



US00D946169S

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

(10) **Patent No.:** **US D946,169 S**
(45) **Date of Patent:** **** Mar. 15, 2022**

(54) **PIERCER FOR USE BY AUTOMATED LABORATORY EQUIPMENT**

4,869,398 A * 9/1989 Colvin A61J 1/1462
222/83

(71) Applicant: **LIFE TECHNOLOGIES CORPORATION**, Carlsbad, CA (US)

6,274,087 B1 * 8/2001 Preston G01N 35/1079
422/510

(72) Inventor: **Earl Zergiebel**, Waltham, MA (US)

D625,805 S * 10/2010 Hereford D24/129

D669,980 S * 10/2012 Lev D24/129

D672,052 S * 12/2012 Bucher D24/224

2007/0205216 A1 * 9/2007 Smith B65D 51/226
222/81

(73) Assignee: **LIFE TECHNOLOGIES CORPORATION**, Carlsbad, CA (US)

* cited by examiner

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

Primary Examiner — Anhdao Doan

(21) Appl. No.: **29/733,407**

(22) Filed: **May 1, 2020**

(51) **LOC (13) Cl.** **24-01**

(52) **U.S. Cl.**
USPC **D24/232**

(58) **Field of Classification Search**
USPC D24/216, 219, 223–227, 231, 232, 233,
D24/234, 119, 121, 133, 118, 127, 129,
D24/146, 147; D10/81; D9/549
CPC .. G01N 35/1079; G01N 35/1097; B67B 7/28;
B65D 51/22; B65D 77/067; Y10T
436/2575
See application file for complete search history.

(57) **CLAIM**

The ornamental design for a piercer for use by automated laboratory equipment, as shown and described.

DESCRIPTION

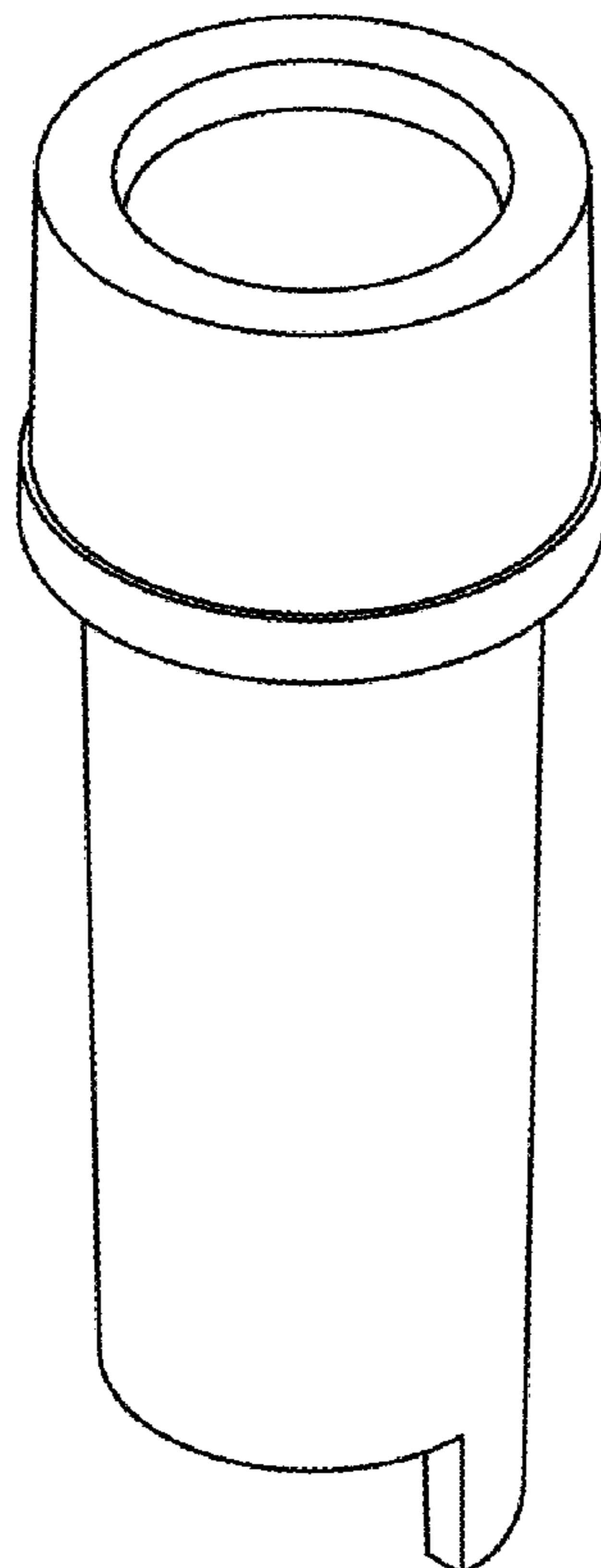
FIG. 1 and FIG. 2 are perspective views of a piercer showing the new design;
FIG. 3, FIG. 4, FIG. 5, and FIG. 6 are side views thereof;
FIG. 7 is a top view thereof;
FIG. 8 is a bottom view thereof; and,
FIG. 9 is a cross-sectional view thereof.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D286,072 S * 10/1986 Miller D24/224
D292,232 S * 10/1987 Forman D24/224

