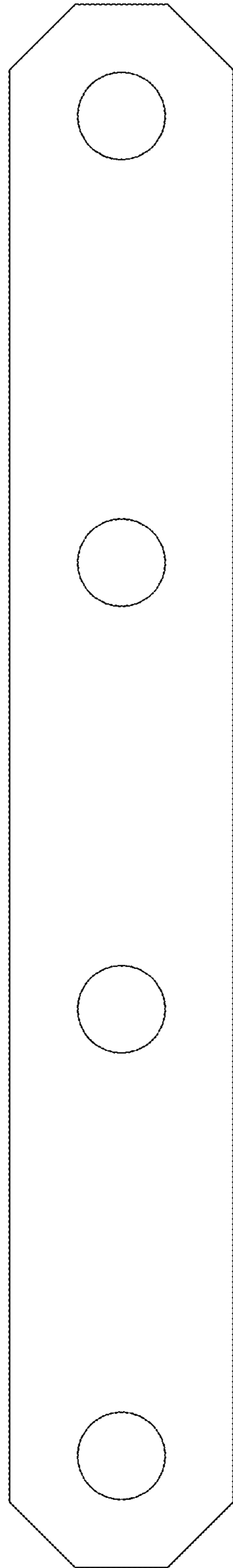


Fig 11



Fig 12

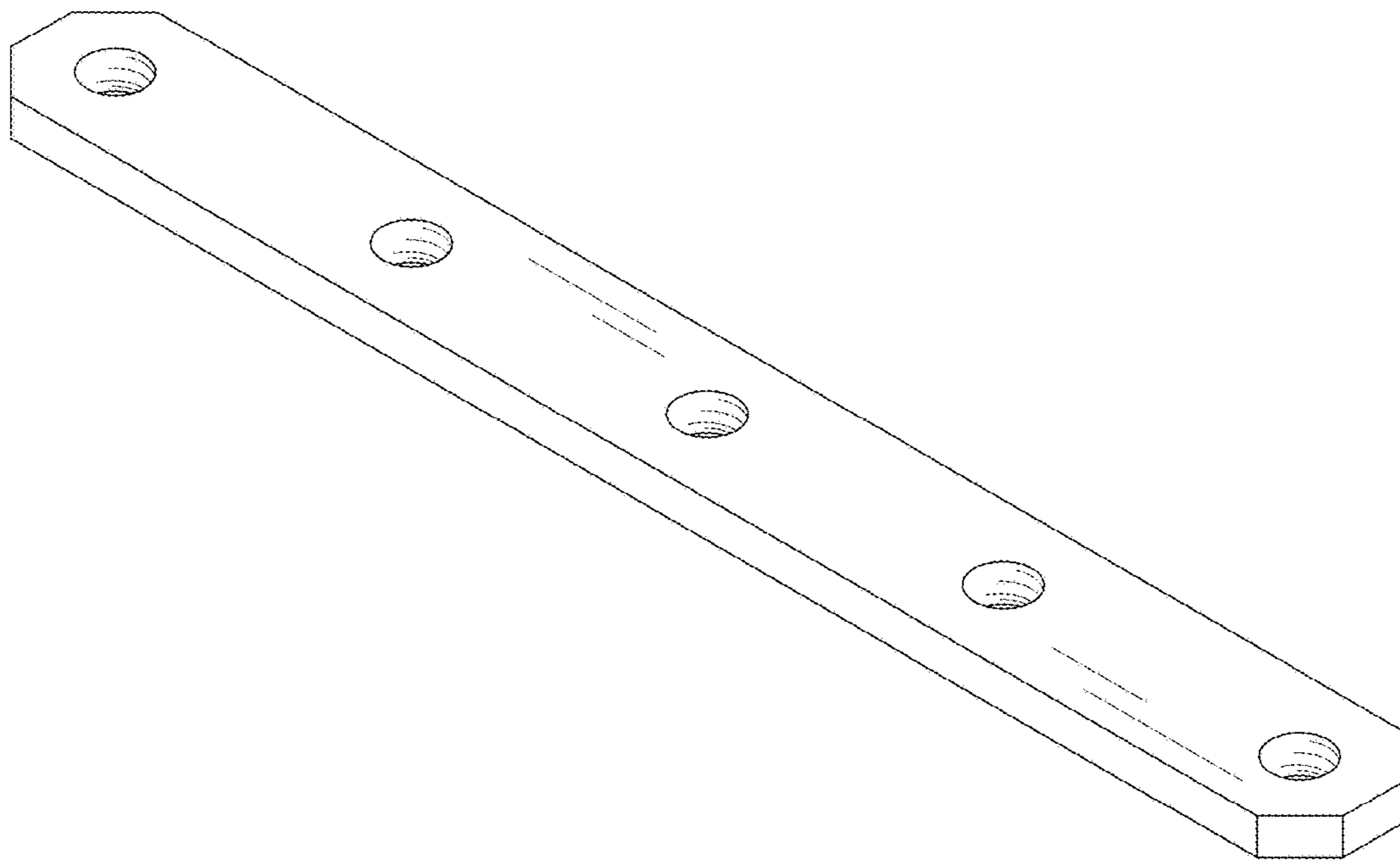


Fig 13



Fig 14

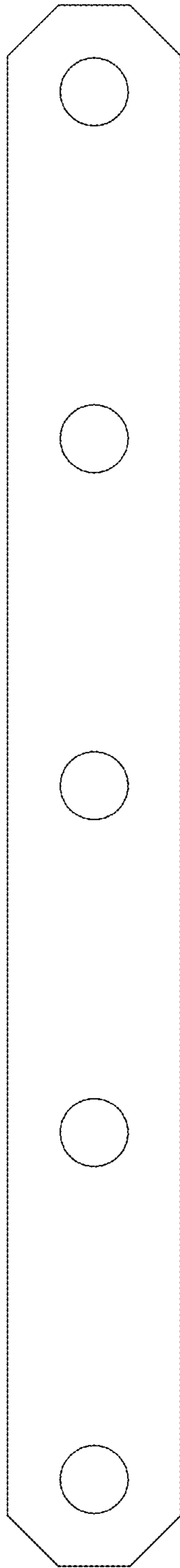


Fig 15

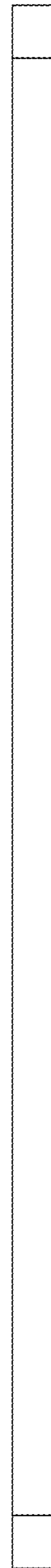


Fig 16

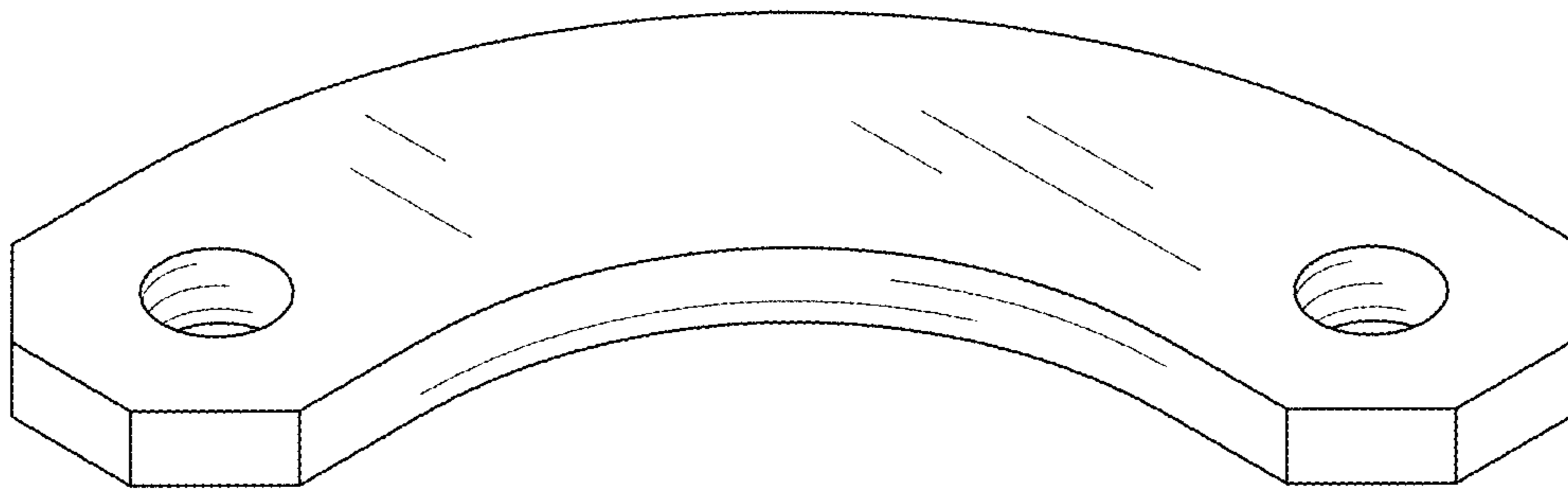


Fig 17

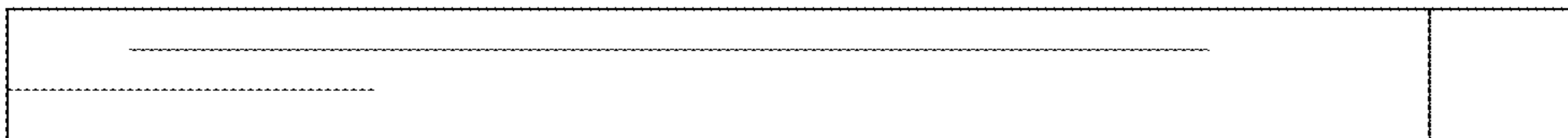


Fig 18

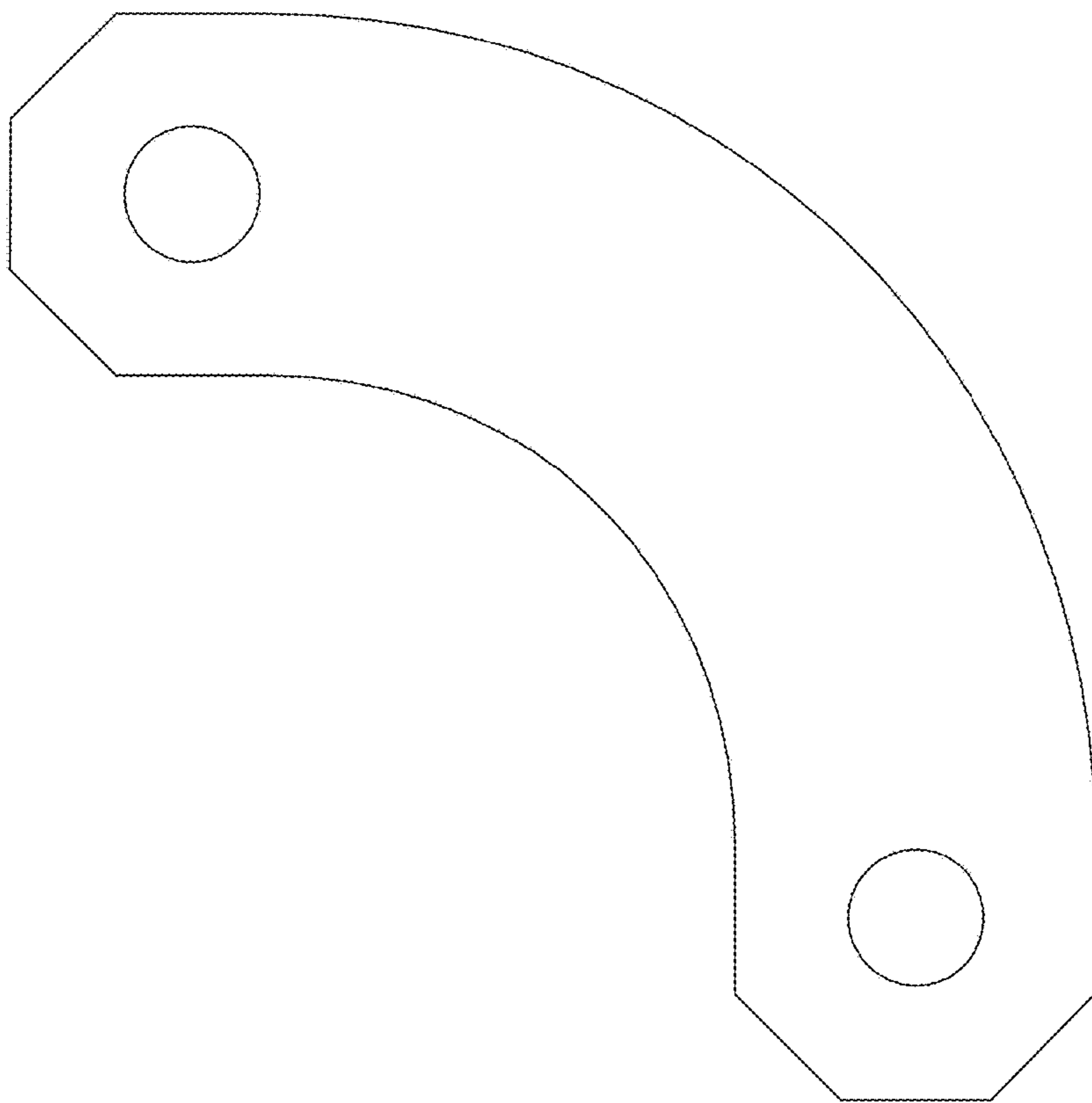


Fig 19

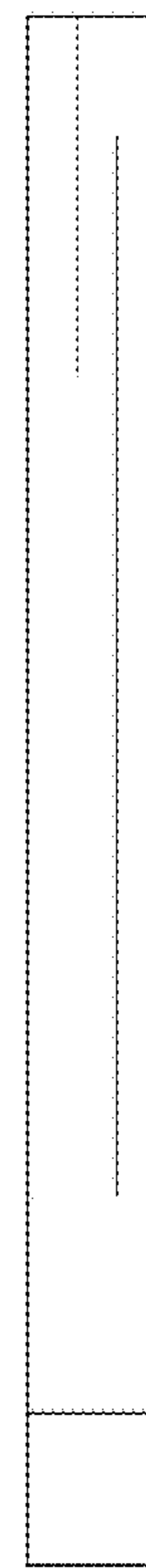


Fig 20

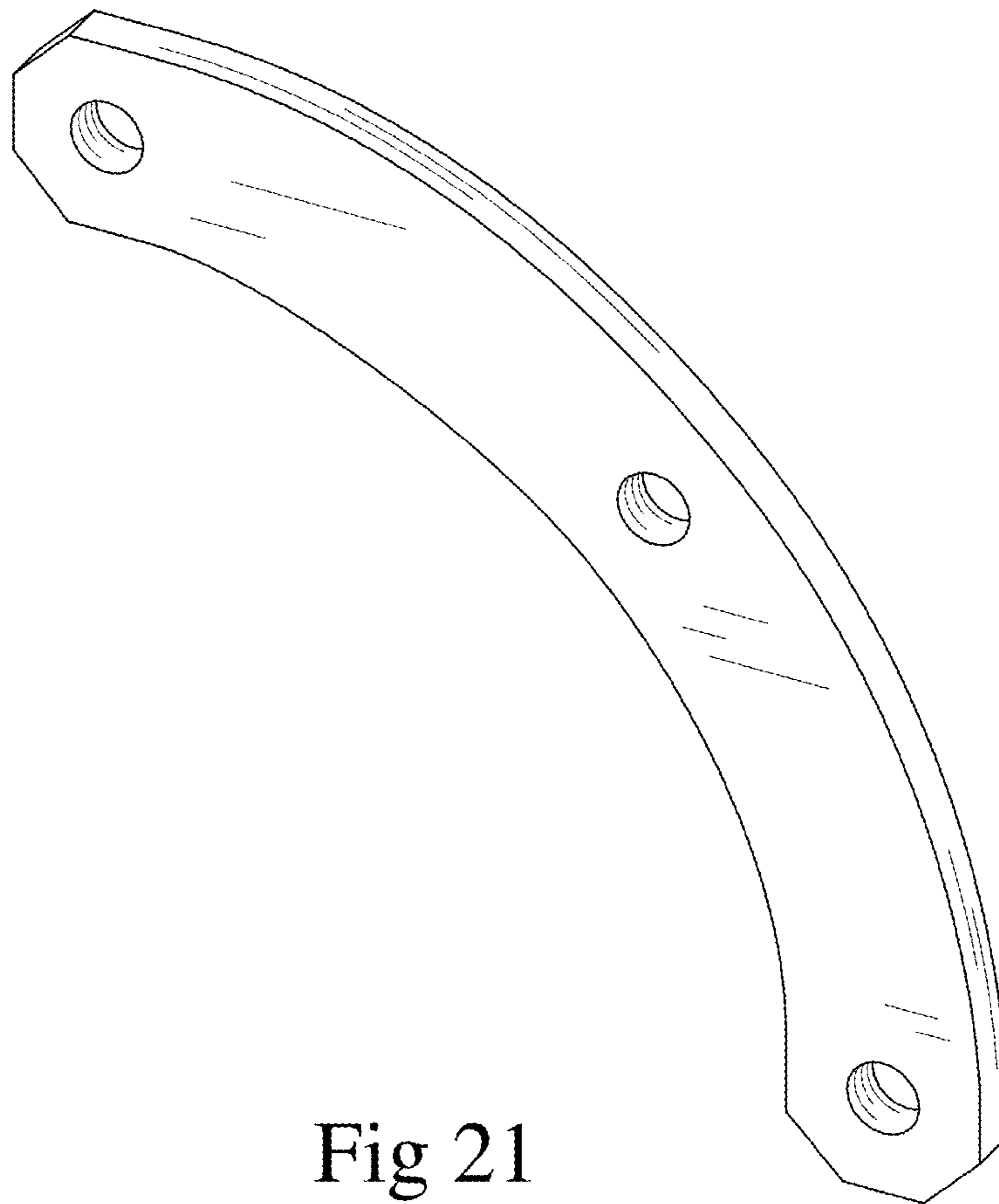


Fig 21

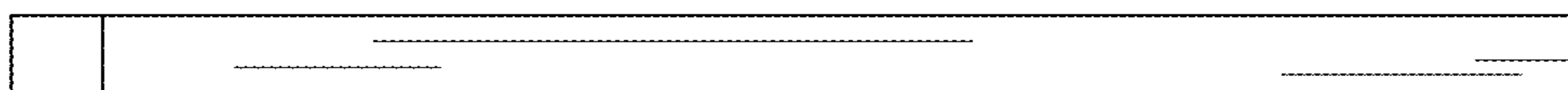


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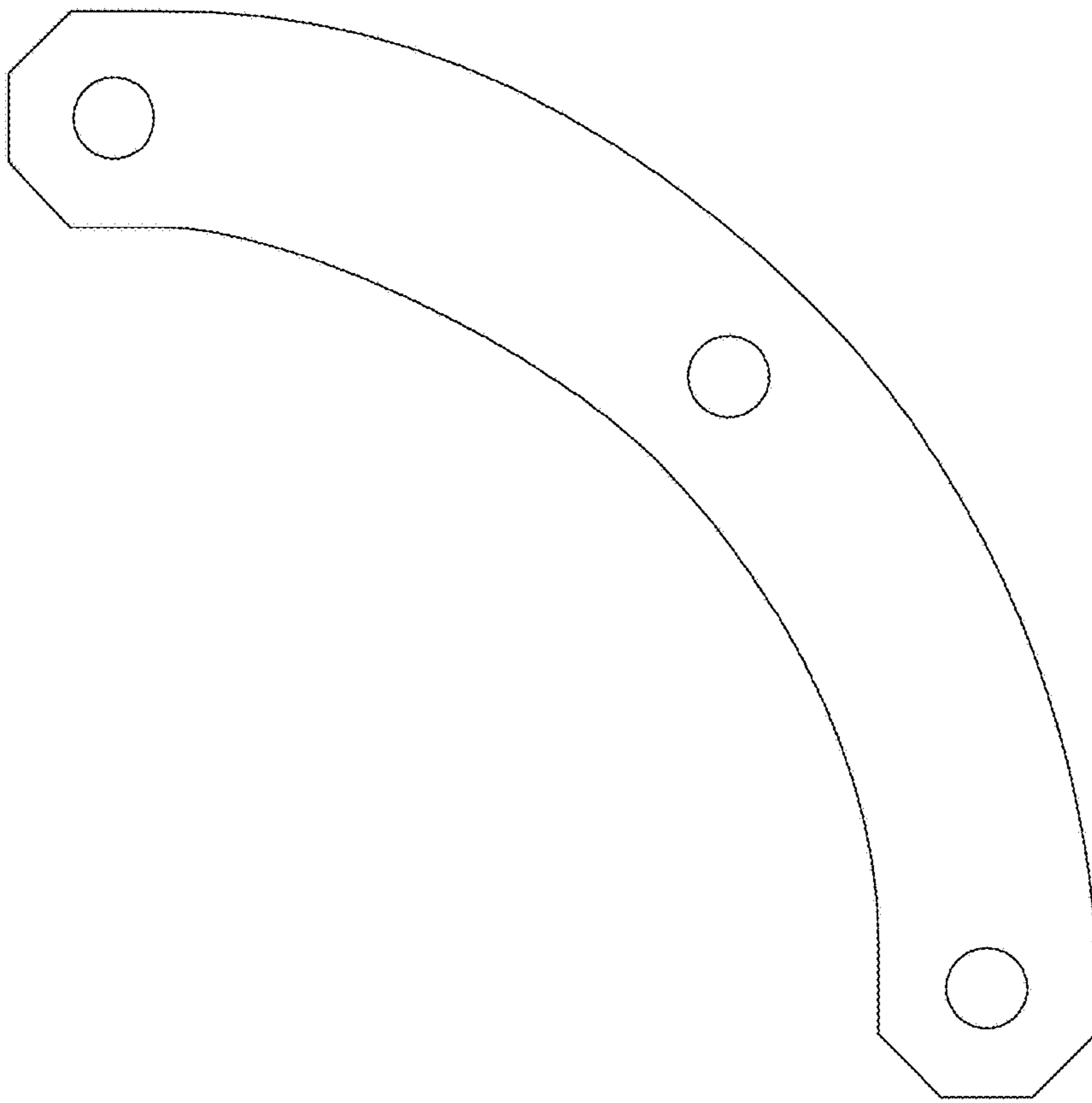


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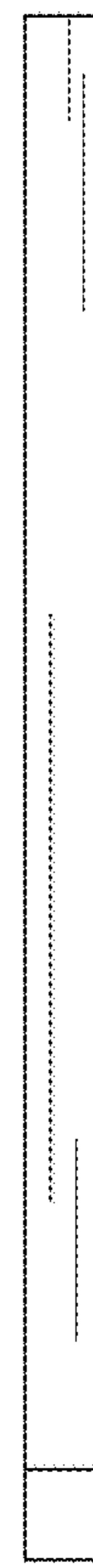


Fig 24

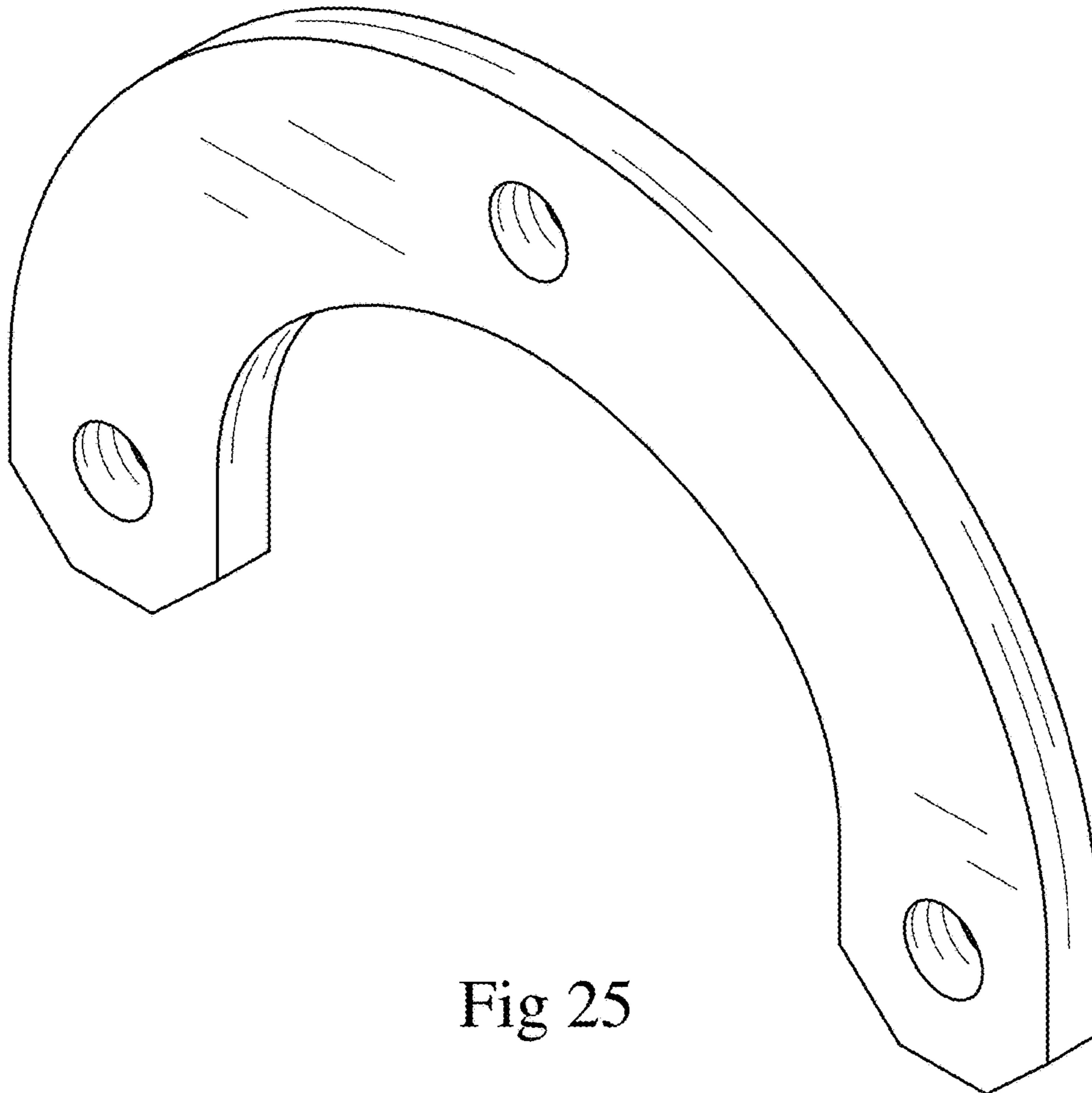


Fig 25



Fig 26



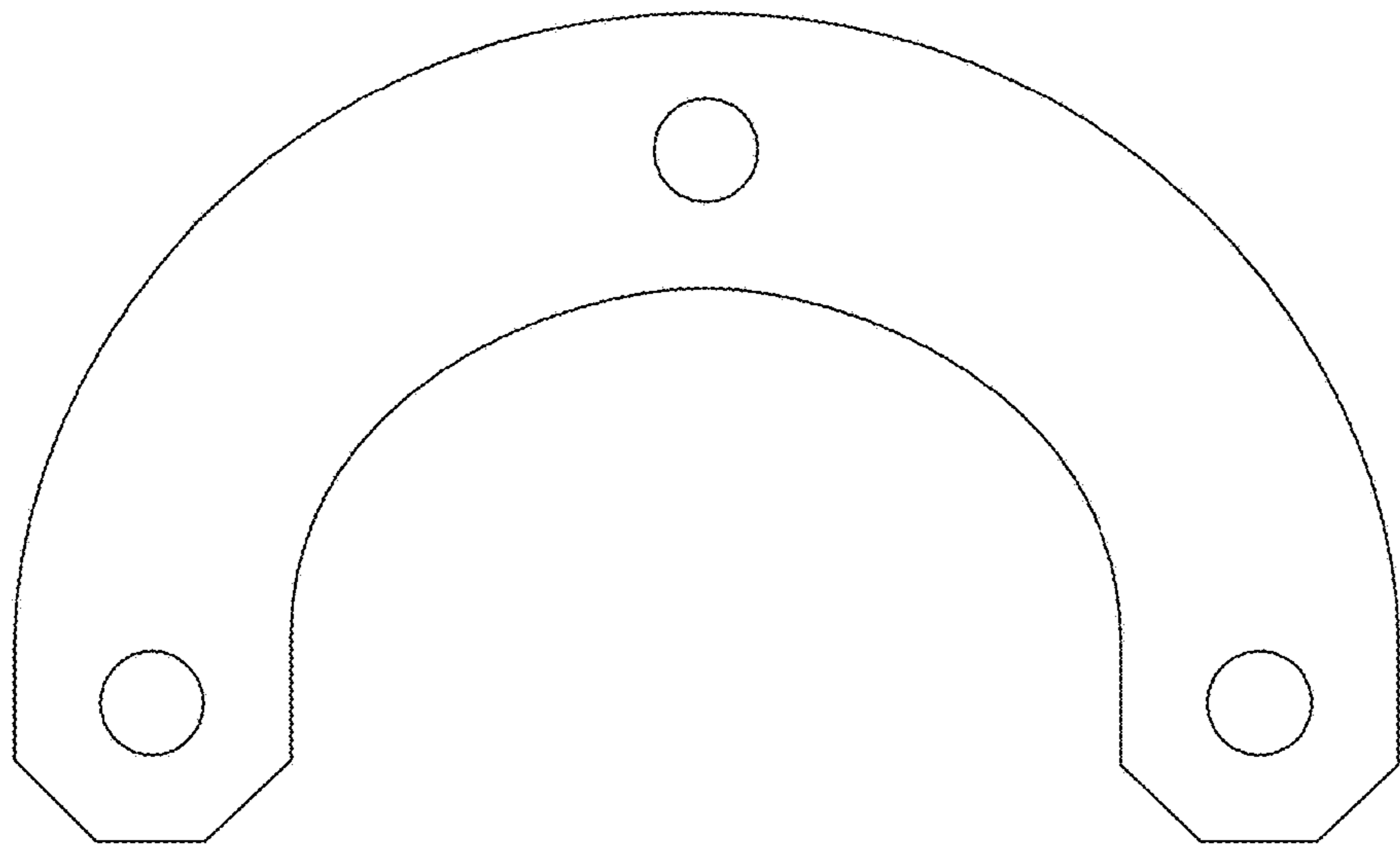


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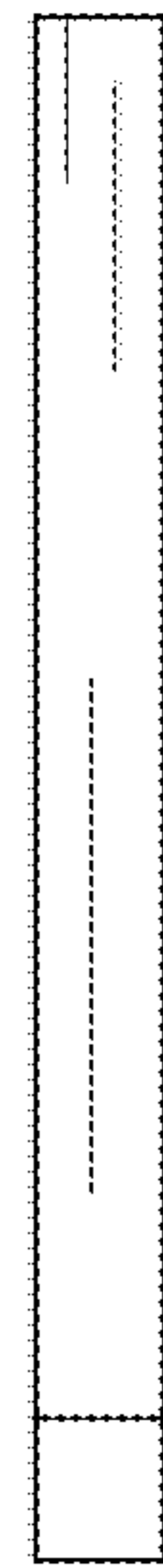


