



US00D882786S

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

(10) **Patent No.:** **US D882,786 S**

(45) **Date of Patent:** **\*\* Apr. 28, 2020**

(54) **ULTRASONIC CUTTER HEAD**

17/1604; A61B 2017/00261; A61B  
2017/320075; A61B 2017/32007; A61B

(Continued)

(71) Applicant: **BEIJING SMTP TECHNOLOGY  
CO., LTD.**, Beijing (CN)

(72) Inventor: **Cao Qun**, Beijing (CN)

(73) Assignee: **BEIJING SMTP TECHNOLOGY  
CO., LTD.**, Beijing (CN)

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

(21) Appl. No.: **29/635,569**

(22) Filed: **Jan. 31, 2018**

(51) **LOC (12) Cl.** ..... **24-02**

(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

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,896,811 A \* 7/1975 Storz ..... A61B 17/22012  
606/128

4,823,793 A \* 4/1989 Angulo ..... A61B 17/22012  
606/128

(Continued)

OTHER PUBLICATIONS

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

*Primary Examiner* — Samantha Q Lawrence

(74) *Attorney, Agent, or Firm* — Maschoff Brennan

(57) **CLAIM**

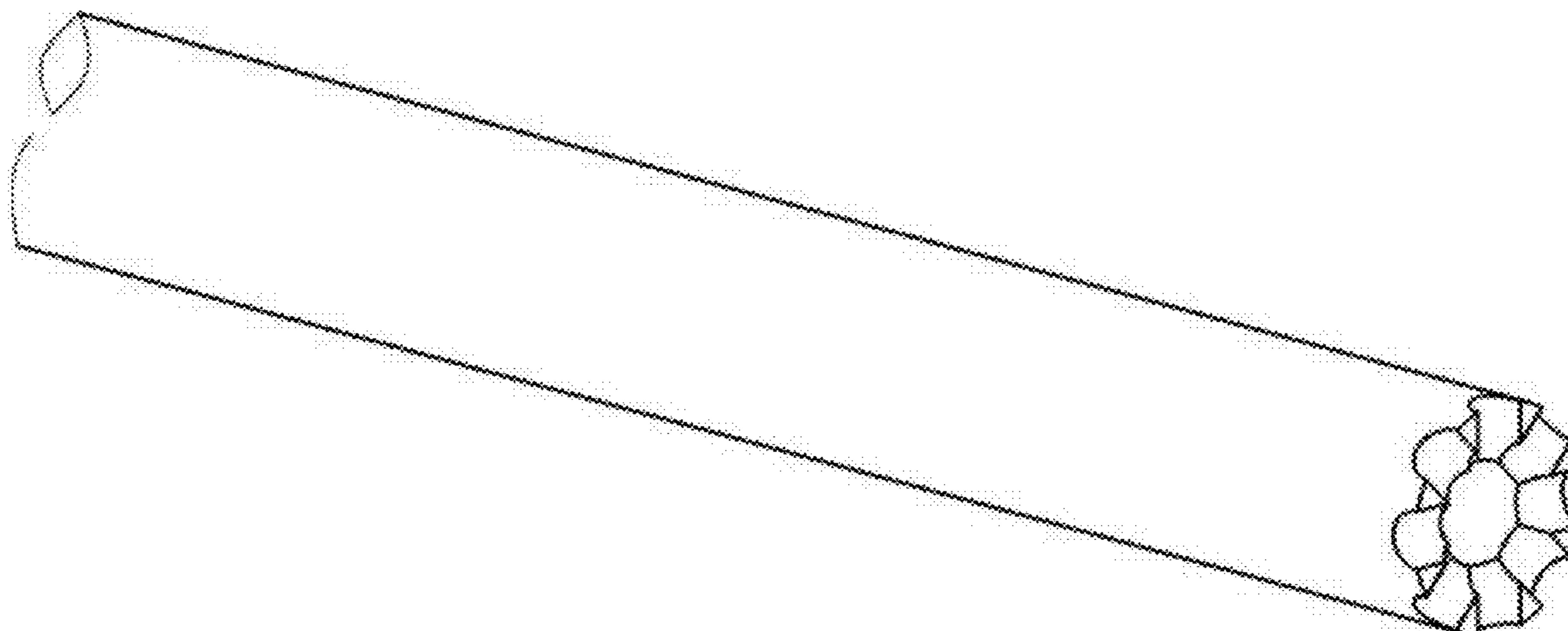
The ornamental design for an ultrasonic cutter head, as shown and described.

