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

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(54) **ULTRASONIC CUTTER HEAD**

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

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(52) **U.S. Cl.**
USPC **D24/146**

(58) **Field of Classification Search**
USPC D24/108, 133, 150, 152, 155, 176, 210, D24/231, 216, 232, 185, 186, 104, D24/112-114, 117-119, 127, 141, 144, D24/146, 147, 148, 188, 207, 200, 209, D24/215, 171; D15/21, 22, 23, 24, 25, D15/26, 27, 28, 29, 138, 139, 140; D8/70, 95, 96, 98; D25/126; D28/7, 9, D28/20

CPC B23B 51/02; B23B 51/08; B23B 51/10; B23B 51/00; B23B 2251/50; B23B 2251/18; B23B 2251/46; B23B 2222/28; B23B 2240/08; Y10S 408/713; Y10T 407/26; Y10T 408/9097; Y10T 408/899; Y10T 408/90; A61C 3/02; A61C 8/0089; A61C 1/07; A61B 17/3213; A61B 17/3417; A61B 17/14; A61B 17/142; A61B 17/320016; A61B 17/32002; A61B 17/3211; A61B 2017/00473; A61B 2017/320032; A61B 2017/32113; A61B 2017/32116; A61B 2017/3454; A61B 2018/1412; A61B 90/30; A61B 17/144; A61B 17/1615; A61B 17/162; A61B 17/1624; A61B 17/1633; A61B 17/1637; A61B 17/1659; A61B 17/16; A61B

17/1604; A61B 2017/00261; A61B 2017/320075; A61B 2017/32007; A61B 2017/320077; A61B 2217/007; A61B 17/1642; A61B 17/1671; B23D 77/02; (Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D302,298 S * 7/1989 Chechelski D24/147
D511,002 S * 10/2005 Easley D24/144
(Continued)

OTHER PUBLICATIONS

Sonopet Ultrasonic Aspirator <https://neurosurgical.stryker.com/wp-content/uploads/2016/09/SONOPET-catalog-brochure.pdf> 2016 (Year: 2016).*

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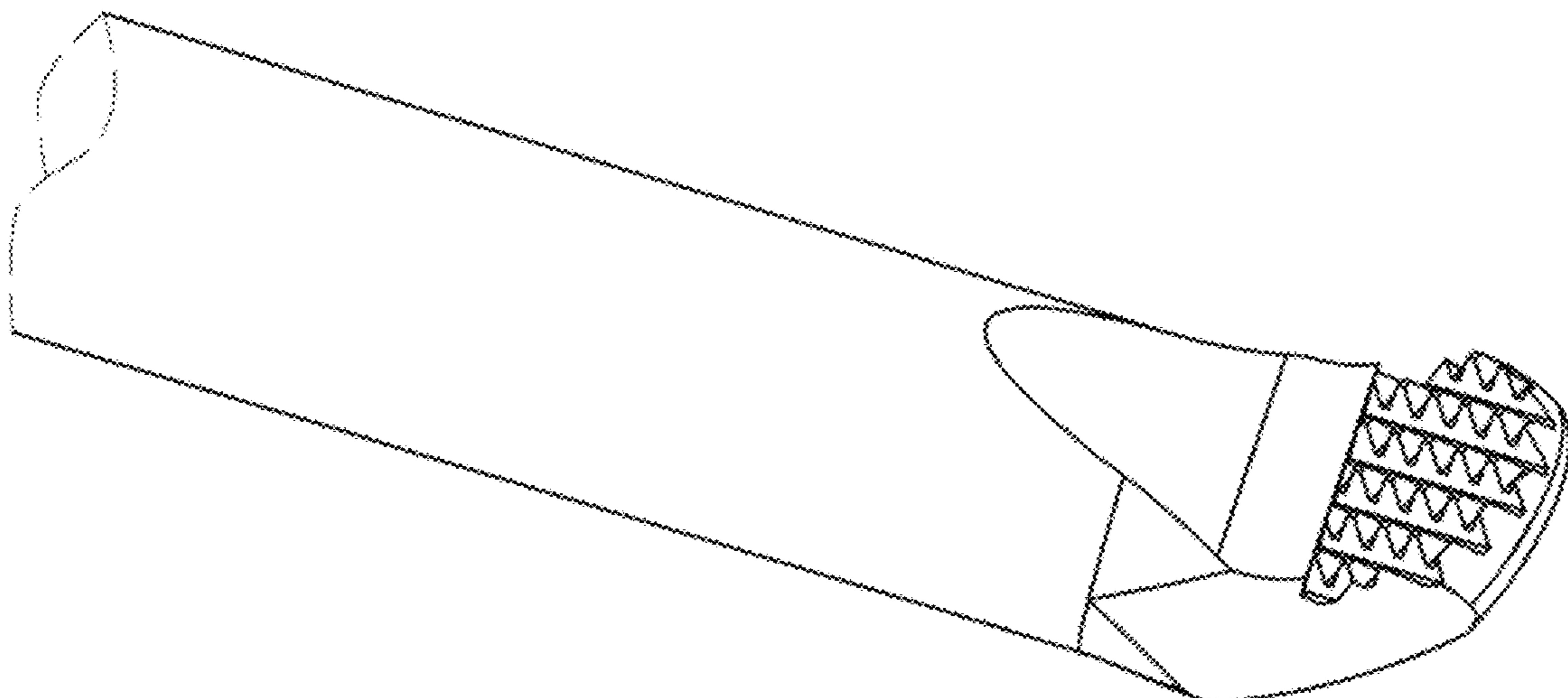
(57) **CLAIM**

