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

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(45) **Date of Patent:** **\*\* May 3, 2022**

(54) **SHAFT FOR ULTRASONIC SURGICAL INSTRUMENTS**

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D627,463 S \* 11/2010 Voic ..... D24/144  
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(Continued)

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

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

*Primary Examiner* — Omeed Agilee

(21) Appl. No.: **29/746,739**

(74) *Attorney, Agent, or Firm* — Sterne, Kessler, Goldstein & Fox P.L.L.C.

(22) Filed: **Aug. 17, 2020**

(57) **CLAIM**

The ornamental design for a shaft for ultrasonic surgical instruments, as shown and described.

(30) **Foreign Application Priority Data**

**DESCRIPTION**

Feb. 18, 2020 (CN) ..... 202030053728.7

(51) **LOC (13) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/187**

(58) **Field of Classification Search**  
USPC ..... D24/133, 137, 138, 141, 158, 160, 164, D24/165, 167, 170, 186, 187, 200, 146; D10/57, 60, 78, 80

CPC ... A61B 5/0095; A61B 8/4444; A61B 8/4455; A61B 8/445; A61B 17/320068; A61B 17/1615; G01S 7/5208; G01N 29/265

See application file for complete search history.

FIG. 1 is a bottom perspective view of a shaft for ultrasonic surgical instruments showing the claimed design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a left side view thereof, the right side view being a mirror image thereof;  
FIG. 5 is an enlarged top view thereof;  
FIG. 6 is an enlarged bottom view thereof;  
FIG. 7 is an enlarged bottom perspective view of area 7 shown in FIG. 1;  
FIG. 8 is an enlarged front view thereof;  
FIG. 9 is an enlarged rear view thereof;  
FIG. 10 is an enlarged left side view thereof; and,  
FIG. 11 is an enlarged bottom view thereof.

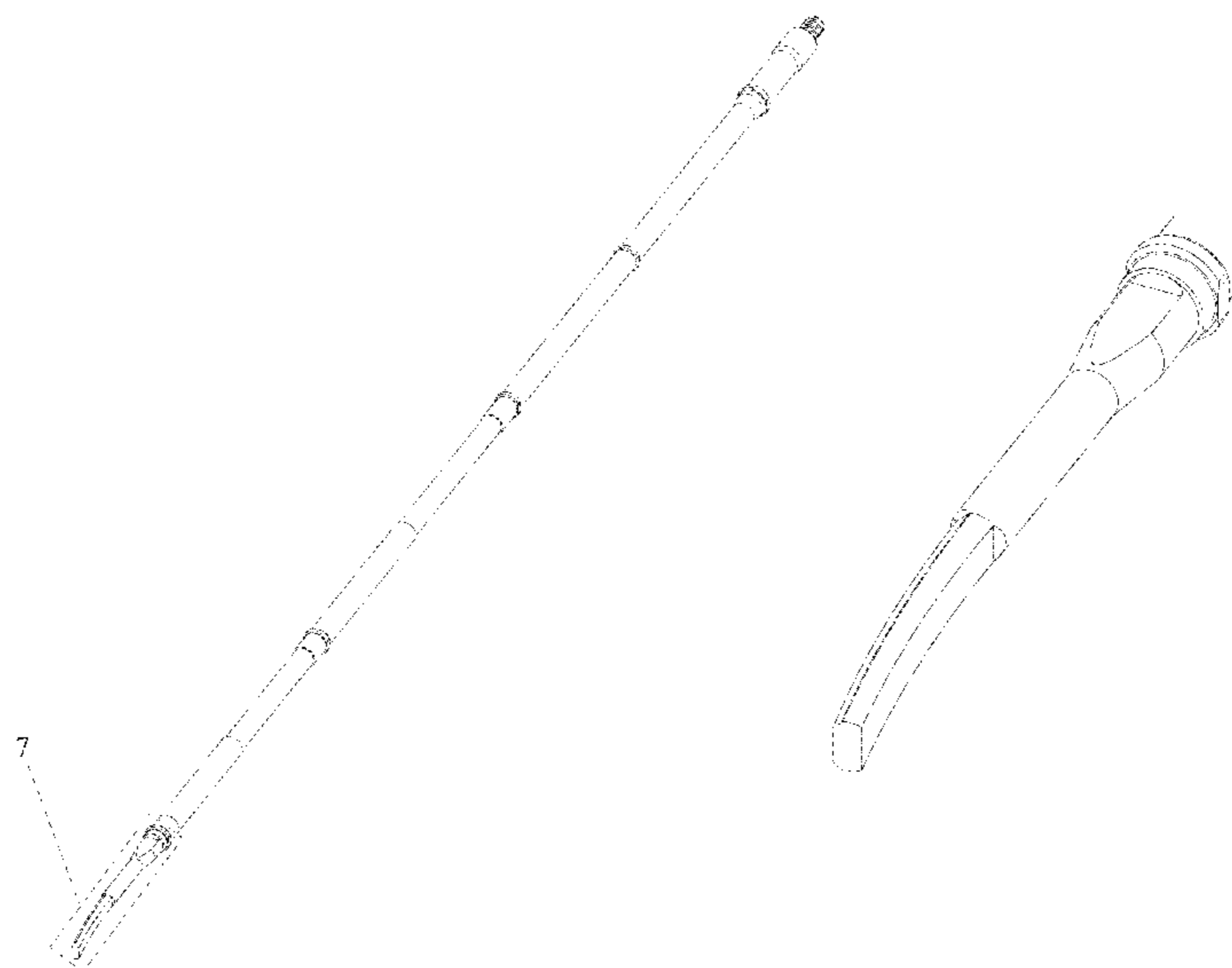
The dash broken lines in the figures depict portions of the shaft for ultrasonic surgical instruments that form no part of the claimed design. The dot dash broken lines depict the boundaries of the claim and form no part thereof.