1 Claim, 5 Drawing Sheets



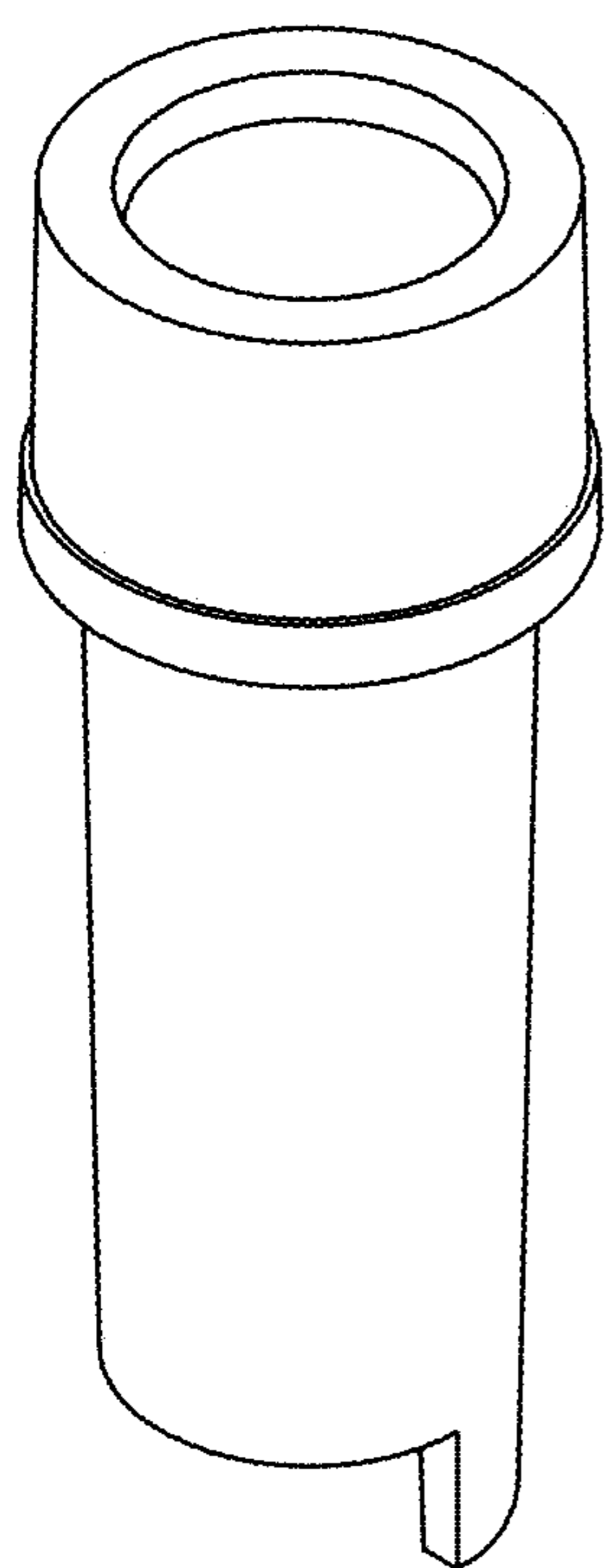