The ornamental design for an ultrasonic cutter head, as shown and described.

DESCRIPTION

FIG. 1 is a top, front, and left side perspective view of an ultrasonic cutter head, showing our new design; FIG. 2 is a top plan view thereof; FIG. 3 is a left side view thereof; FIG. 4 is a right side view thereof; FIG. 5 is a bottom plan view thereof; FIG. 6 is a front elevational view thereof; FIG. 7 is a rear elevational view thereof; and, FIG. 8 is a full view thereof. The broken lines shown in FIGS. 1-5 and FIGS. 7-8 atop the cylinder illustrate boundaries of the ultrasonic cutter head. The additional broken lines shown in FIG. 8 illustrate environment and form no part of the claimed design.

1 Claim, 3 Drawing Sheets



(58) **Field of Classification Search**

CPC B23D 61/006; B23D 61/121; B23P 15/32;
B27B 19/006

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,223,267 B2 * 5/2007 Isola A61B 17/320068
606/169
8,353,912 B2 * 1/2013 Darian A61B 17/320068
606/84
8,430,897 B2 * 4/2013 Novak A61B 17/320068
606/169
8,512,340 B2 * 8/2013 Easley A61B 17/1659
606/79
9,622,766 B2 * 4/2017 Voic A61B 17/320783
9,872,697 B2 * 1/2018 Voic A61B 17/320068
10,398,463 B2 * 9/2019 Darian A61B 17/320068
2004/0030254 A1 * 2/2004 Babaev A61B 17/54
600/459
2005/0177184 A1 * 8/2005 Easley A61B 17/1659
606/167
2018/0228551 A1 * 8/2018 Moe A61B 17/32002
2019/0110799 A1 * 4/2019 Sun A61B 17/32
2019/0183521 A1 * 6/2019 Li A61B 17/1604
2019/0223898 A1 * 7/2019 Curtin A61B 17/32002
2019/0231379 A1 * 8/2019 Edwards A61B 17/32002