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**1 Claim, 9 Drawing Sheets**



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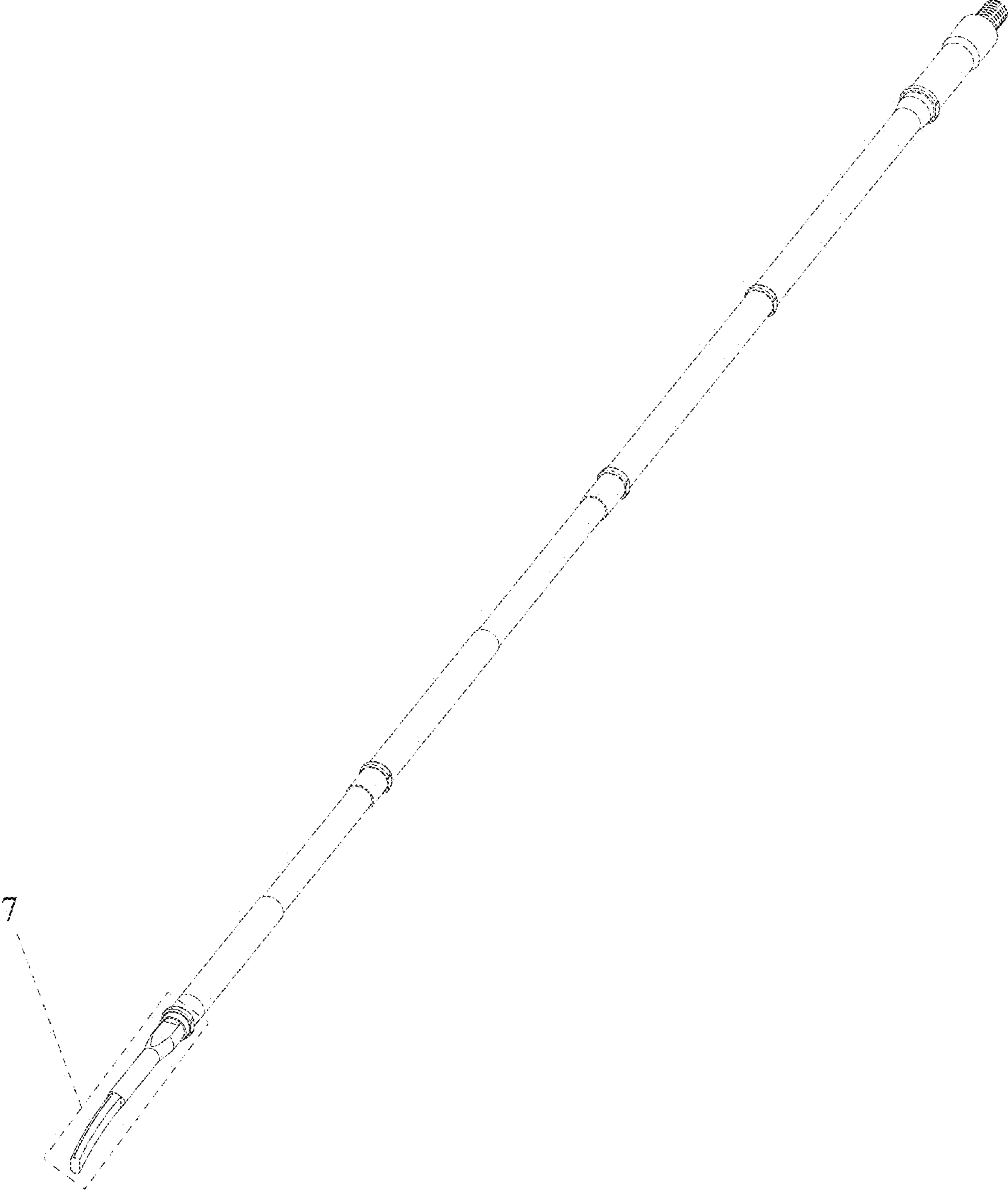