FIG. 1

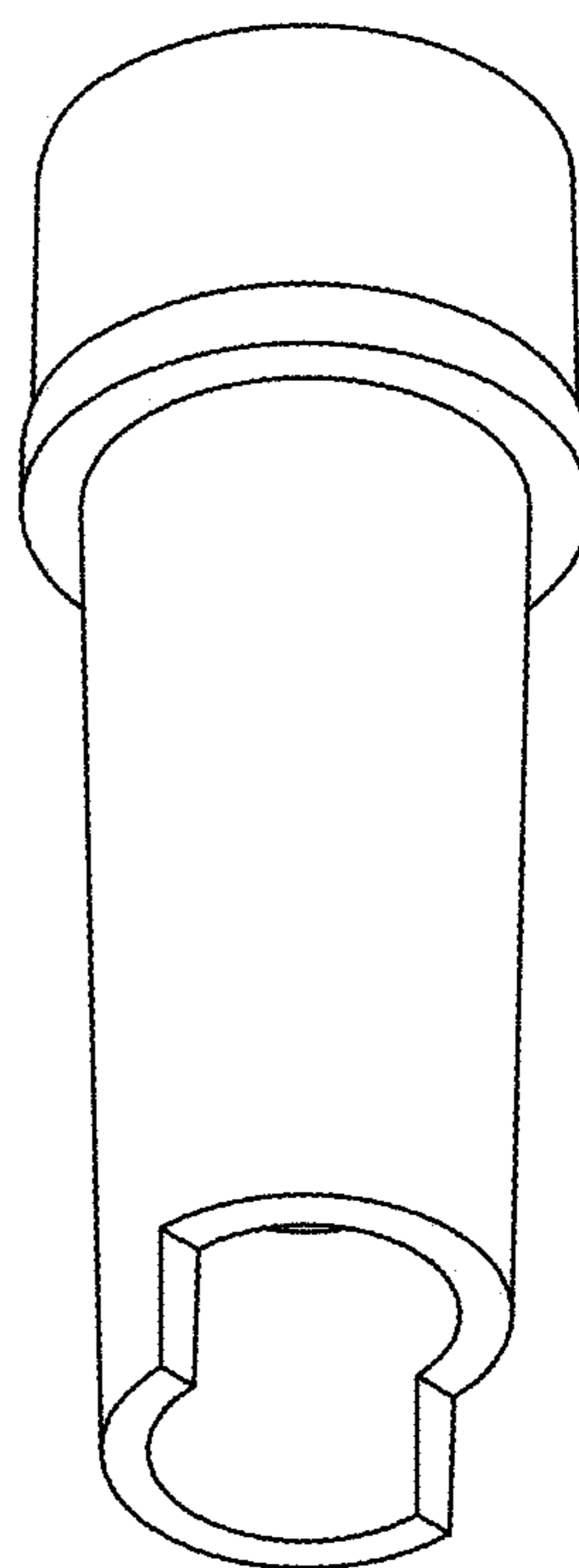


FIG. 2