* cited by examiner

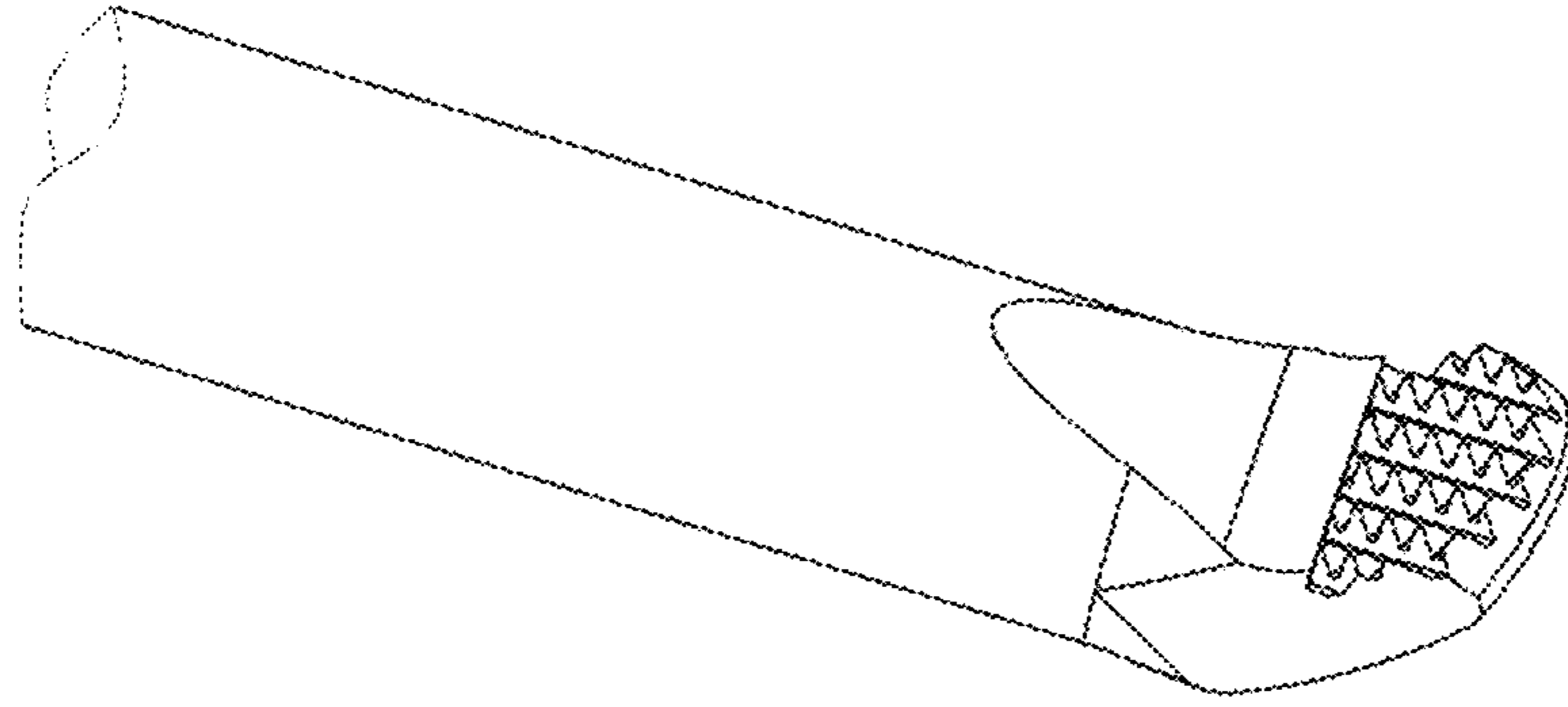


Fig.1



Fig.2