FIG. 1

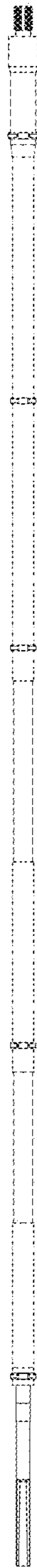


FIG. 2

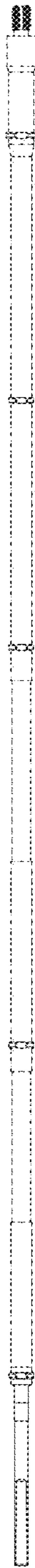


FIG. 3

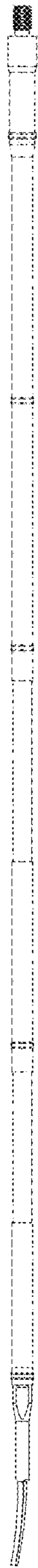


FIG. 4

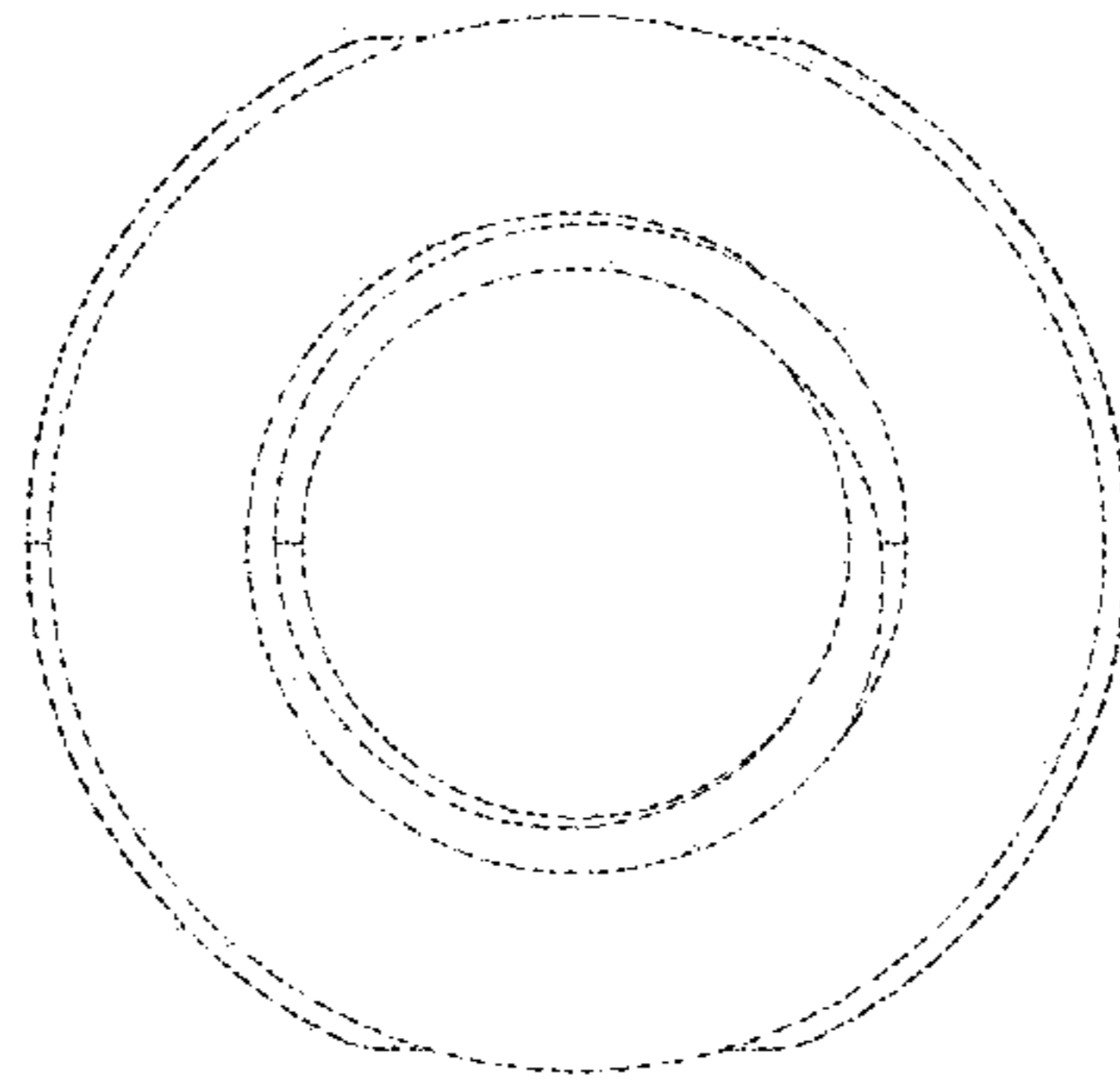


FIG. 5

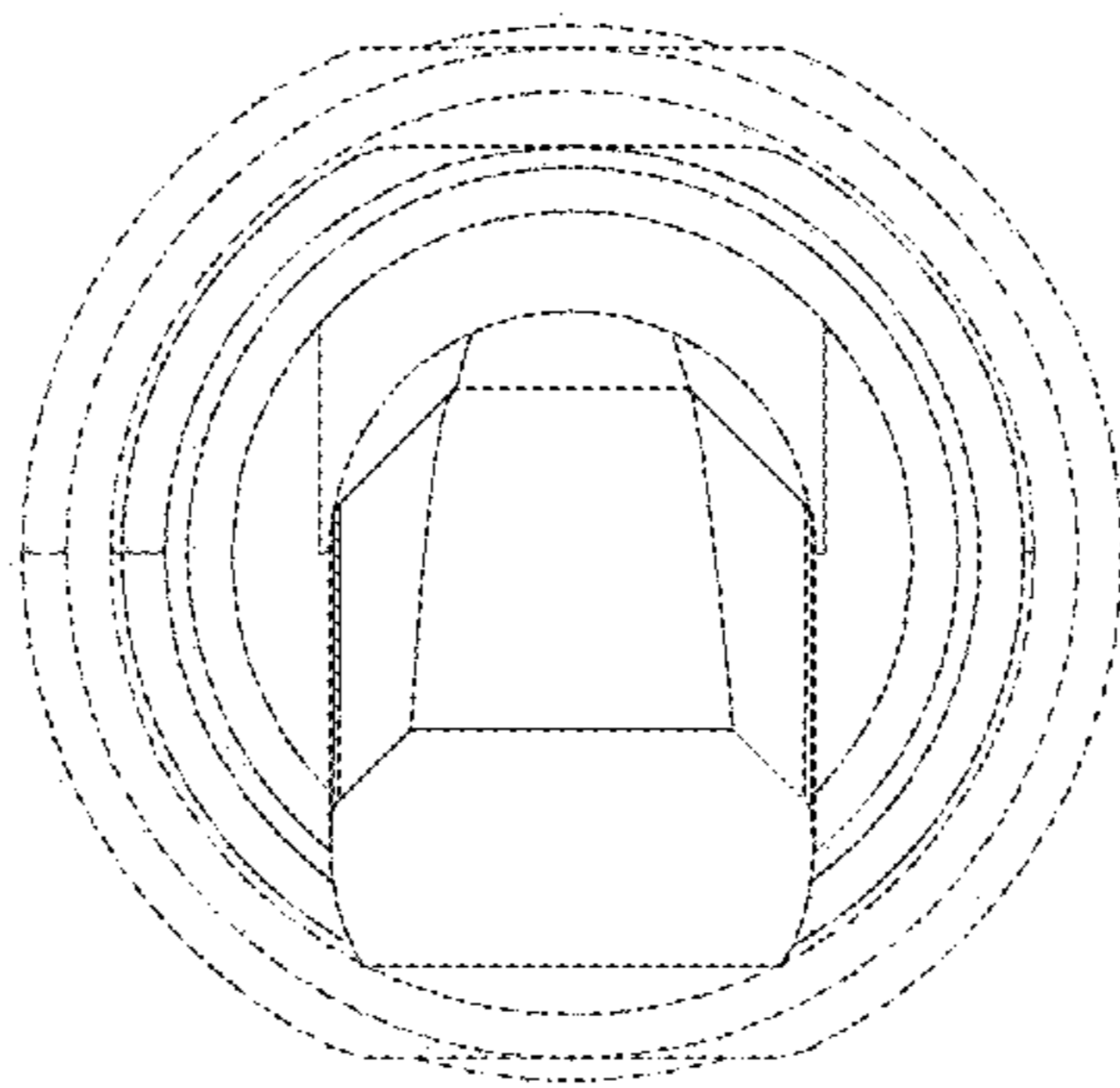


FIG. 6