Fig 28

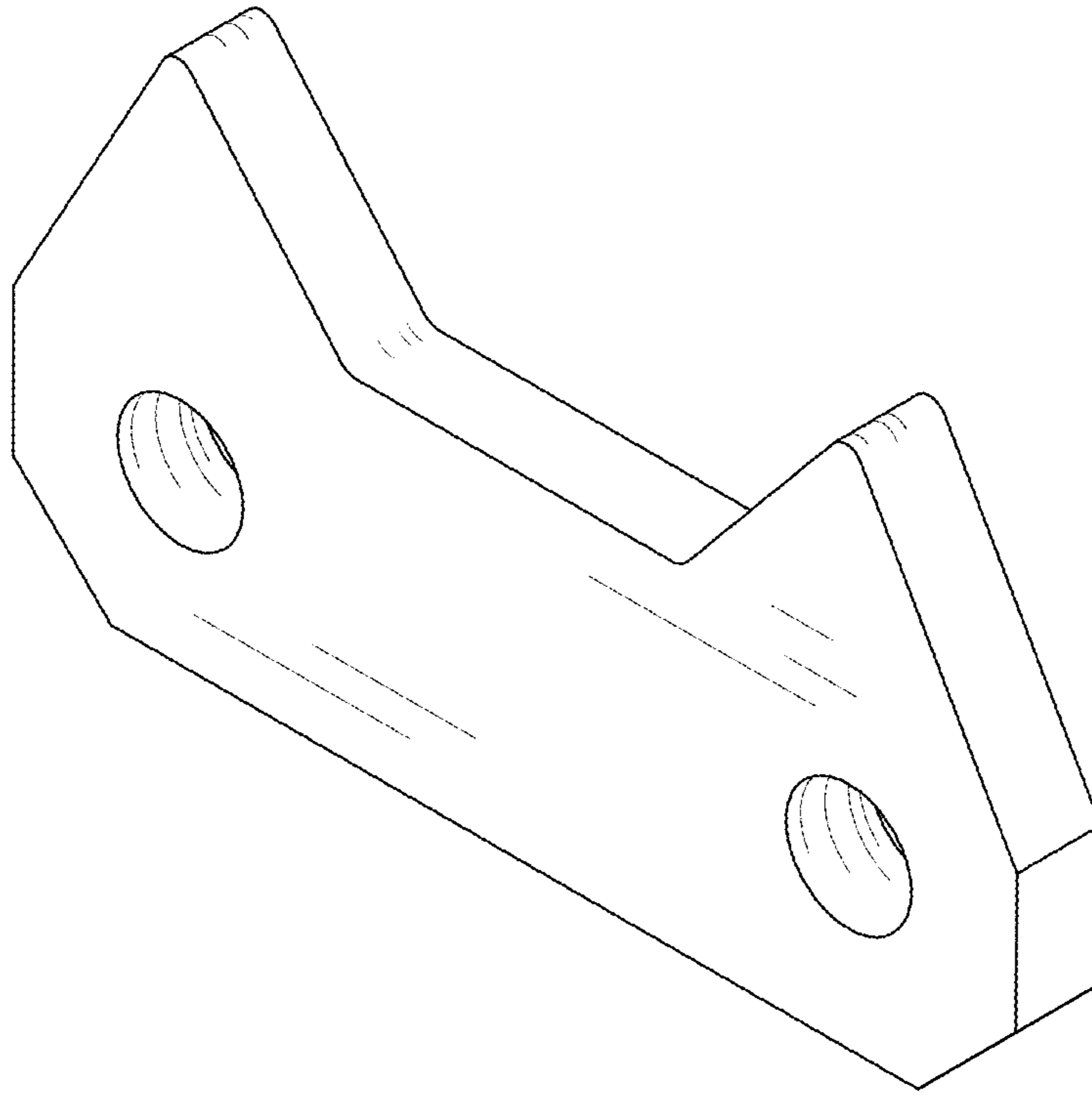


Fig 29

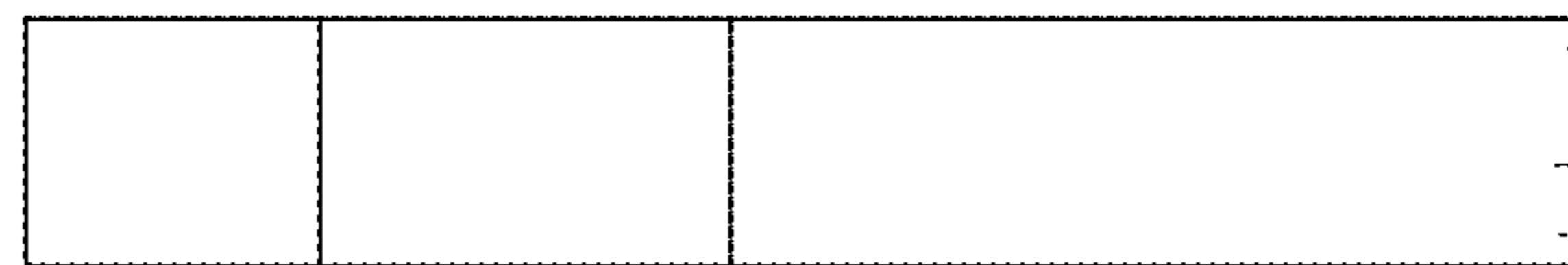


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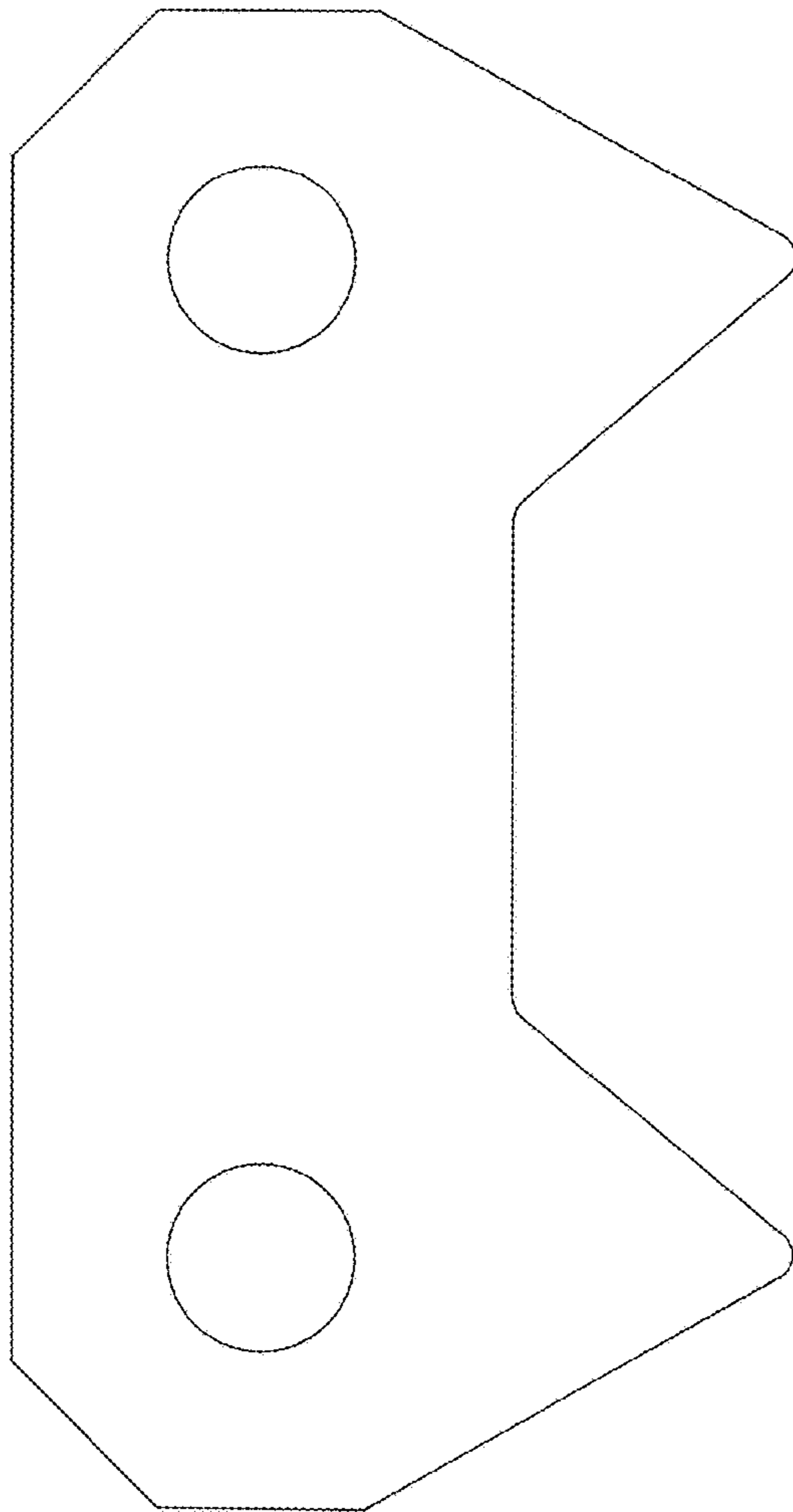


Fig 31



Fig 32

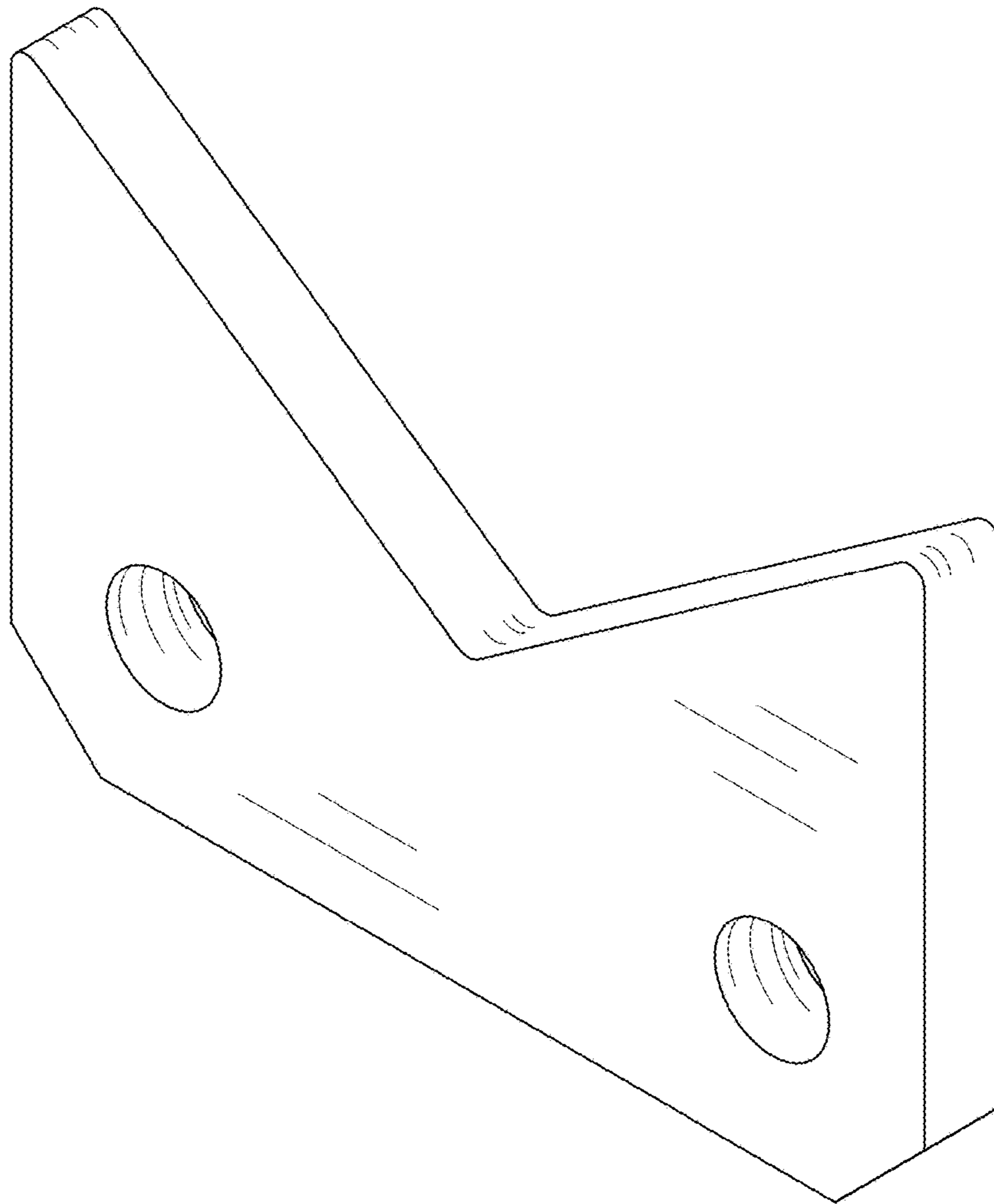


Fig 33



Fig 34

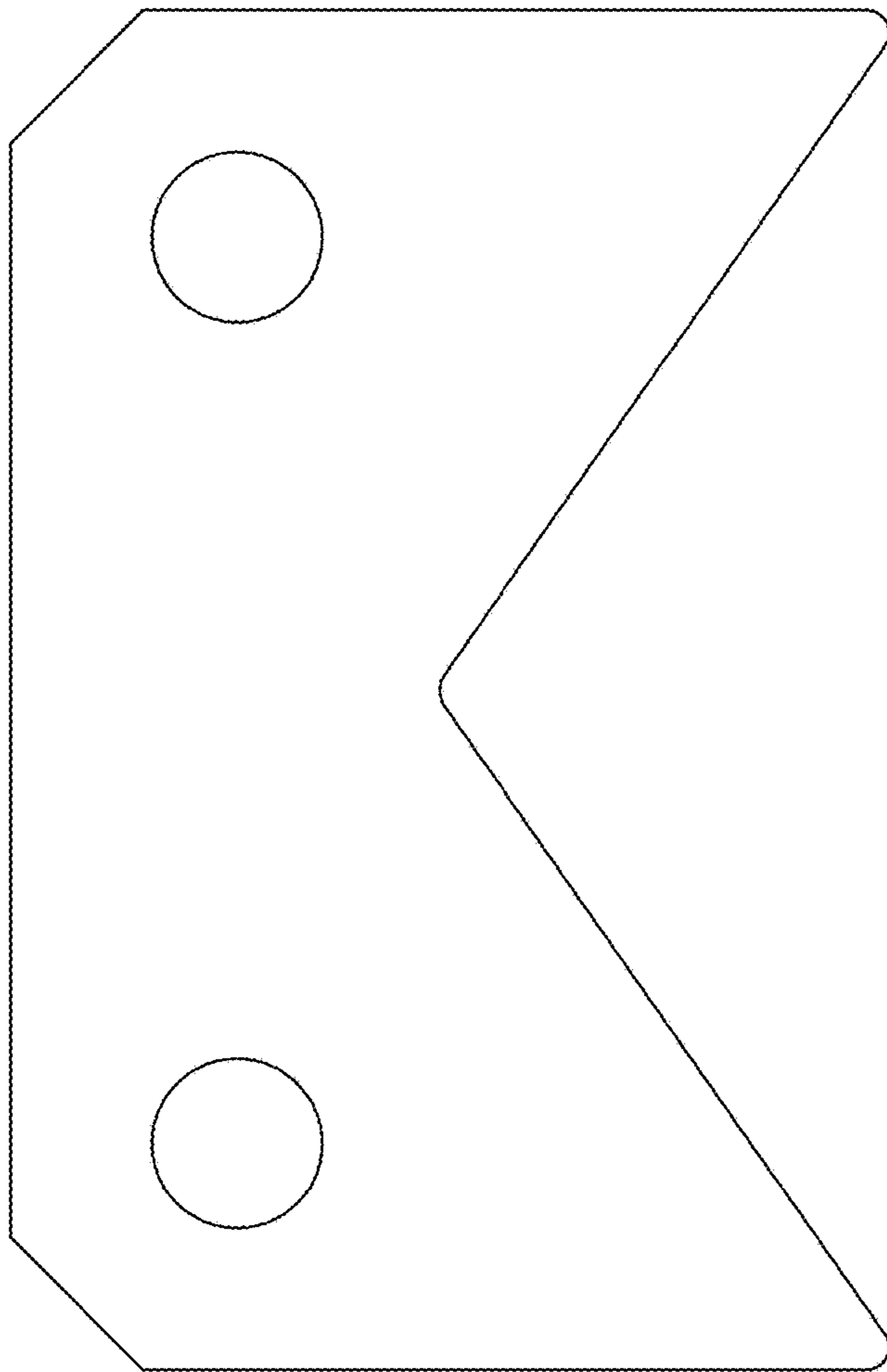


Fig 35



Fig 36

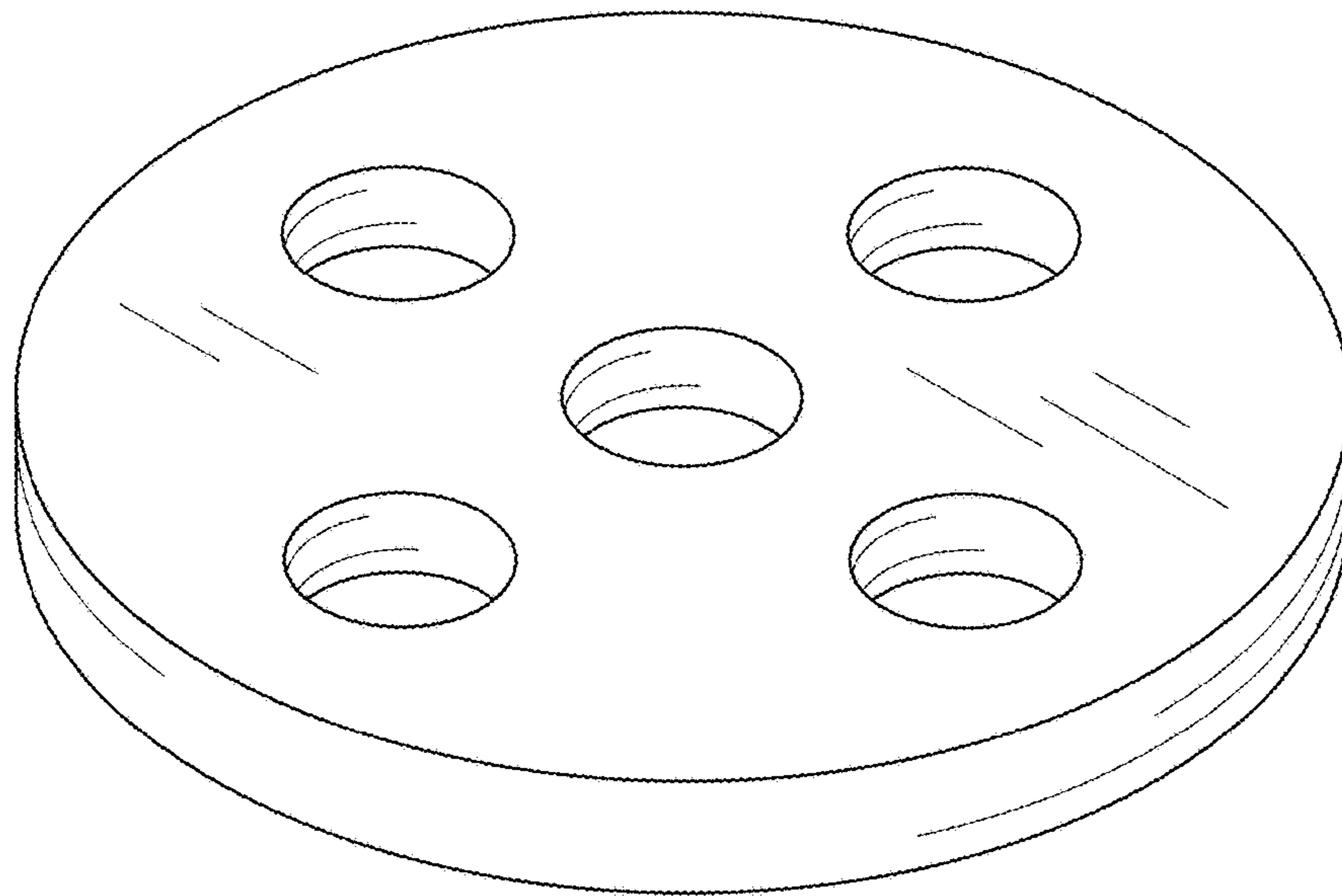


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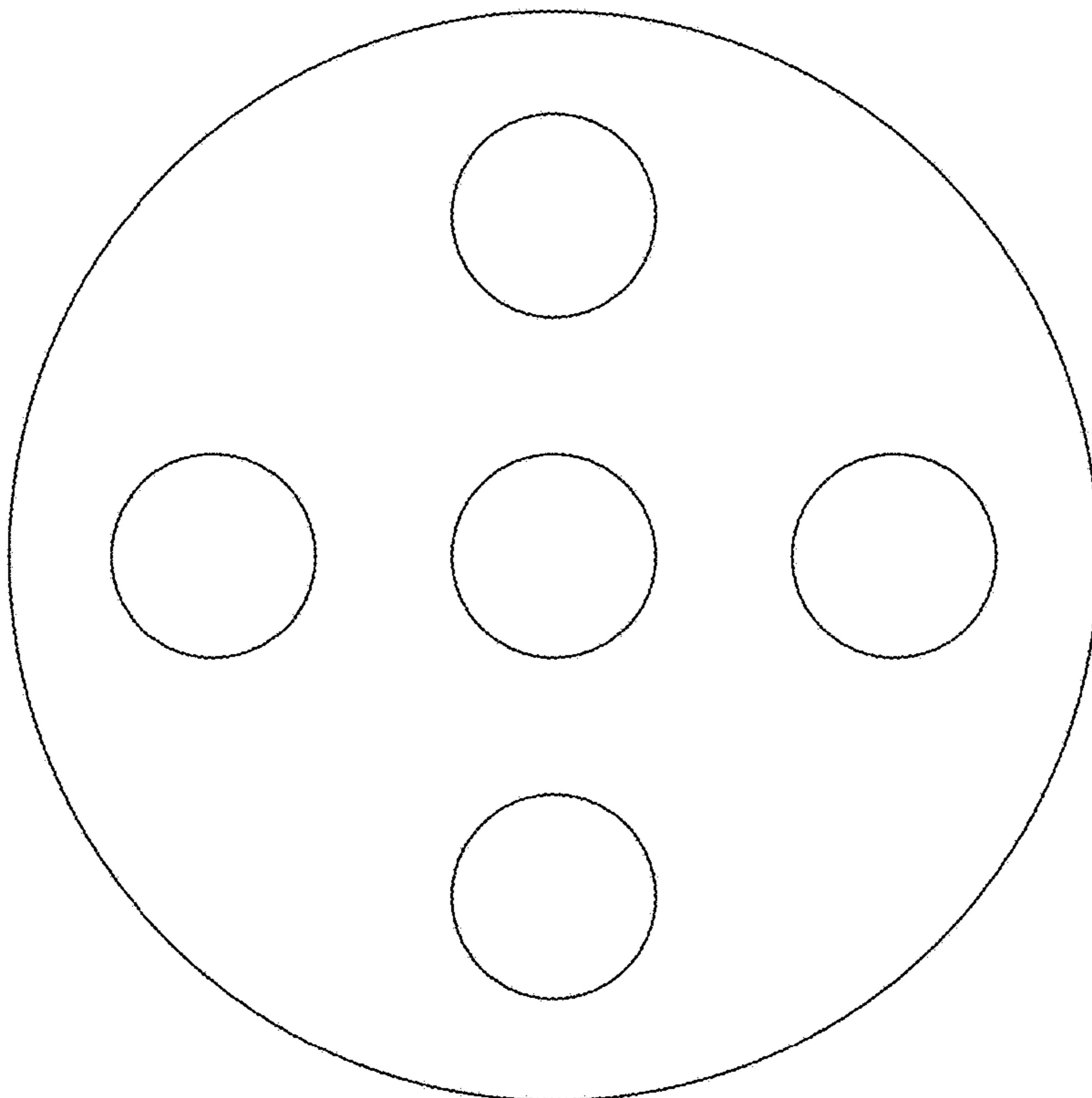


Fig 38



Fig 39

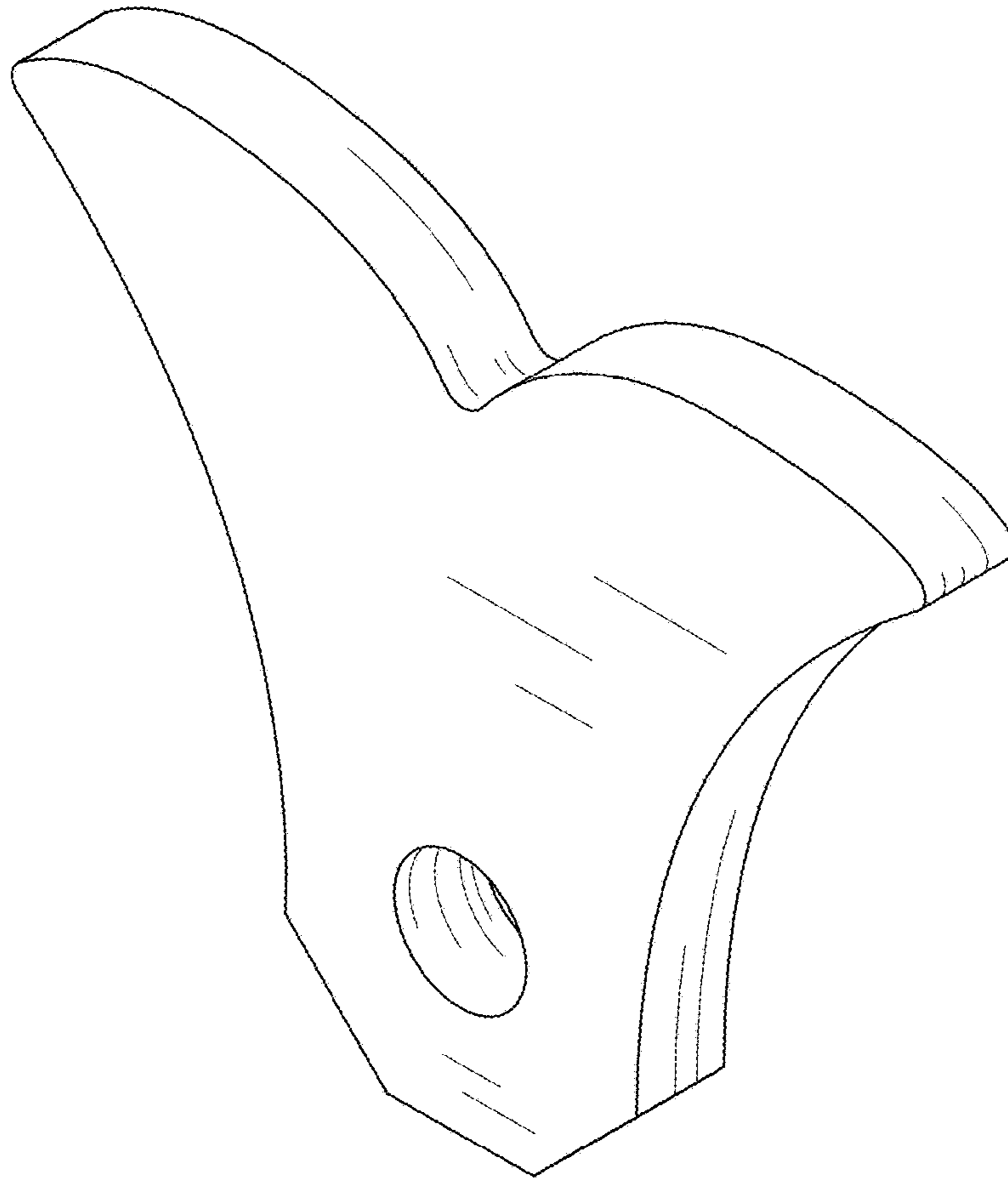


Fig 40



Fig 41



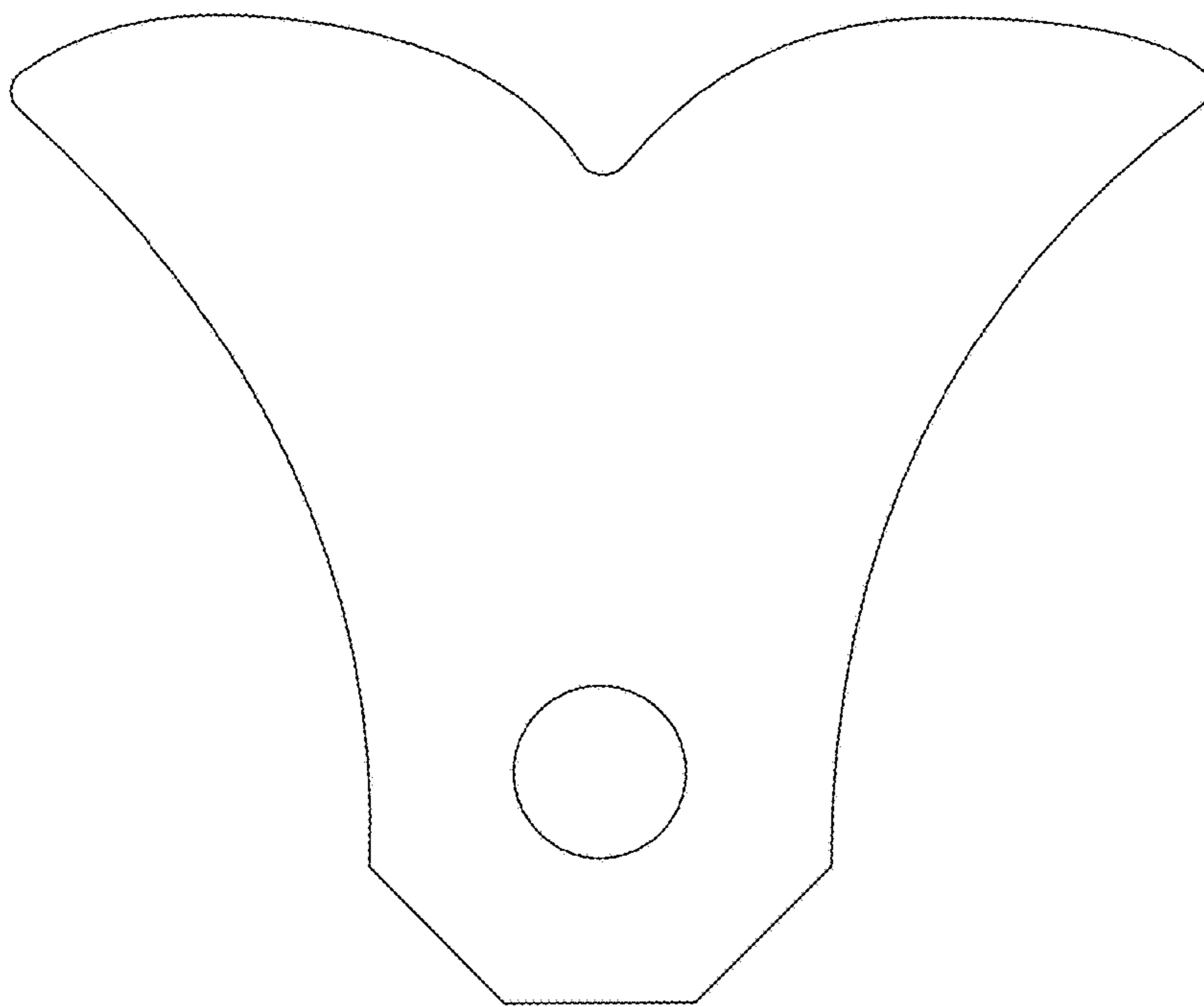


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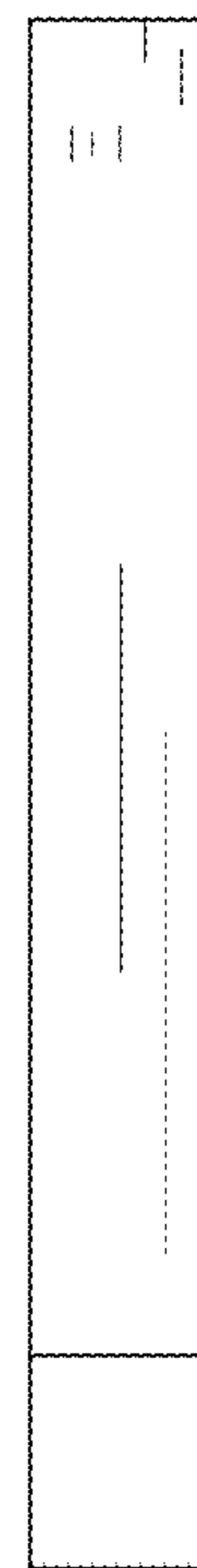


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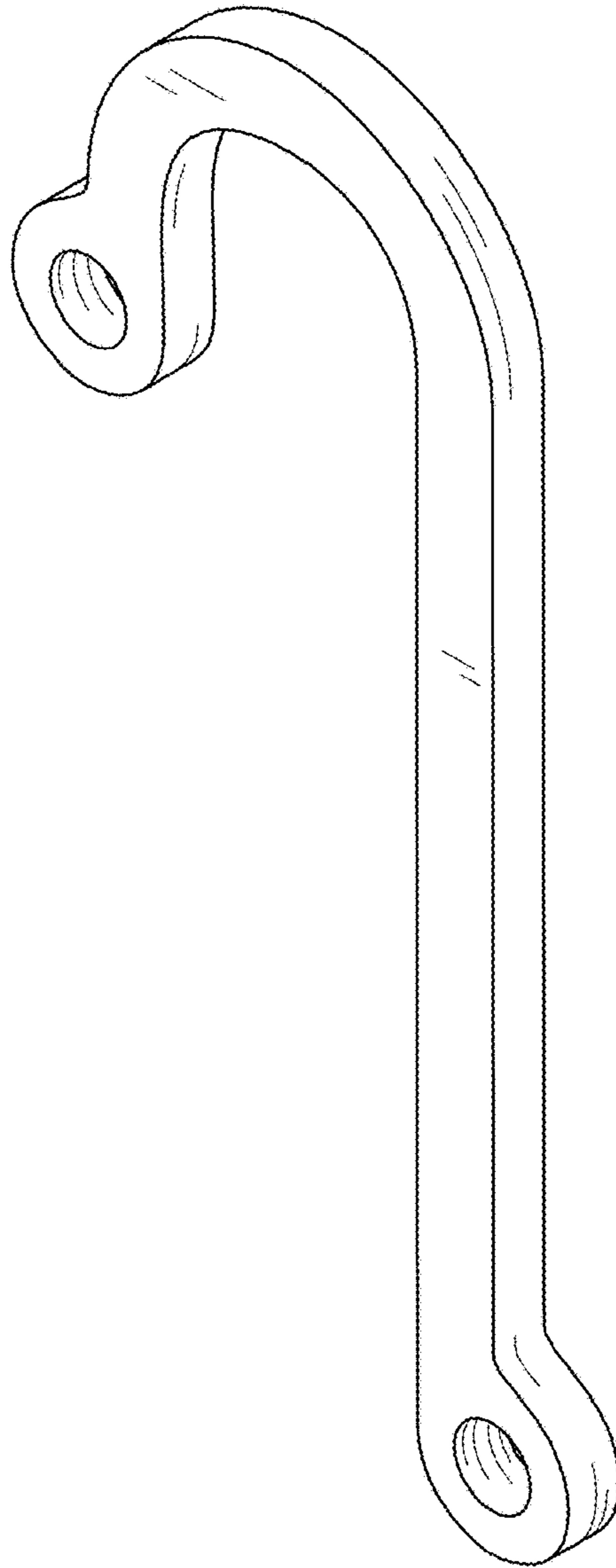


