



US00D939948S

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

(10) **Patent No.:** **US D939,948 S**

(45) **Date of Patent:** **** Jan. 4, 2022**

- (54) **ROCK BOLT COMPONENT**
- (71) Applicant: **RSC MINING (PTY) LTD**, Germiston (ZA)
- (72) Inventor: **Frans Hermanus Cronje**, Germiston (ZA)
- (73) Assignee: **RSC MINING (PTY) LTD.**, Germiston (ZA)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/730,208**
- (22) Filed: **Apr. 2, 2020**

- 3,785,598 A * 1/1974 Gillstrap F16L 3/00 248/58
 - 4,303,354 A * 12/1981 McDowell, Jr. E21D 21/008 405/302.1
 - 4,445,808 A * 5/1984 Arya E21D 21/0086 405/302.1
 - D301,687 S * 6/1989 Cassidy D8/353
 - D399,730 S * 10/1998 Pitre D8/399
 - 5,871,193 A * 2/1999 Jacobs D07B 1/185 248/317
 - 5,954,456 A * 9/1999 Bowles E21D 21/0086 405/259.6
 - 6,405,983 B1 * 6/2002 Goj F16B 19/1081 248/205.1
 - D470,041 S * 2/2003 Fergusson D8/399
 - D479,848 S * 9/2003 Smith D15/199
- (Continued)

- (30) **Foreign Application Priority Data**
- Oct. 14, 2019 (ZA) F2019/01527
- (51) **LOC (13) Cl.** **08-08**
- (52) **U.S. Cl.**
- USPC **D8/399**
- (58) **Field of Classification Search**
- USPC D25/199, 133; D15/143; D8/16, 19, D8/353, 397, 399, 354
- CPC F16B 31/021; F16B 37/145; F16B 13/141; F16B 21/183; F16B 5/02; F16B 41/002; F16B 11/006; F16B 37/04; F16B 21/07; F16B 2200/50; F16B 2200/503; F16B 2200/506
- See application file for complete search history.

FOREIGN PATENT DOCUMENTS

- CA 2763338 A1 * 7/2012 E21D 20/02
- WO WO-2016077861 A1 * 5/2016 F16B 39/10
- WO WO-2021024229 A1 * 2/2021 F16B 31/021

Primary Examiner — Holly E Thurman
Assistant Examiner — Ieisha N Price
 (74) *Attorney, Agent, or Firm* — Tutunjian & Bitetto, P.C.

(57) **CLAIM**

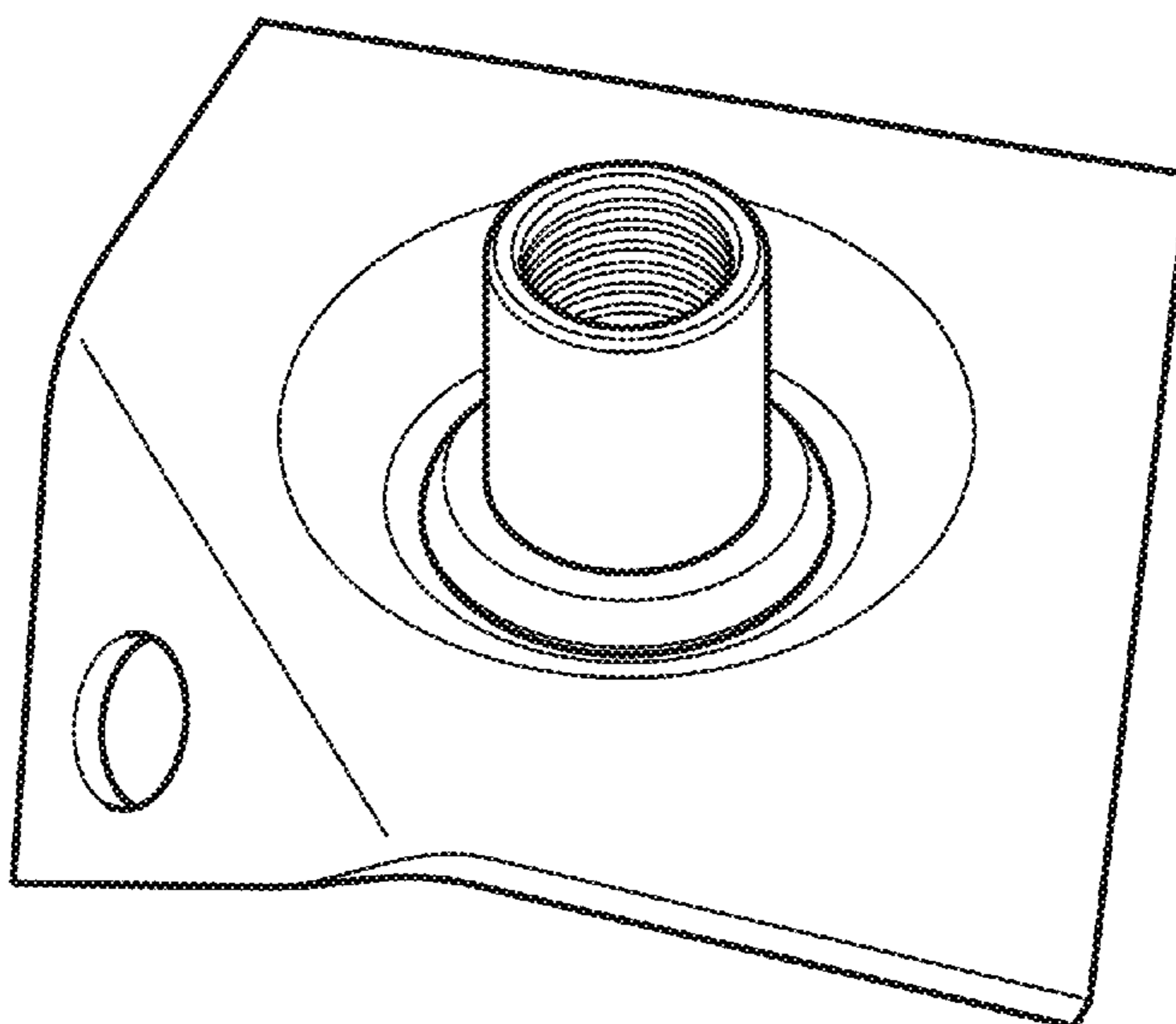
The ornamental design for a rock bolt component, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of the rock bolt component showing my new design;
 FIG. 2 is a bottom perspective view thereof;
 FIG. 3 is a top view thereof;
 FIG. 4 is a bottom view thereof;
 FIG. 5 is a front view thereof;
 FIG. 6 is a right side view thereof;
 FIG. 7 is a left side view thereof; and,
 FIG. 8 is a rear view thereof.

