



US00D820327S

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

(10) **Patent No.:** **US D820,327 S**
(45) **Date of Patent:** **** Jun. 12, 2018**

- (54) **SETTING SLEEVE**
- (71) Applicant: **Downhole Technology, LLC**, Houston, TX (US)
- (72) Inventor: **Duke VanLue**, Tomball, TX (US)
- (73) Assignee: **Downhole Technology, LLC**, Houston, TX (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/613,004**
- (22) Filed: **Aug. 7, 2017**

- 2014/0020911 A1* 1/2014 Martinez E21B 23/01
166/387
- 2015/0101796 A1* 4/2015 Davies E21B 33/128
166/192
- 2015/0260008 A1* 9/2015 McCoy E21B 33/134
166/387
- 2015/0330177 A1* 11/2015 Williams E21B 33/1291
166/138
- 2016/0138363 A1* 5/2016 Sommers E21B 23/06
166/387
- 2016/0168944 A1* 6/2016 Pulat E21B 33/128
166/377
- 2016/0251921 A1* 9/2016 MacLeod E21B 17/07
166/382
- 2016/0258253 A1* 9/2016 MacLeod E21B 17/07
- 2016/0265305 A1* 9/2016 Davies E21B 43/26
- 2016/0305215 A1* 10/2016 Harris E21B 33/1291

(Continued)

Related U.S. Application Data

- (63) Continuation of application No. 14/532,965, filed on Nov. 4, 2014, now Pat. No. 9,777,551.
- (51) **LOC (11) Cl.** **15-03**
- (52) **U.S. Cl.**
USPC **D15/21**
- (58) **Field of Classification Search**
USPC D15/21, 132
CPC E21B 33/128; E21B 33/124; E21B 33/129;
E21B 33/1291; E21B 33/1292; E21B
23/01; E21B 23/06; E21B 23/006; E21B
34/14; E21B 34/16
See application file for complete search history.

Primary Examiner — Mark Goodwin

(74) *Attorney, Agent, or Firm* — Rao DeBoer Osterrieder, PLLC; John M. DeBoer

(57) **CLAIM**

The ornamental design for a setting sleeve, as shown and described.

DESCRIPTION

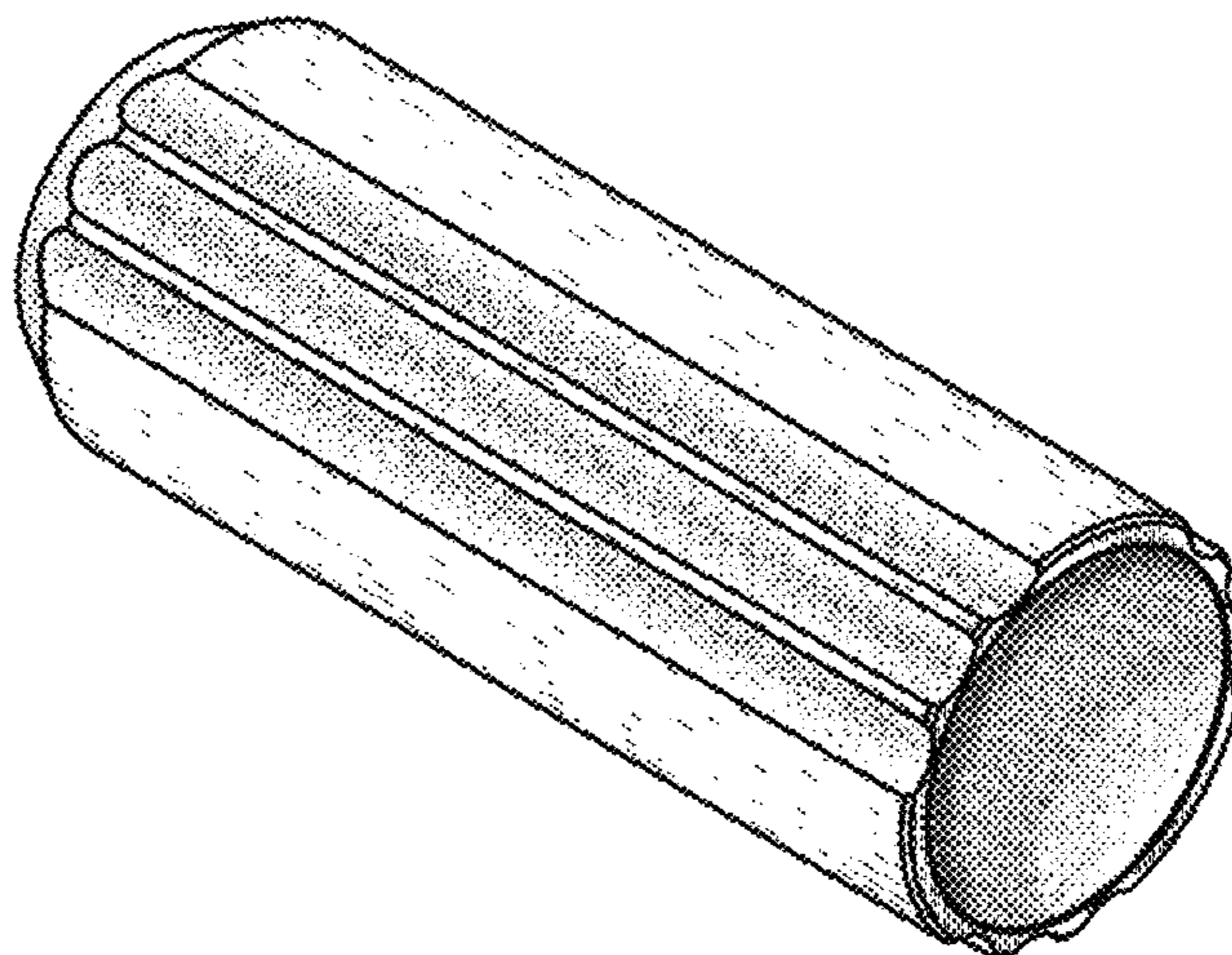
FIG. 1 is a longitudinal side view of a setting sleeve with a grooved outer surface, in accordance with embodiments of the present disclosure;
 FIG. 2 is an end view looking at the left end of the setting sleeve of FIG. 1, in accordance with embodiments of the present disclosure;
 FIG. 3 is an opposite end view looking at the right end of the setting sleeve of FIG. 1, in accordance with embodiments of the present disclosure; and,
 FIG. 4 is an isometric view of the setting sleeve of FIG. 1, in accordance with embodiments of the present disclosure.