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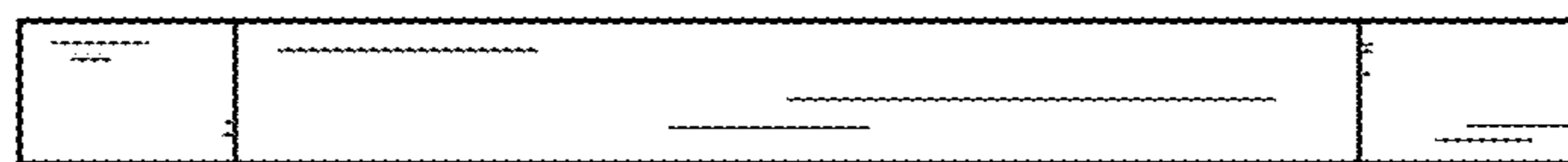


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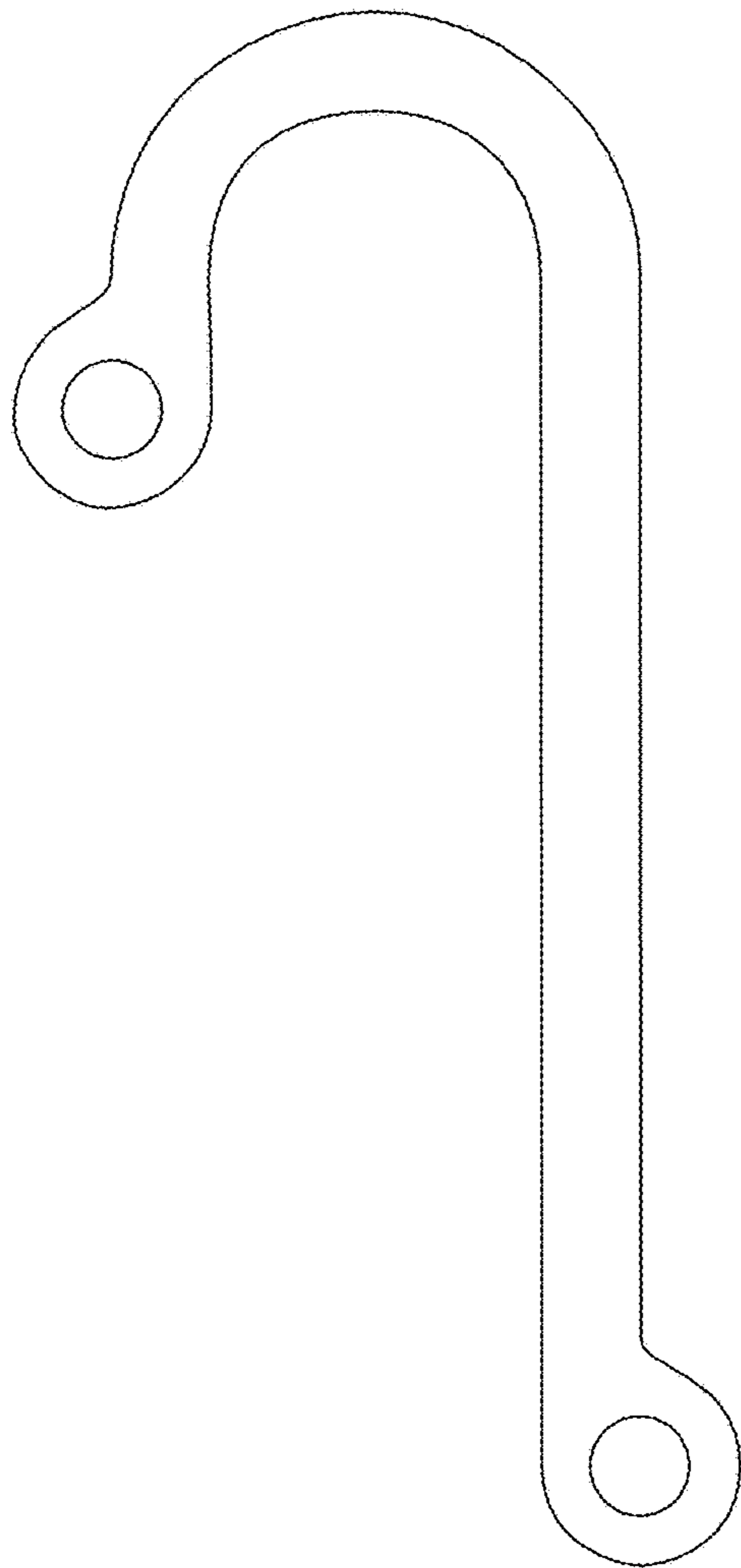


Fig 46



Fig 47

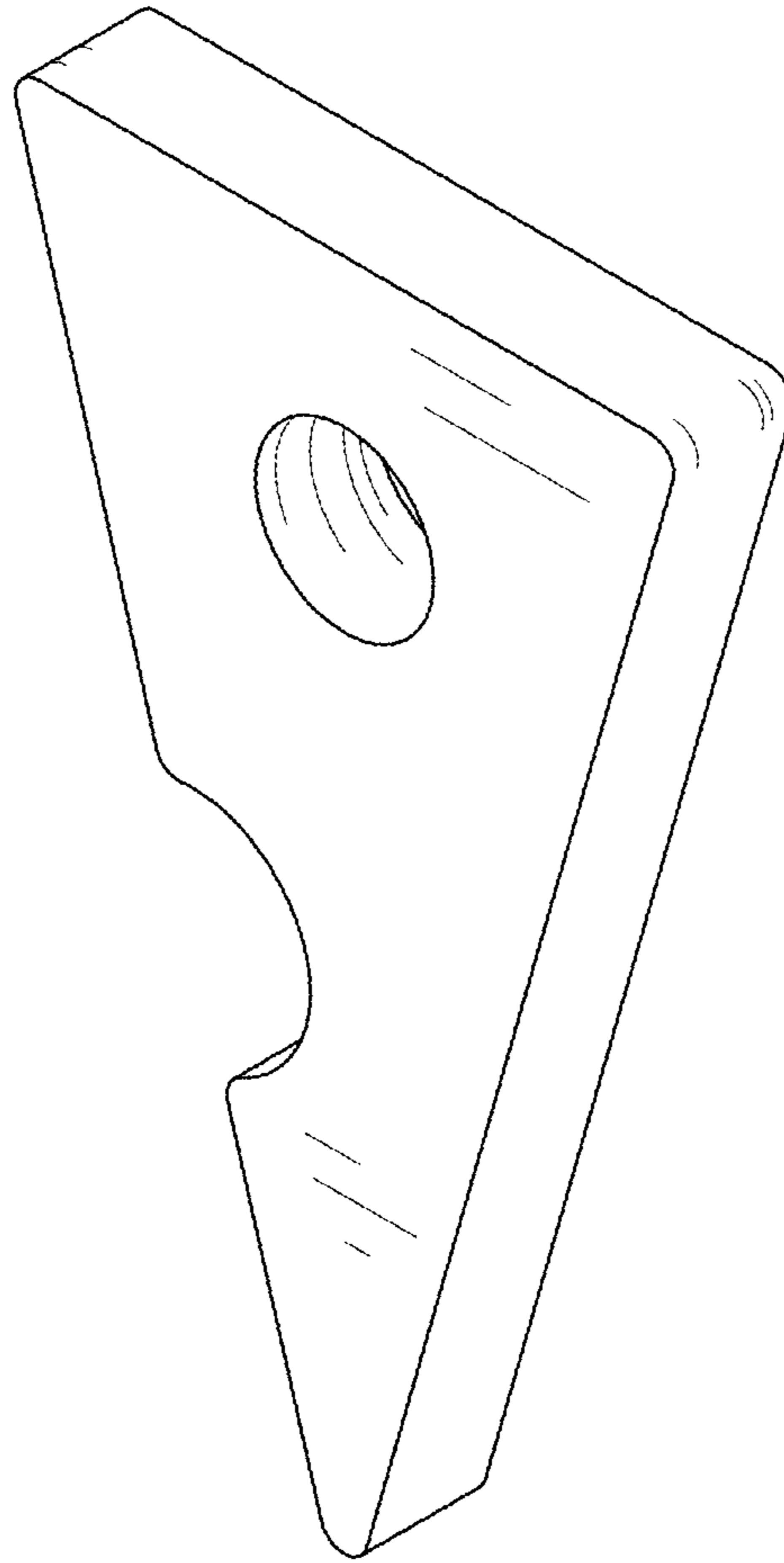


Fig 48



Fig 49

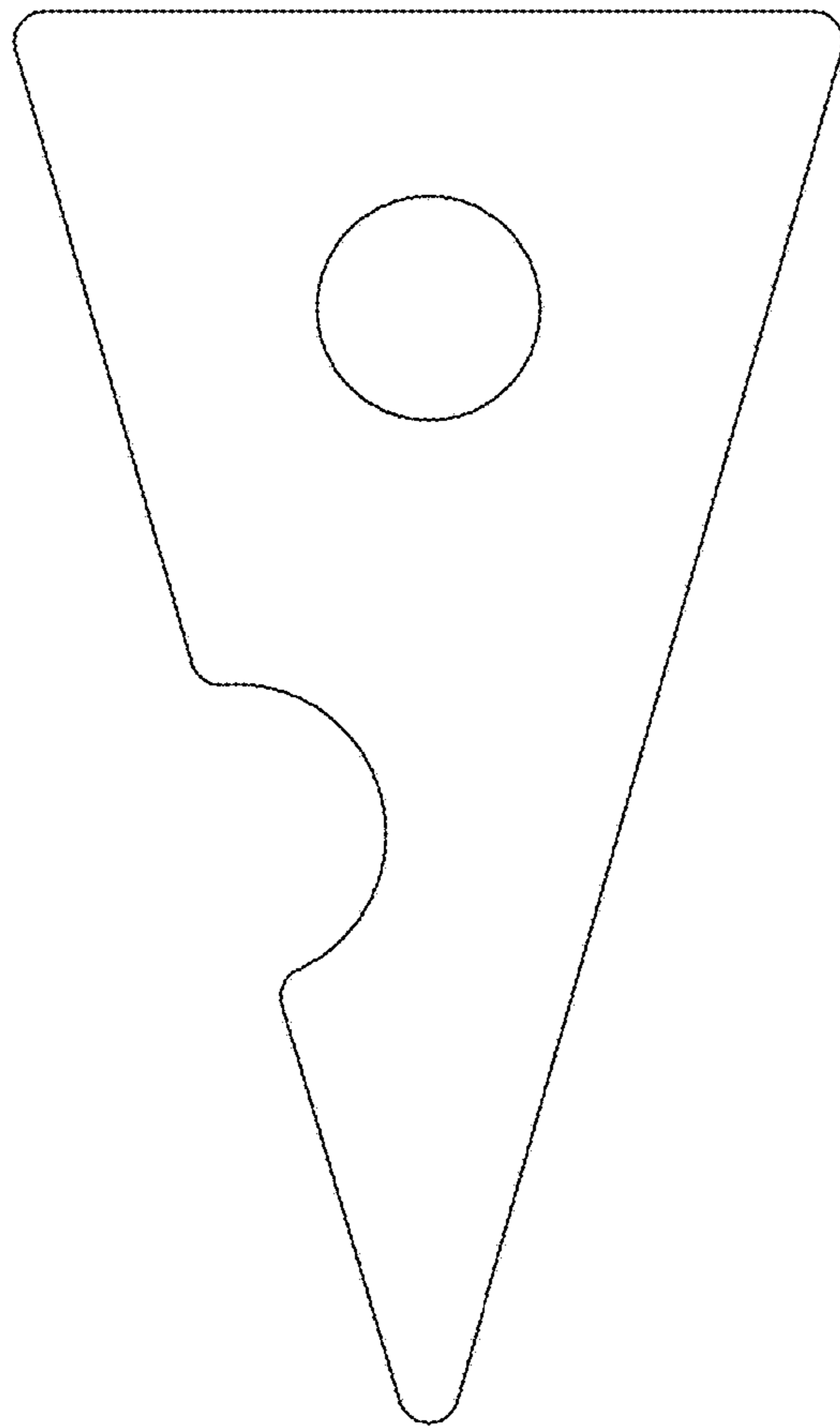


Fig 50

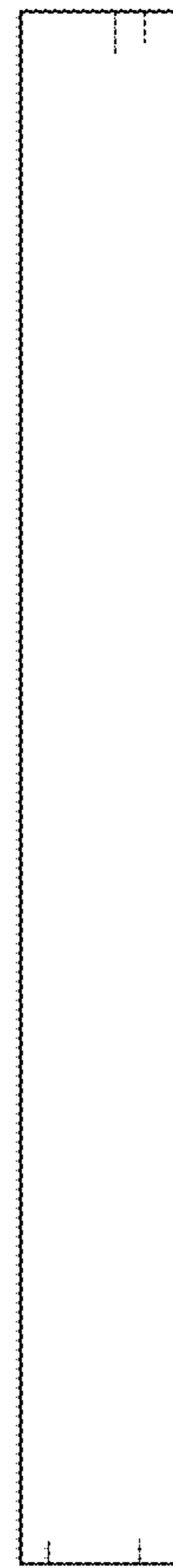


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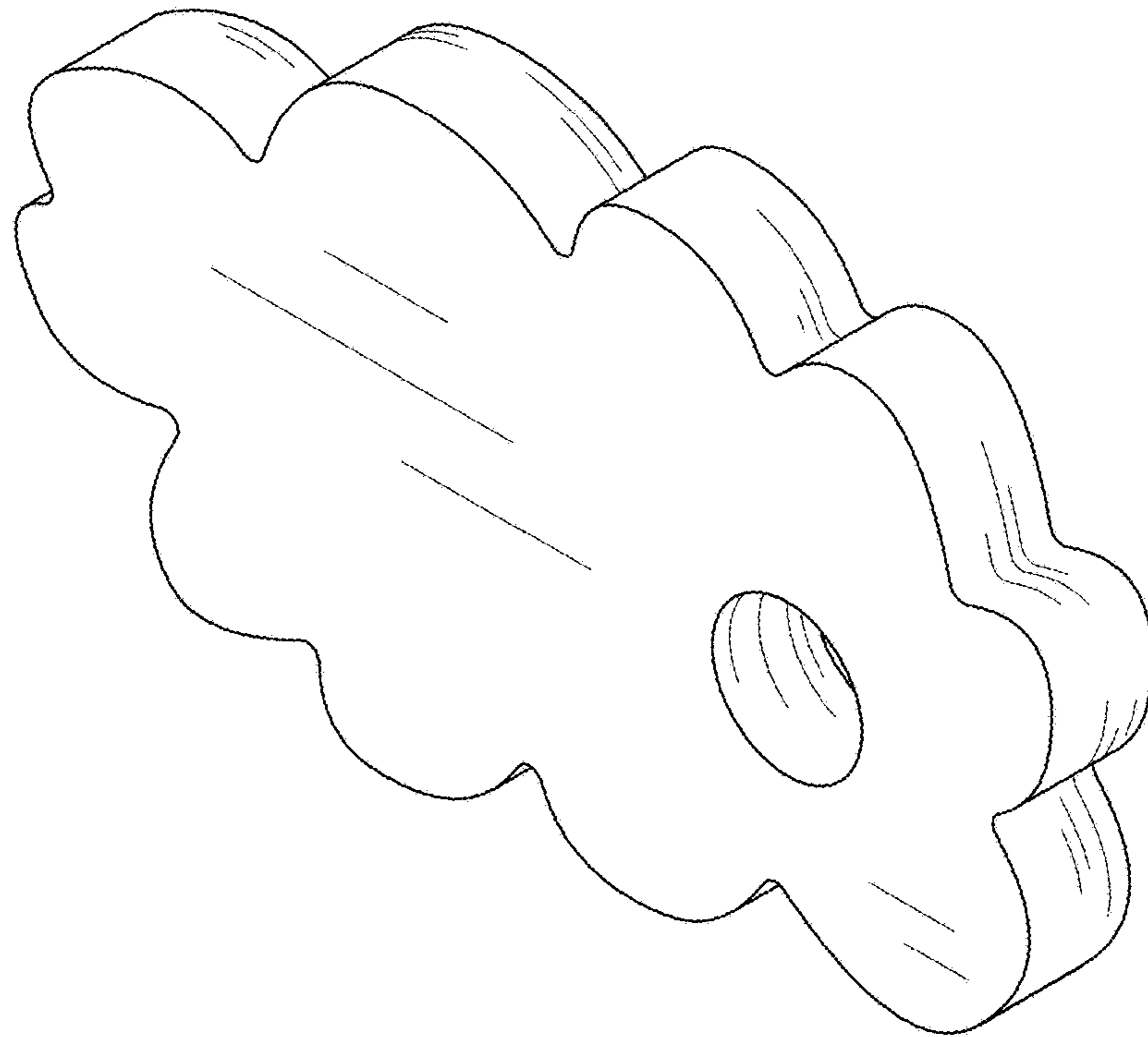


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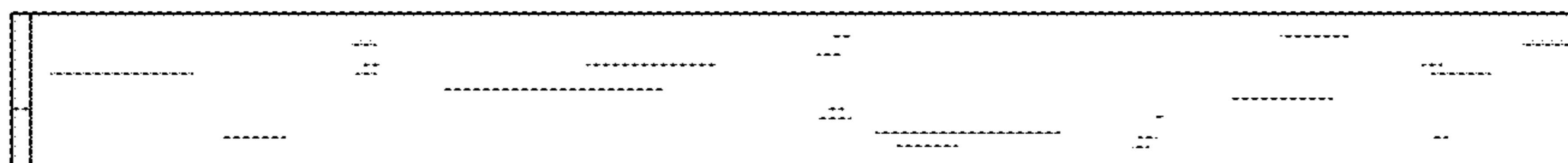


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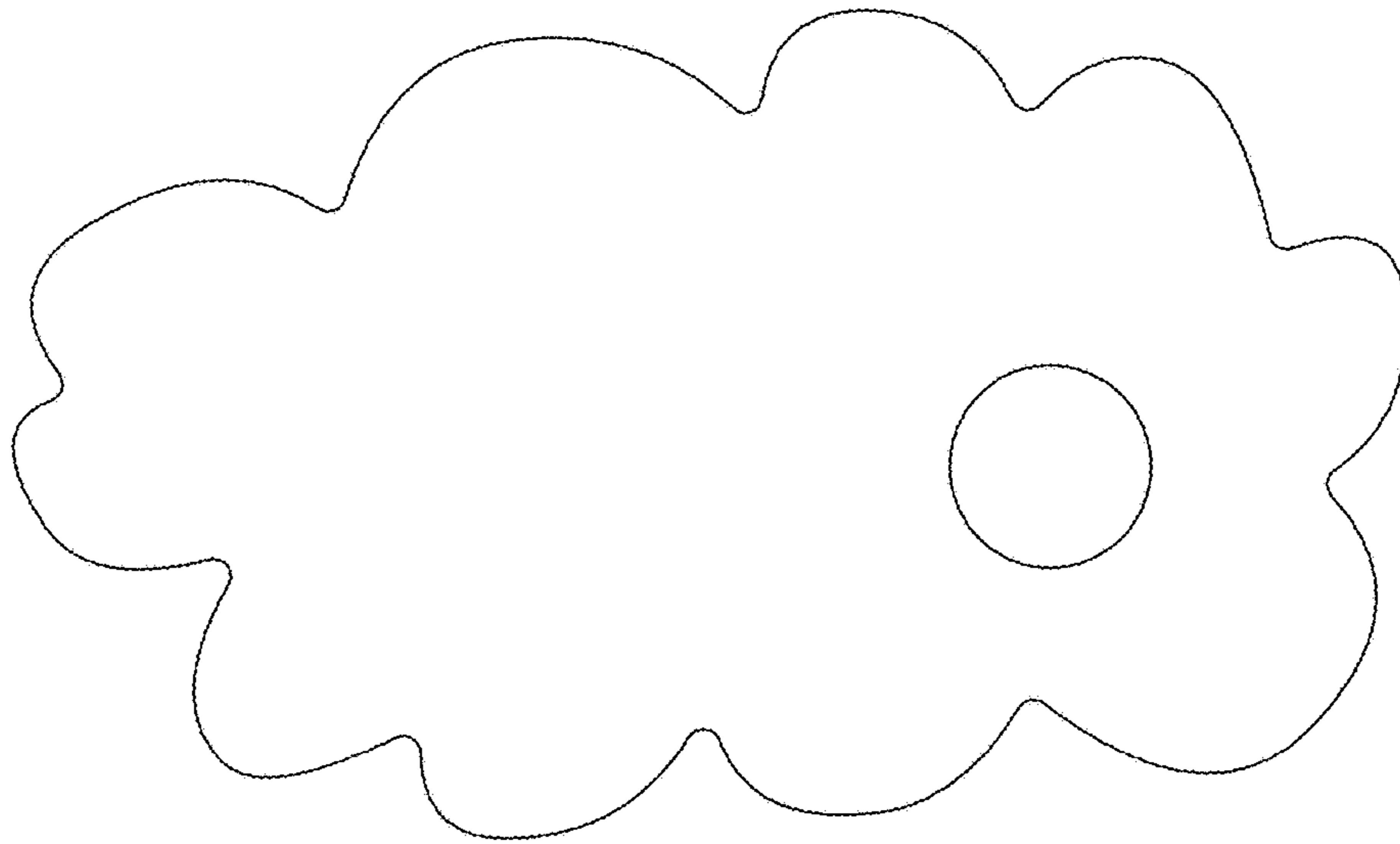


Fig 54



Fig 55

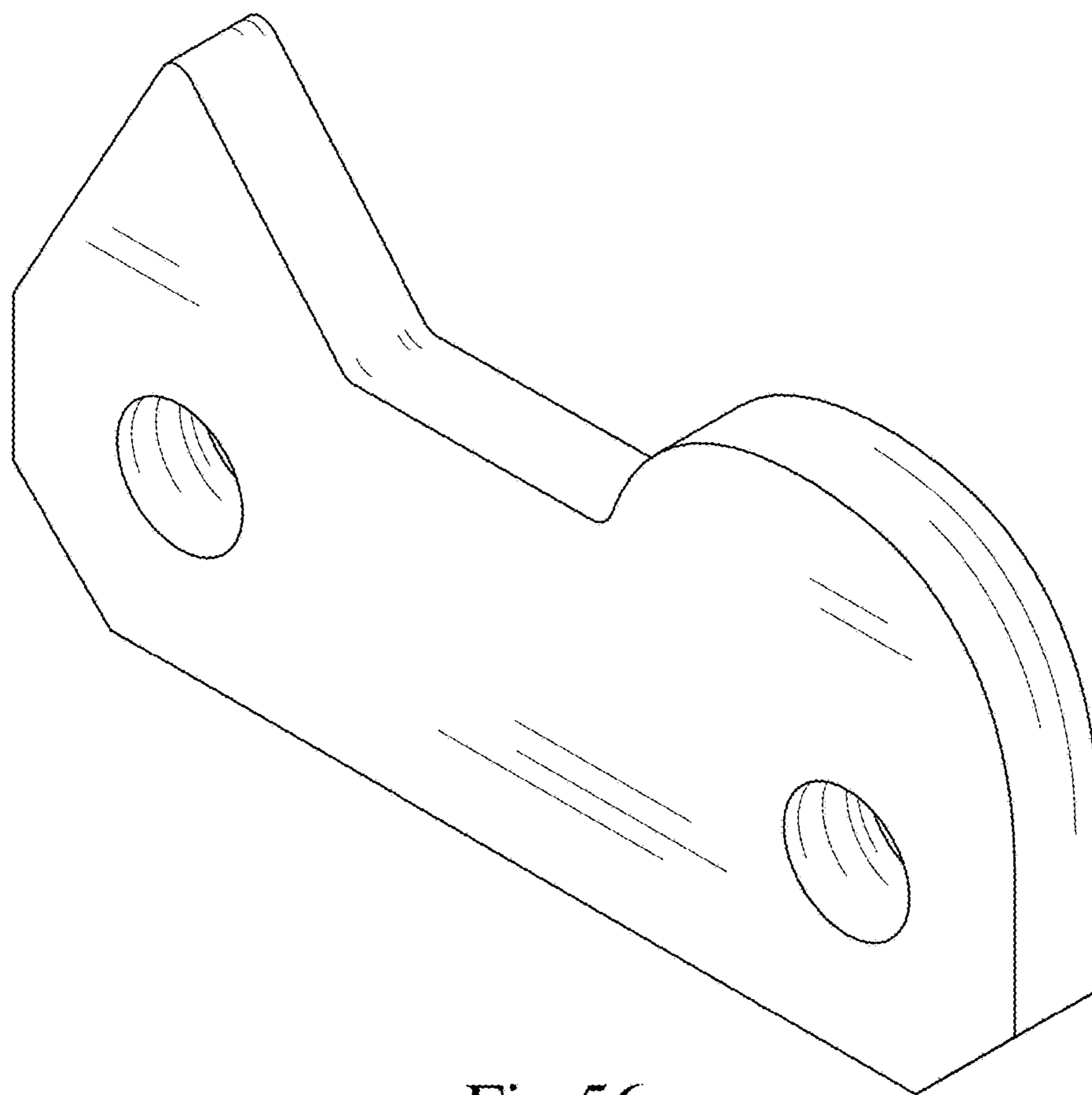


Fig 56

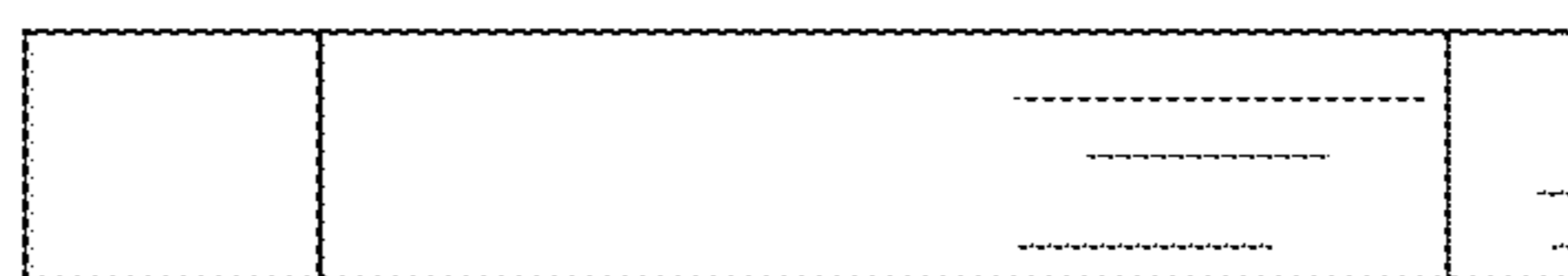


Fig 57



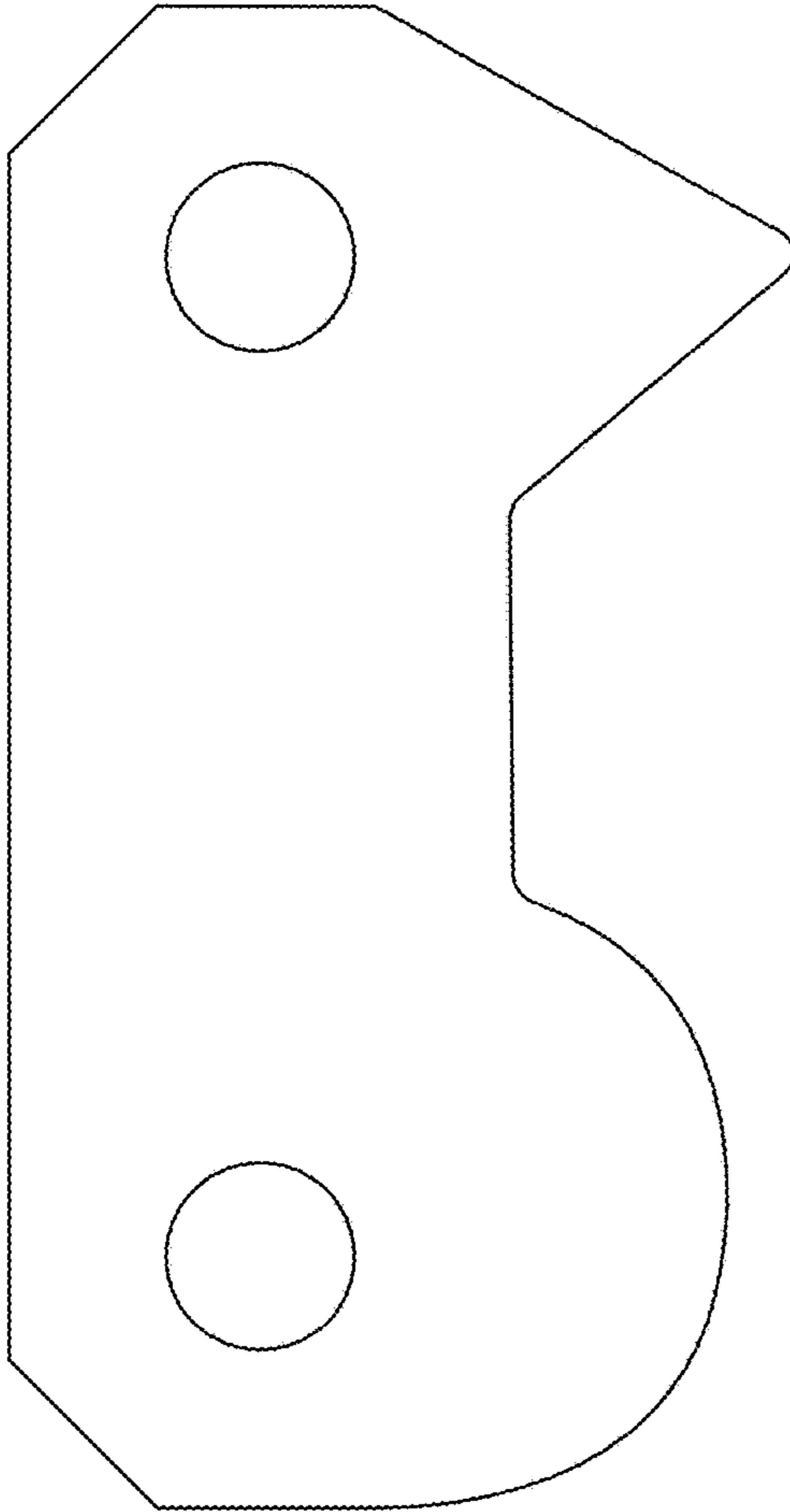


Fig 58



Fig 59

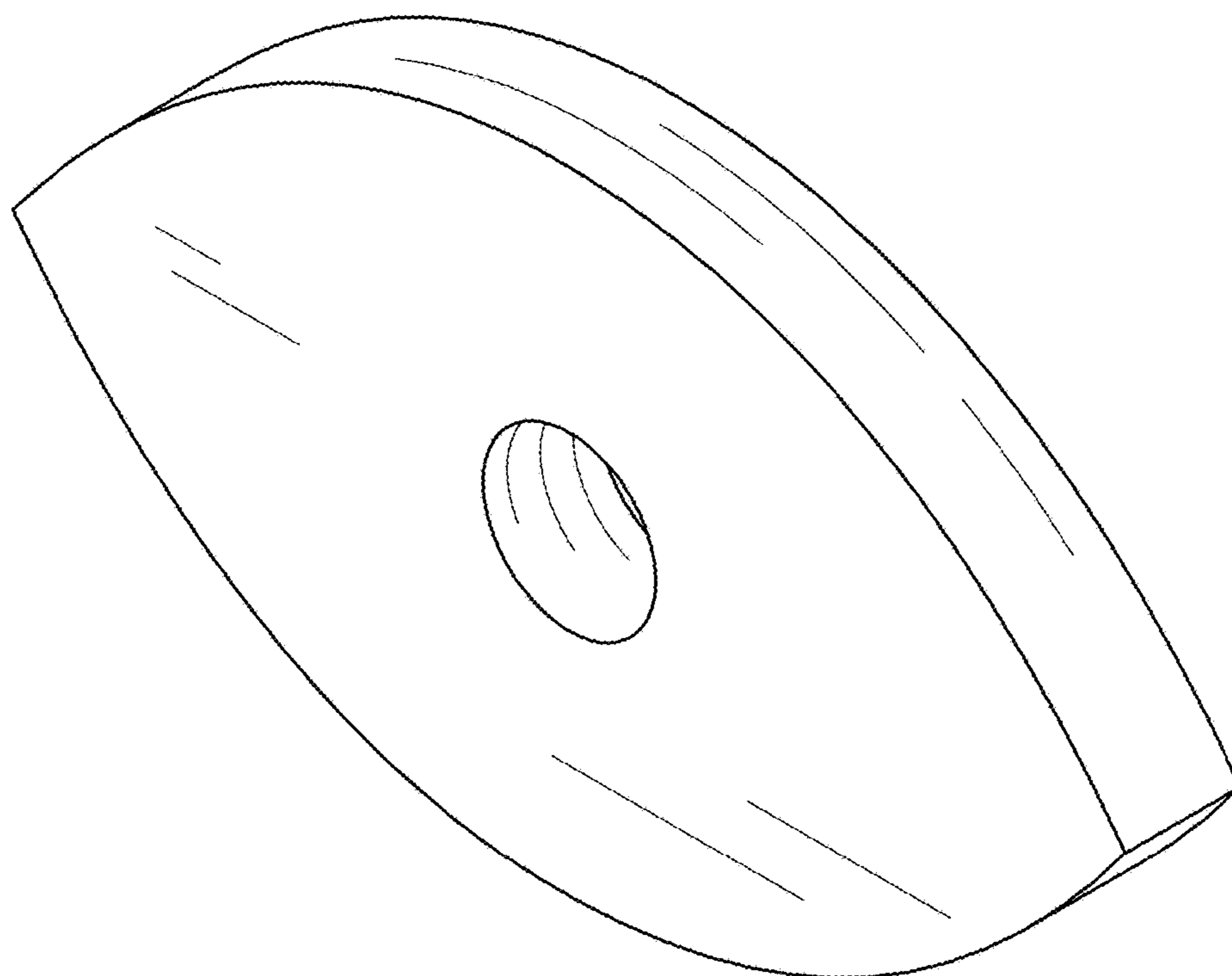


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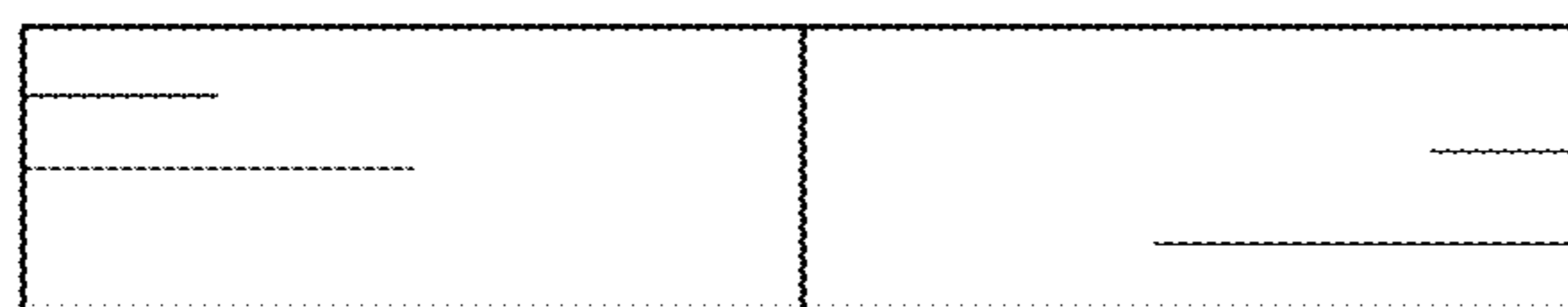