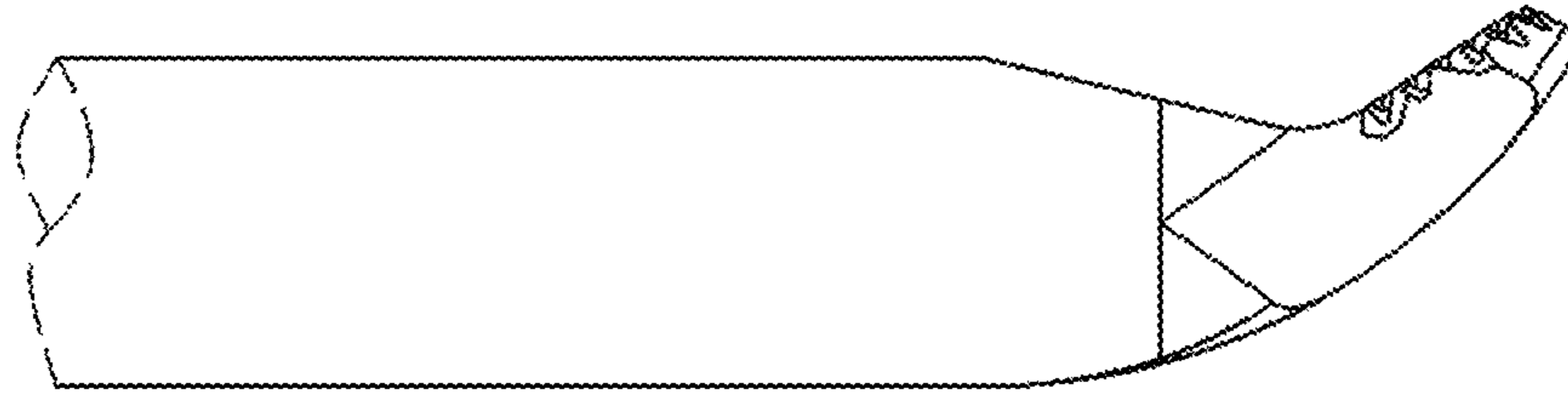


Fig.3

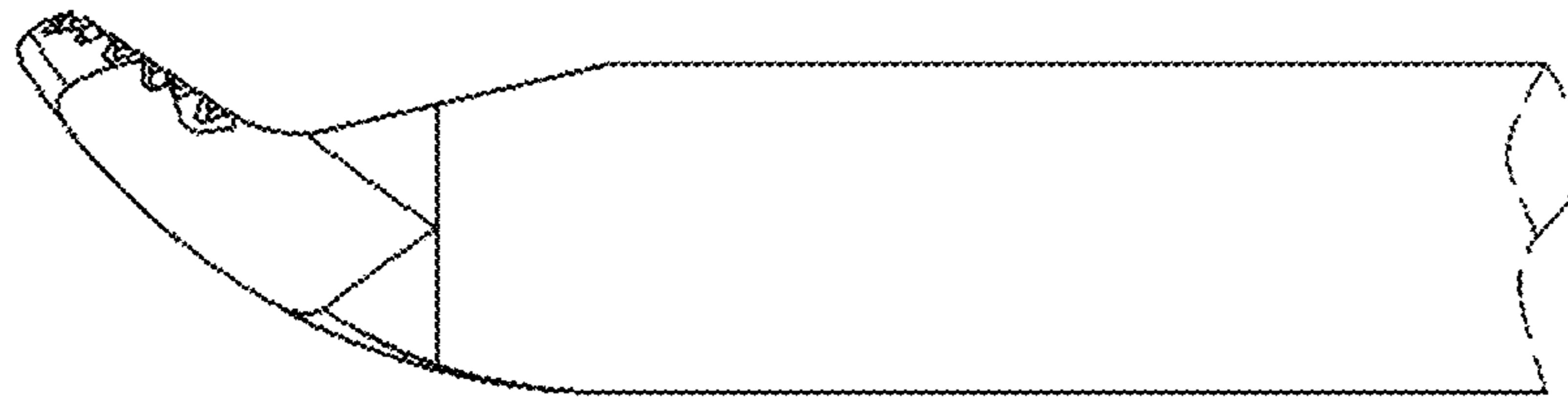