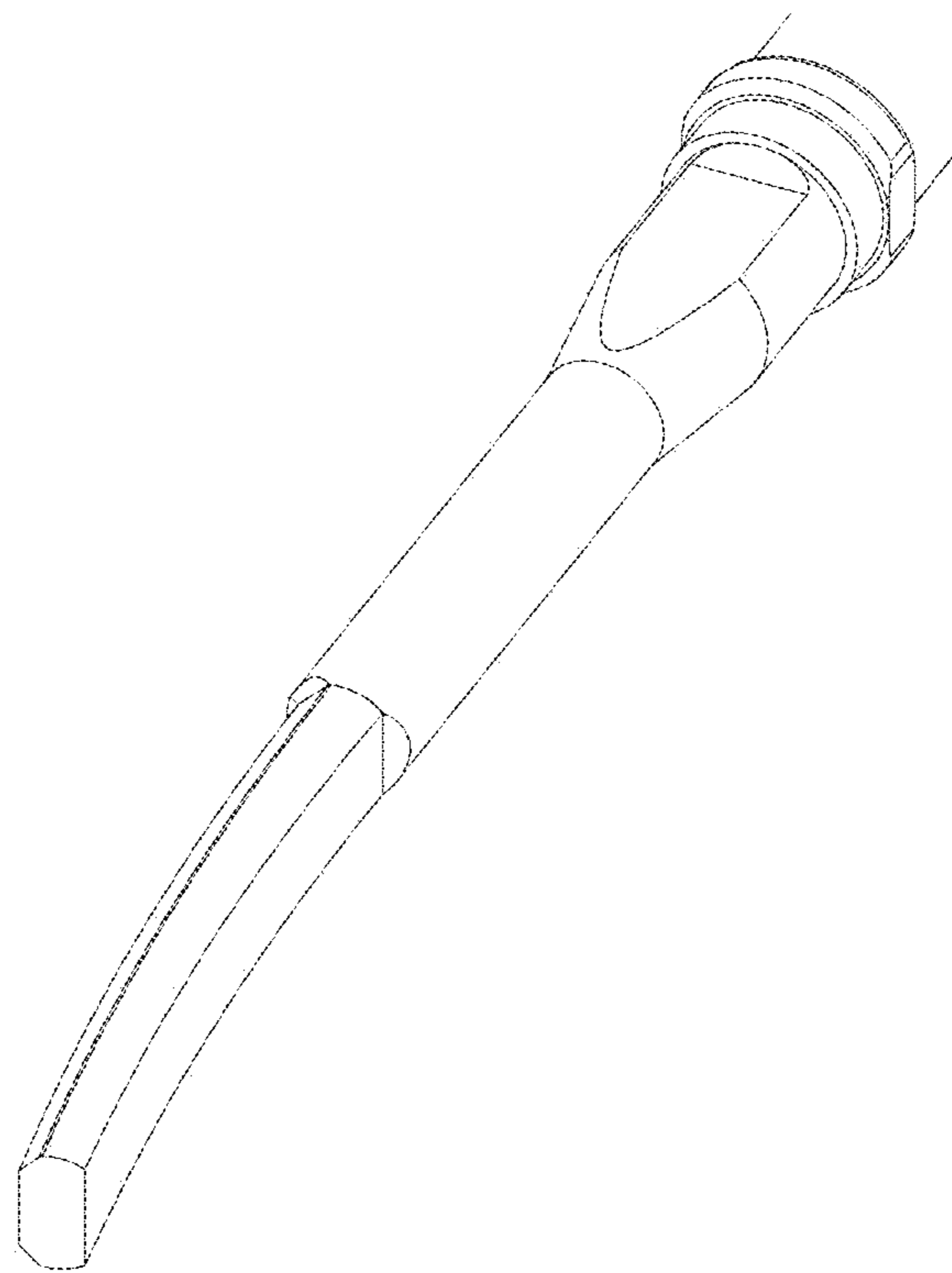


FIG. 7



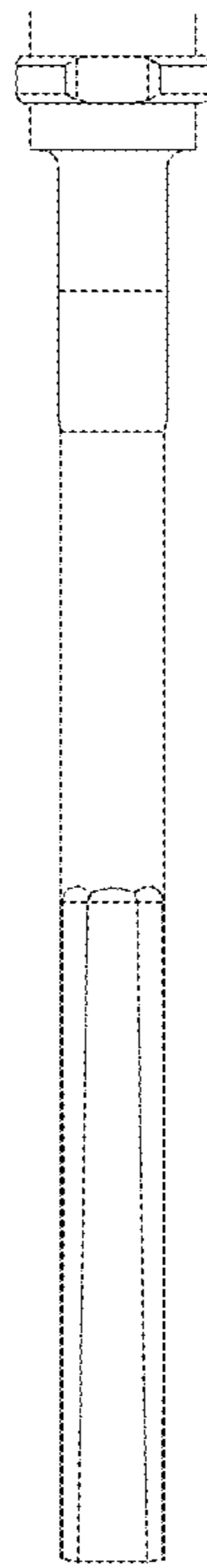


FIG. 8

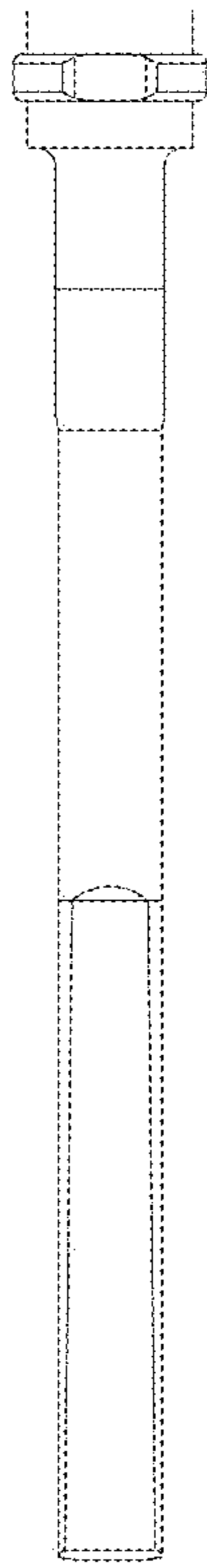