Fig 61

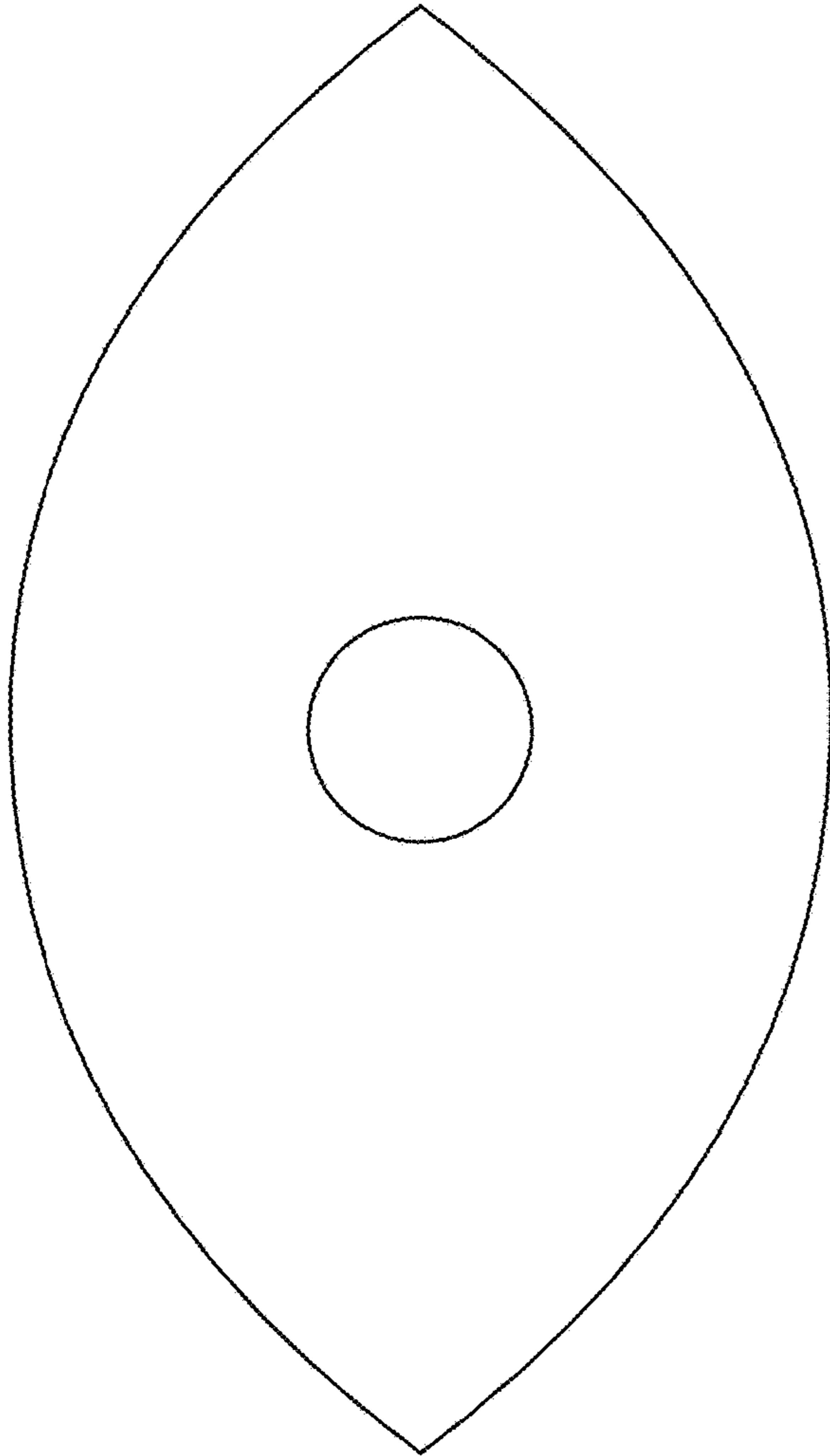


Fig 62

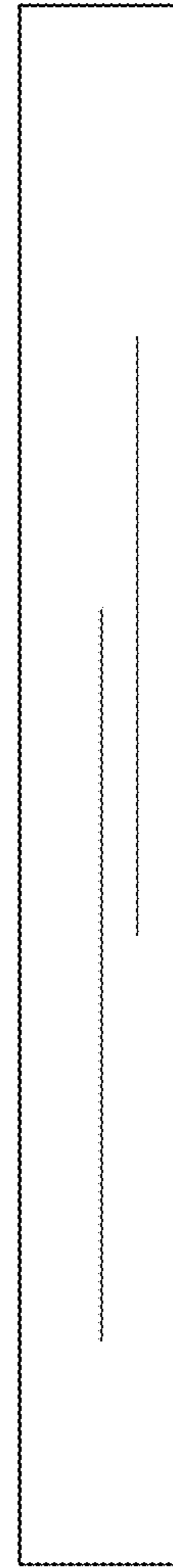


Fig 63

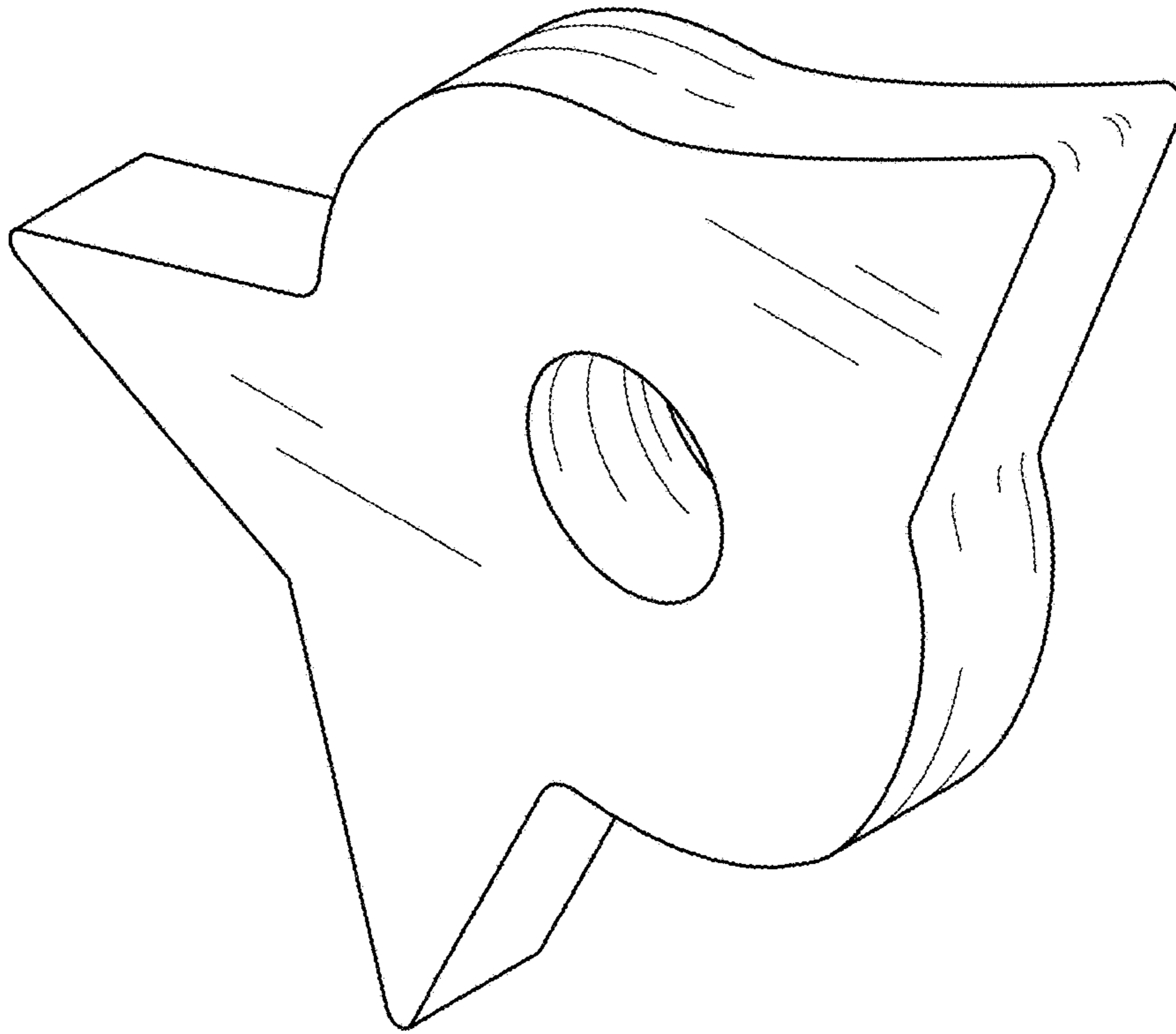


Fig 64



Fig 65

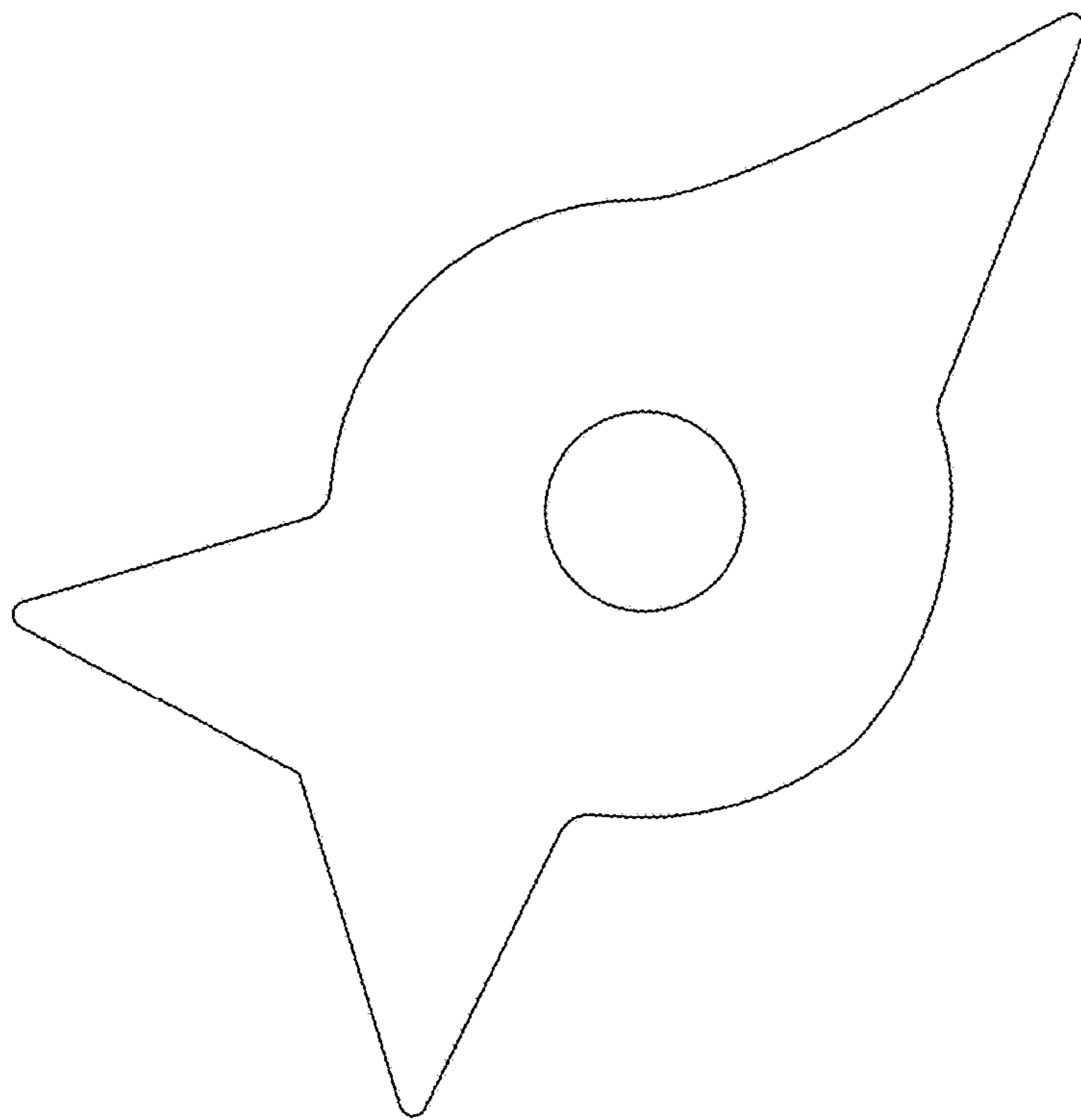


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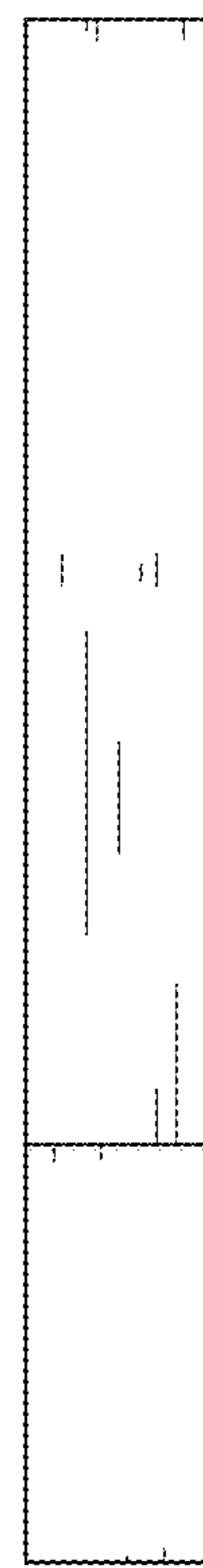


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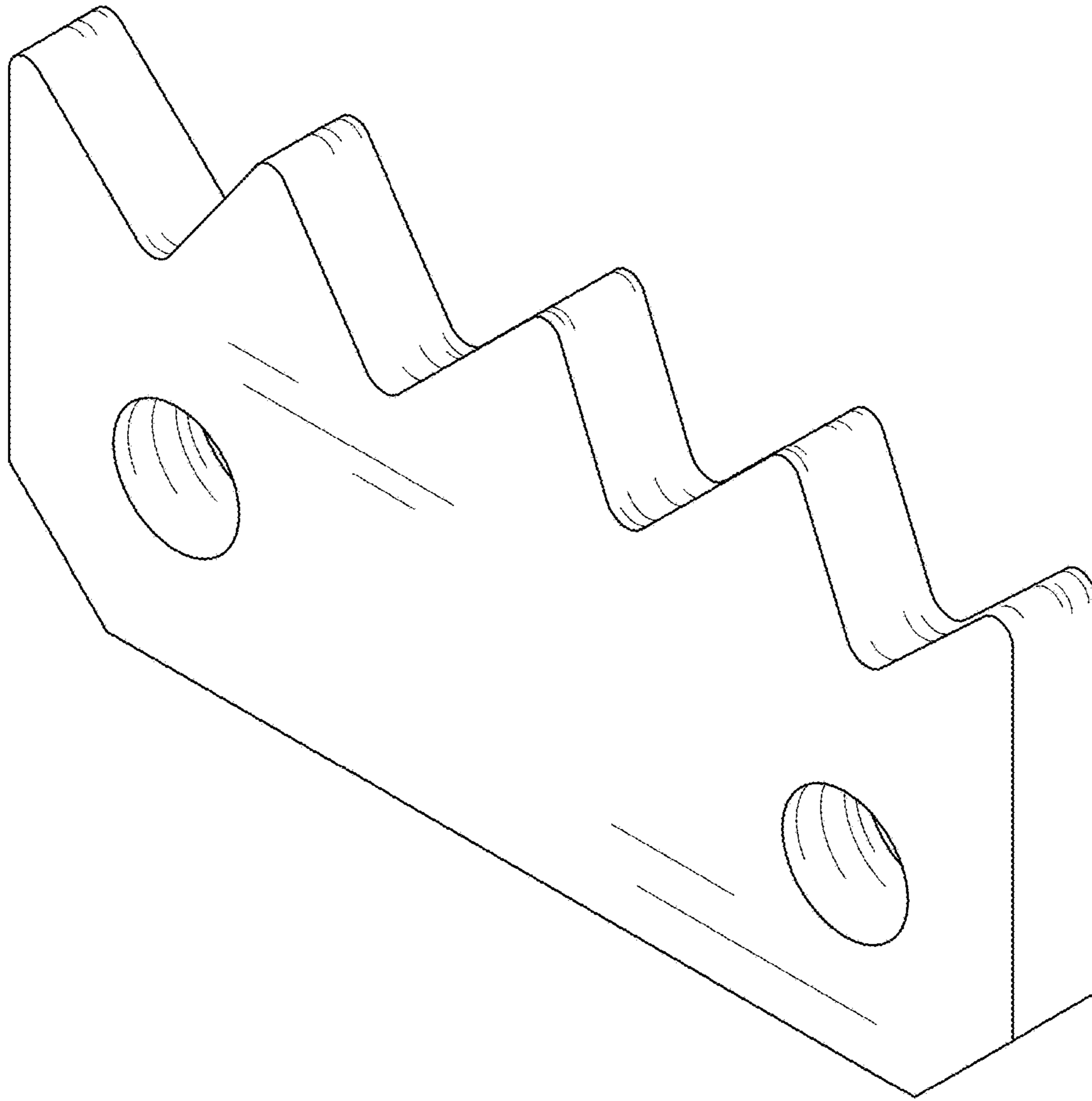


Fig 68



Fig 69

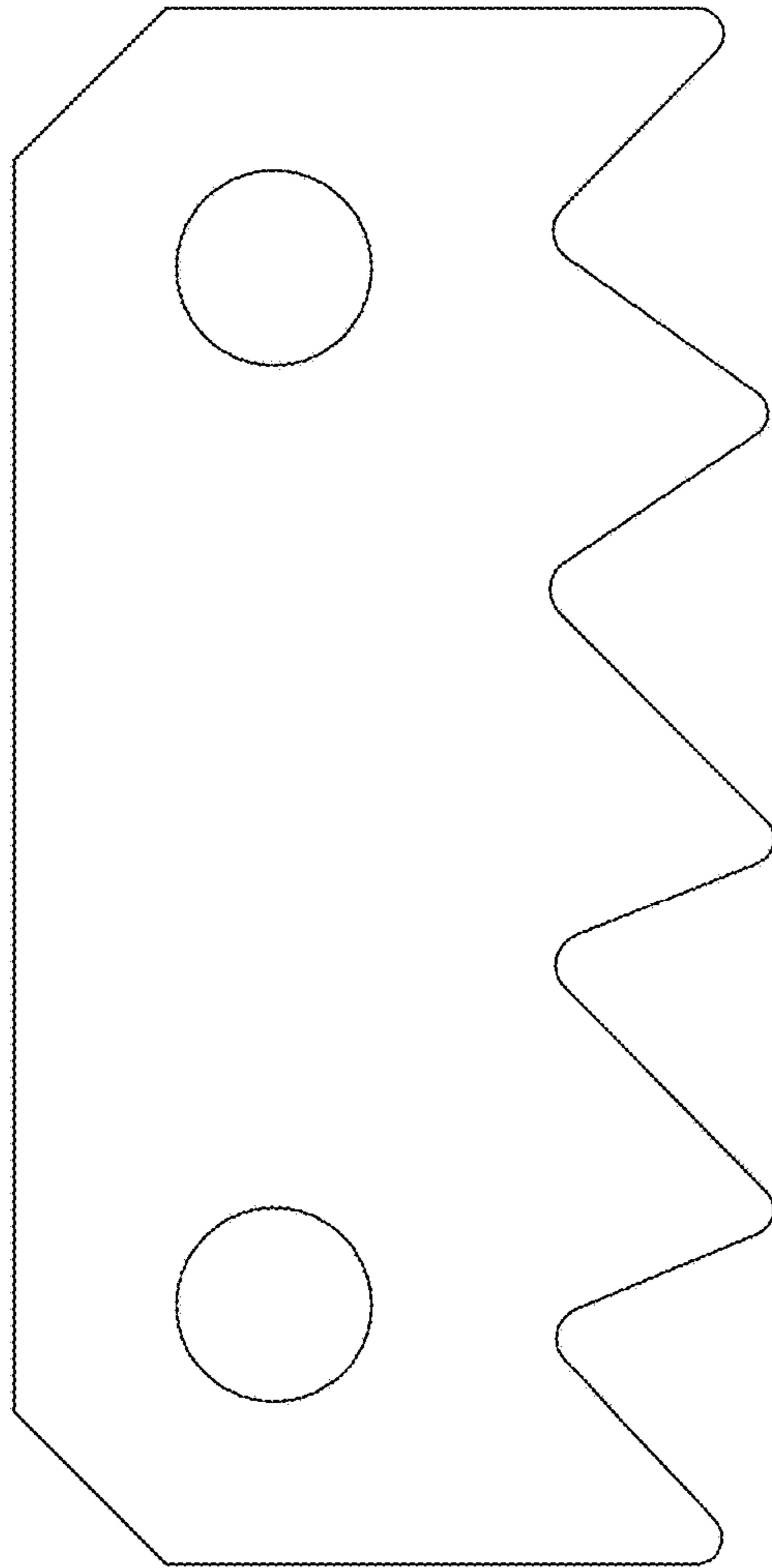


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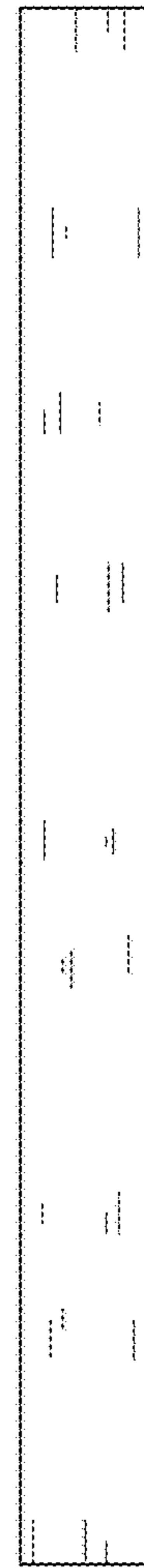


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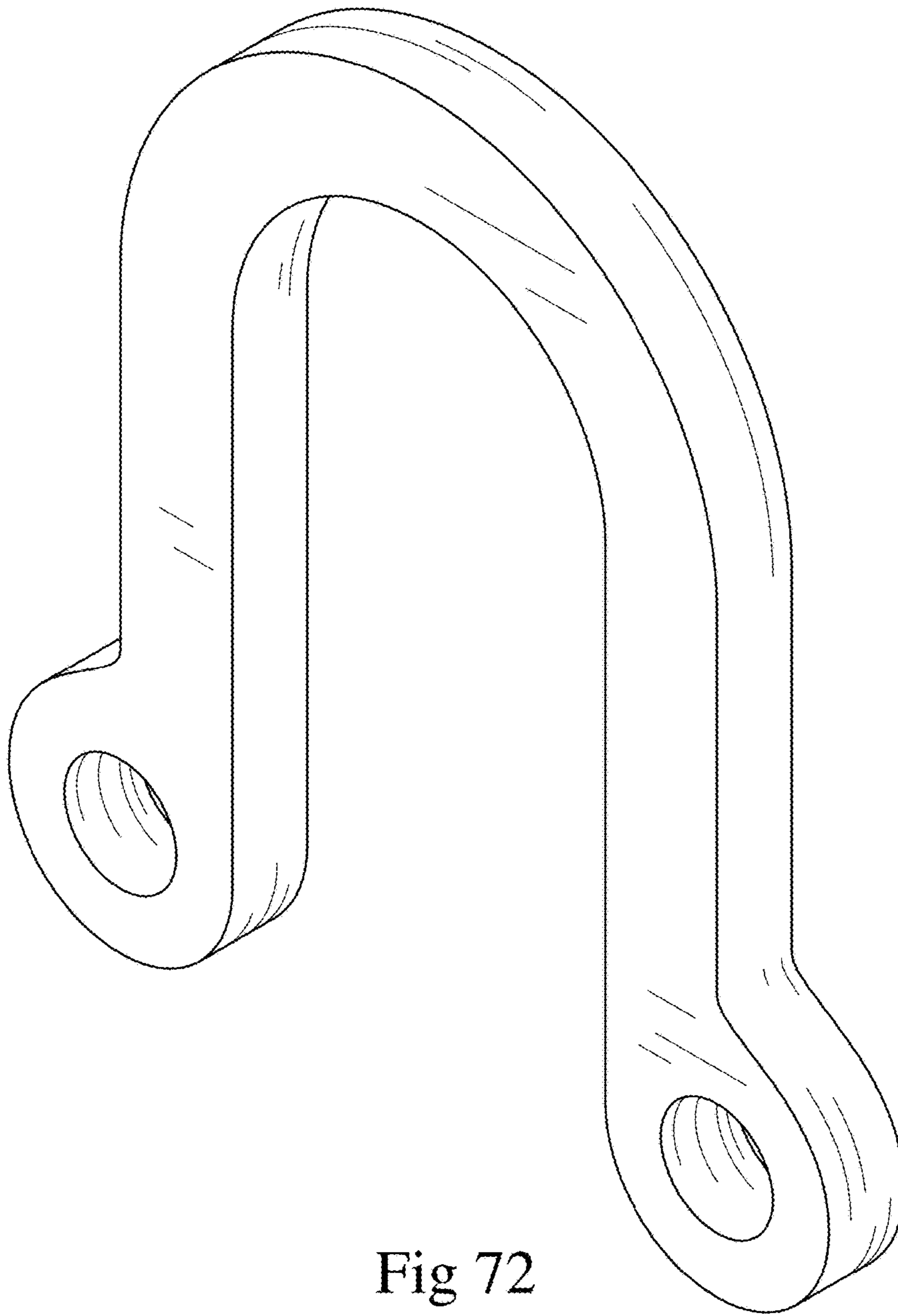


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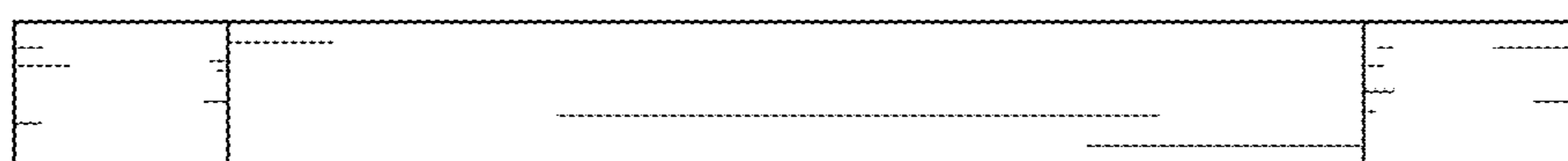


