



US00D852684S

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

(10) **Patent No.:** **US D852,684 S**

(45) **Date of Patent:** **\*\* Jul. 2, 2019**

- (54) **SHAFT**
- (71) Applicant: **Aircraft Gear Corporation**, Loves Park, IL (US)
- (72) Inventor: **Sean M. Carlini**, Rockford, IL (US)
- (73) Assignee: **Aircraft Gear Corporation**, Loves Park, IL (US)
- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/594,490**
- (22) Filed: **Feb. 18, 2017**
- (51) **LOC (11) Cl.** ..... **12-16**
- (52) **U.S. Cl.**  
USPC ..... **D12/159**
- (58) **Field of Classification Search**  
USPC ..... D12/159-162, 223  
CPC ... F16C 11/06; F16C 11/0619; F16C 11/0642;  
F16C 11/0695; B62D 7/14; B62D 7/142;  
B62D 7/16; B62D 7/20; B62D 49/0621  
See application file for complete search history.

- D462,256 S \* 9/2002 Jaynes ..... D12/160
- 7,913,782 B1 \* 3/2011 Foss ..... B60D 1/00  
180/14.4
- D645,382 S \* 9/2011 Verbowski ..... D12/159
- D686,677 S \* 7/2013 Simonds ..... D12/160
- D719,493 S \* 12/2014 Mochinaga ..... D12/160
- D772,661 S \* 11/2016 Norton ..... D8/14

(Continued)

**OTHER PUBLICATIONS**

RCV Ultimate CV Prop Shaft for Polaris XP Turbo, posted at RCV, posting date Jan. 13, 2017. [site visited Jul. 3, 2018] [Available from internet] URL: <<https://www.rcvperformance.com/rcv-ultimate-cv-prop-shaft-for-polaris-xpturbo-2-seat.html>> (Year: 2017).\*

(Continued)

*Primary Examiner* — Kevin K Rudzinski  
*Assistant Examiner* — Kathleen L Jones  
(74) *Attorney, Agent, or Firm* — John V. Daniluck;  
Bingham Greenebaum Doll LLP