Fig.4



Fig.5

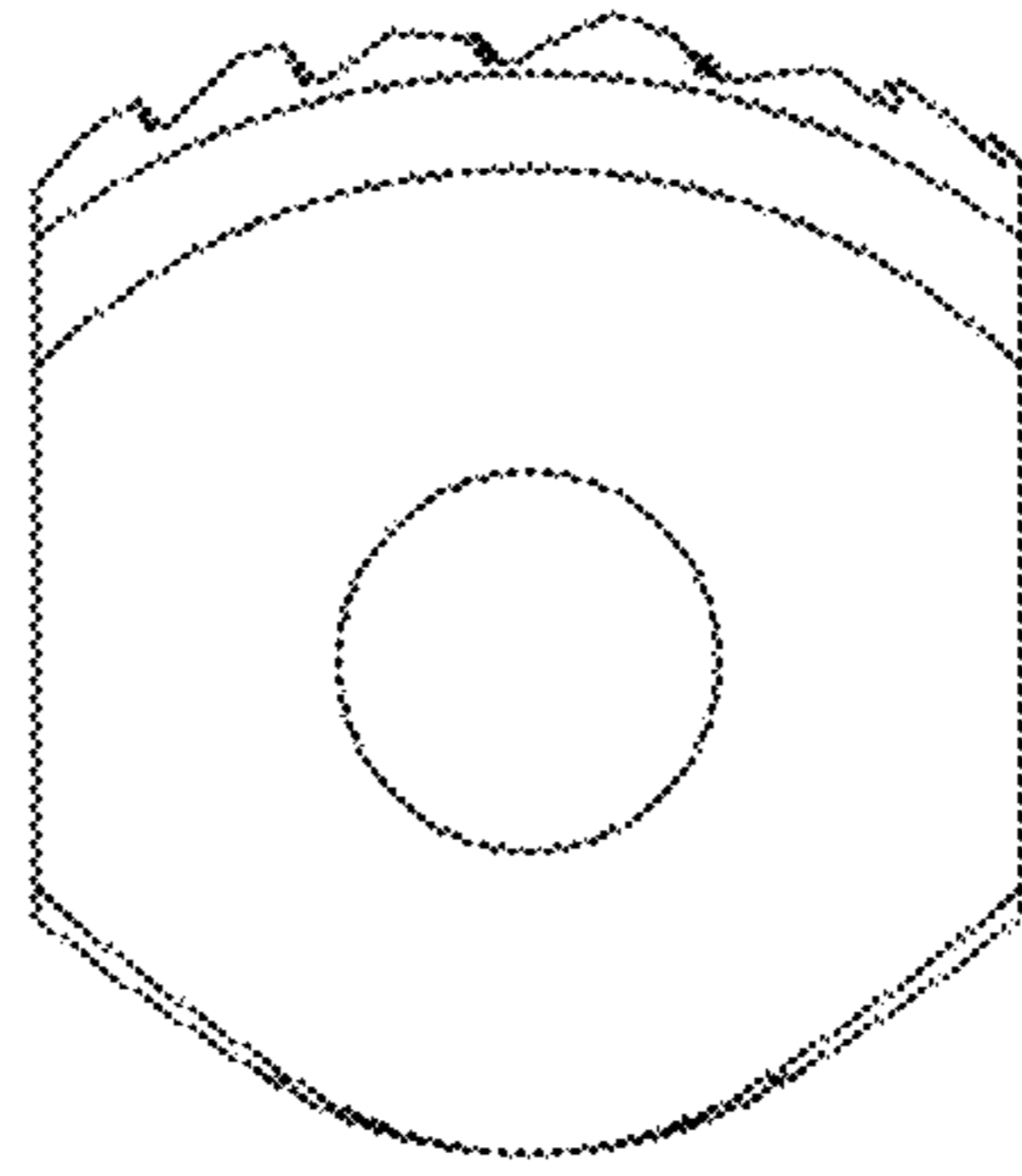


Fig.6