1 Claim, 3 Drawing Sheets

- (56) **References Cited**
- U.S. PATENT DOCUMENTS**
- D34,939 S * 8/1901 Taylor D8/399
- D173,629 S * 12/1954 Schlage D8/353
- 3,090,203 A * 5/1963 Durget E21D 21/00 405/259.4
- 3,238,731 A * 3/1966 Seifert E21D 21/0086 405/302.1



(56)

References Cited

U.S. PATENT DOCUMENTS

7,963,725 B2 * 6/2011 Dawe E21D 21/008
405/259.1
8,596,923 B2 * 12/2013 Oldsen E21D 21/0086
405/259.4
D805,223 S * 12/2017 DeBellis D25/199
D837,041 S * 1/2019 Barnes D8/382
D856,548 S * 8/2019 Stephan D25/199
10,605,078 B2 * 3/2020 Zhao E21D 21/0046
D908,196 S * 1/2021 Tropper D23/262
2009/0191007 A1 * 7/2009 Seegmiller E21D 21/008
405/259.5
2017/0314394 A1 * 11/2017 Craig E21D 21/0093

* cited by examiner

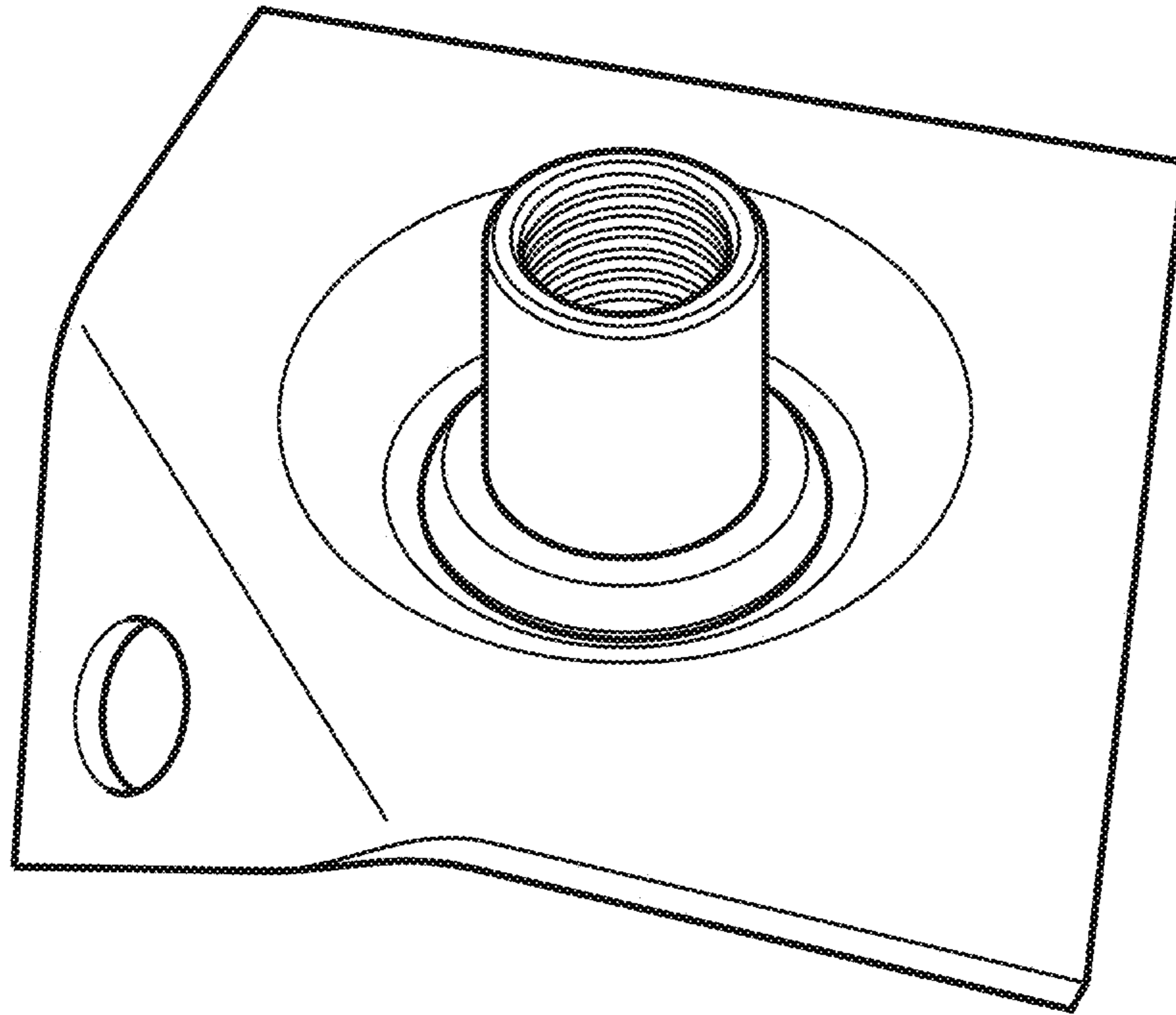


FIG. 1

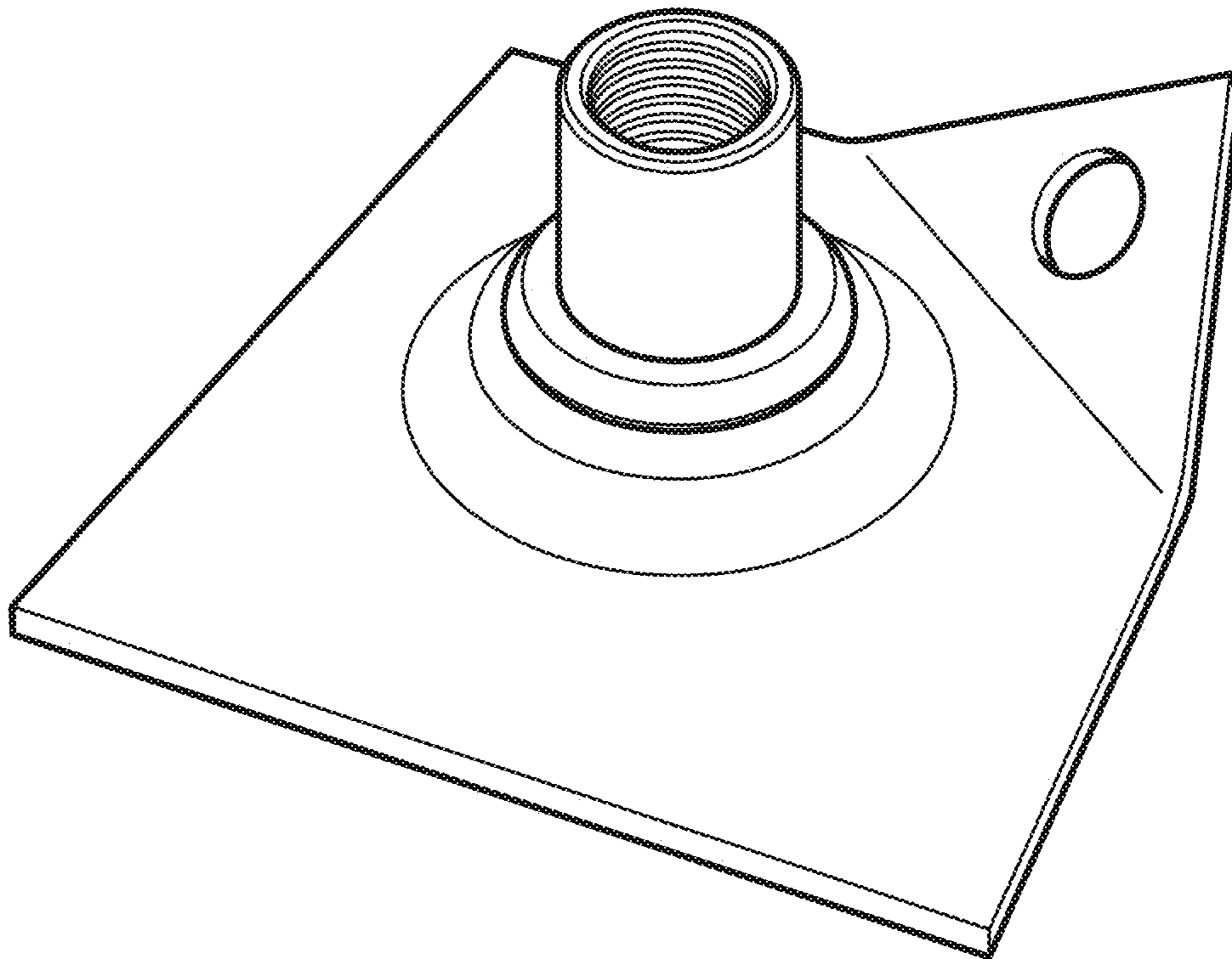