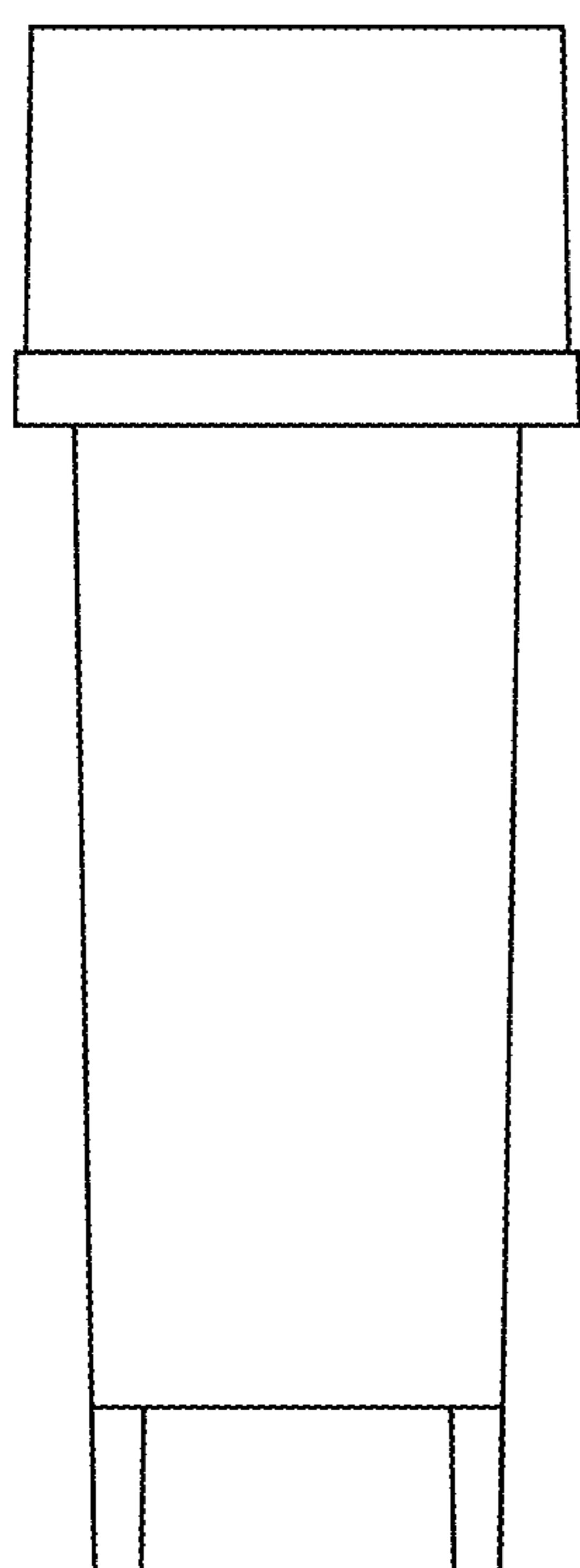


FIG. 3

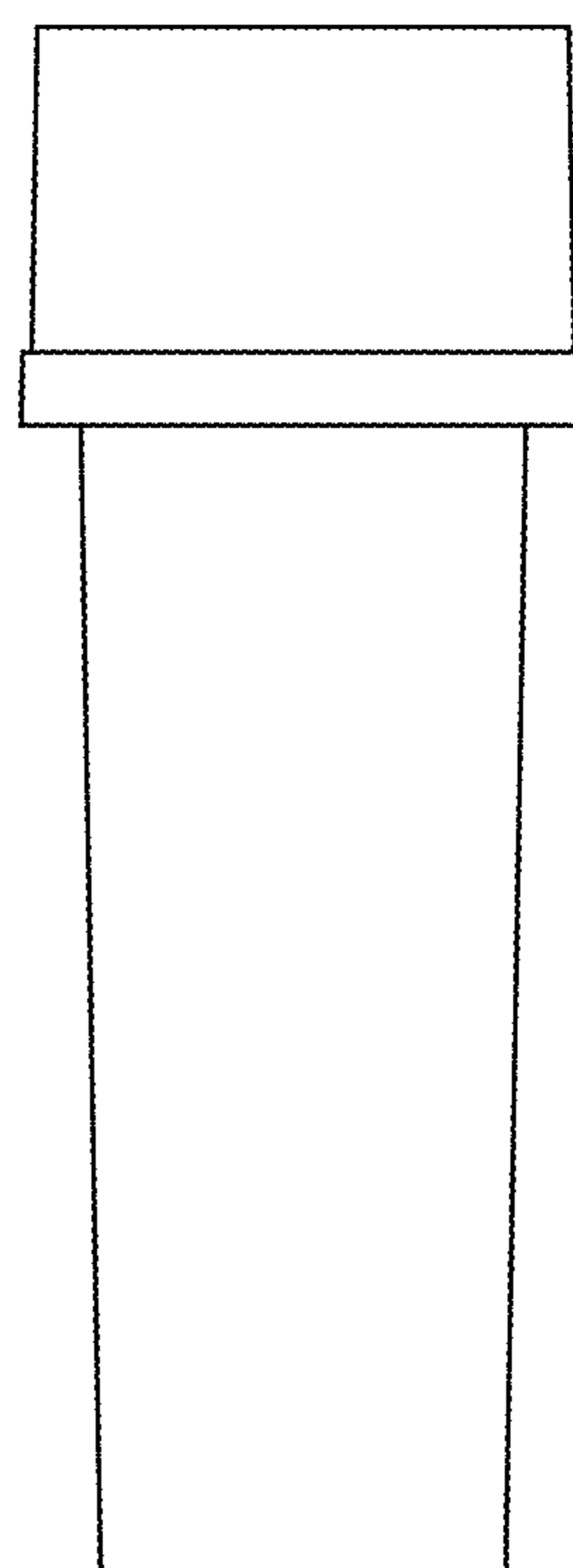