**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 a top 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 ..... 2017/320077; A61B 2217/007; A61B  
17/1642; A61B 17/1671; B23D 77/02;  
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

6,723,110 B2 \* 4/2004 Timm ..... A61B 17/320068  
606/169  
D529,937 S \* 10/2006 Brady ..... D15/139  
D596,743 S \* 7/2009 Agbodo ..... D24/146  
7,695,520 B2 \* 4/2010 Metzger ..... A61B 17/1675  
623/20.35  
D616,094 S \* 5/2010 Boone, III ..... D24/133  
D725,164 S \* 3/2015 Guerriero ..... D15/139  
D776,277 S \* 1/2017 Prendergast ..... D24/147  
D861,740 S \* 10/2019 Stanley ..... D15/28  
2008/0139995 A1 \* 6/2008 Guerra ..... A61B 17/32002  
604/22  
2015/0223841 A1 \* 8/2015 Prendergast ..... A61B 17/4208  
606/125  
2016/0074944 A1 \* 3/2016 Koga ..... B23B 51/02  
408/1 R  
2017/0216945 A1 \* 8/2017 Kopton ..... B23D 77/00  
2017/0326652 A1 \* 11/2017 Koga ..... B23B 51/02  
2018/0235737 A1 \* 8/2018 Chung ..... A61B 17/1673  
2018/0250756 A1 \* 9/2018 Koga ..... B23B 51/02  
2018/0318939 A1 \* 11/2018 Harada ..... B23B 51/00  
2018/0369925 A1 \* 12/2018 Novovic ..... B23B 27/141  
2019/0291189 A1 \* 9/2019 Onchi ..... B23B 51/02