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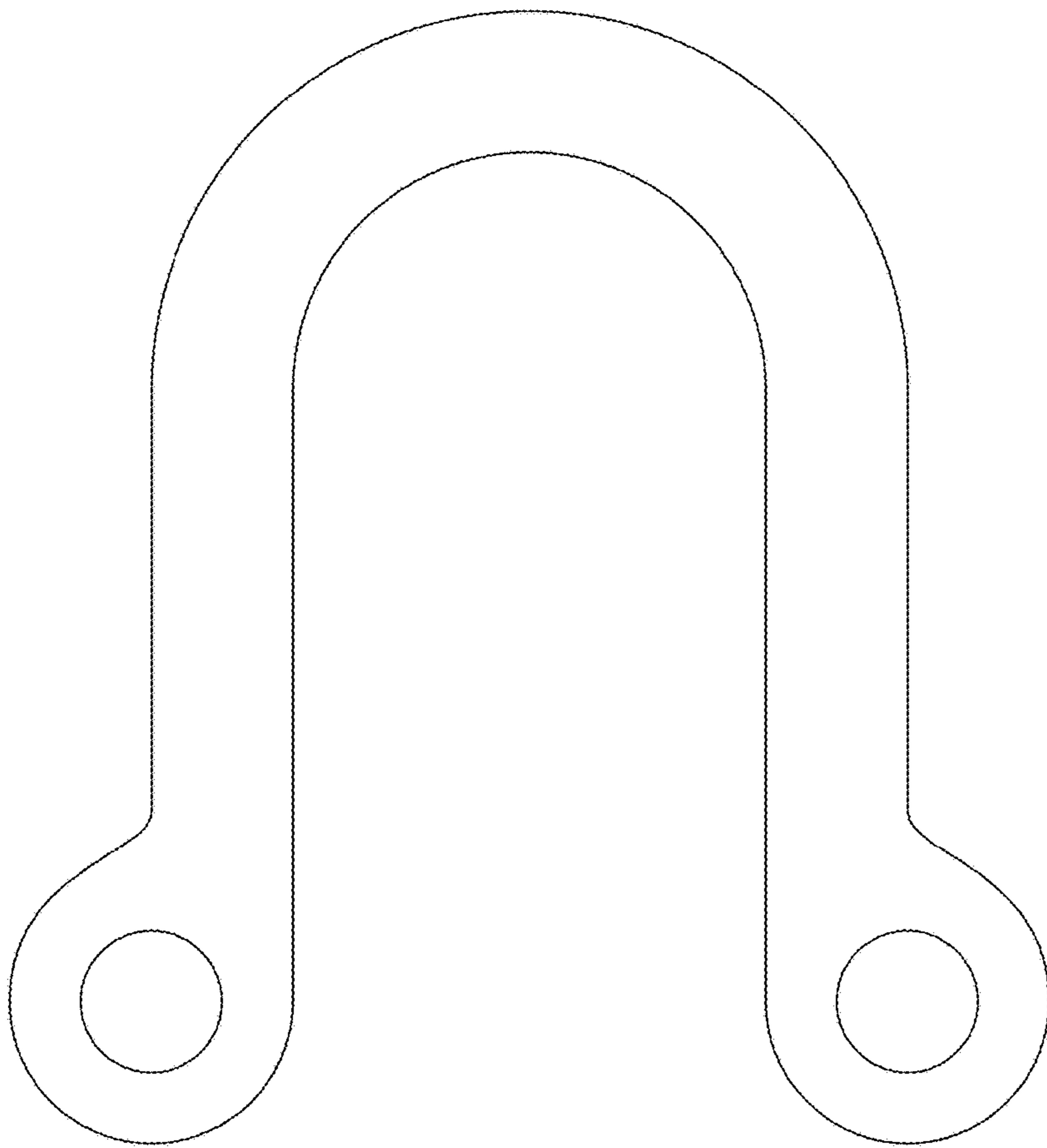


Fig 74



Fig 75

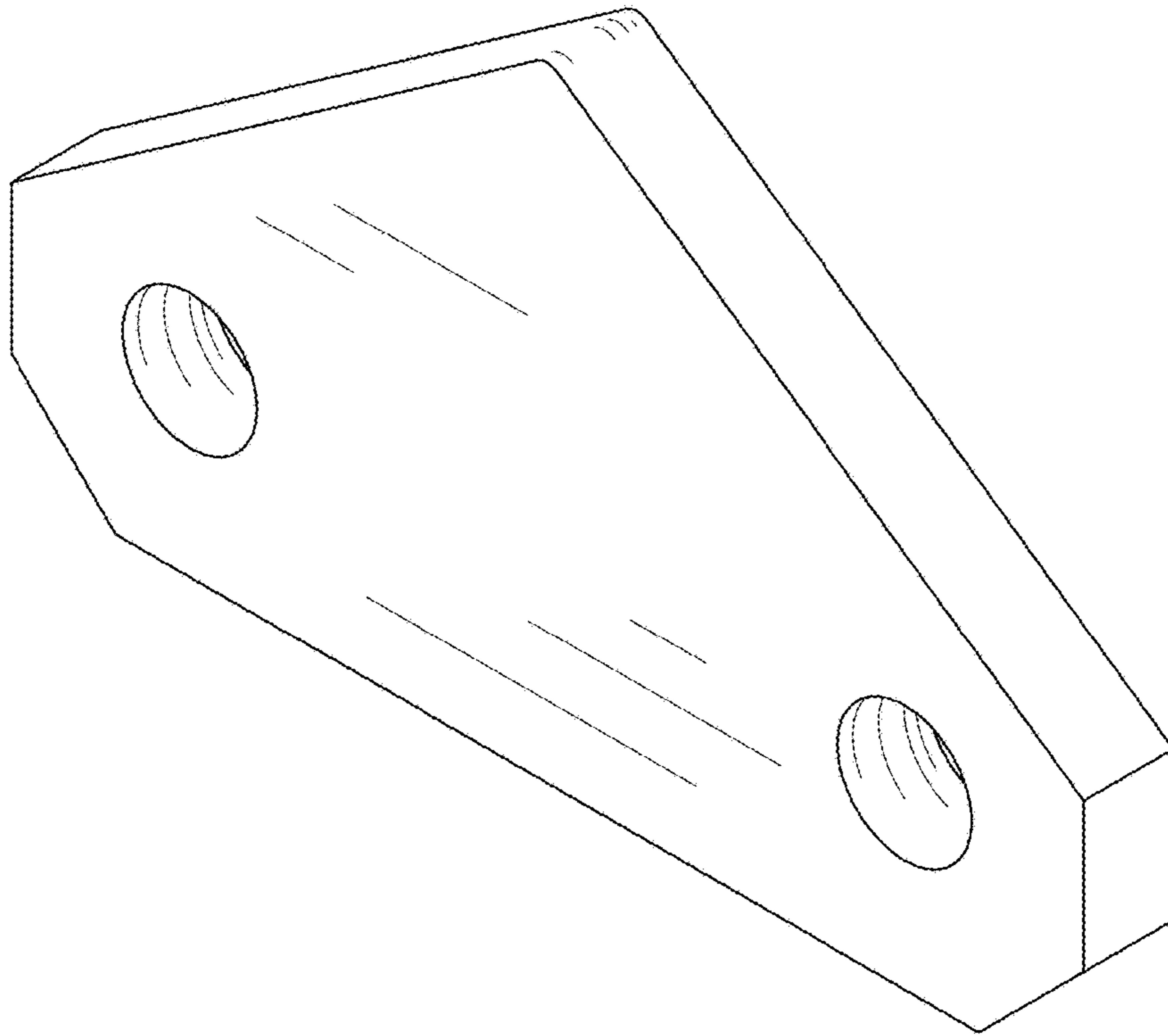


Fig 76



Fig 77

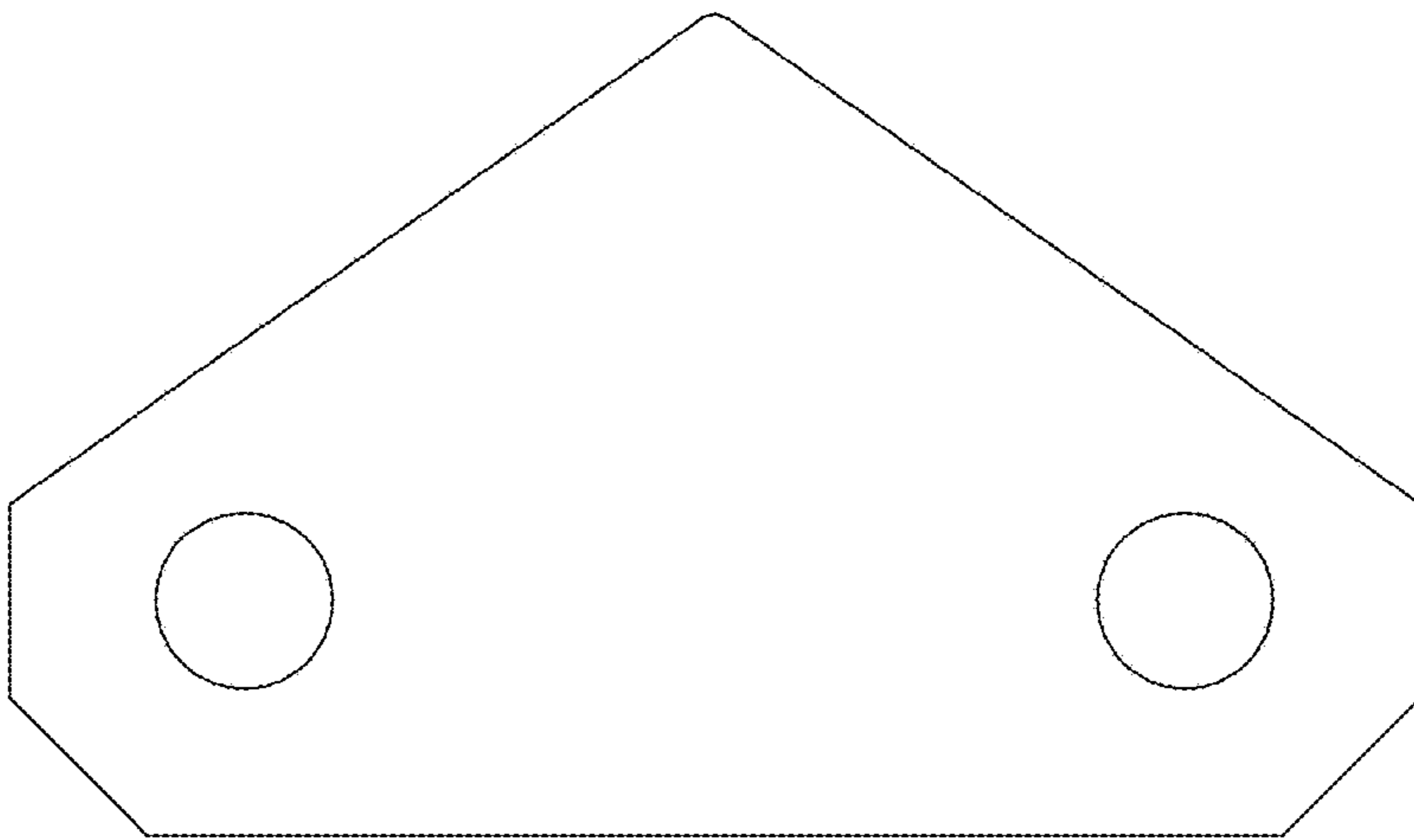


Fig 78



Fig 79

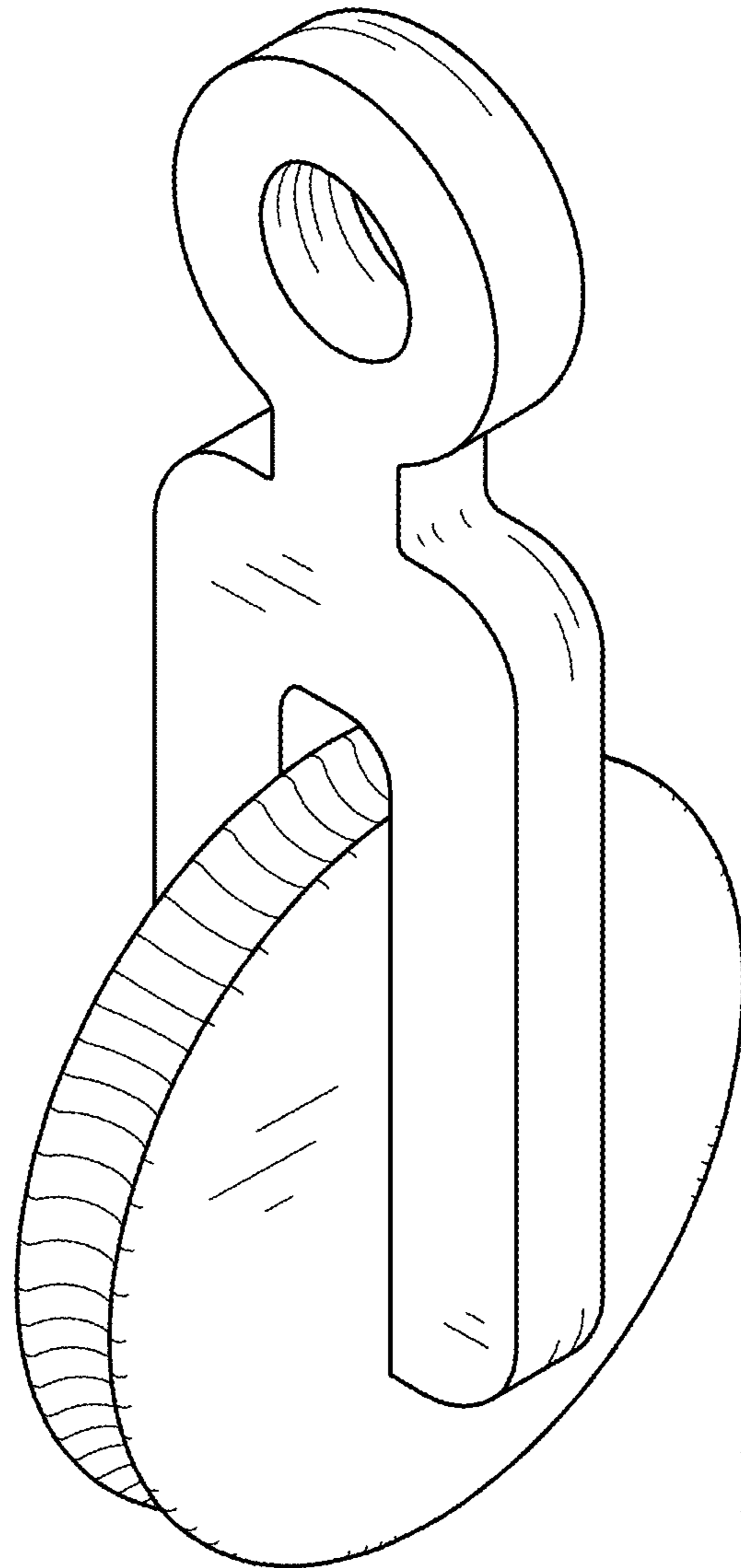


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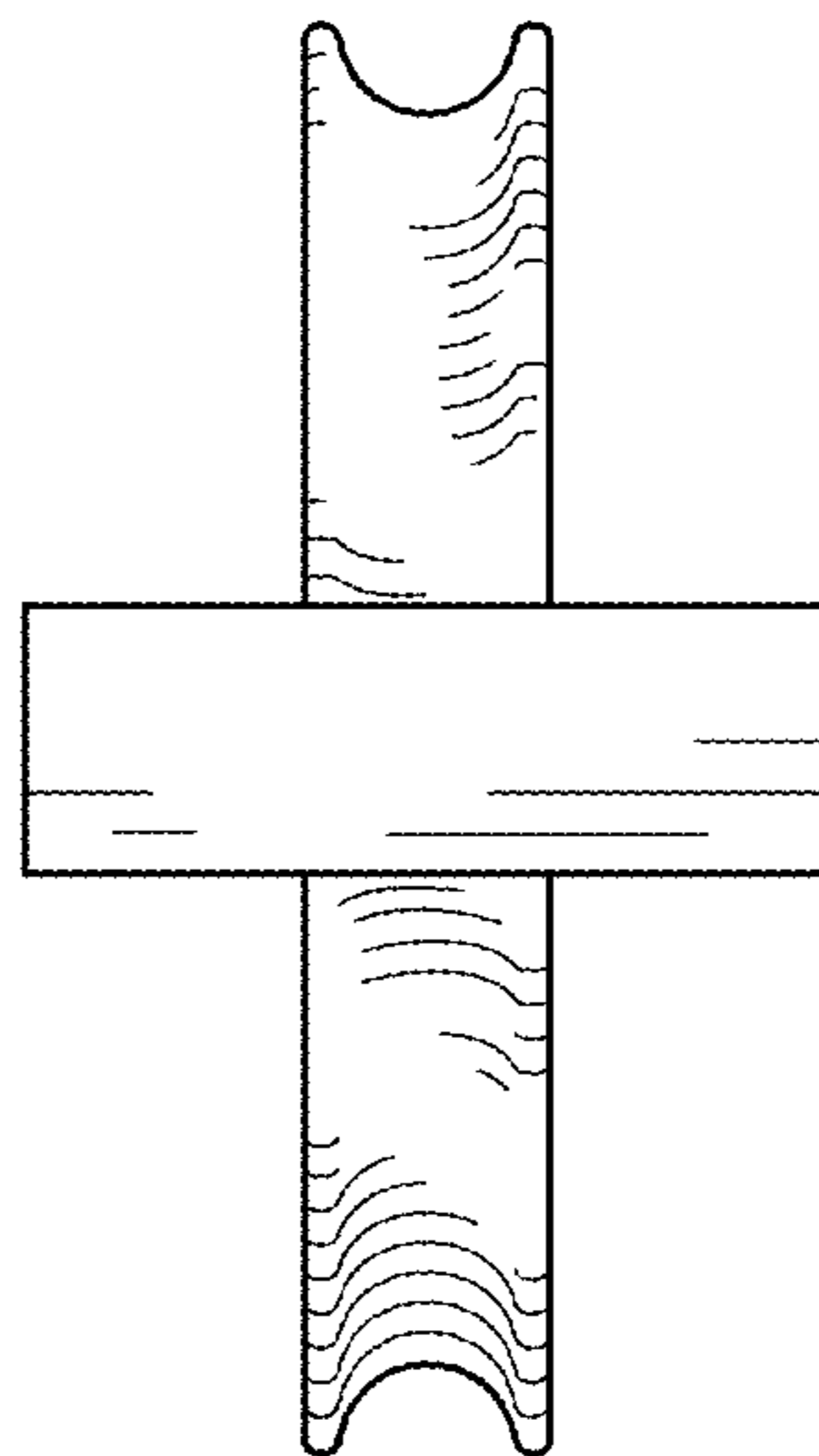


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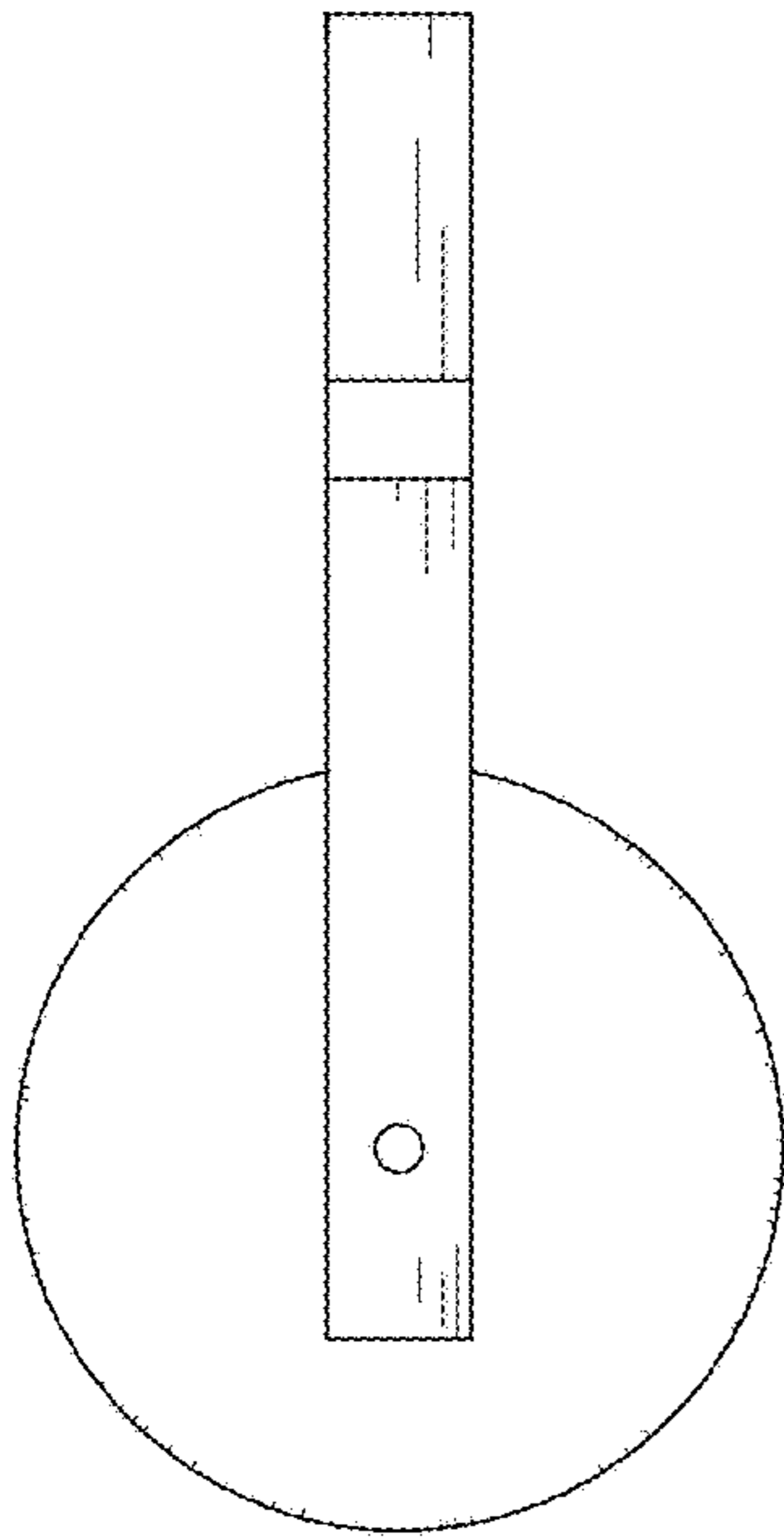


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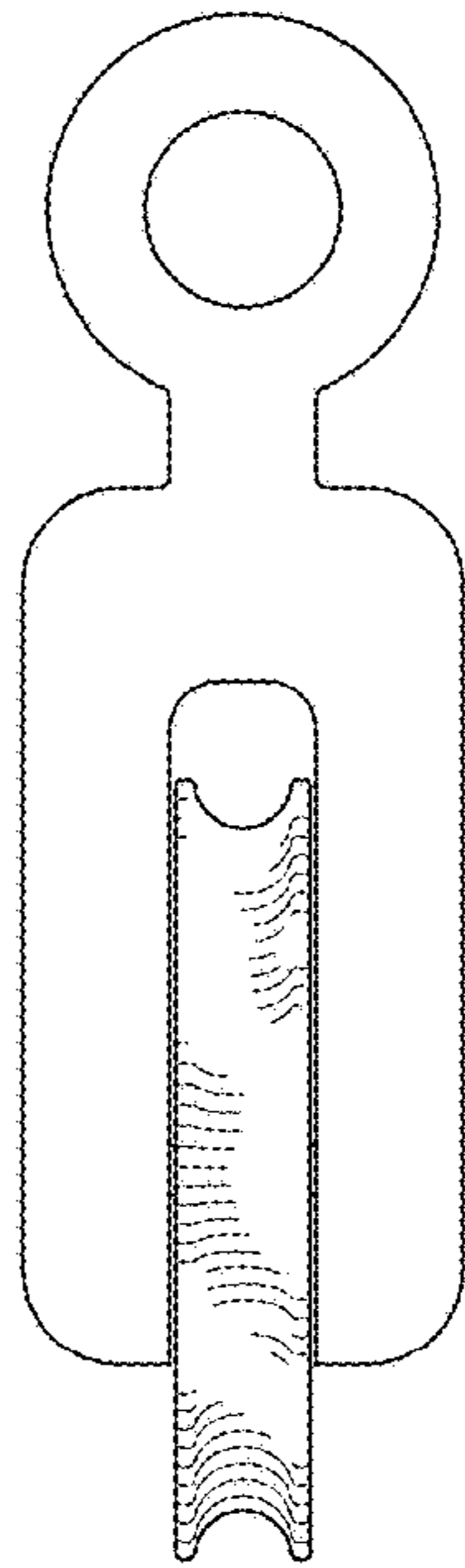


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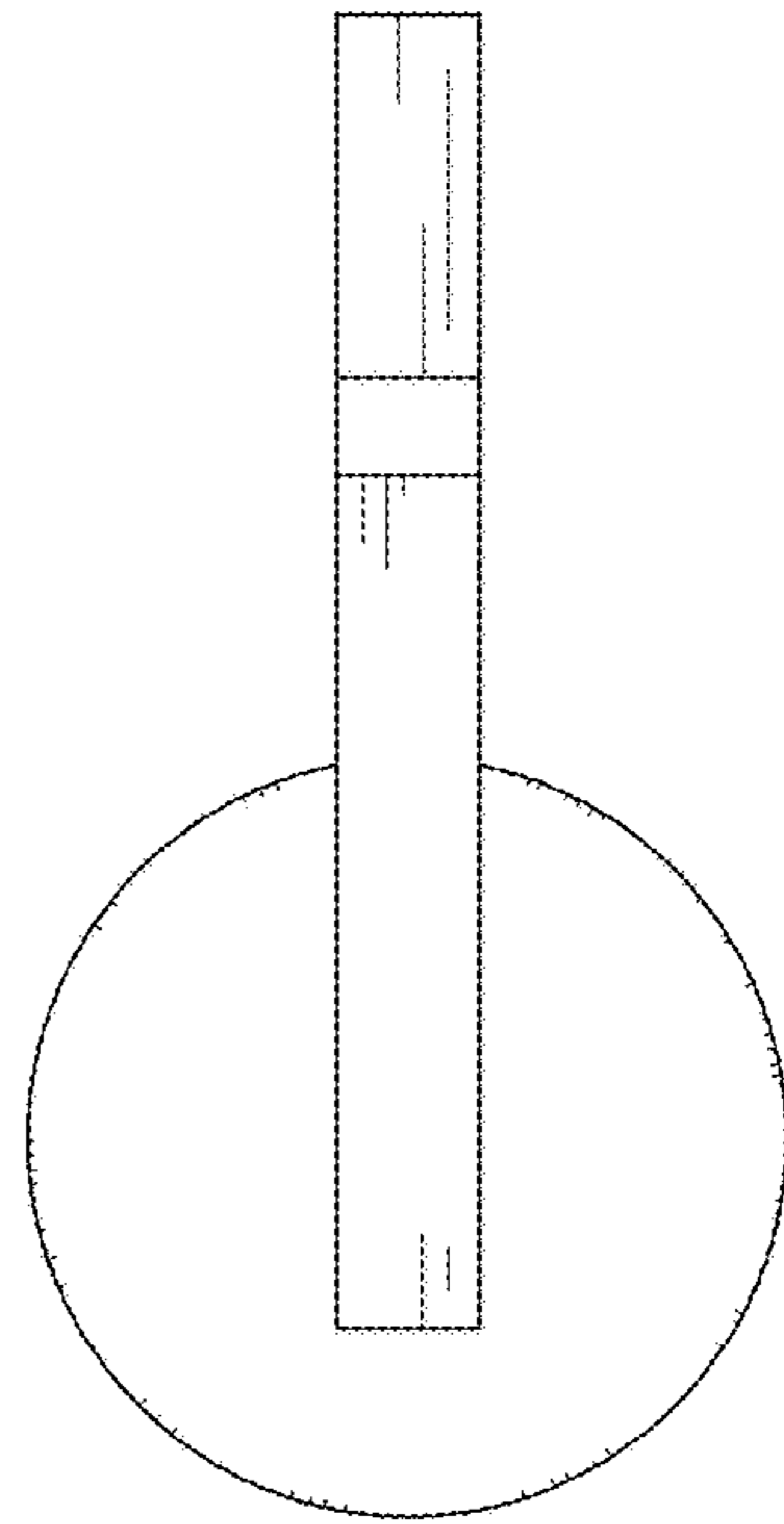


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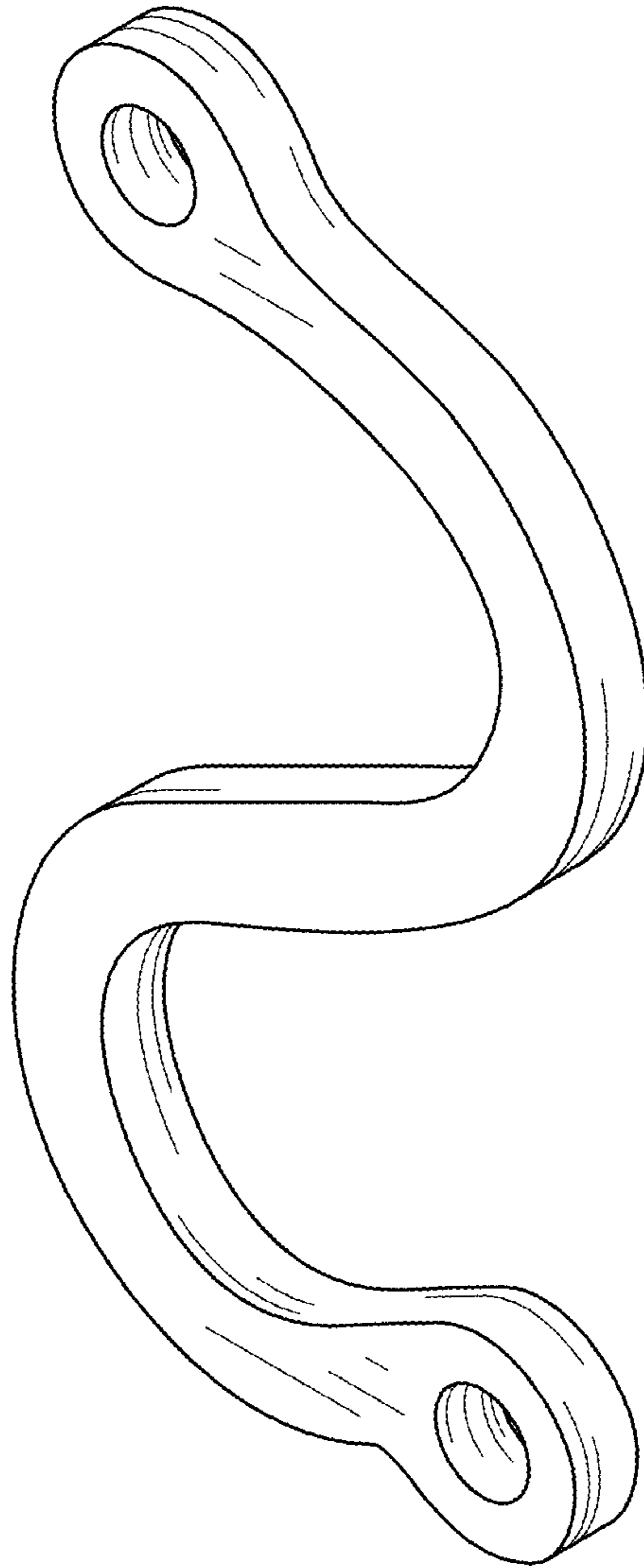


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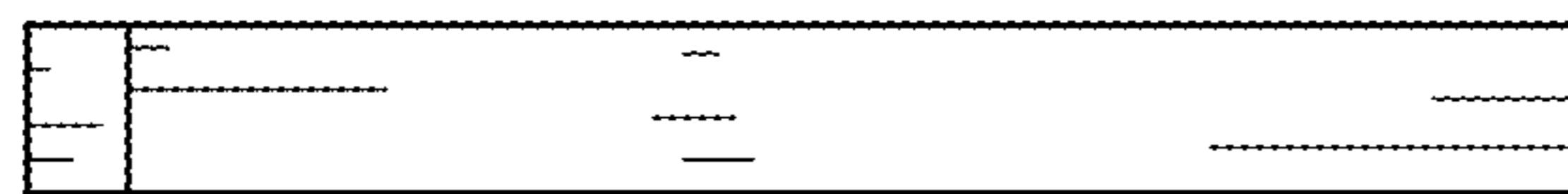


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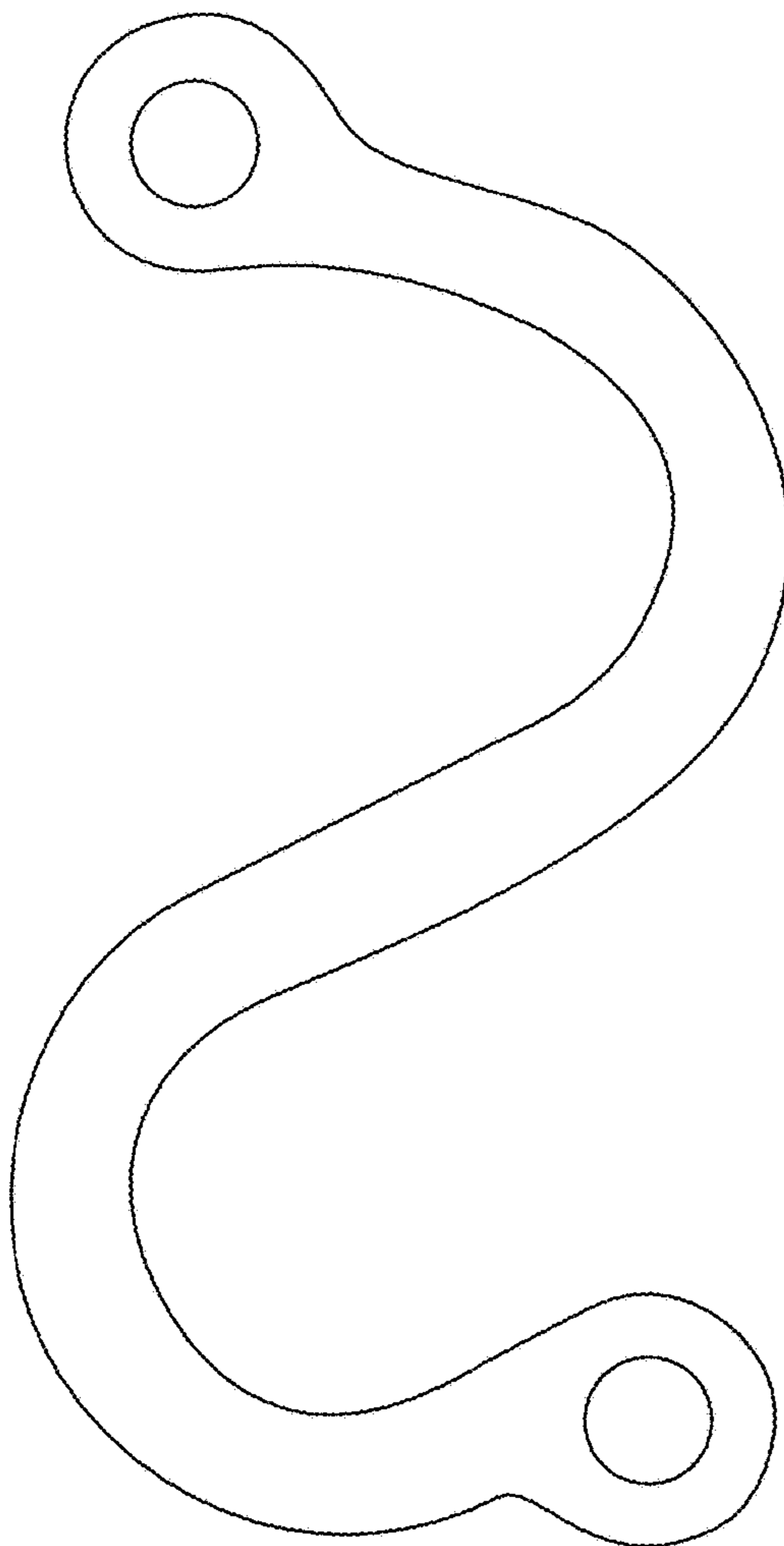