(57) **CLAIM**

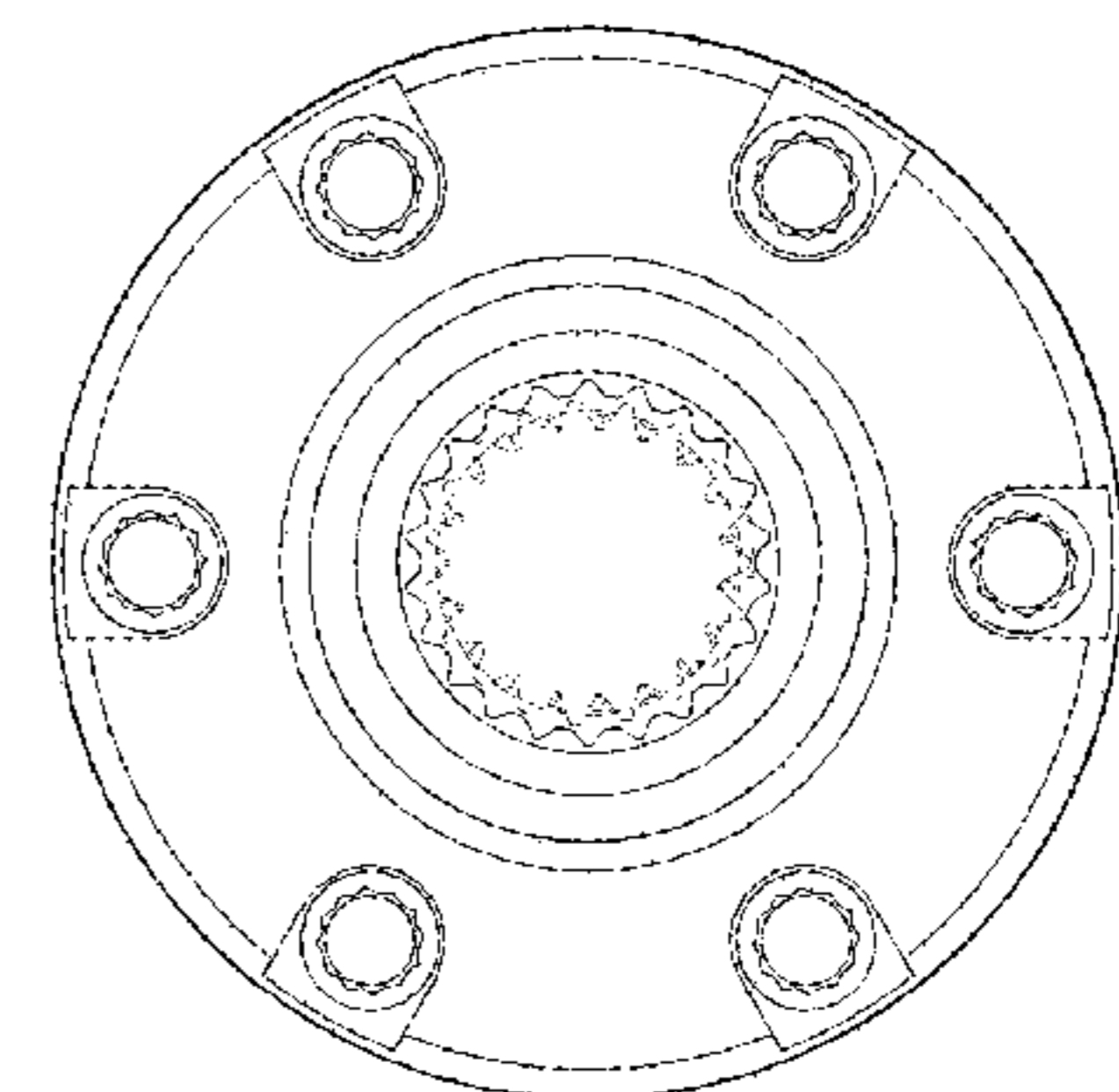
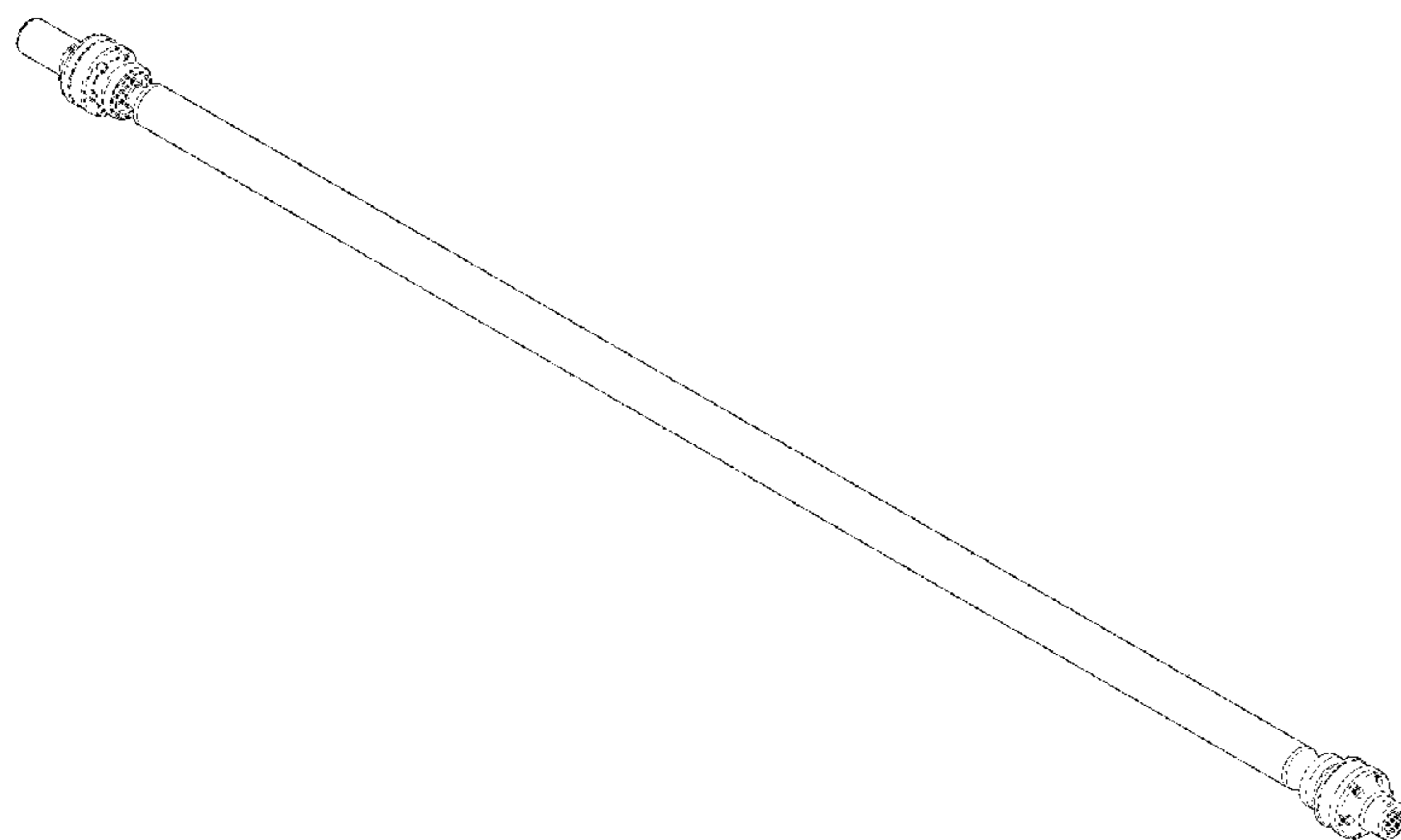
The ornamental design for a shaft, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, right, frontal perspective view of a shaft showing my new design according to one embodiment; FIG. 2 shows portions of the shaft of FIG. 1, enlarged with center section excluded for clarity of illustration; FIG. 3 is a top view of the shaft of FIG. 1, shown enlarged with center section excluded for clarity of illustration; FIG. 4 is a frontal view of the shaft of FIG. 1, shown enlarged with center section excluded for clarity of illustration; and, FIG. 5 is a right end view of the shaft of FIG. 2, the left end being identical, the broken lines showing environment forming no part of the claimed design.