\* cited by examiner

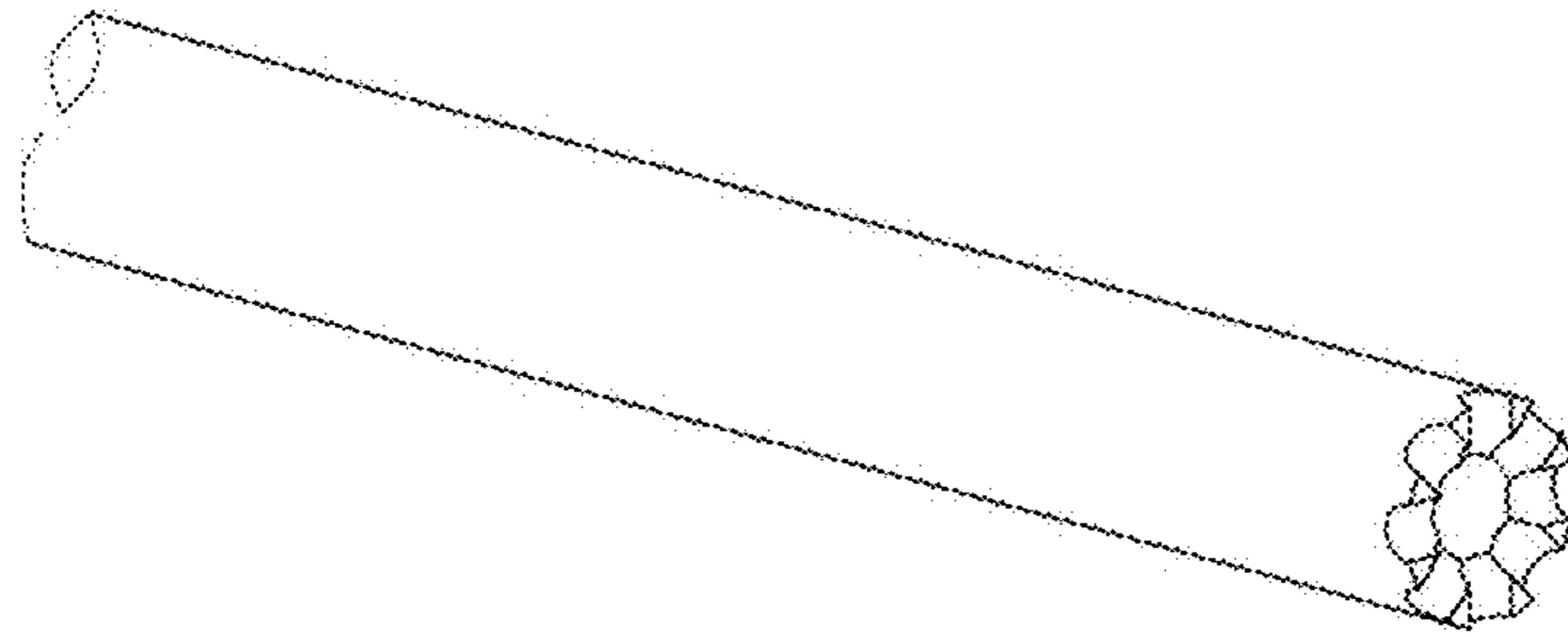


Fig.1

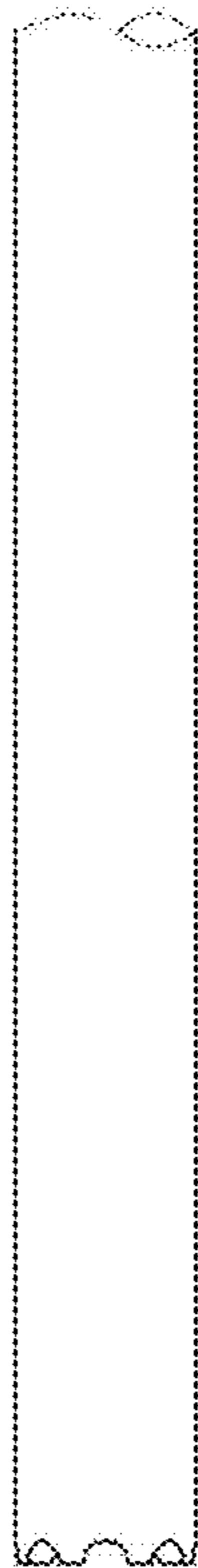