Fig 87



Fig 88



Fig 89

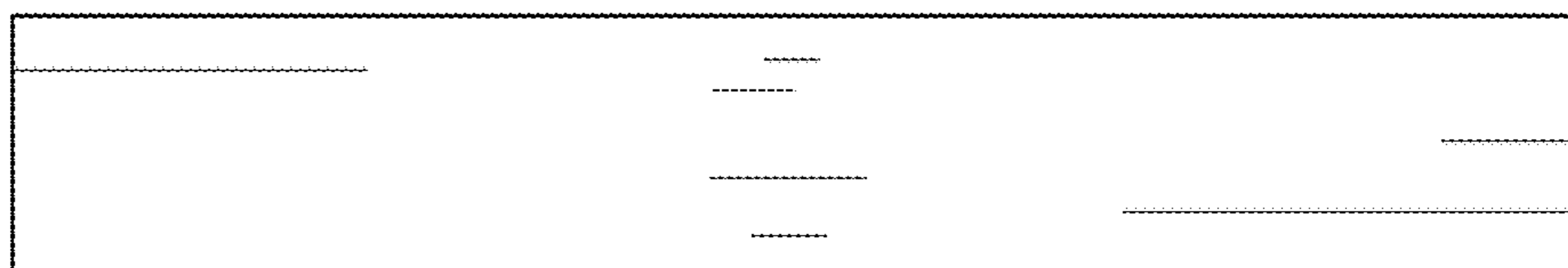


Fig 90



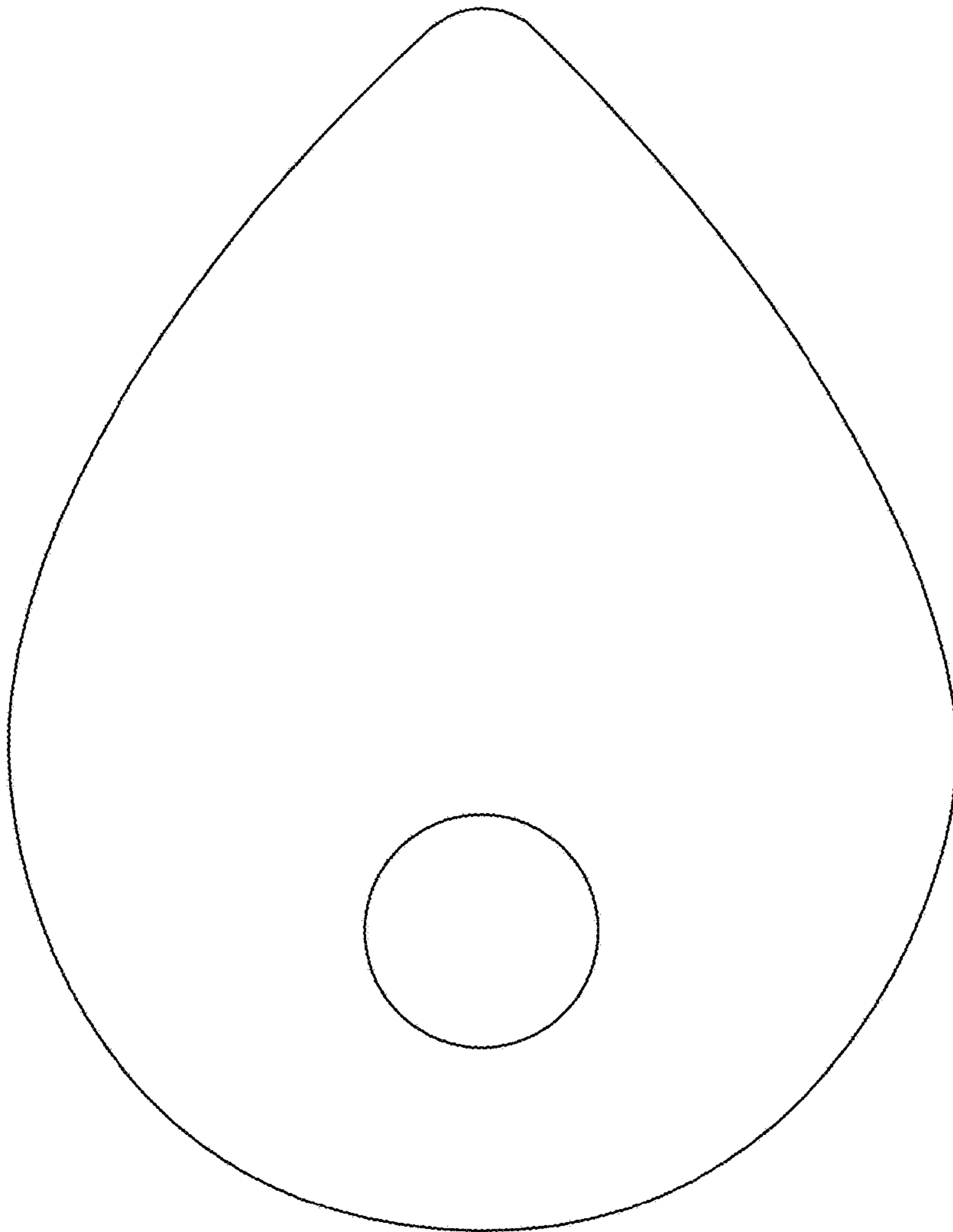


Fig 91

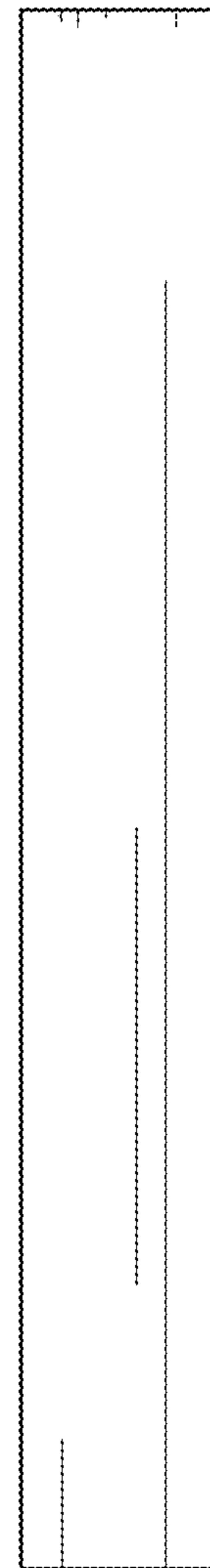


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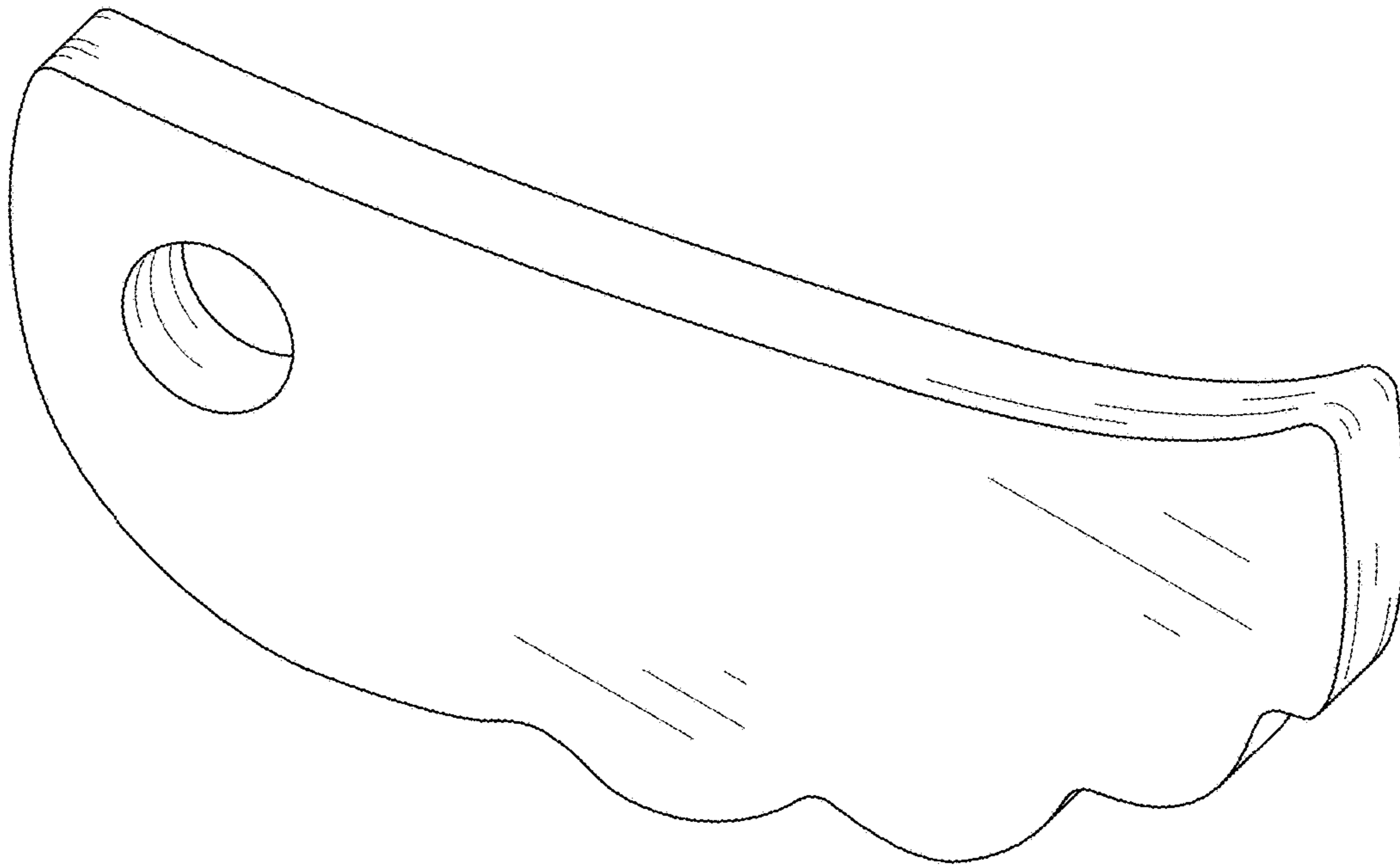


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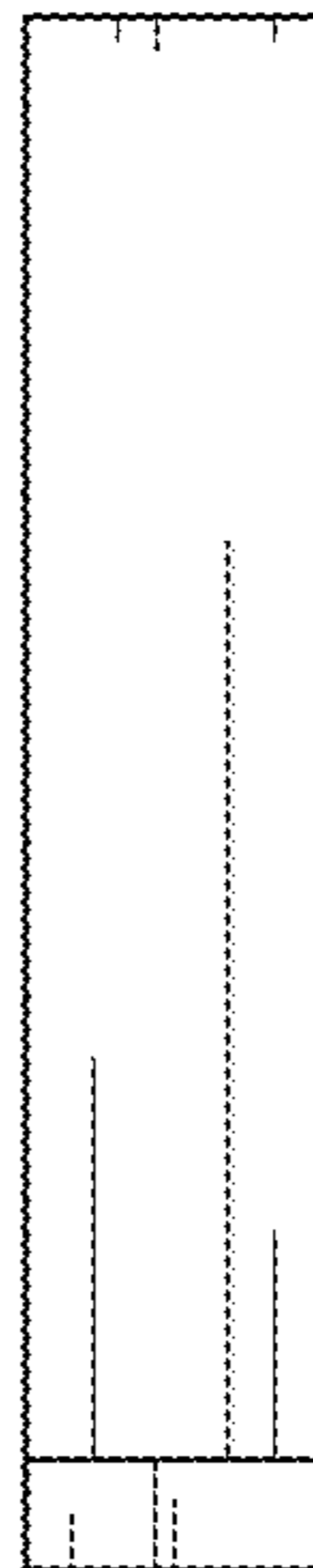


Fig 94

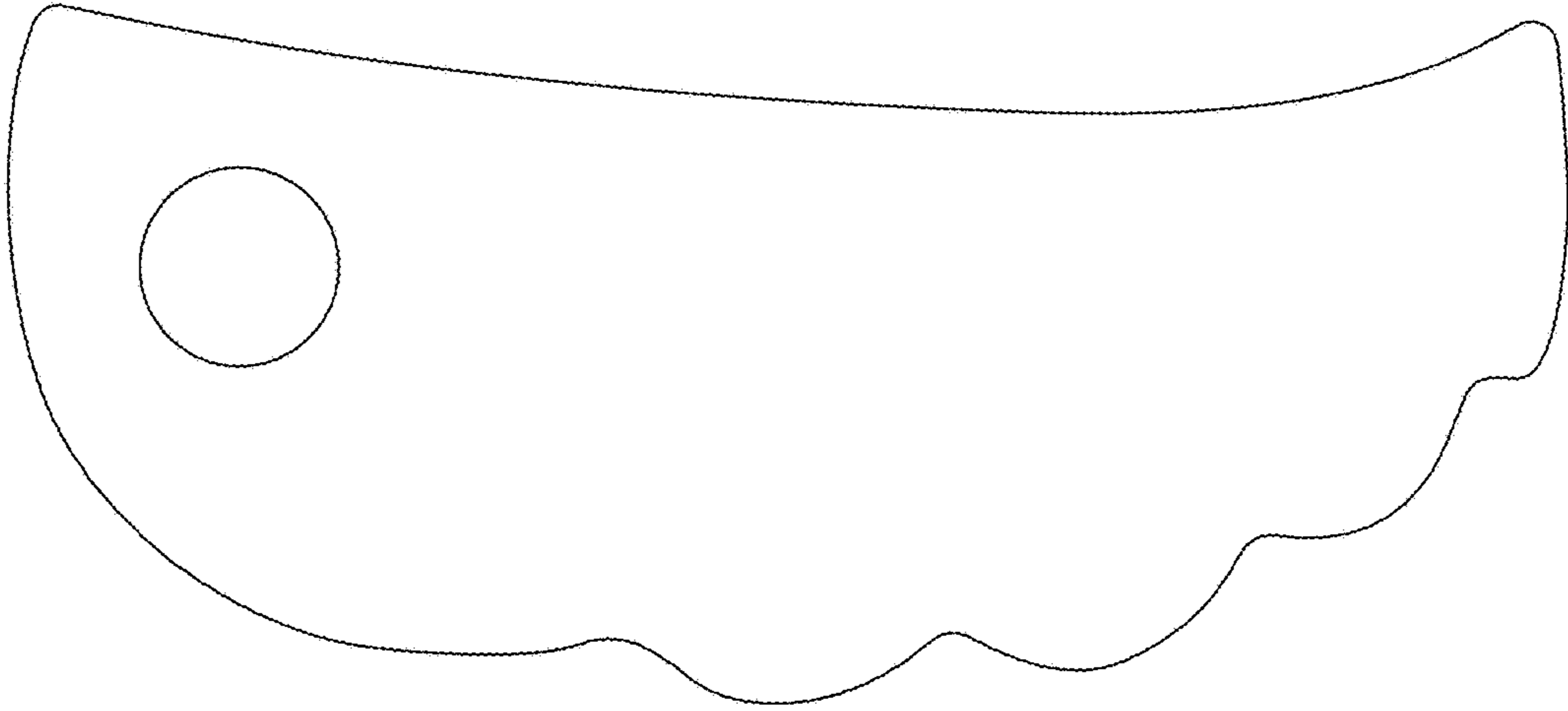


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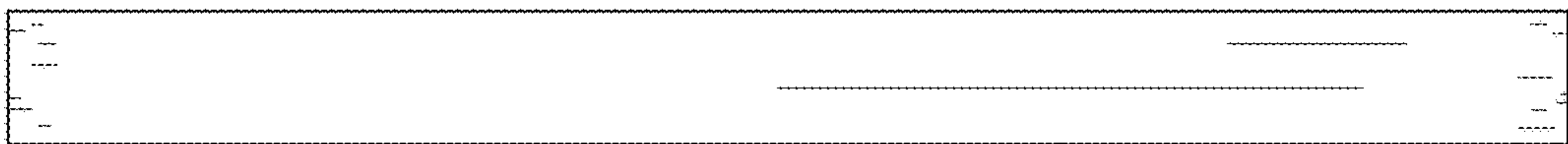


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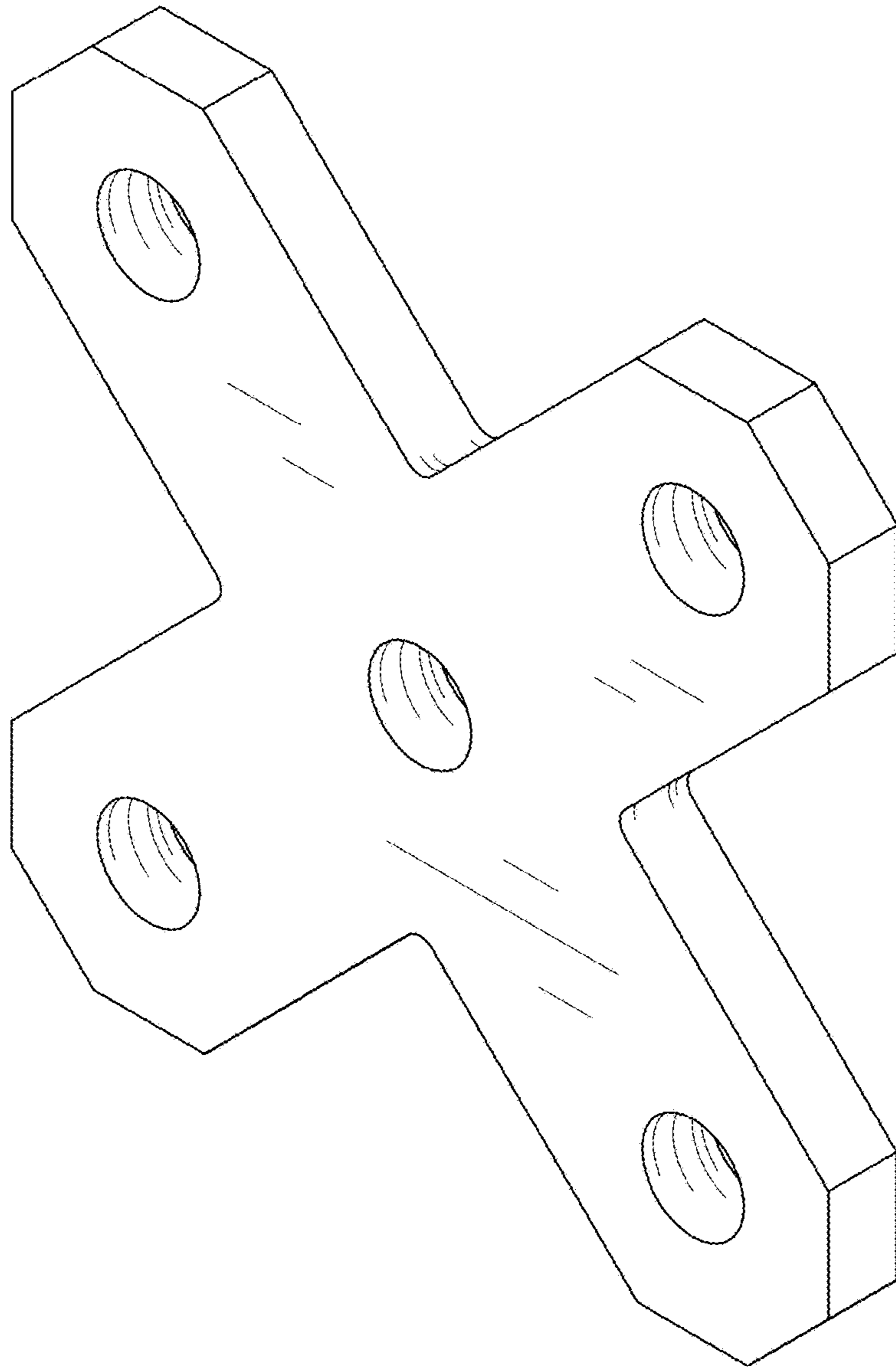


Fig 97



Fig 98

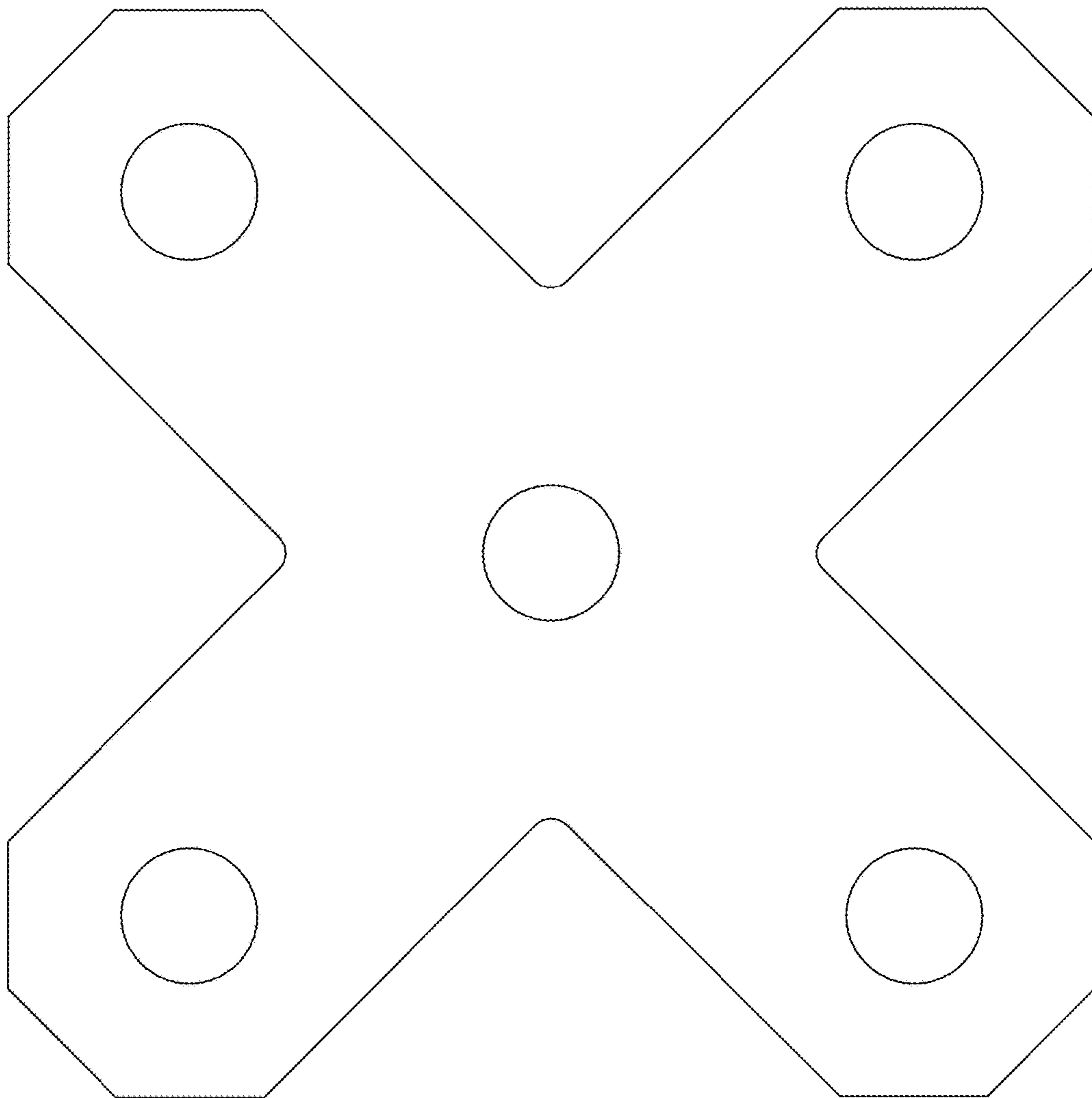


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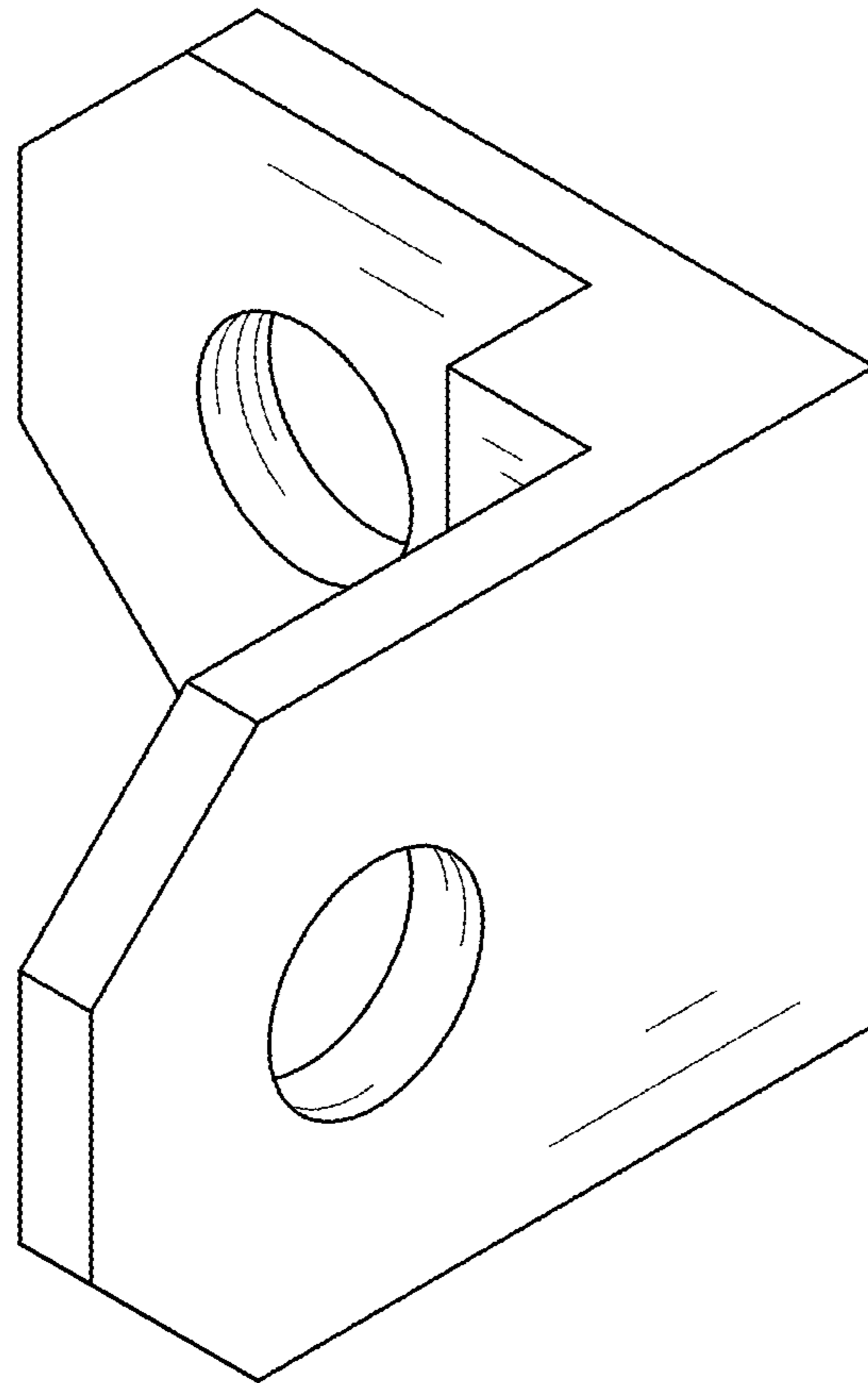