**1 Claim, 5 Drawing Sheets**

- (56) **References Cited**  
U.S. PATENT DOCUMENTS
- 2,525,695 A \* 10/1950 Lombard ..... F16D 3/185  
403/314
- D242,442 S \* 11/1976 Garrison ..... D12/114
- D250,465 S \* 12/1978 Morrison ..... D12/159
- D294,219 S \* 2/1988 Hamatani ..... D8/51
- 4,817,752 A \* 4/1989 Lobo ..... B60K 17/3515  
180/247
- 4,856,633 A \* 8/1989 Specht ..... F16D 11/14  
192/49
- 5,105,517 A \* 4/1992 Barnow ..... B60K 17/26  
180/247
- D358,119 S \* 5/1995 Winter ..... D12/160
- 5,429,204 A \* 7/1995 Tuholski ..... B60K 17/26  
180/247



(56)

**References Cited**

U.S. PATENT DOCUMENTS

D809,437 S \* 2/2018 Sugiyama ..... D12/159  
 D814,979 S \* 4/2018 Cantuern ..... D12/160  
 2004/0226368 A1 \* 11/2004 Nieman ..... F16F 15/20  
 73/462  
 2006/0157948 A1 \* 7/2006 Genz ..... B62D 7/142  
 280/91.1  
 2009/0166995 A1 \* 7/2009 Sorquist ..... A61G 5/023  
 280/249  
 2009/0302672 A1 \* 12/2009 Brooks ..... B60B 35/12  
 301/128  
 2014/0144023 A1 \* 5/2014 Cerimeli ..... B60K 17/22  
 29/897.2  
 2014/0256454 A1 \* 9/2014 Shimshie ..... F16D 7/08  
 464/36  
 2015/0096825 A1 \* 4/2015 Goethe ..... B60K 17/22  
 180/379  
 2015/0167744 A1 \* 6/2015 Yoo ..... F16C 35/047  
 384/456