FIG. 9

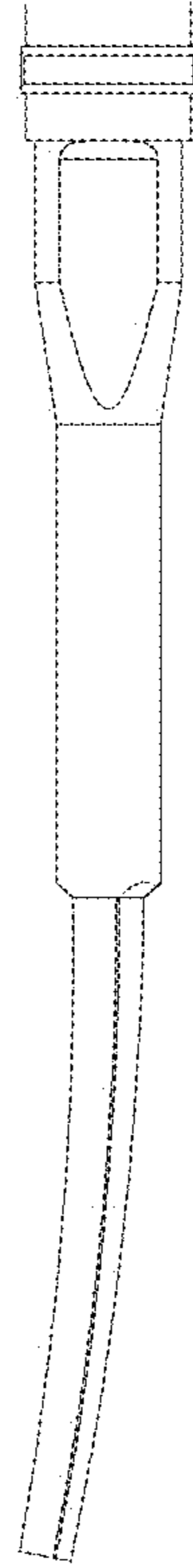


FIG. 10

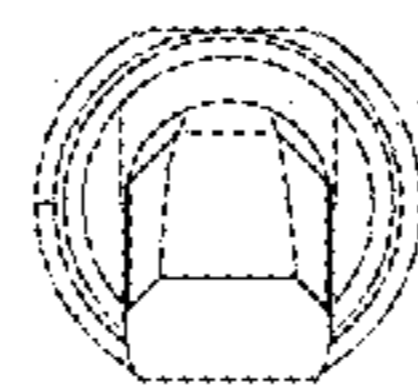


FIG. 11