FIG. 4

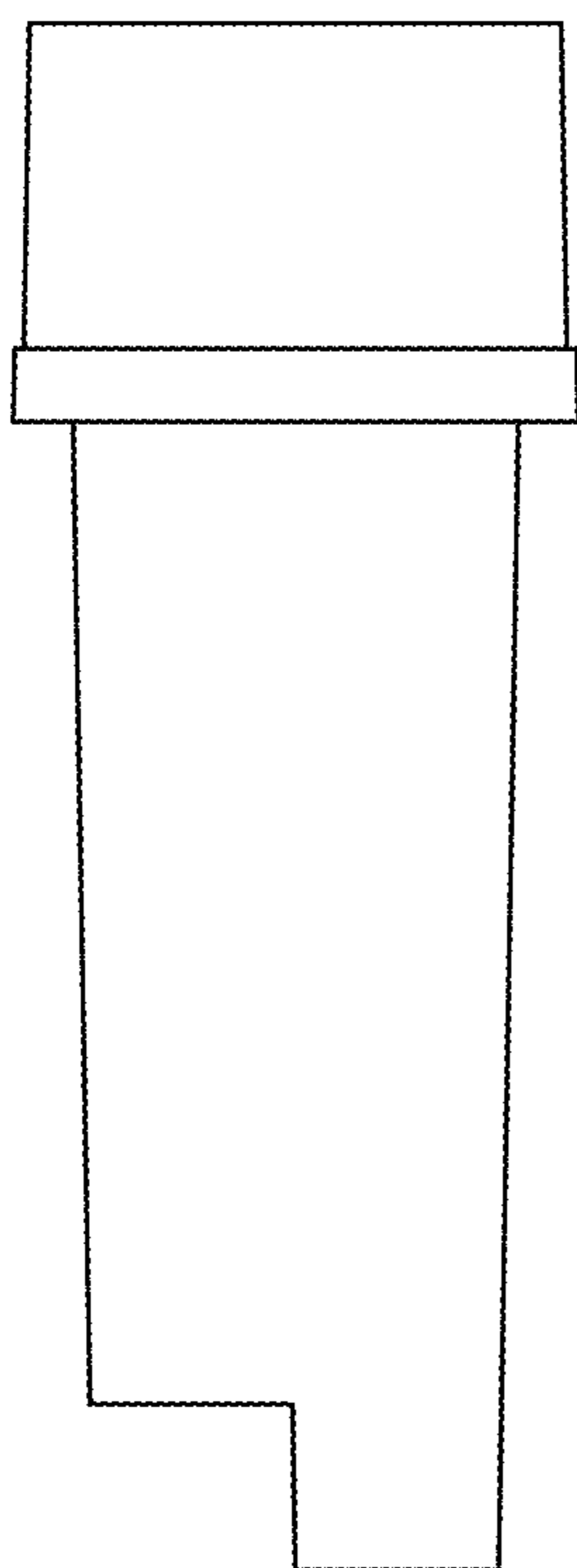