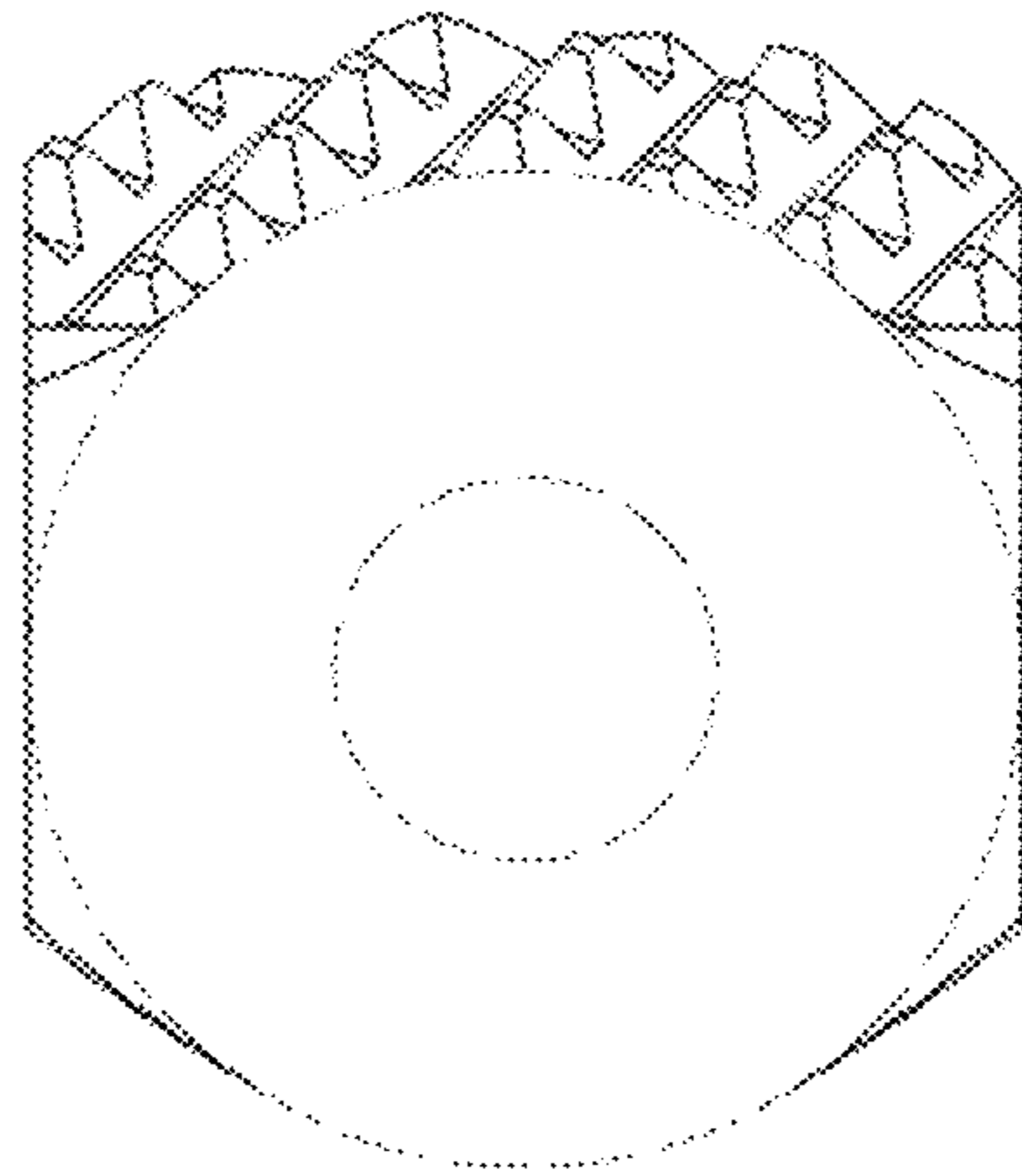


Fig.7

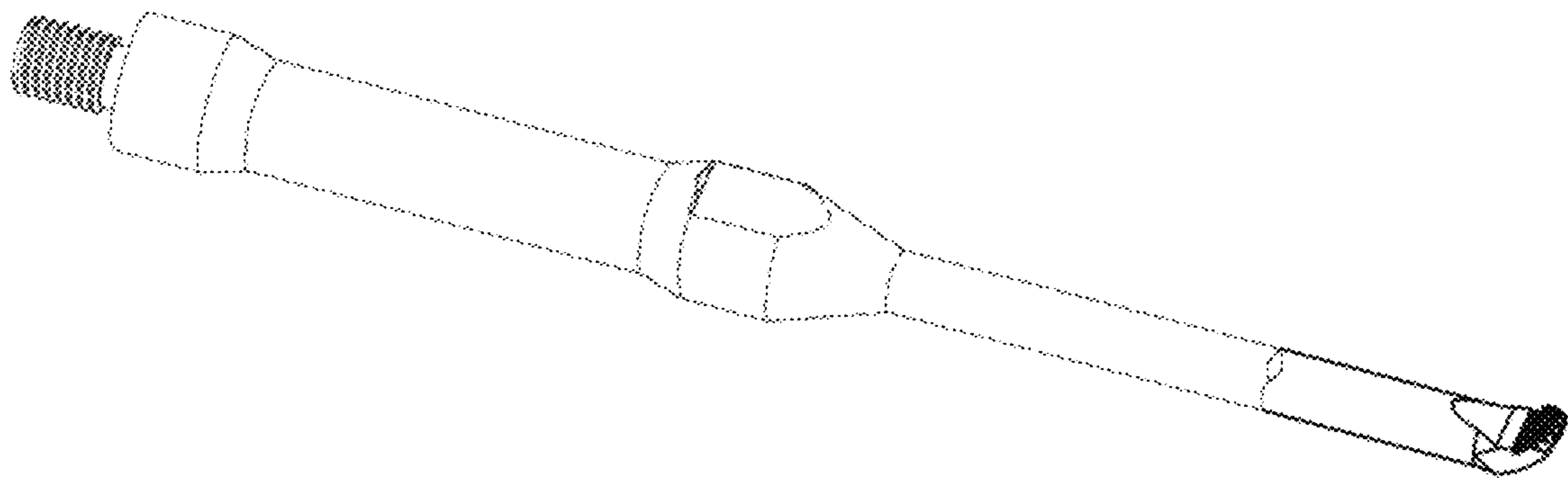


Fig.8