2015/0174956 A1 \* 6/2015 Malik ..... B60B 27/065  
 411/116  
 2015/0367681 A1 \* 12/2015 Pale ..... B21K 21/12  
 301/126  
 2016/0059328 A1 \* 3/2016 Jacobson ..... B23D 17/00  
 30/249  
 2016/0297278 A1 \* 10/2016 Farjoud ..... B60G 17/08  
 2018/0273084 A1 \* 9/2018 Dickson ..... B62D 5/0457

OTHER PUBLICATIONS

Axle Shaft Assembly, posted at Paragon, posting date Oct. 17, 2013. [site visited Jul. 3, 2018] [Available from internet] URL: <<https://www.paragon-products.com/Front-Axle-Shaft-Assembly-Left-Right-p/pp-996.349.038.11.htm>> (Year: 2013).\*  
 1000 HP Extreme Duty Rear Axles, posted at Spohn, posting date Oct. 6, 2009. [site visited Jul. 3, 2018] URL: <<http://www.spohn.net/shop/2004-2006-Pontiac-GTO/Drivetrain/Rear-End-Axles-CV-Joints-Stubs/1000-HP-Extreme-Duty-Rear-Axles-CV-Joints-Stubs-Package-2004-2006-Pontiac-GTO.html>> (Year: 2009).\*