FIG. 5

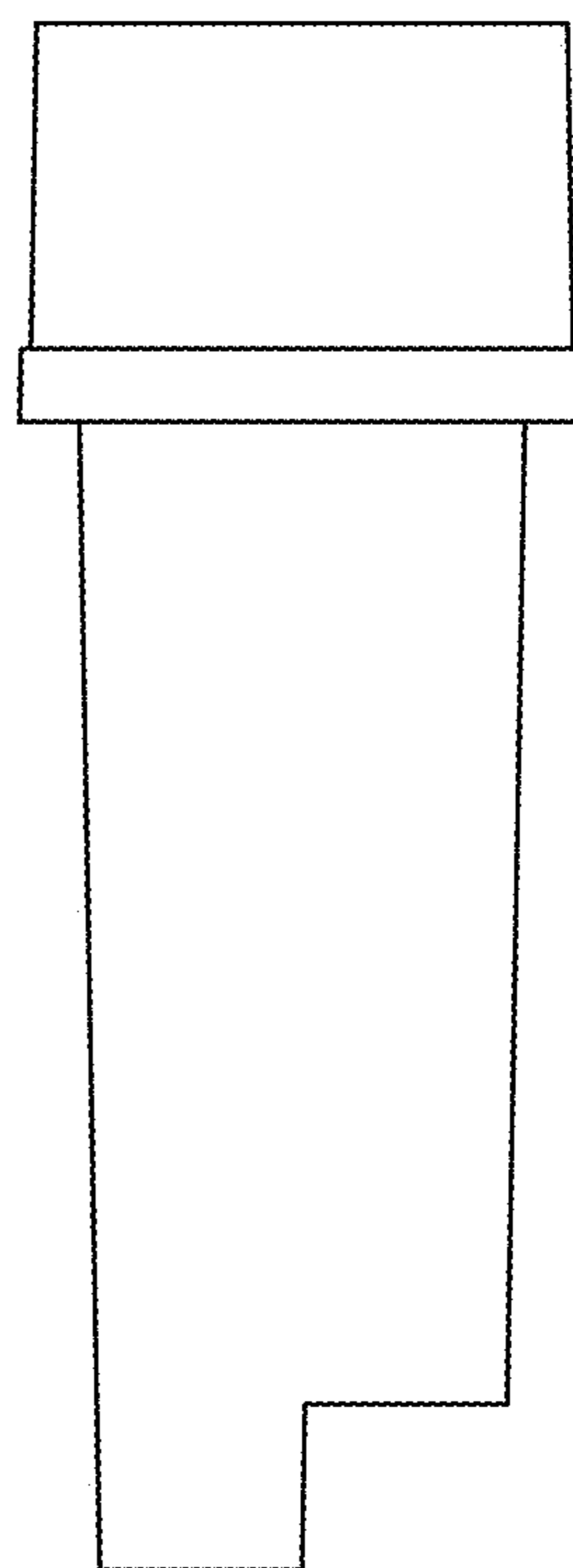


FIG. 6