Fig.2



Fig.3



Fig.4



Fig.5

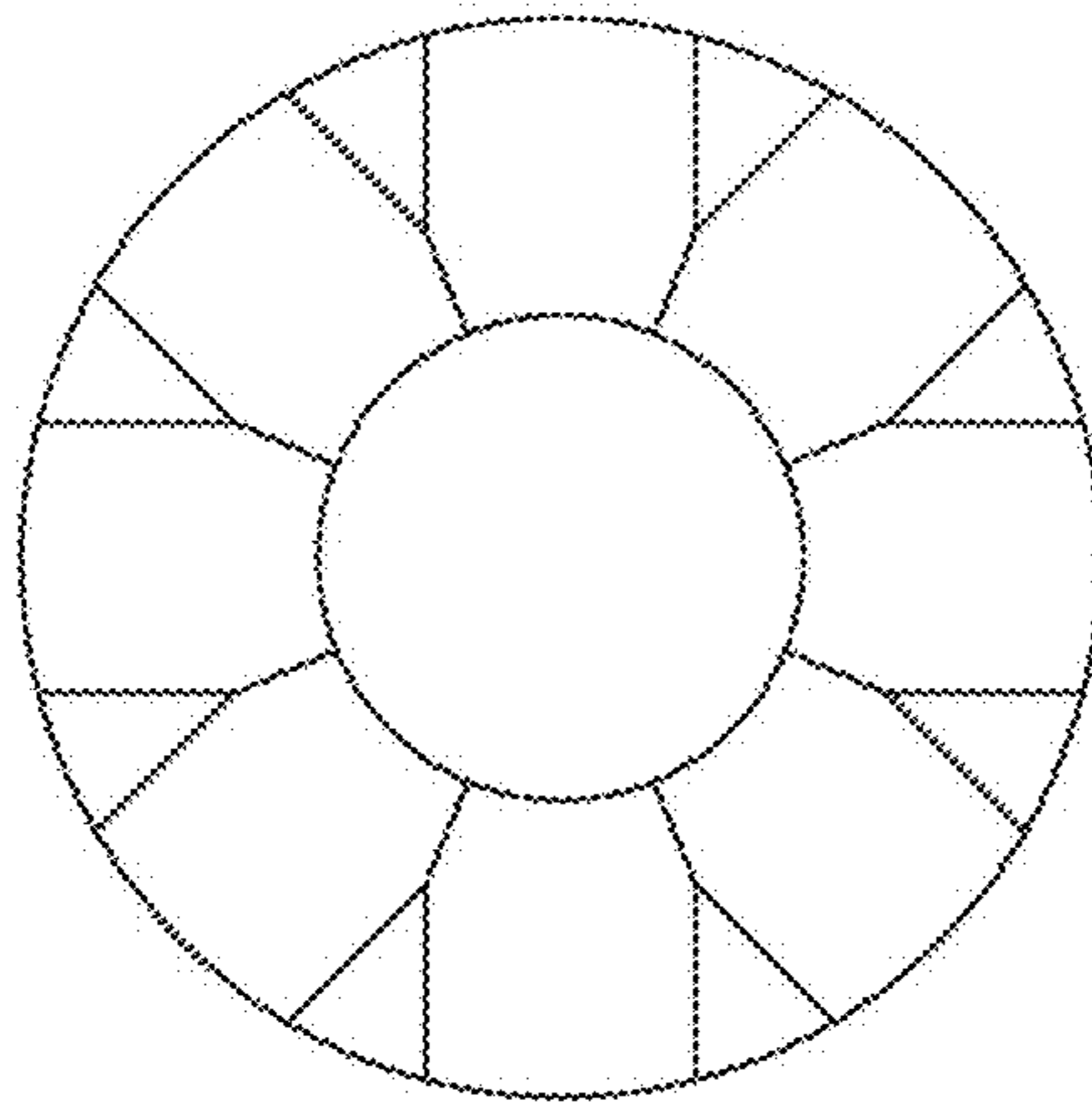


Fig.6