Fig 100

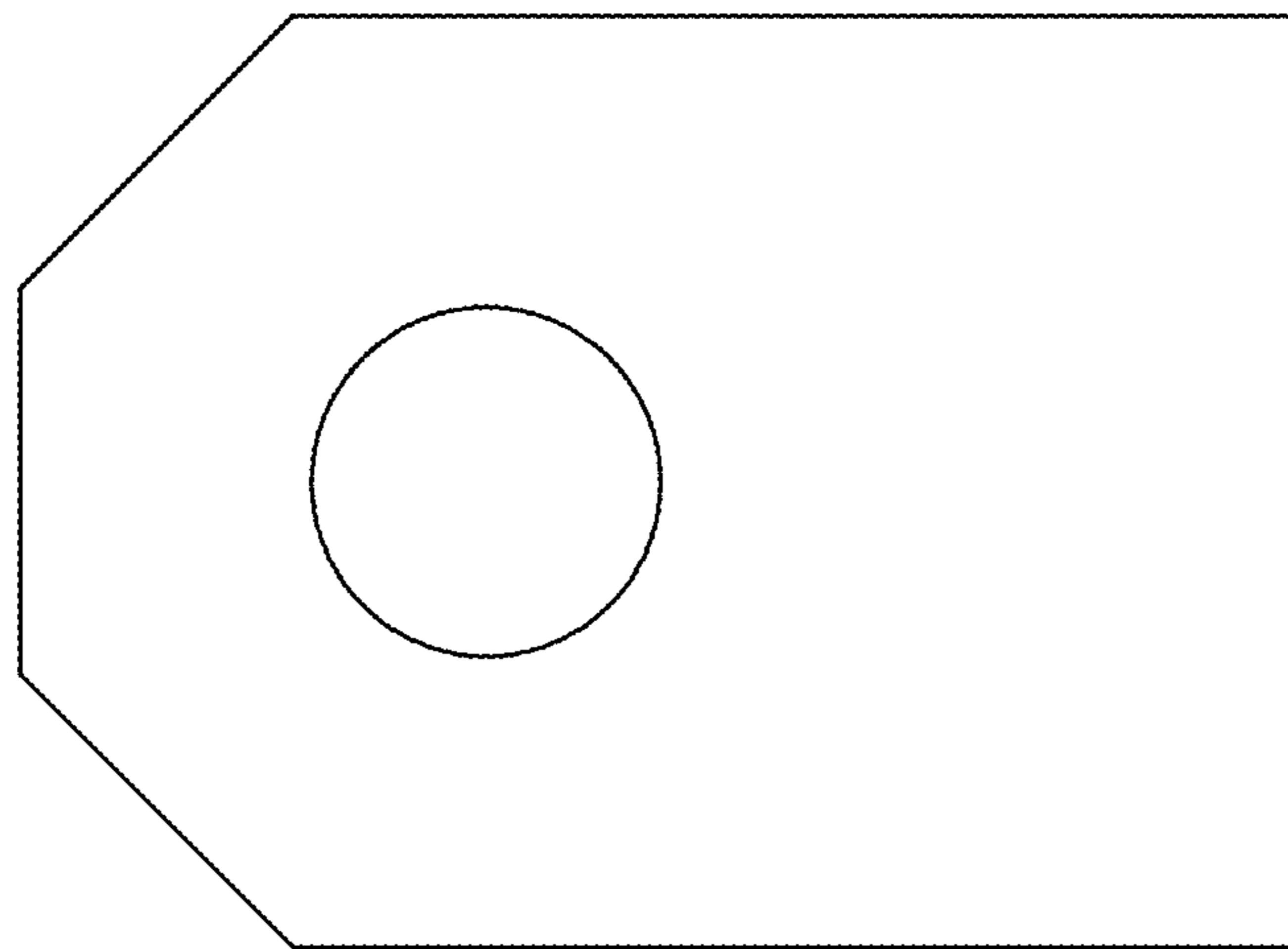


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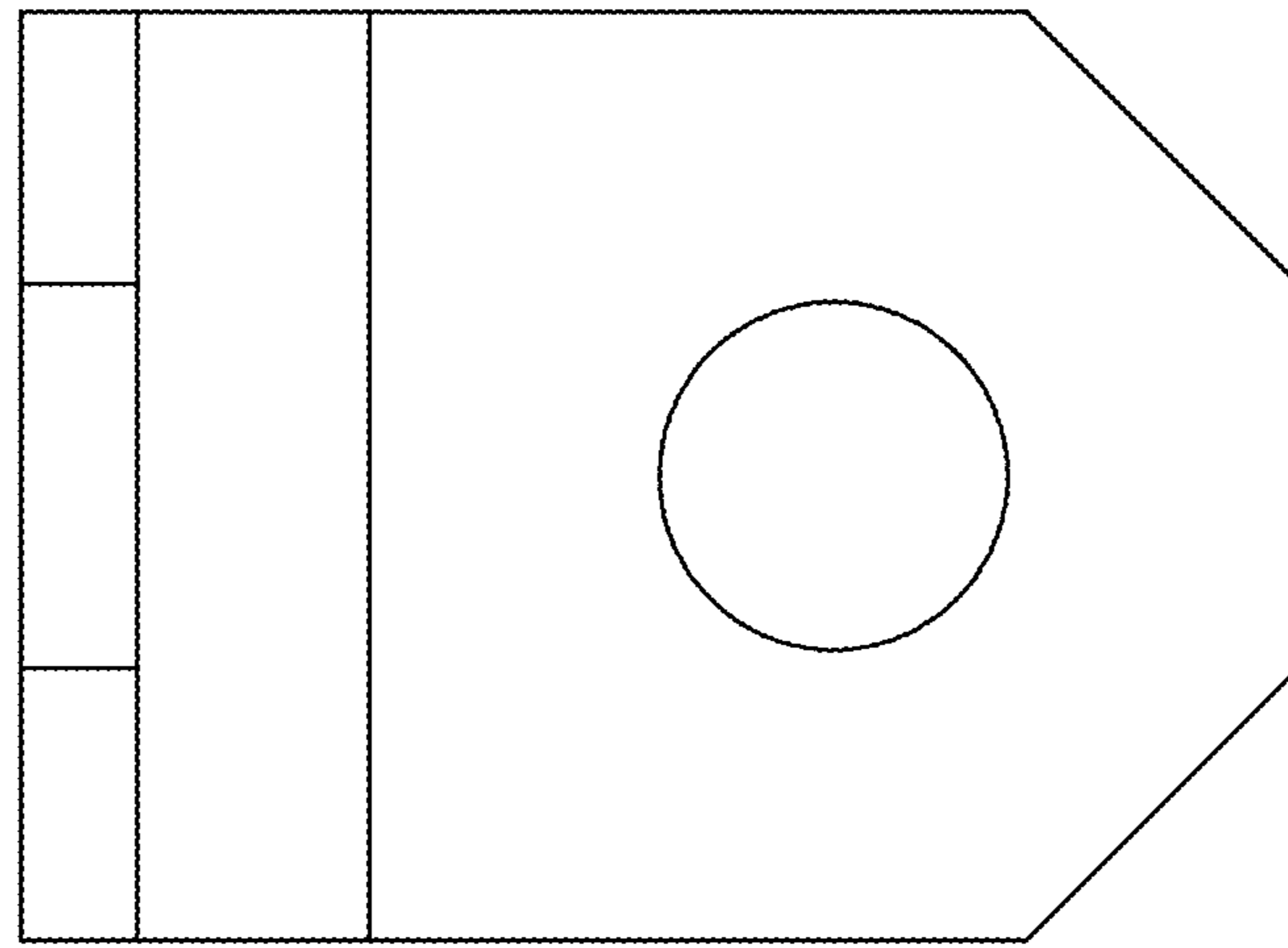


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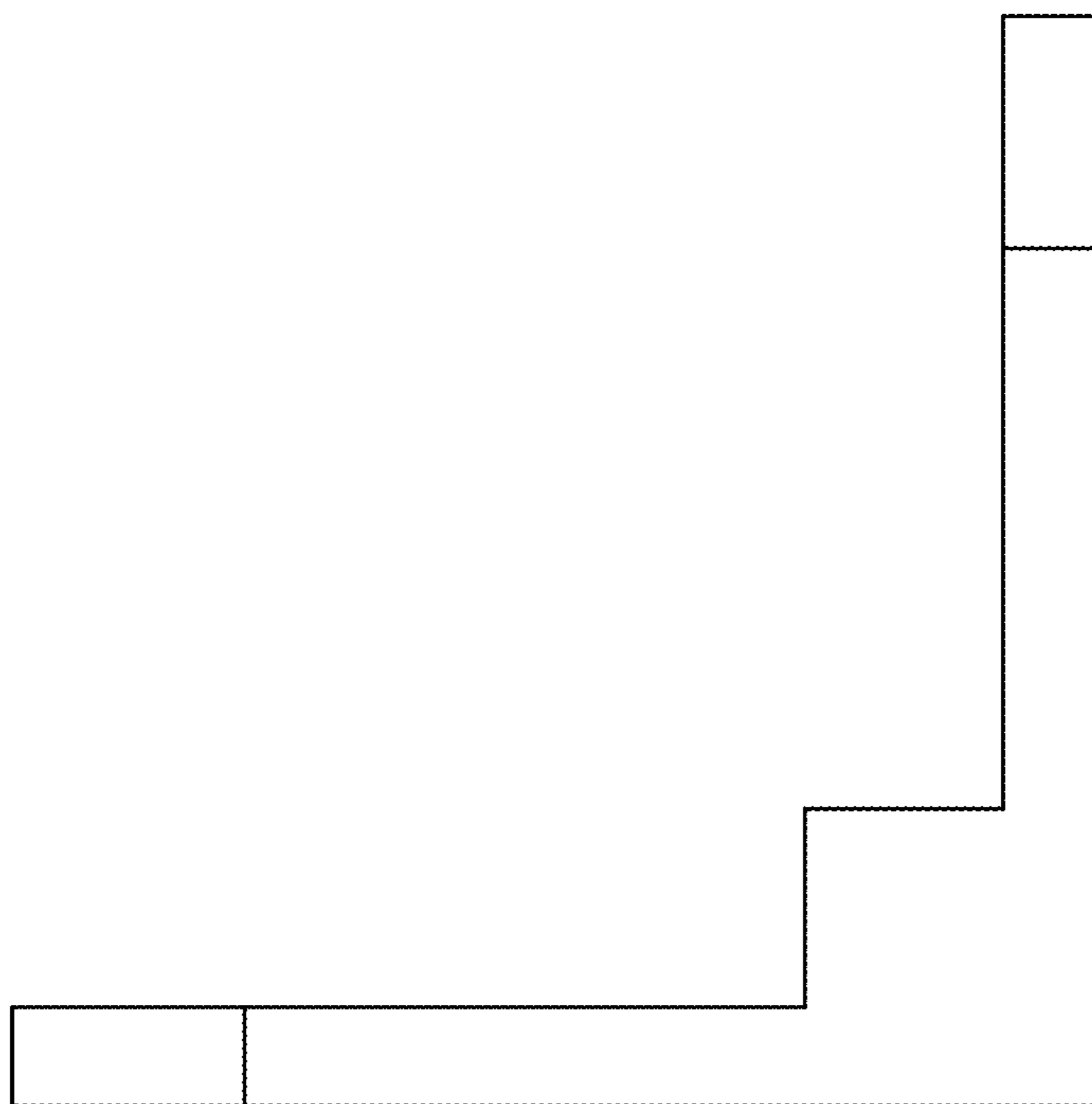


Fig 103

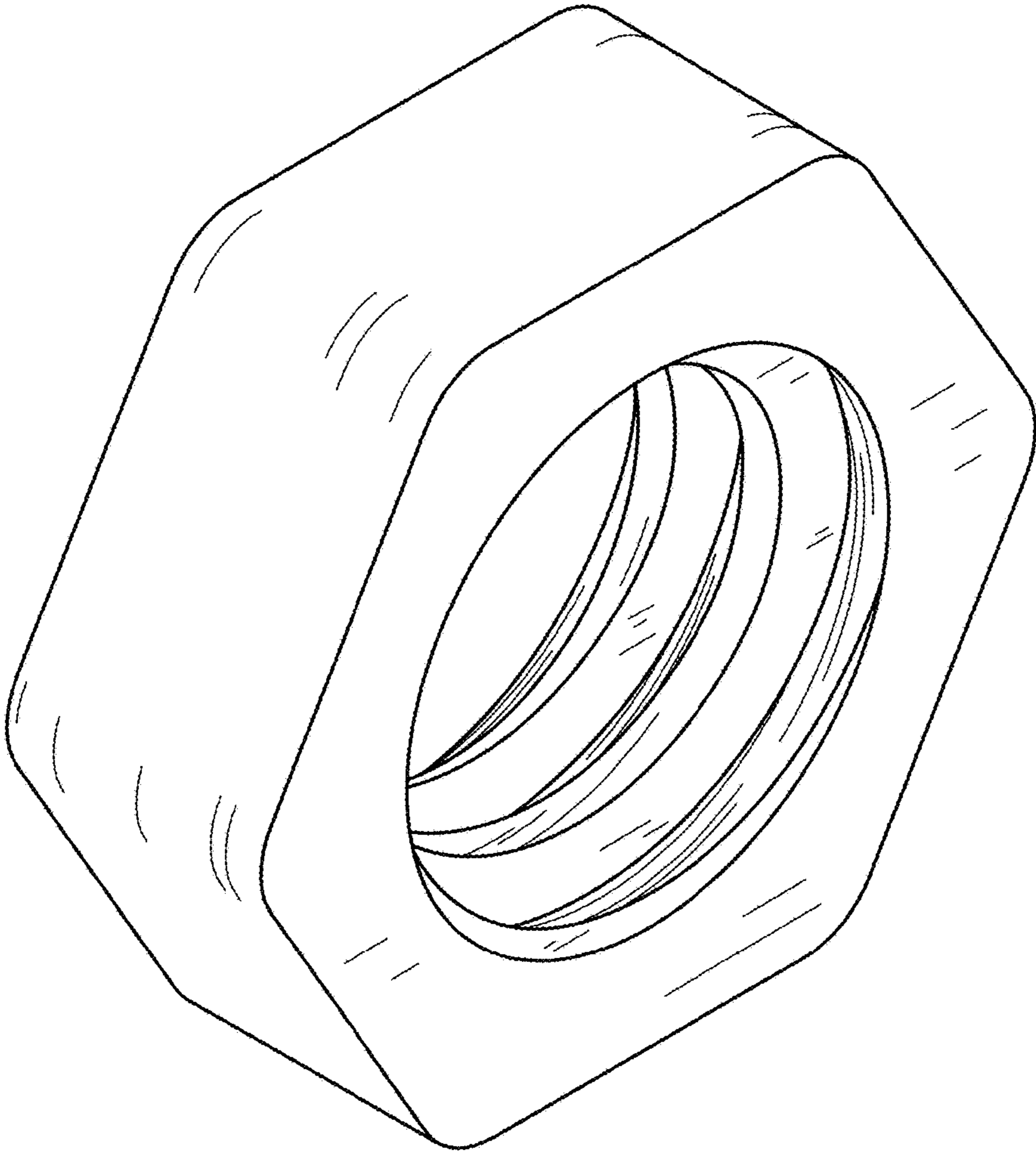


Fig 104



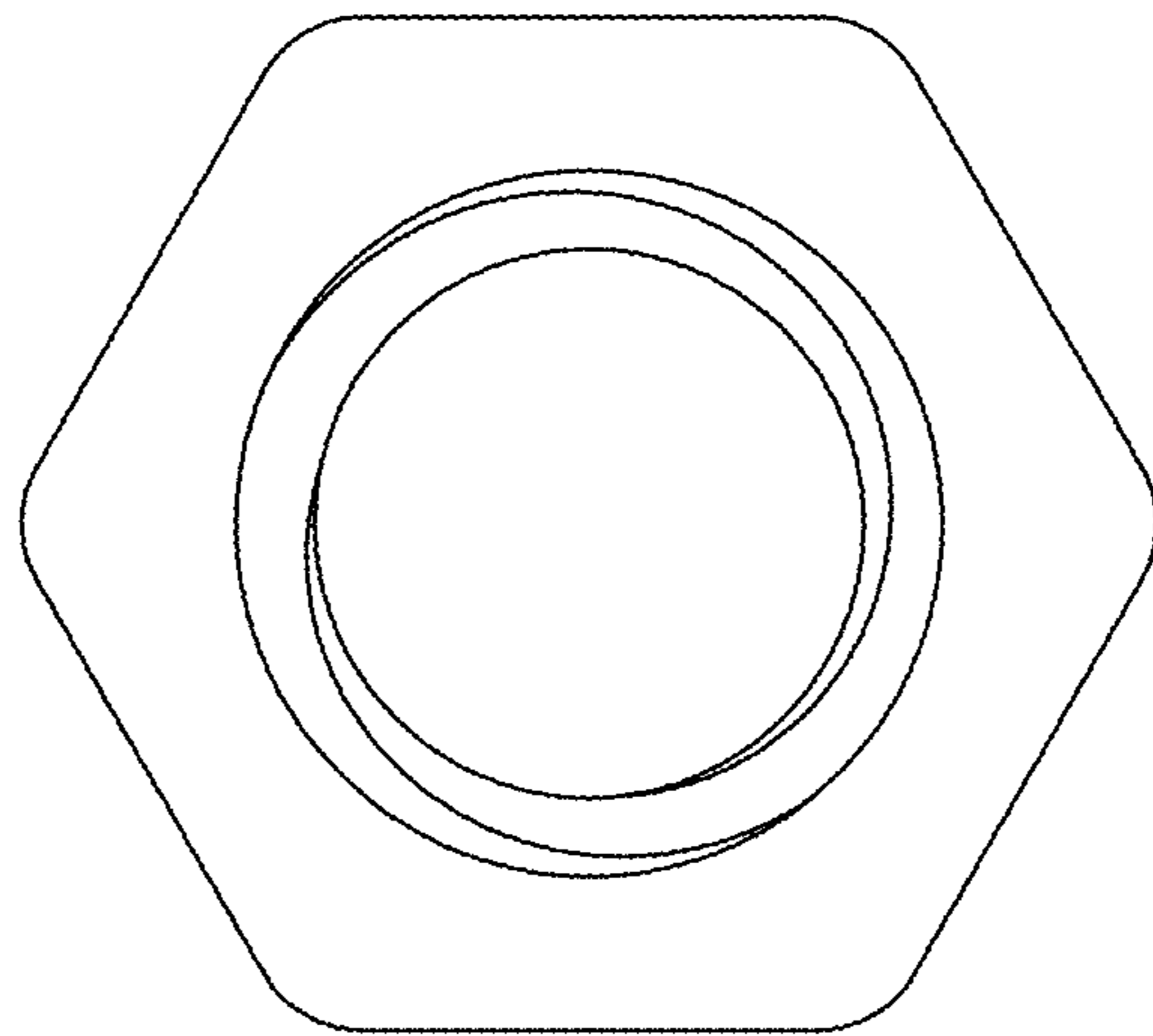


Fig 105



Fig 106

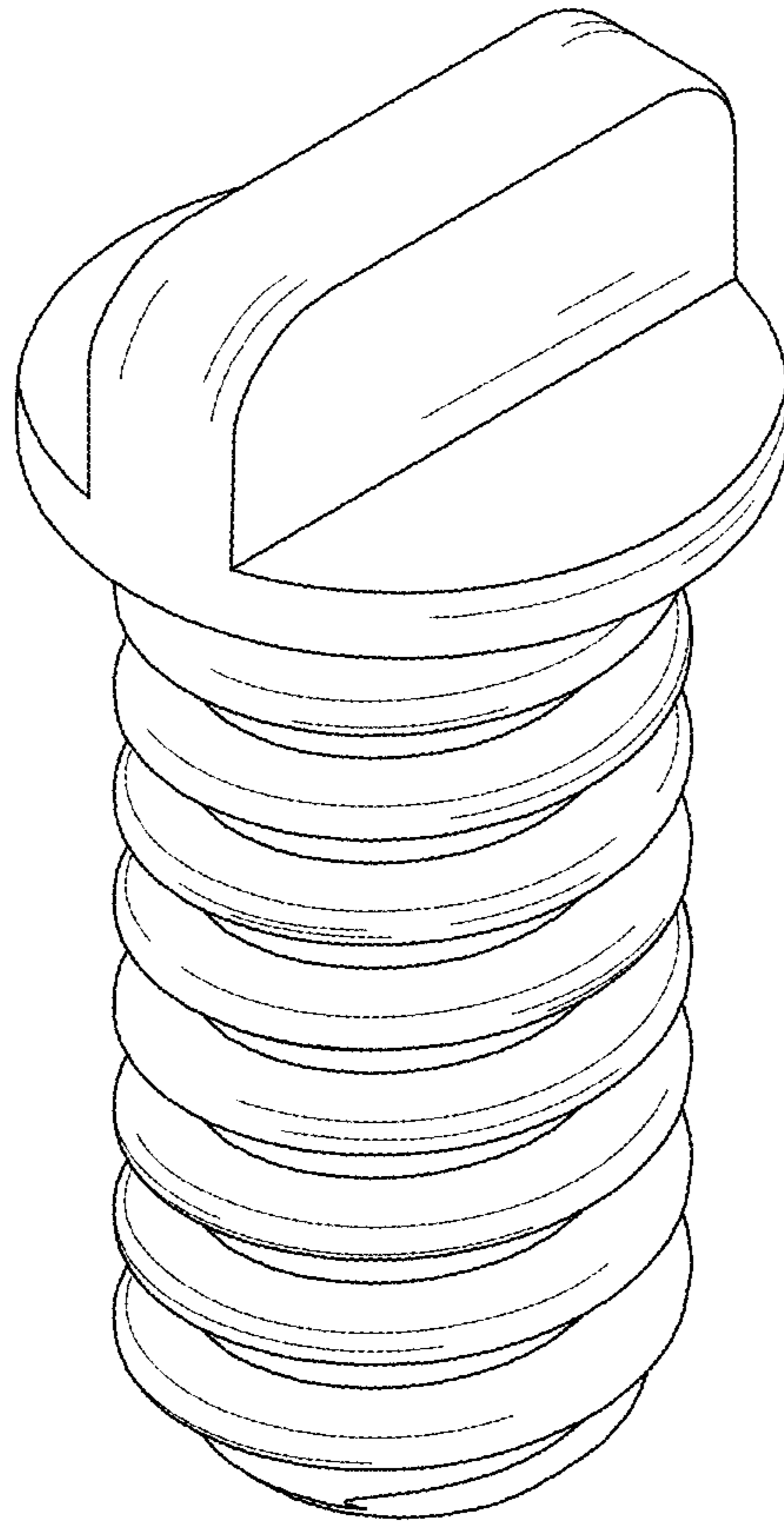


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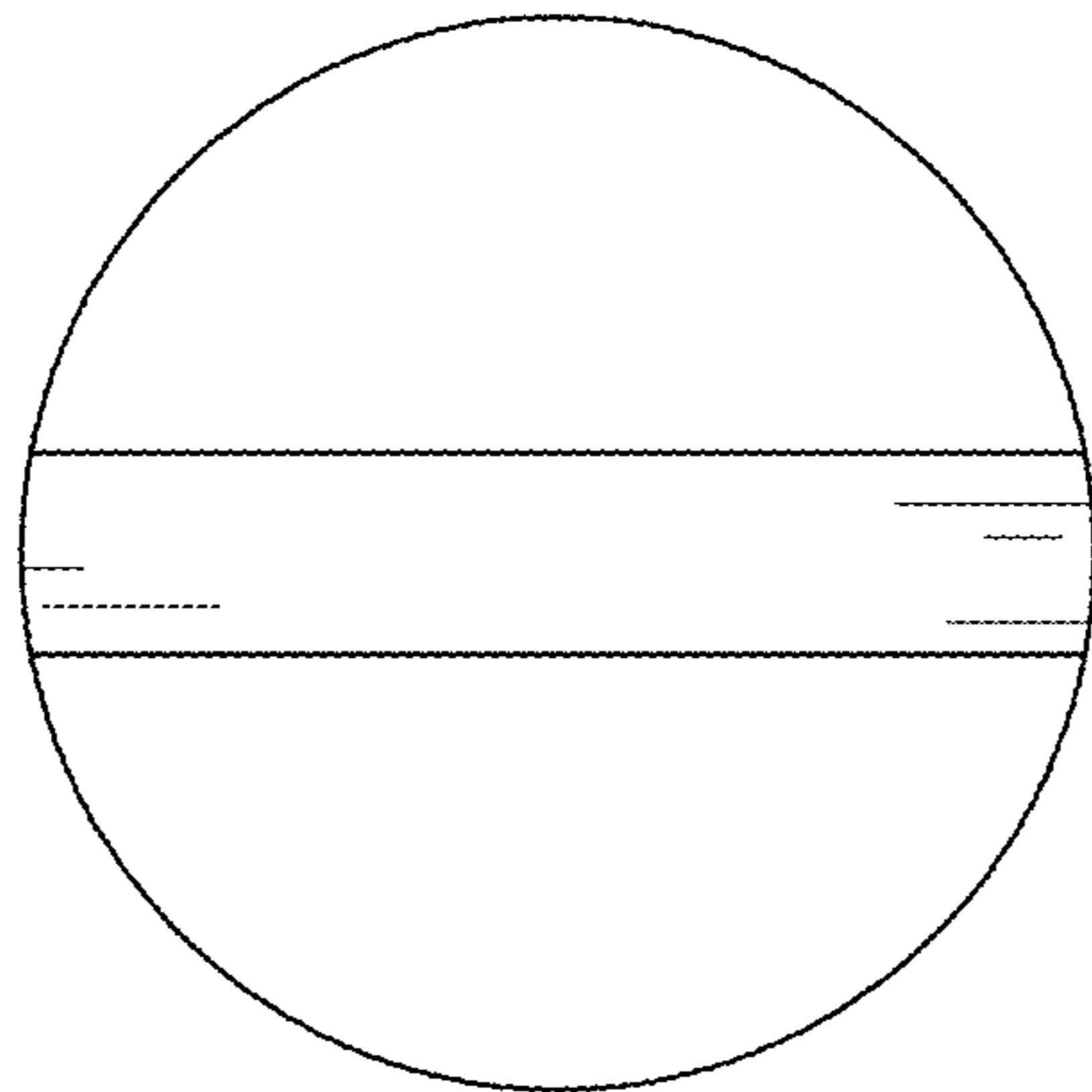


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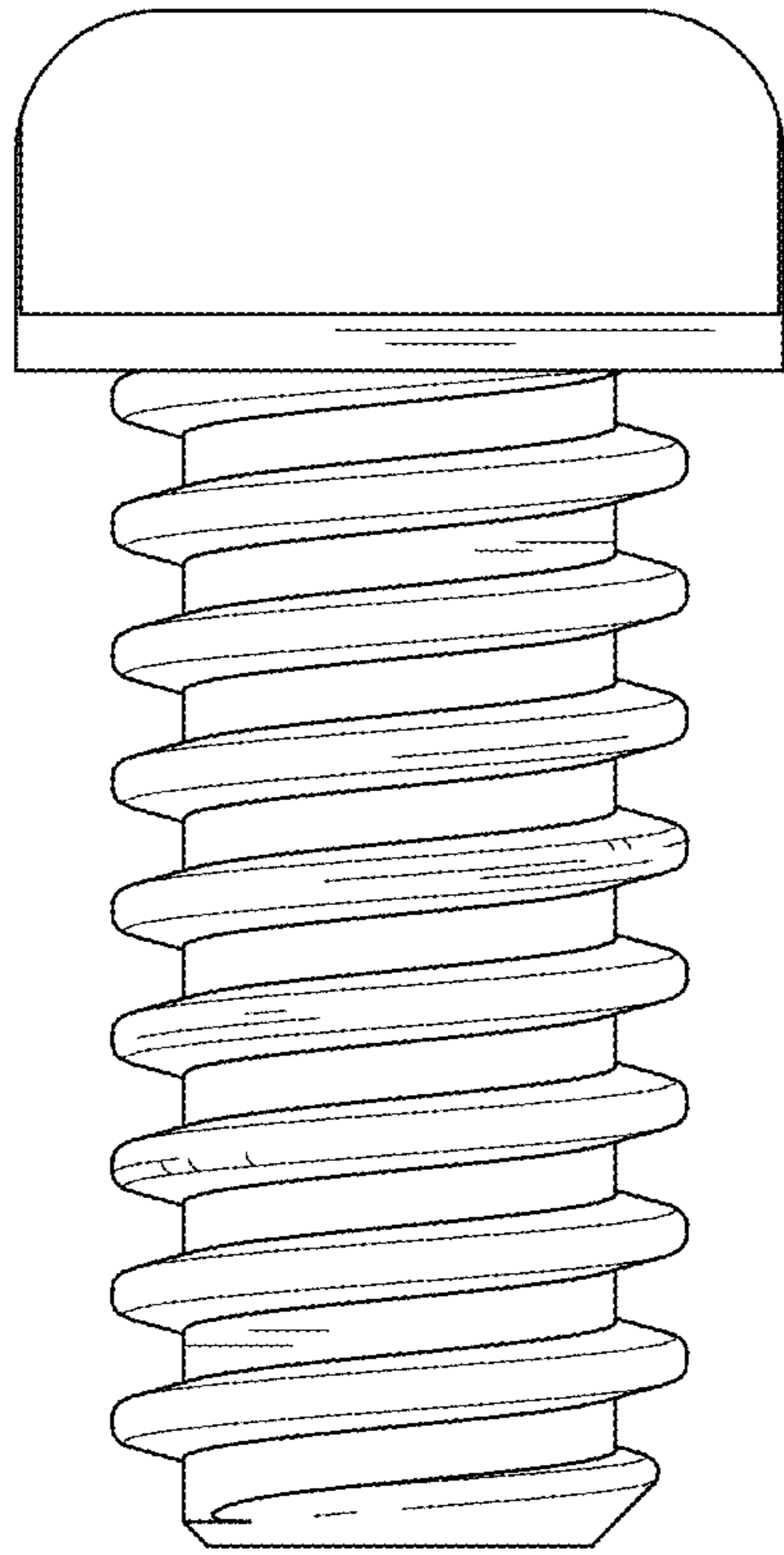


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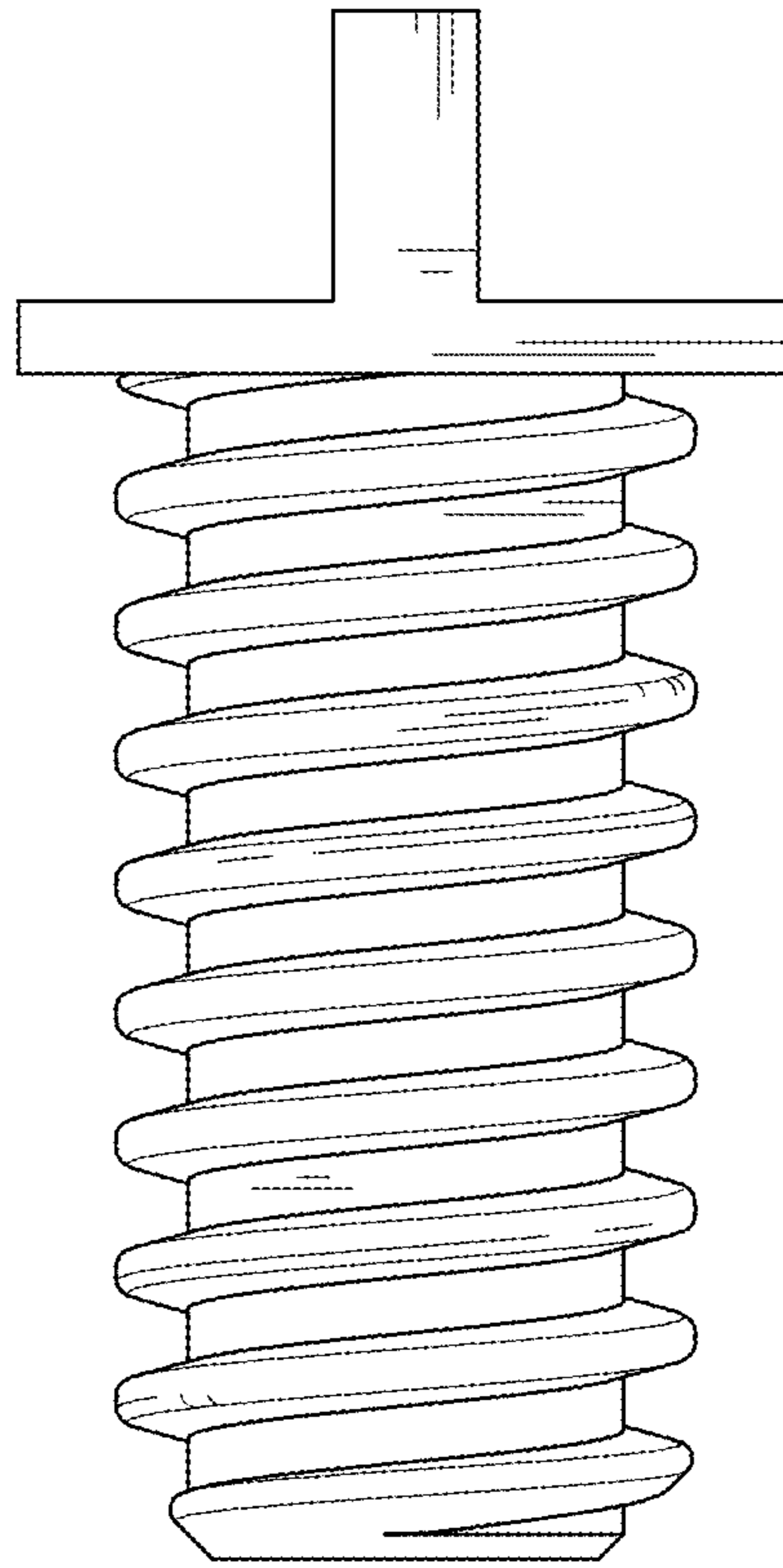


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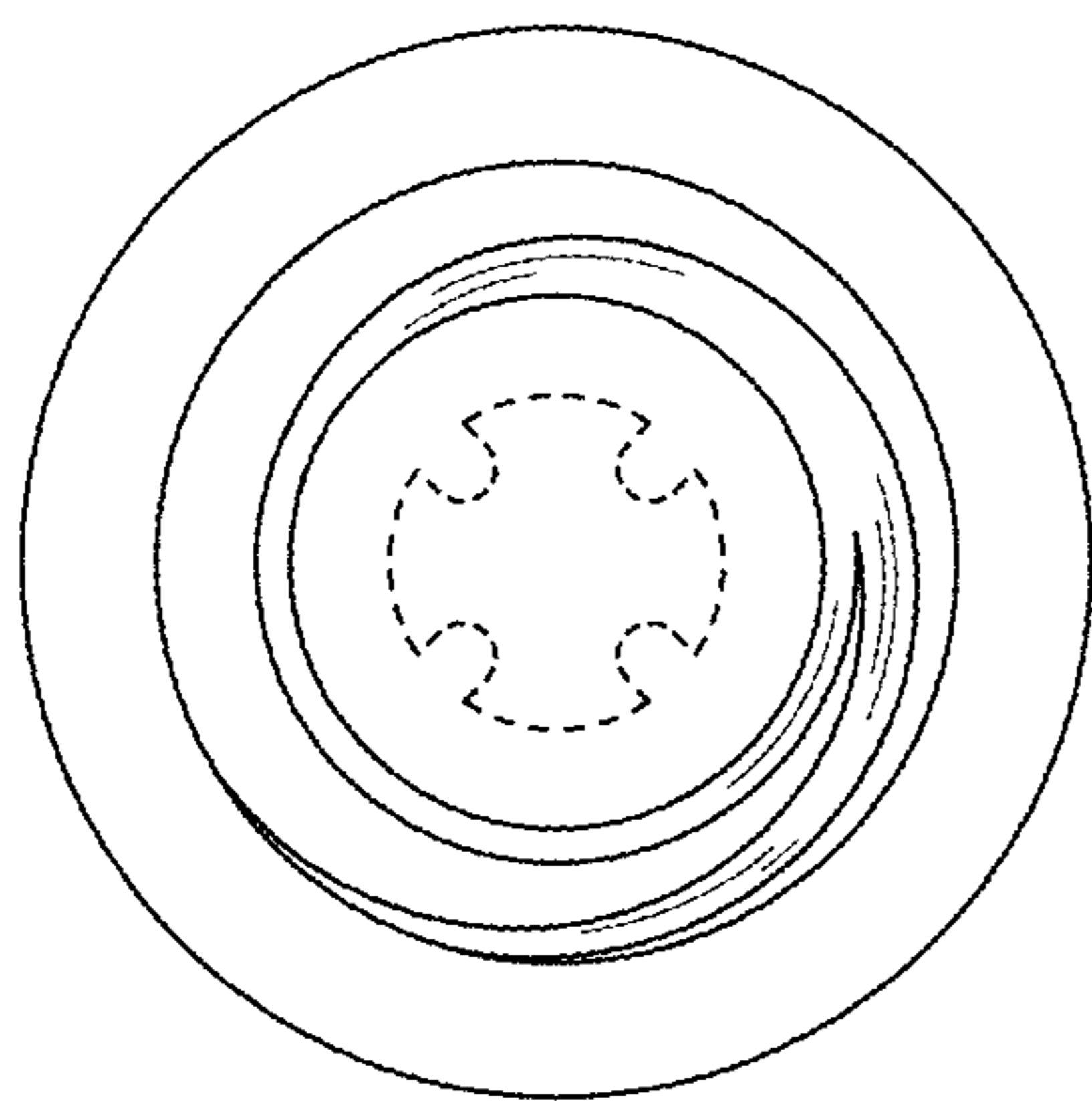