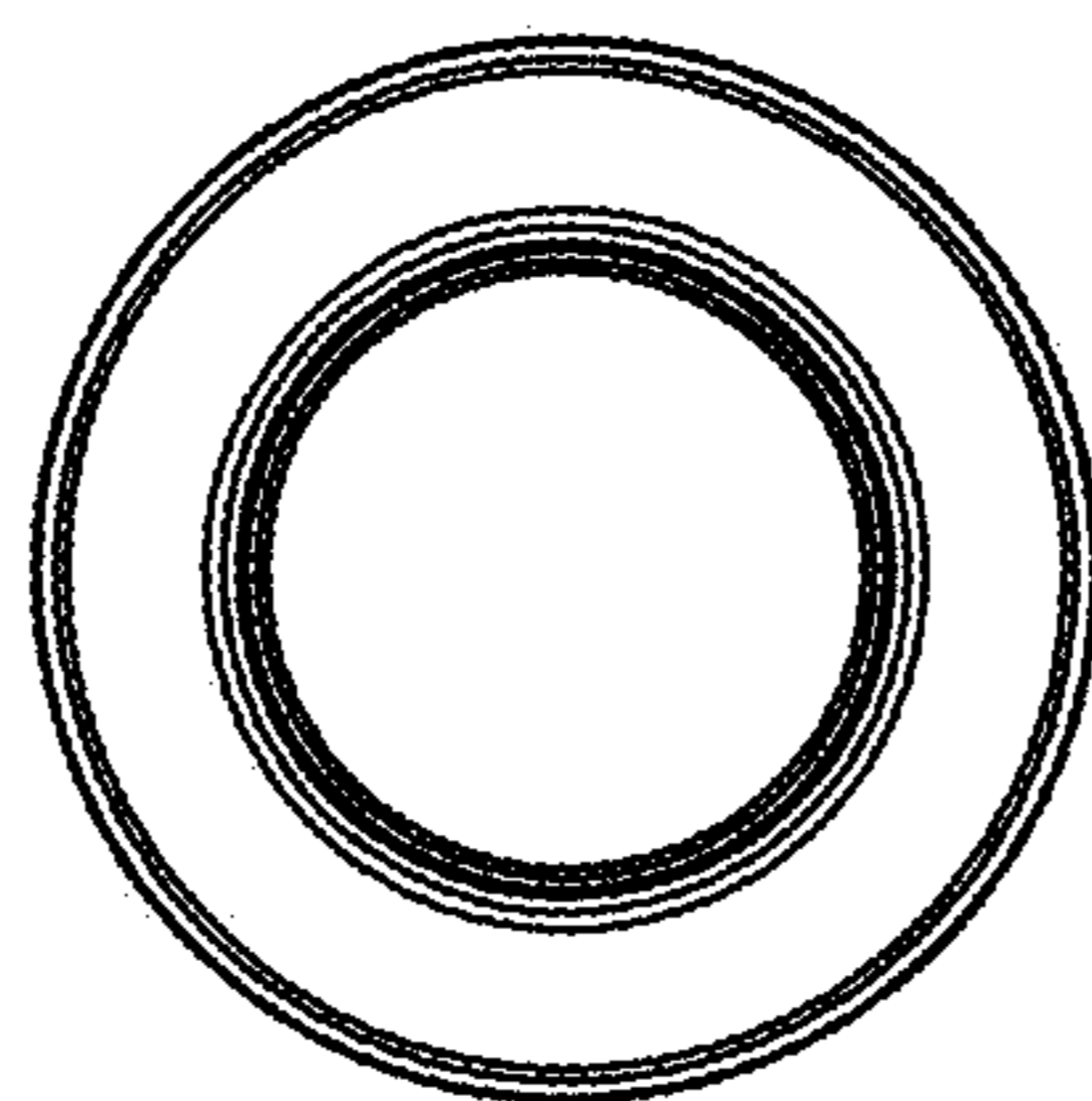


FIG. 7

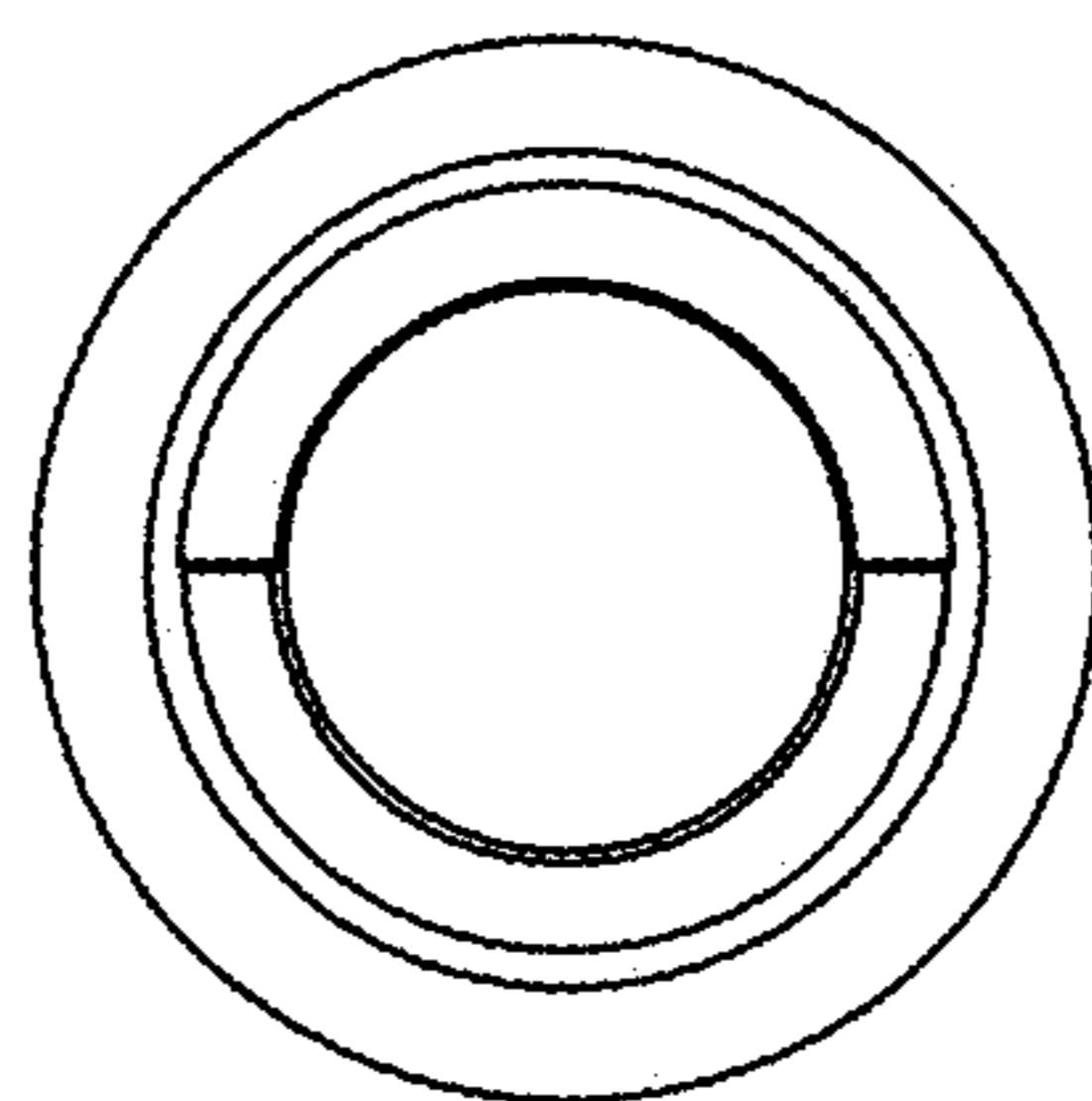