1 Claim, 2 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 8,887,818 B1* 11/2014 Carr E21B 33/1204
166/118
- 9,777,551 B2* 10/2017 Davies E21B 33/128
- 9,835,003 B2* 12/2017 Harris E21B 23/01
- 2011/0284208 A1* 11/2011 MacLeod E21B 17/07
166/88.2
- 2013/0048271 A1* 2/2013 VanLue E21B 33/128
166/118



(56)

References Cited

U.S. PATENT DOCUMENTS

2016/0376869 A1* 12/2016 Rothen E21B 23/06
166/135
2017/0122048 A1* 5/2017 Davies E21B 23/01
2017/0130553 A1* 5/2017 Harris E21B 23/01
2017/0145780 A1* 5/2017 Castro E21B 33/1291
2017/0335650 A1* 11/2017 Davies E21B 33/128

* cited by examiner

FIG. 1

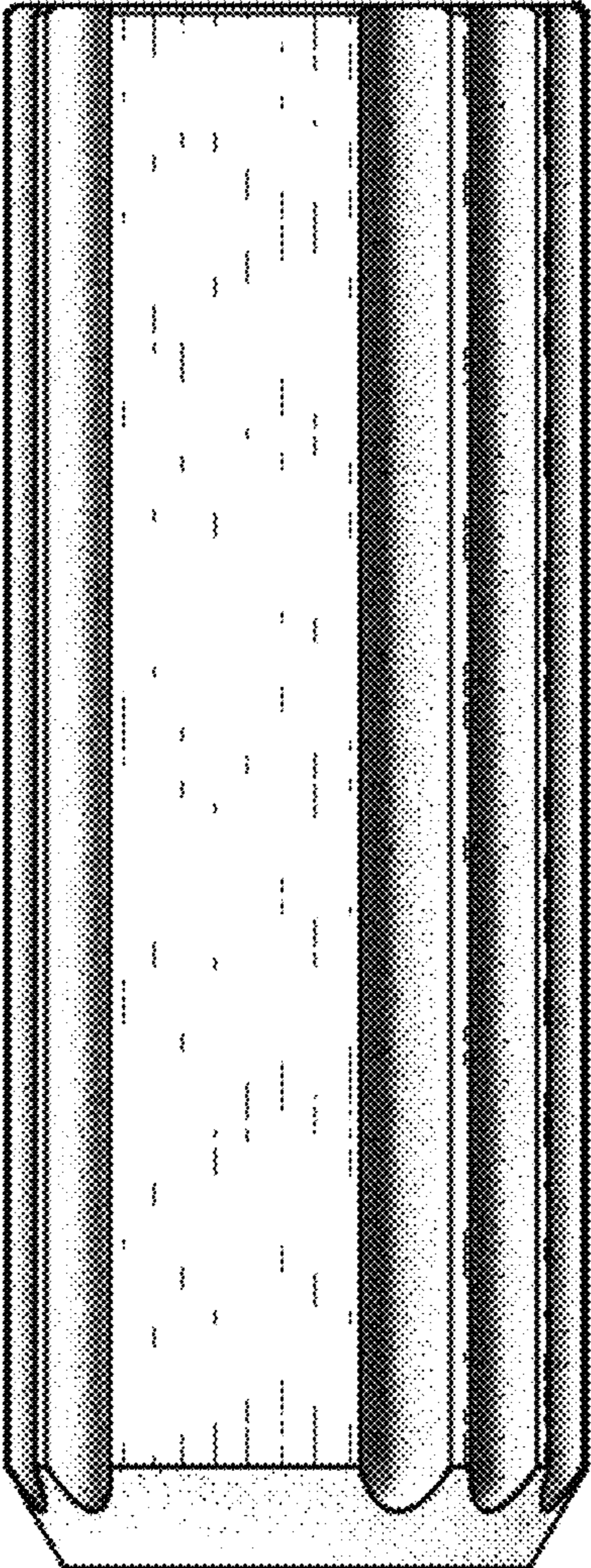


FIG. 2

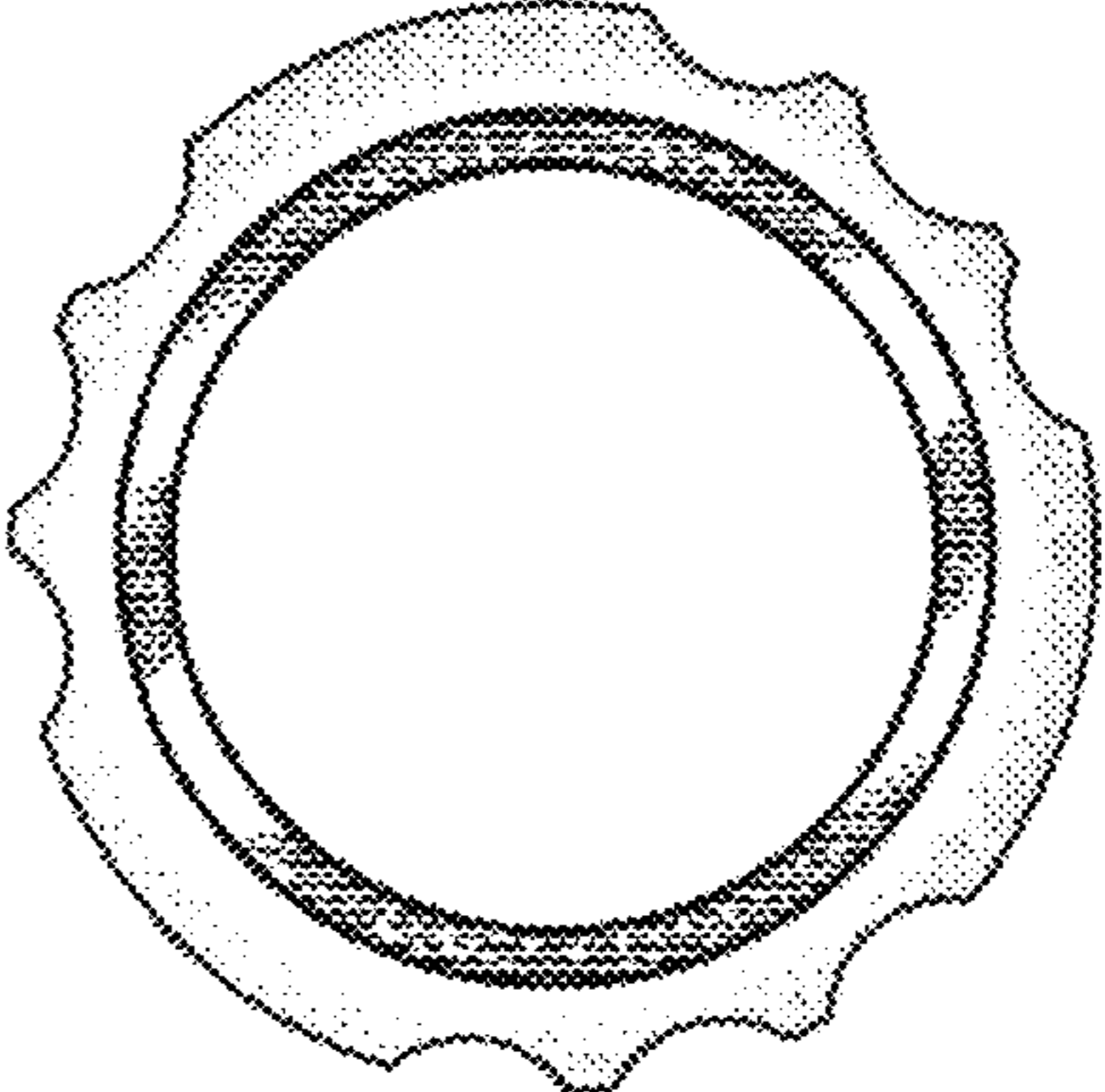


FIG. 3

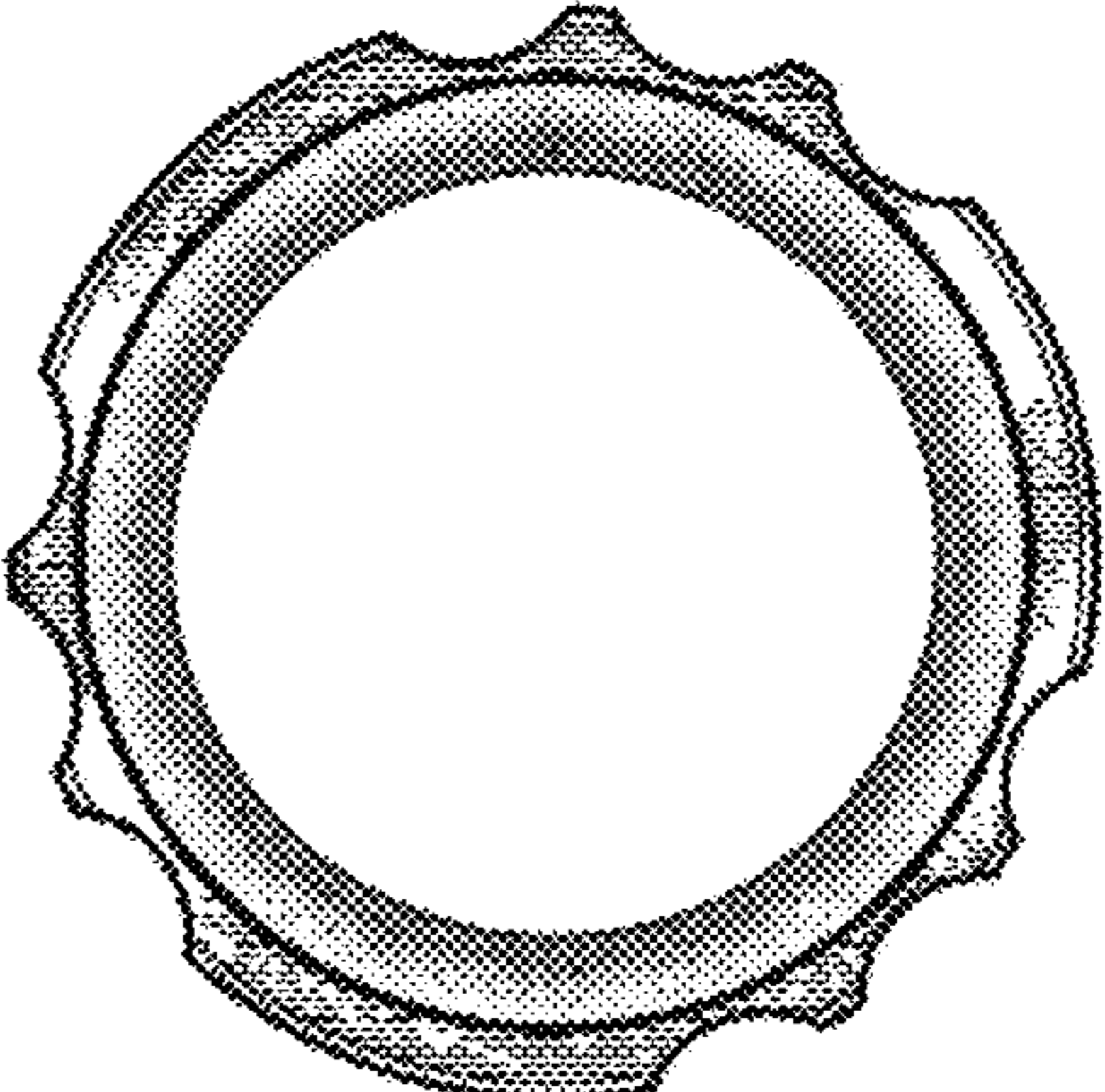


FIG. 4