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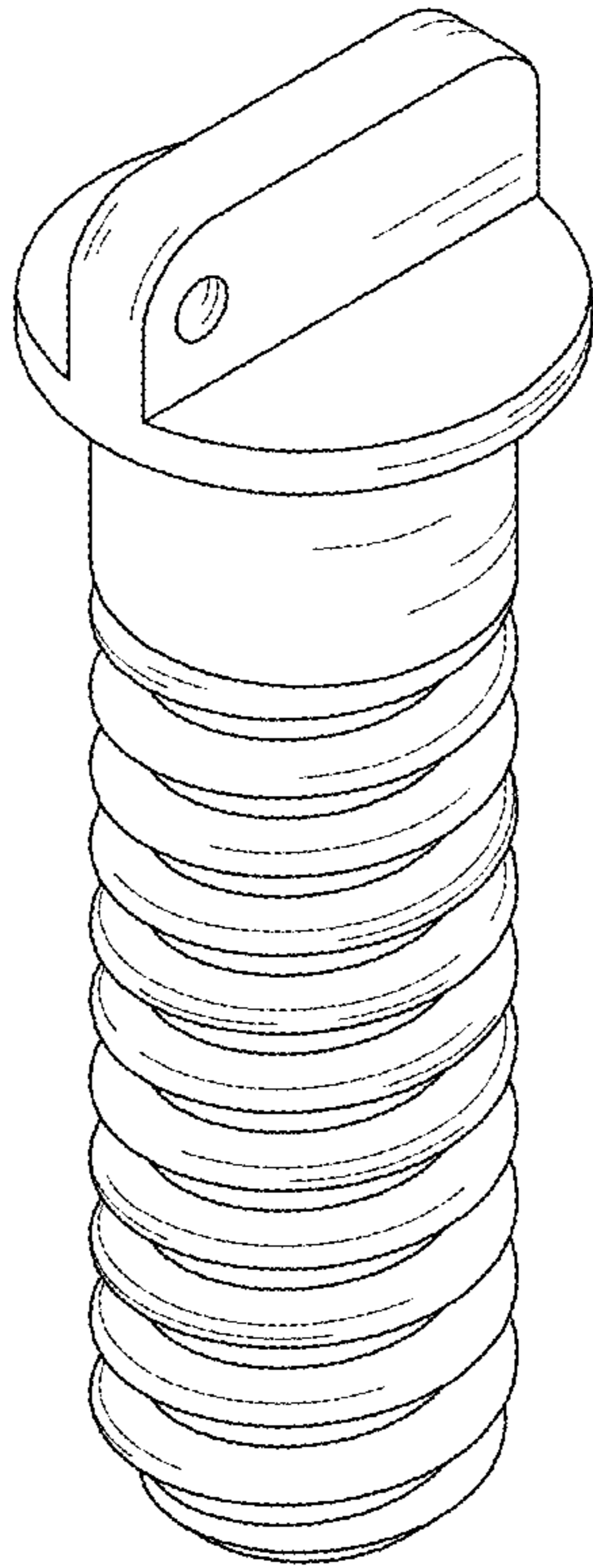


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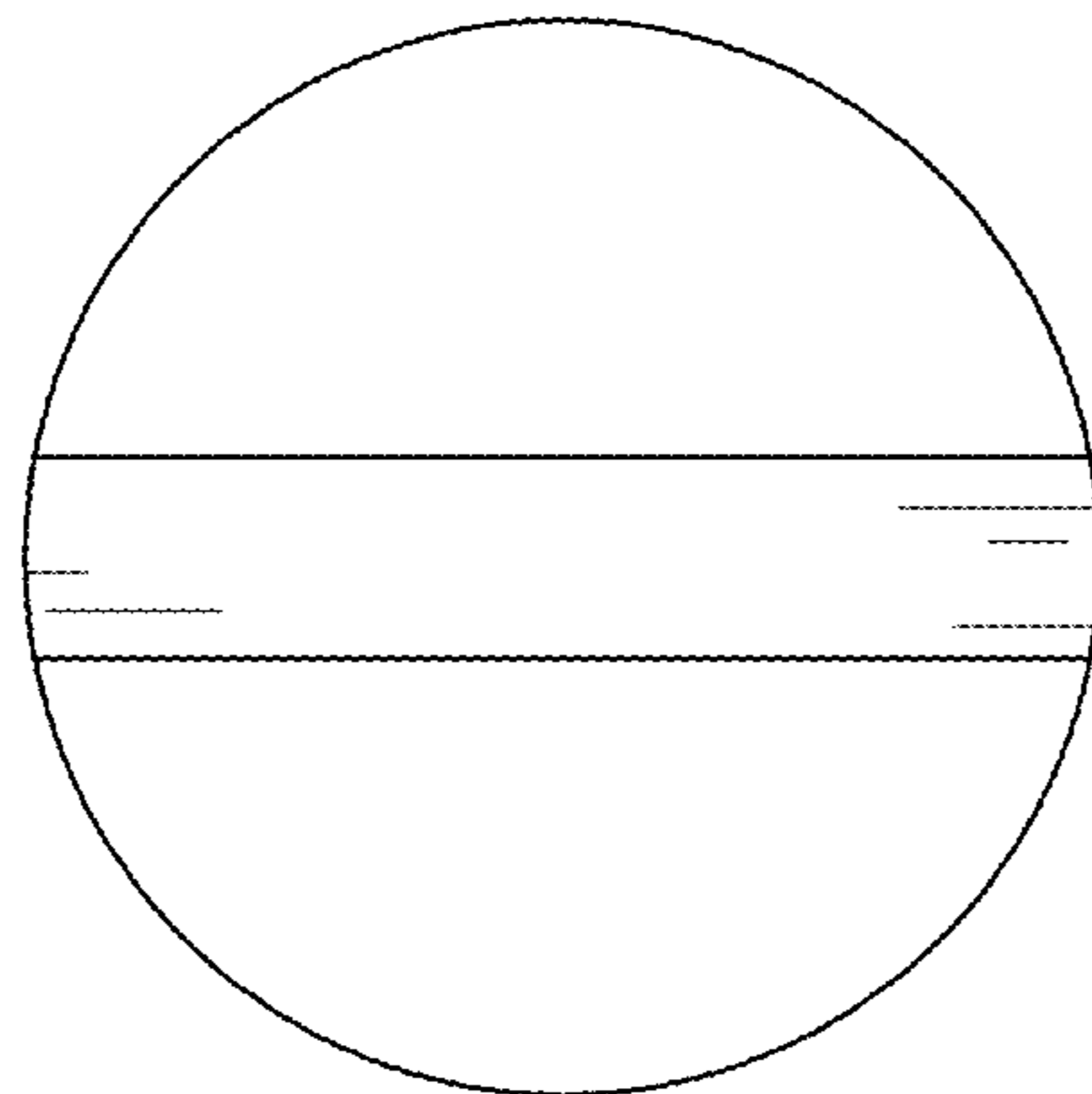


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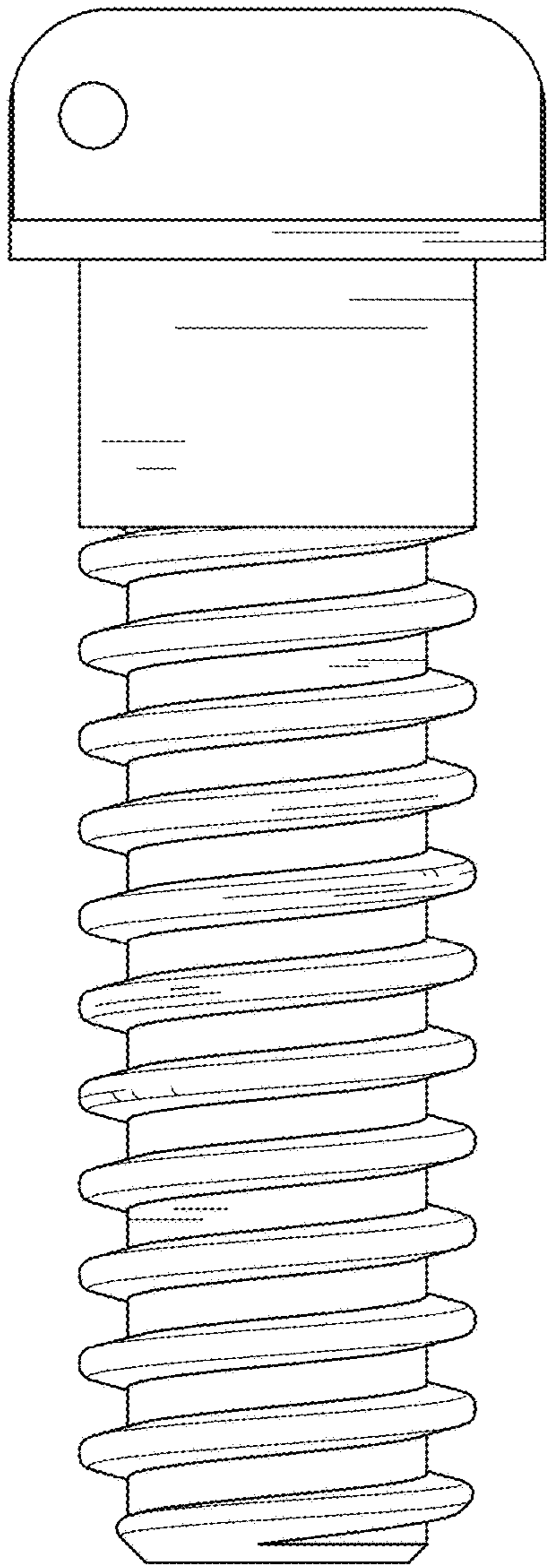


Fig 114

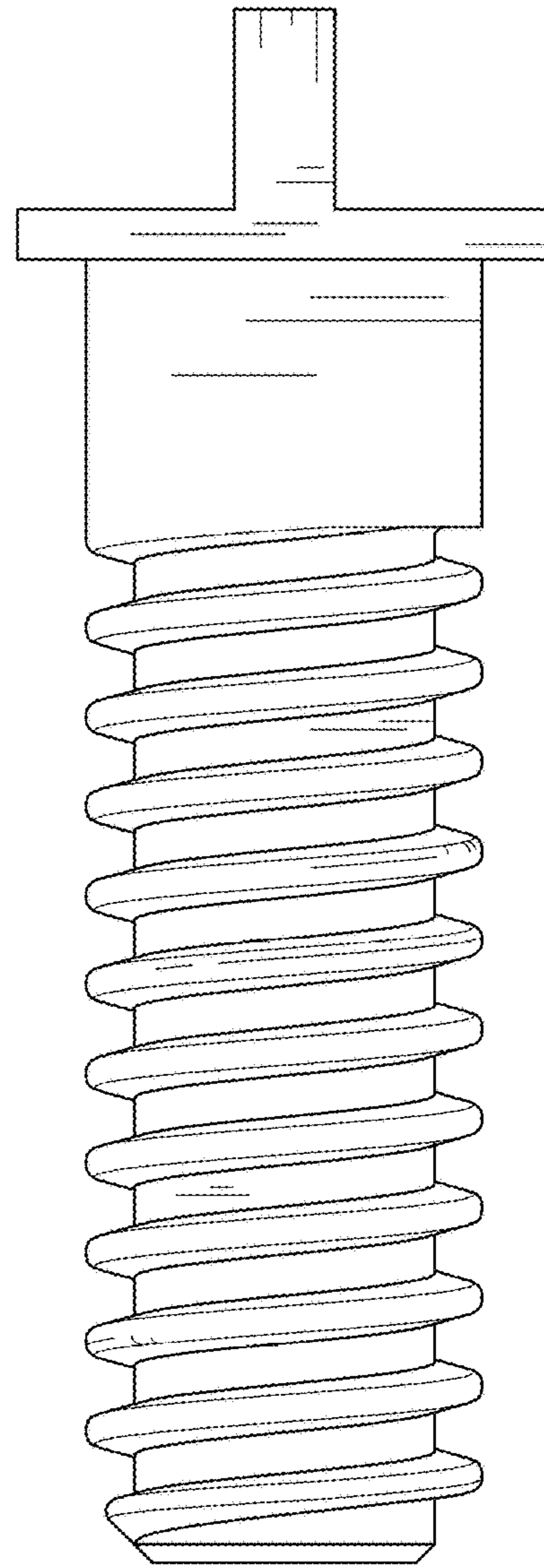


Fig 115

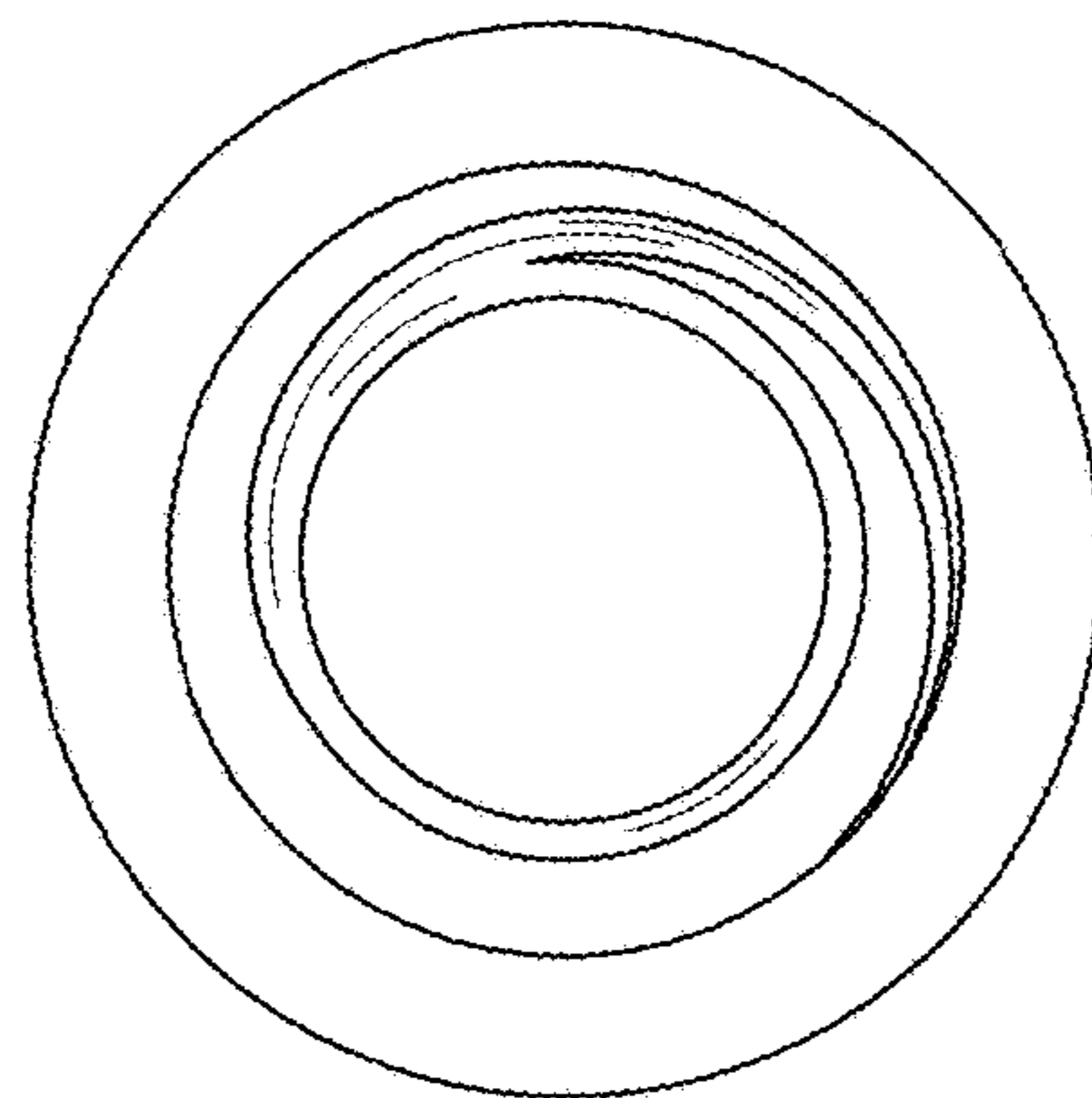


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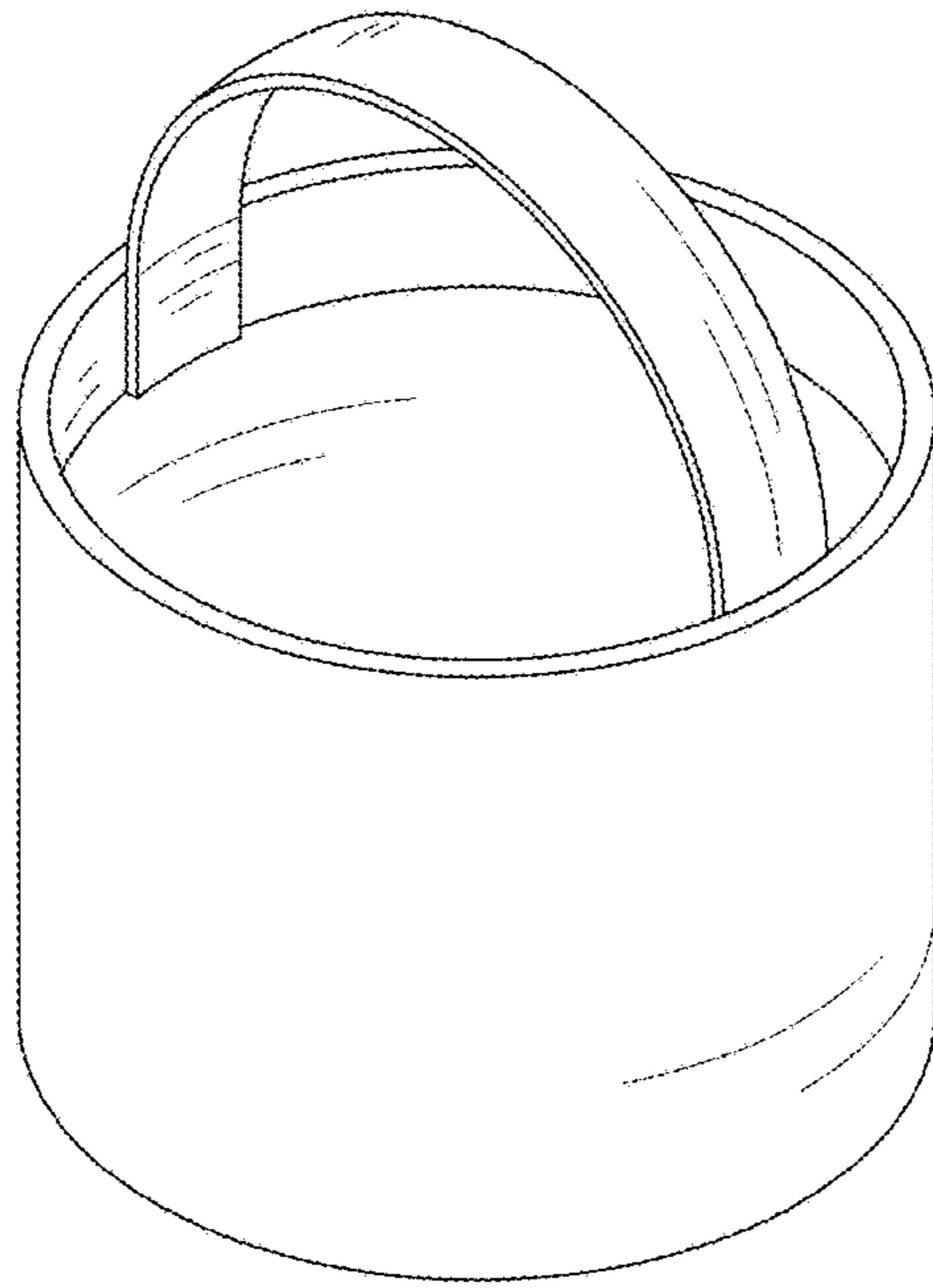


Fig 117

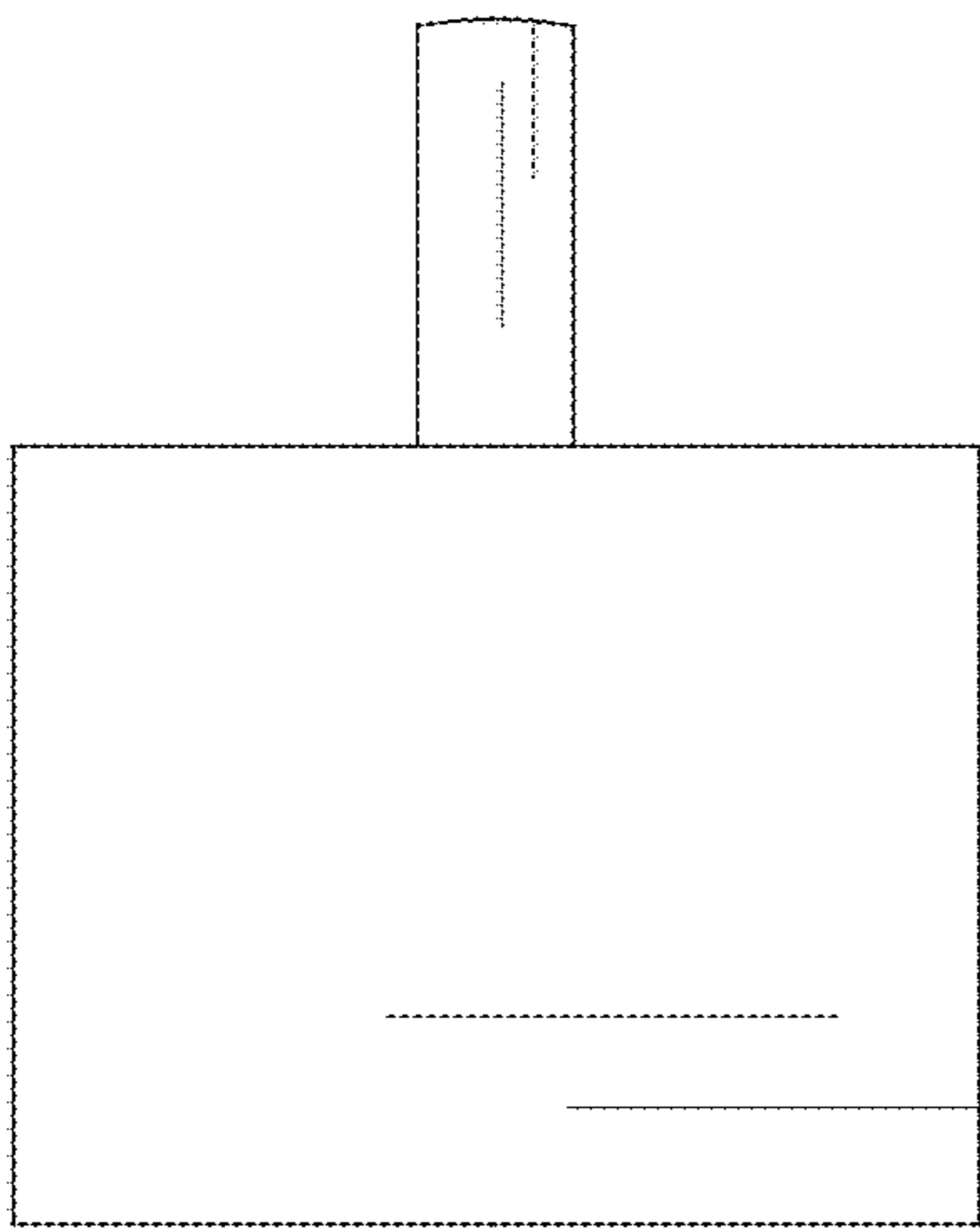


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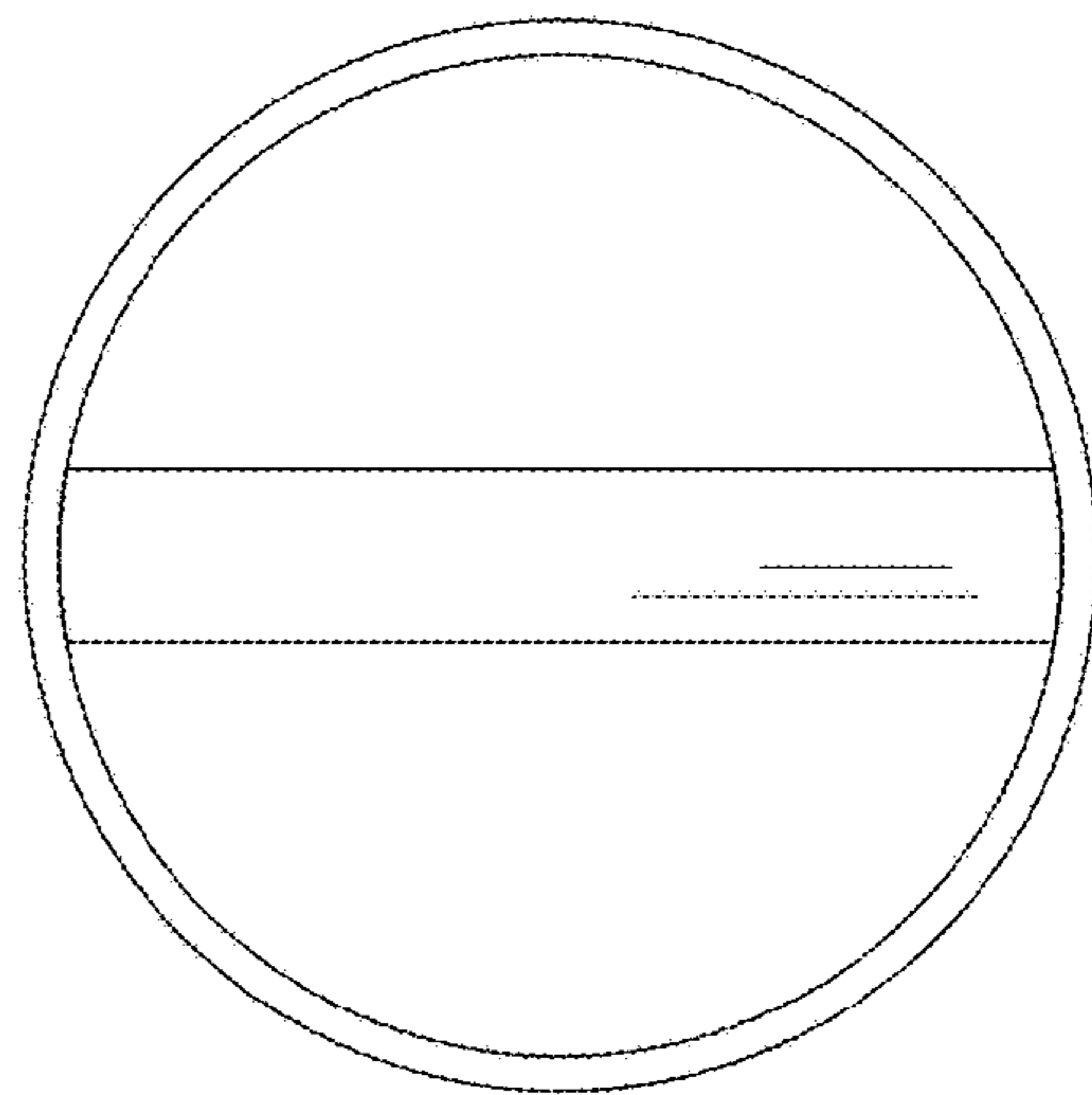


Fig 119

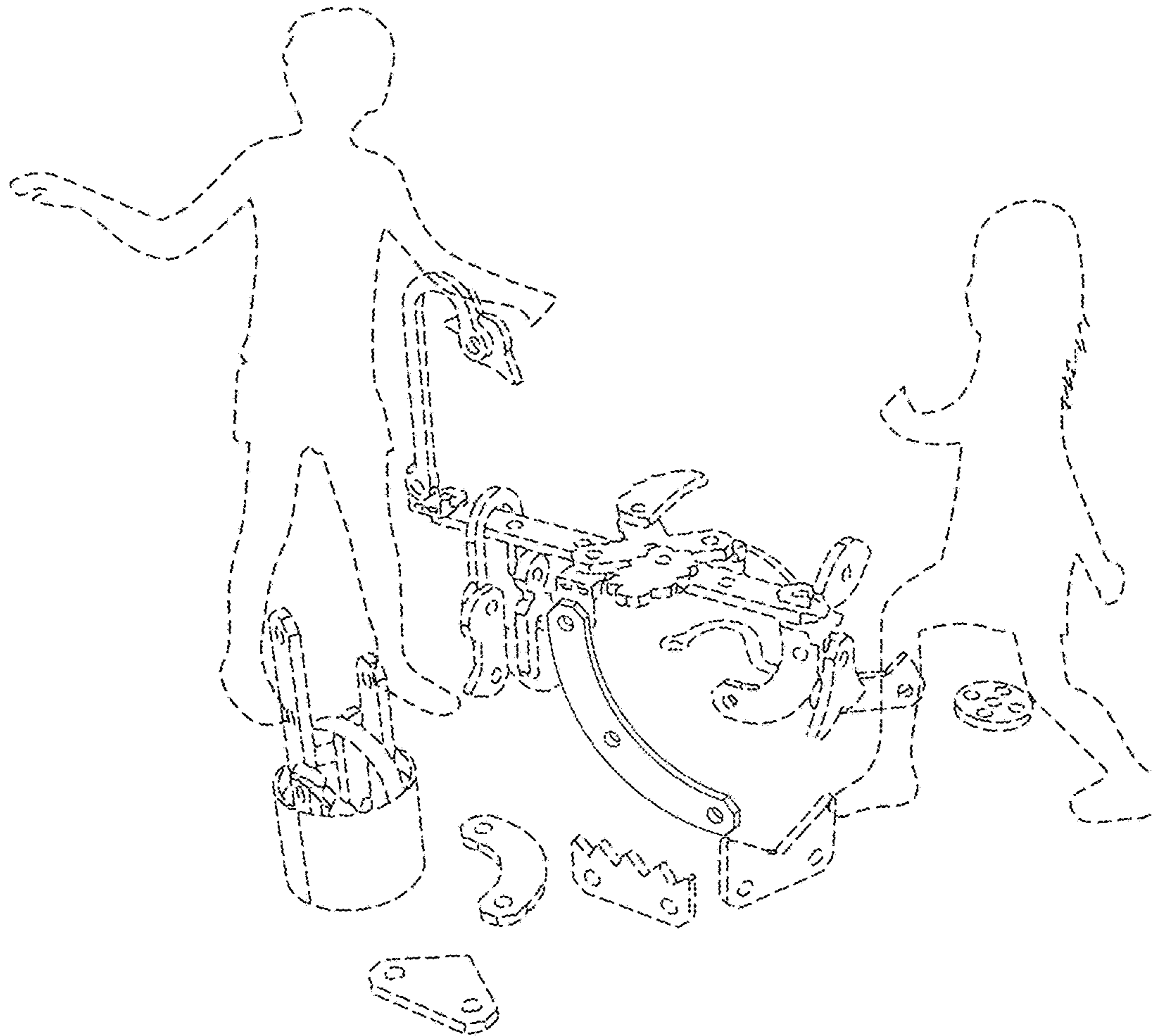


Fig 120