FIG. 8

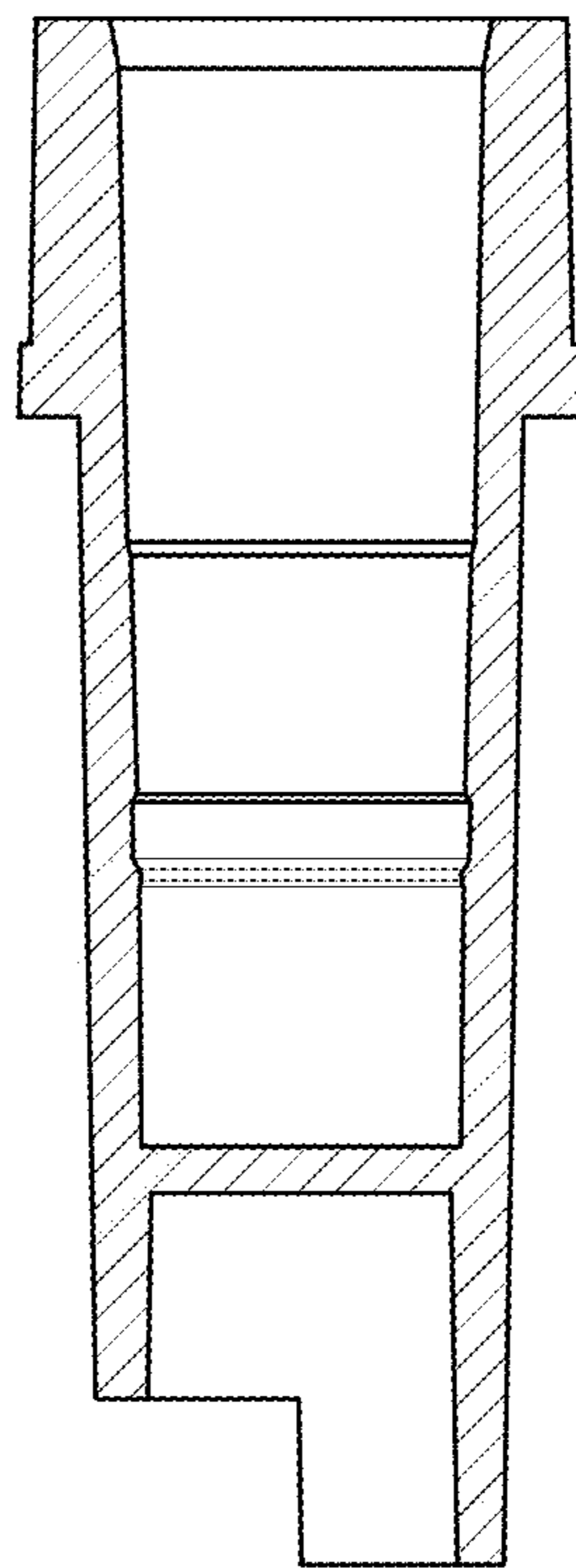


FIG. 9