FIG. 2

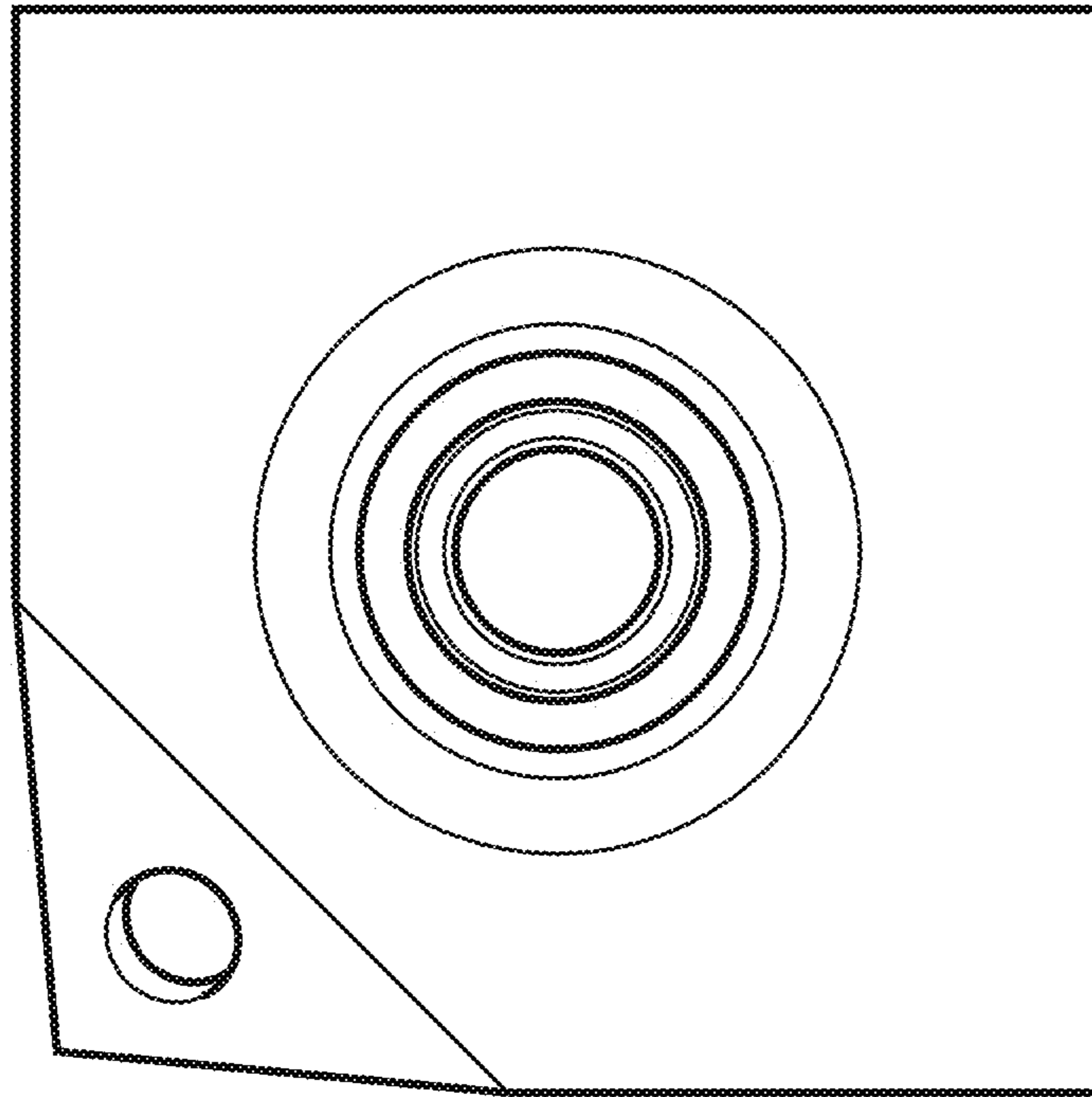


FIG. 3

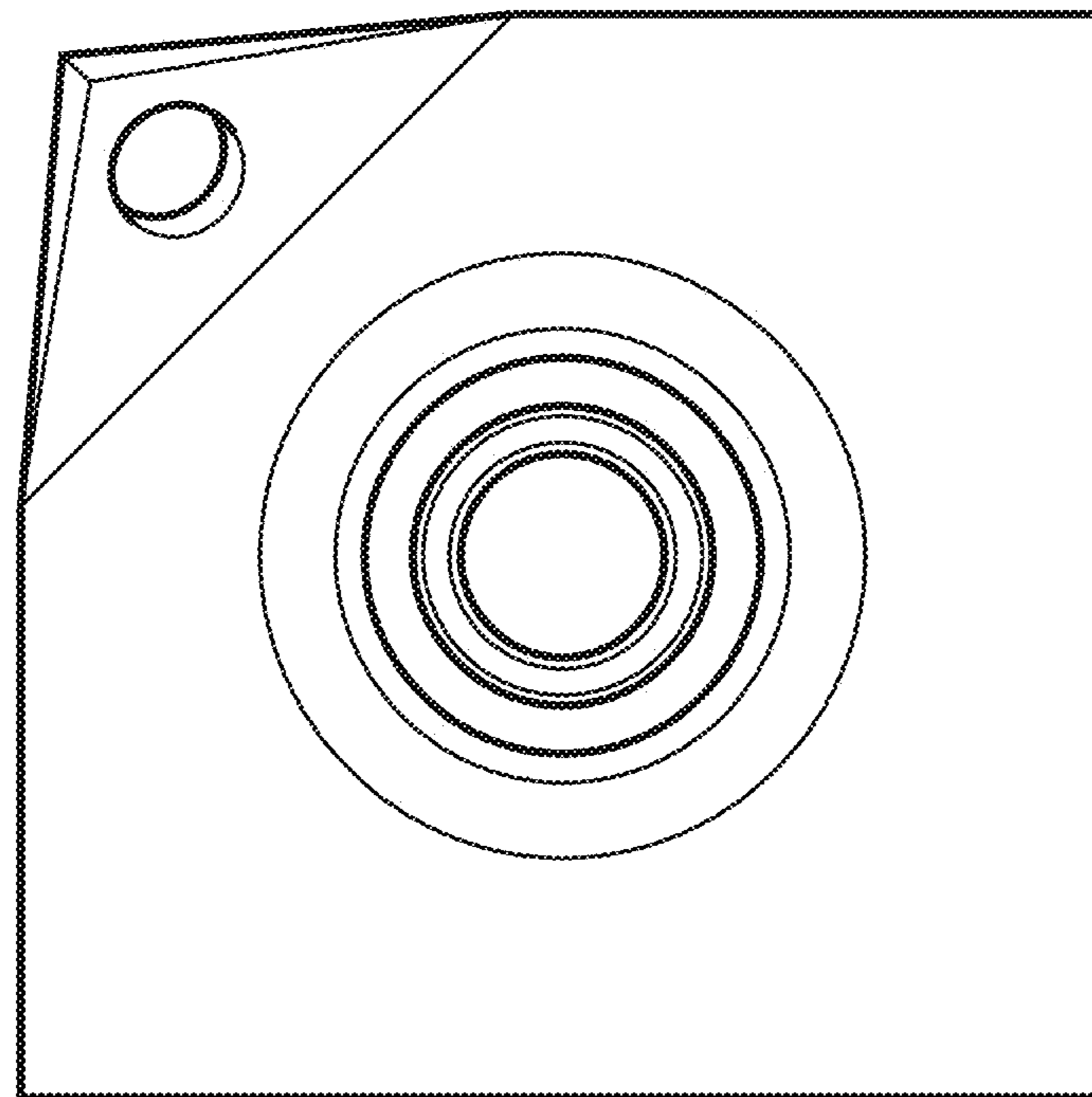


FIG. 4

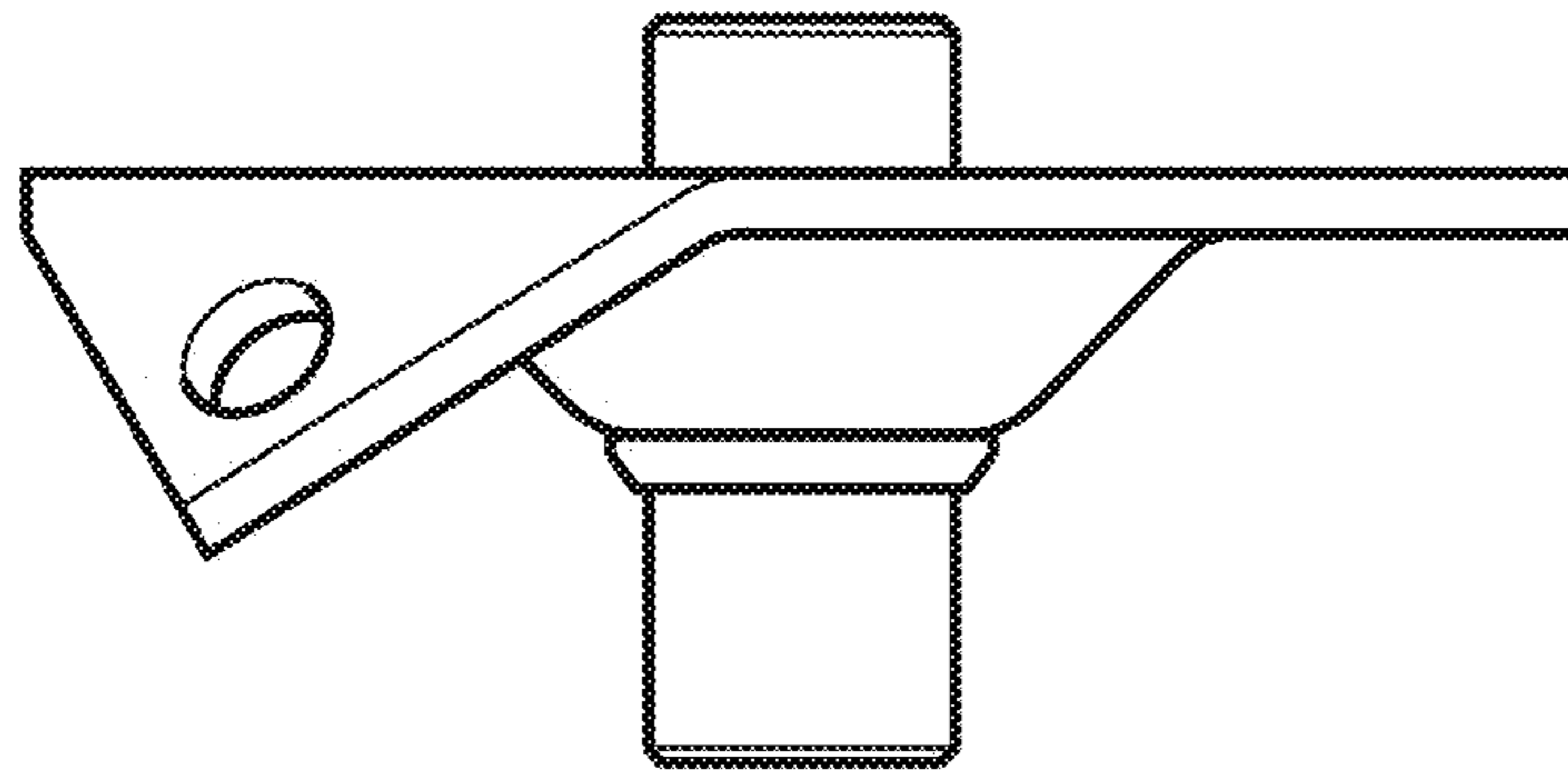