\* cited by examiner

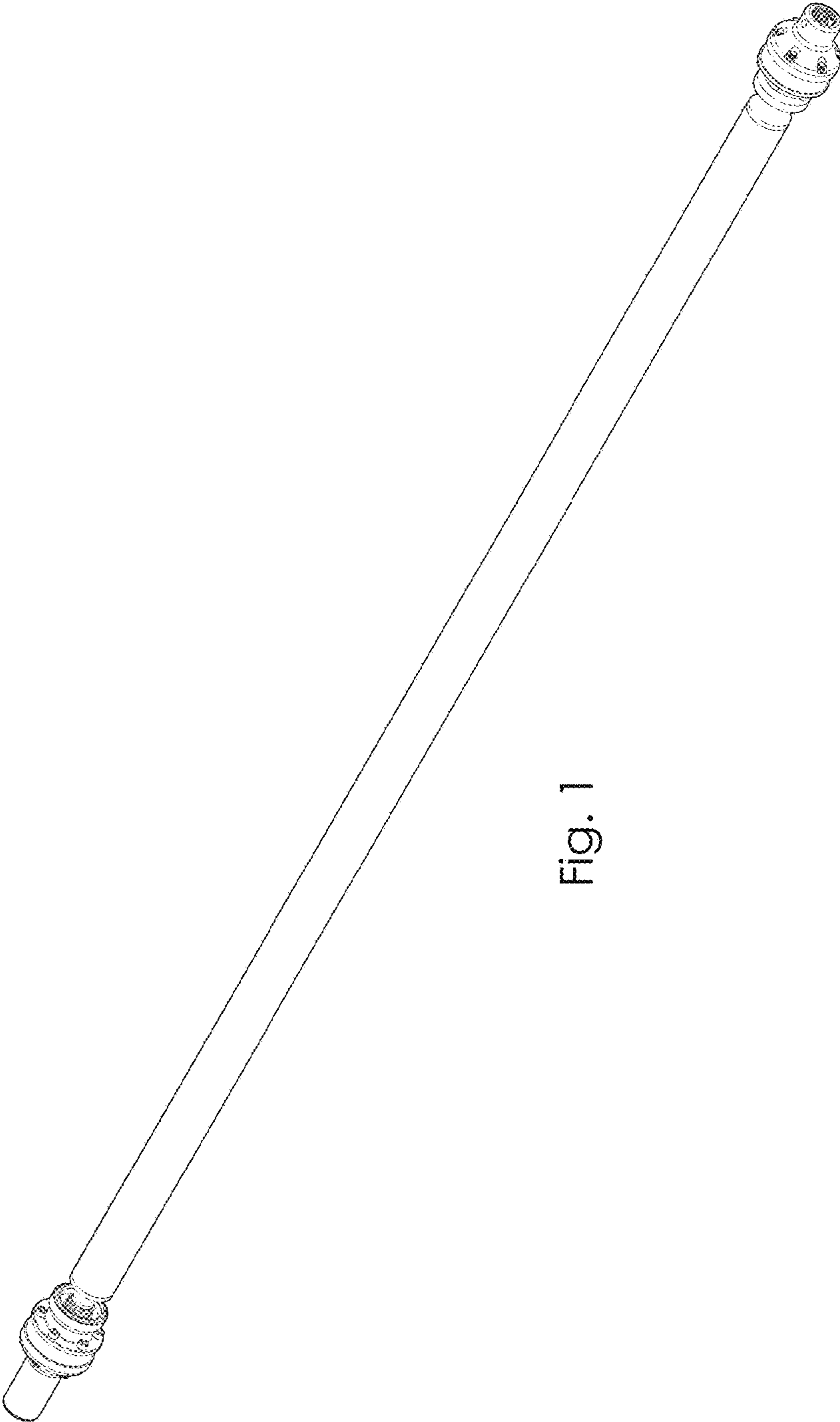


Fig. 1

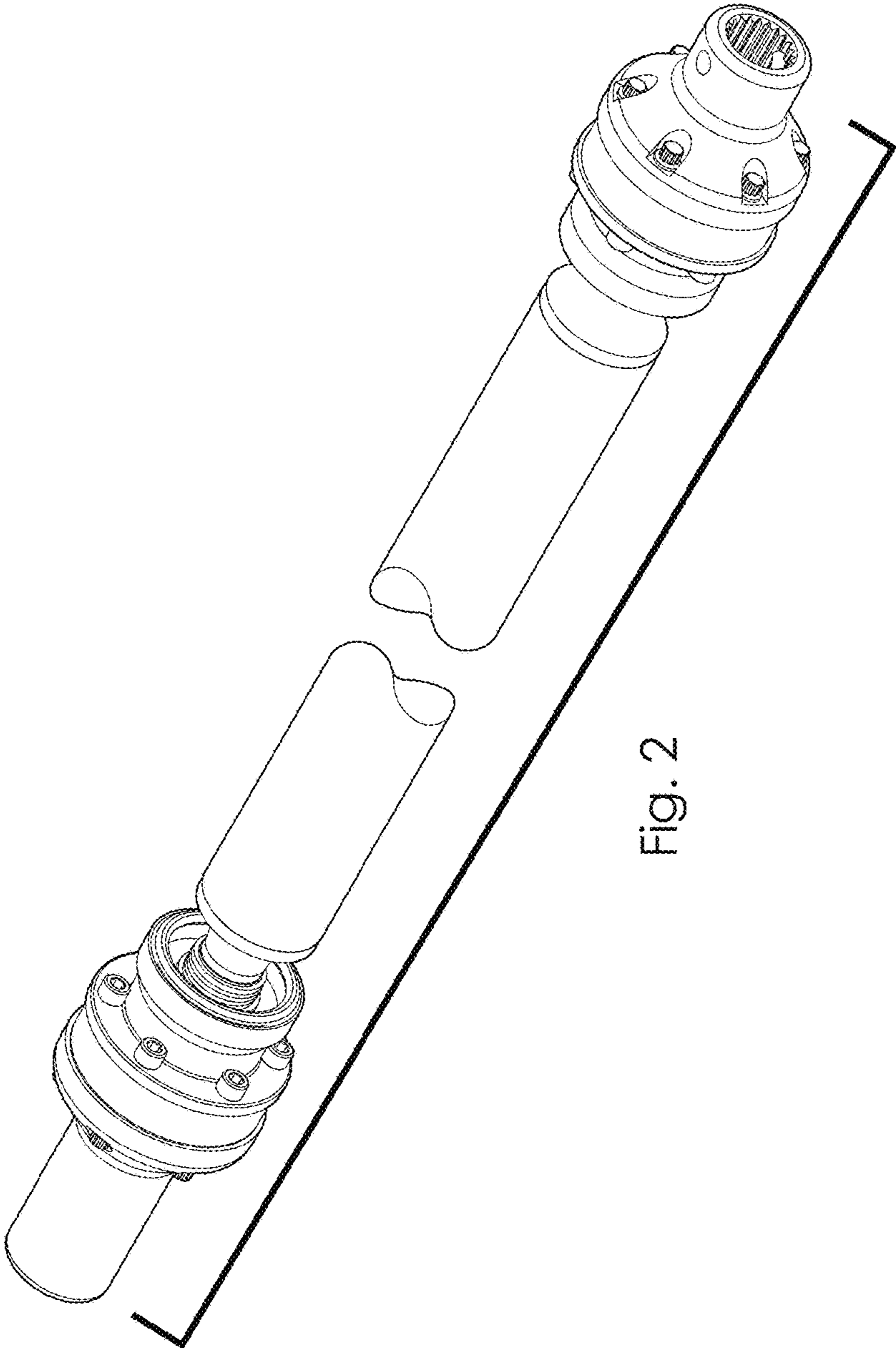