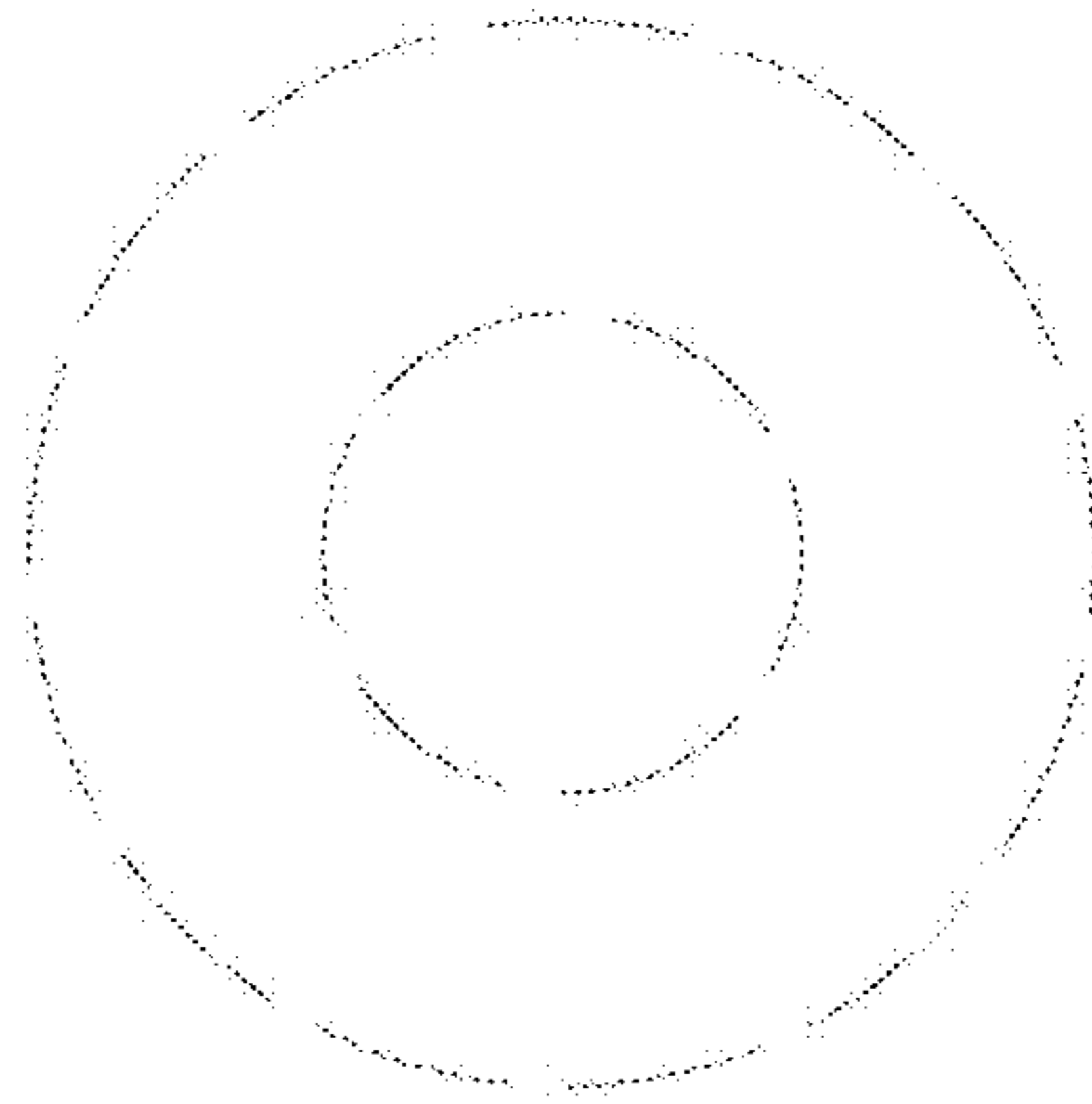


Fig.7

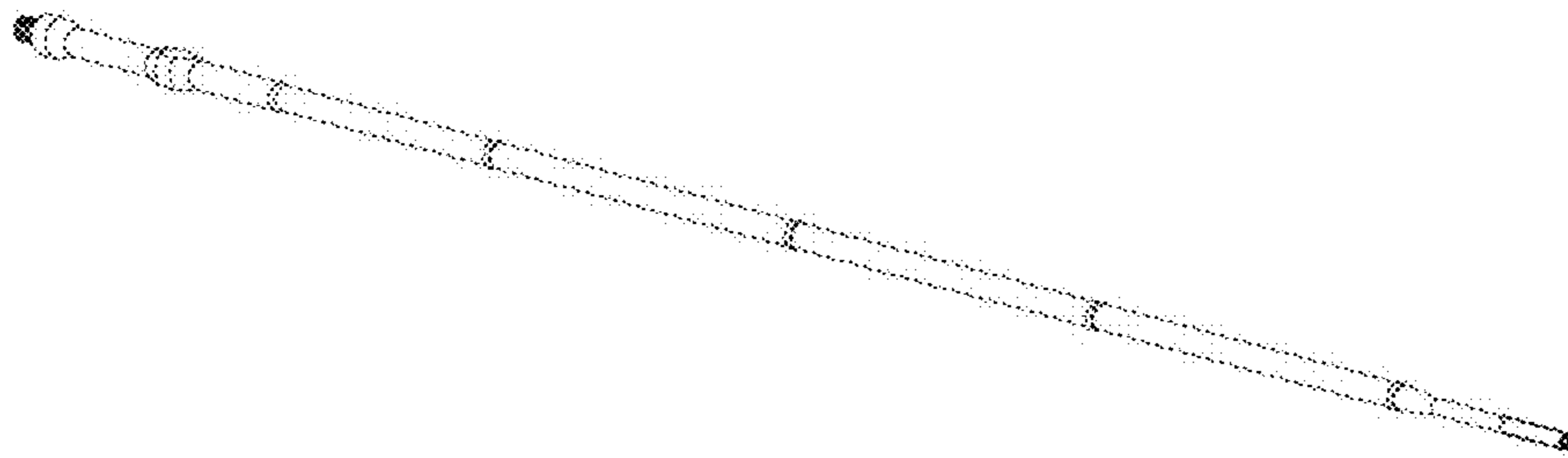


Fig.8