FIG. 5

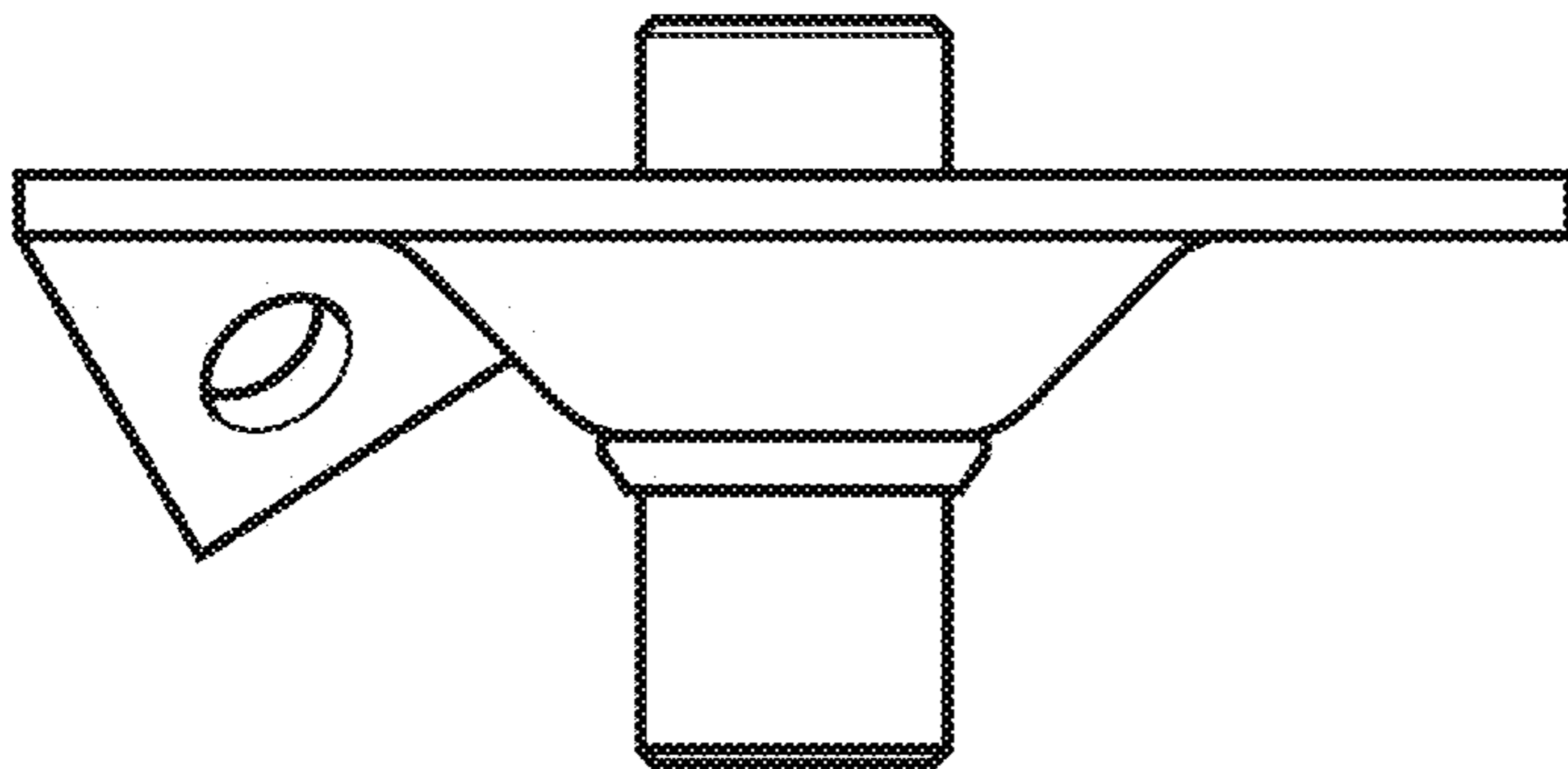


FIG. 6

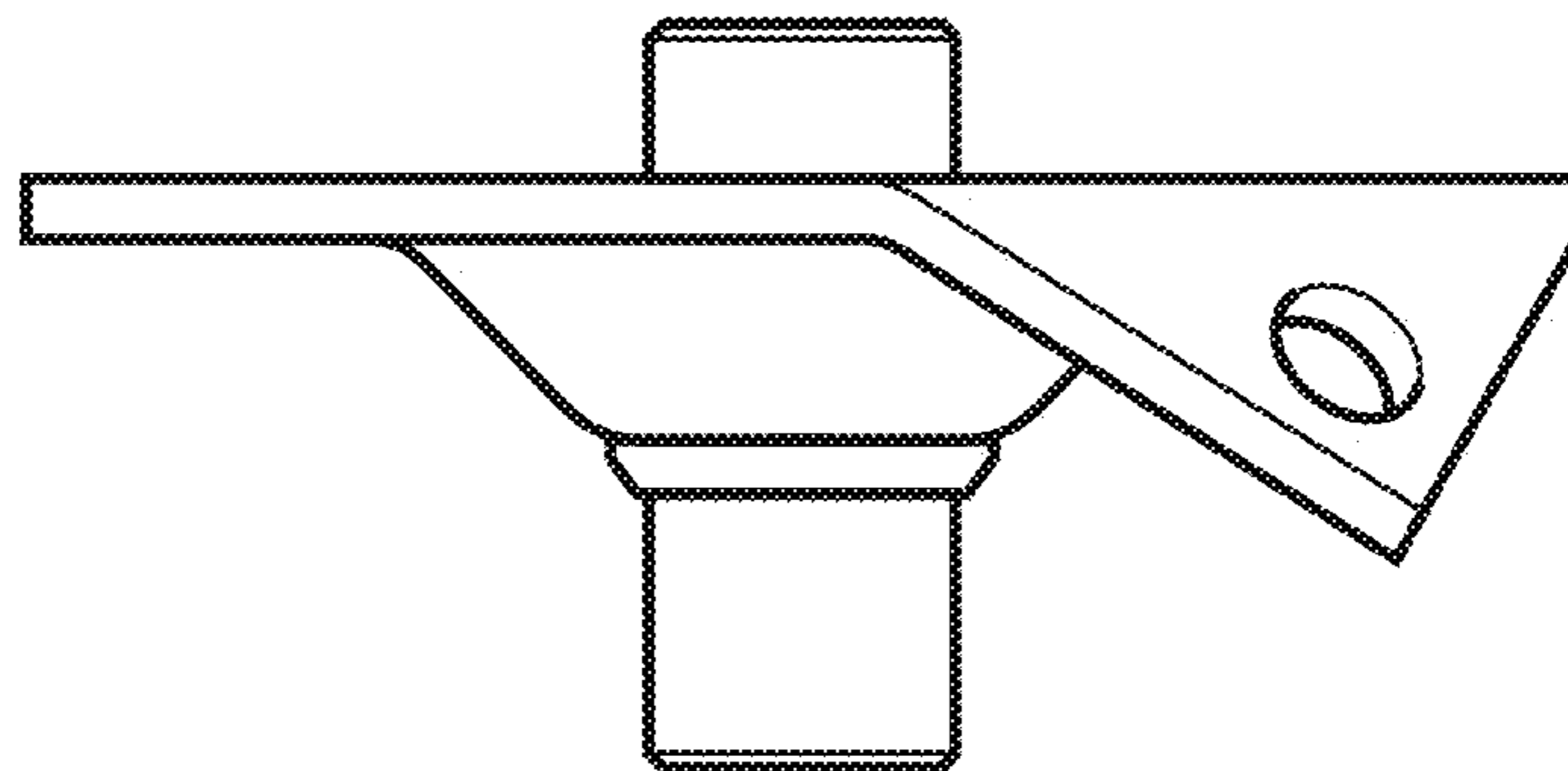


FIG. 7

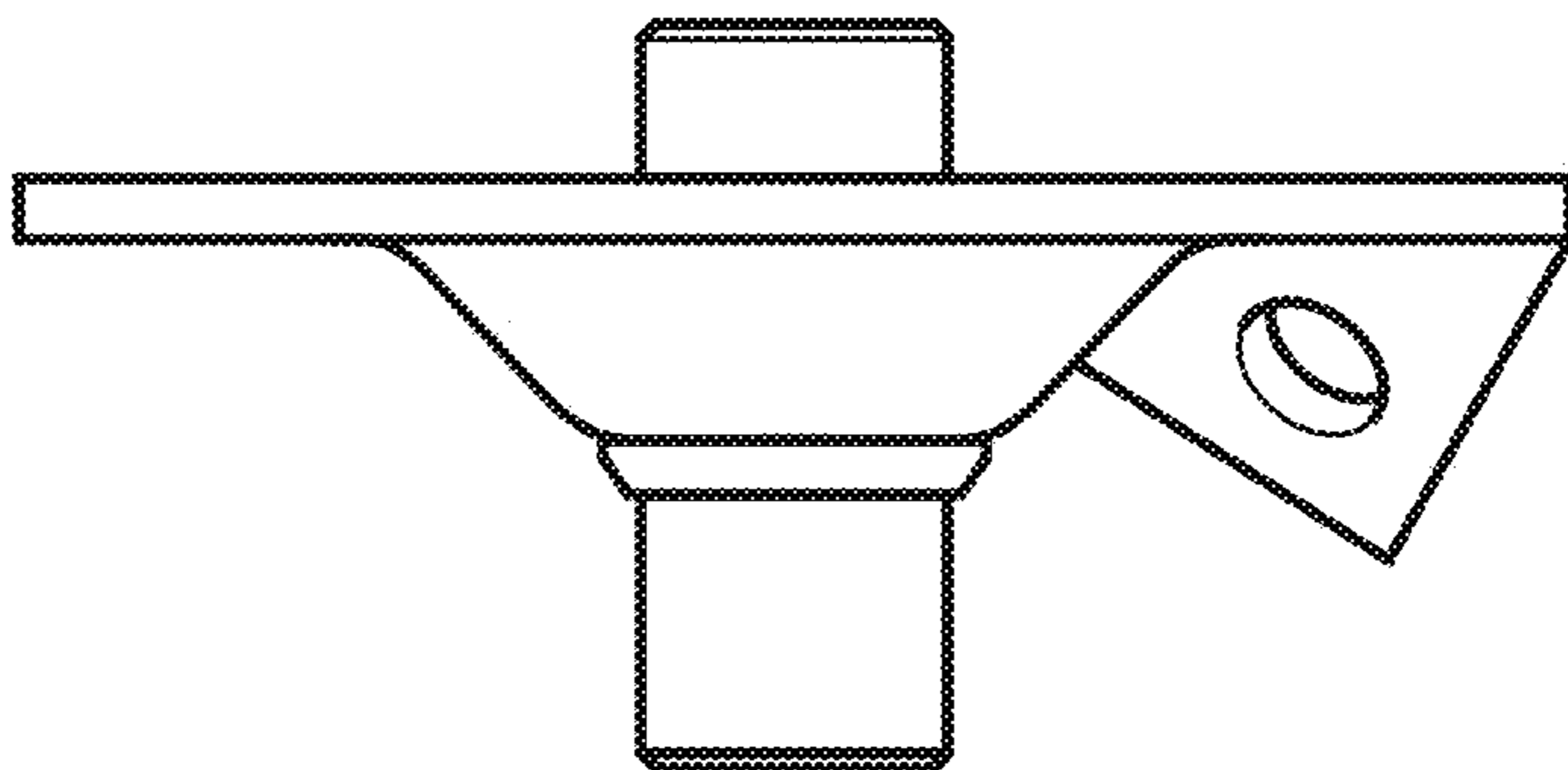


FIG. 8