Fig. 2

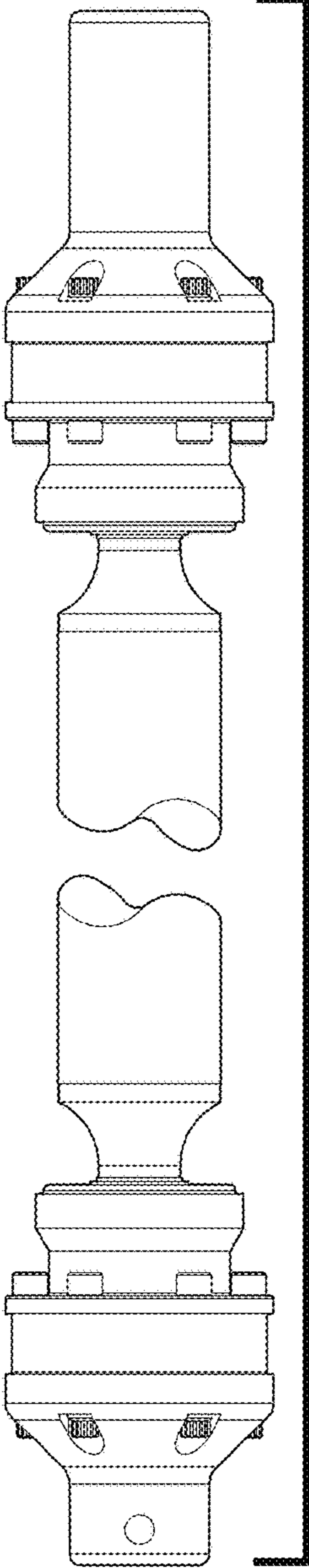


Fig. 3

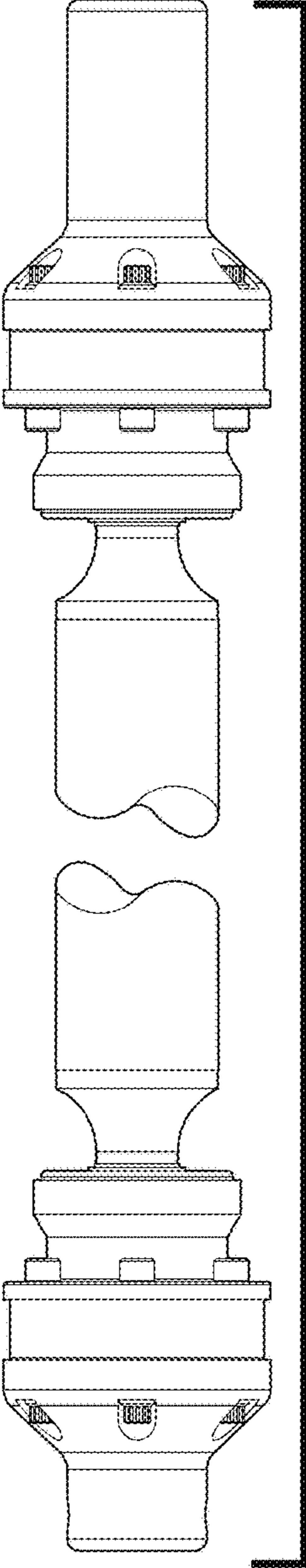


Fig. 4

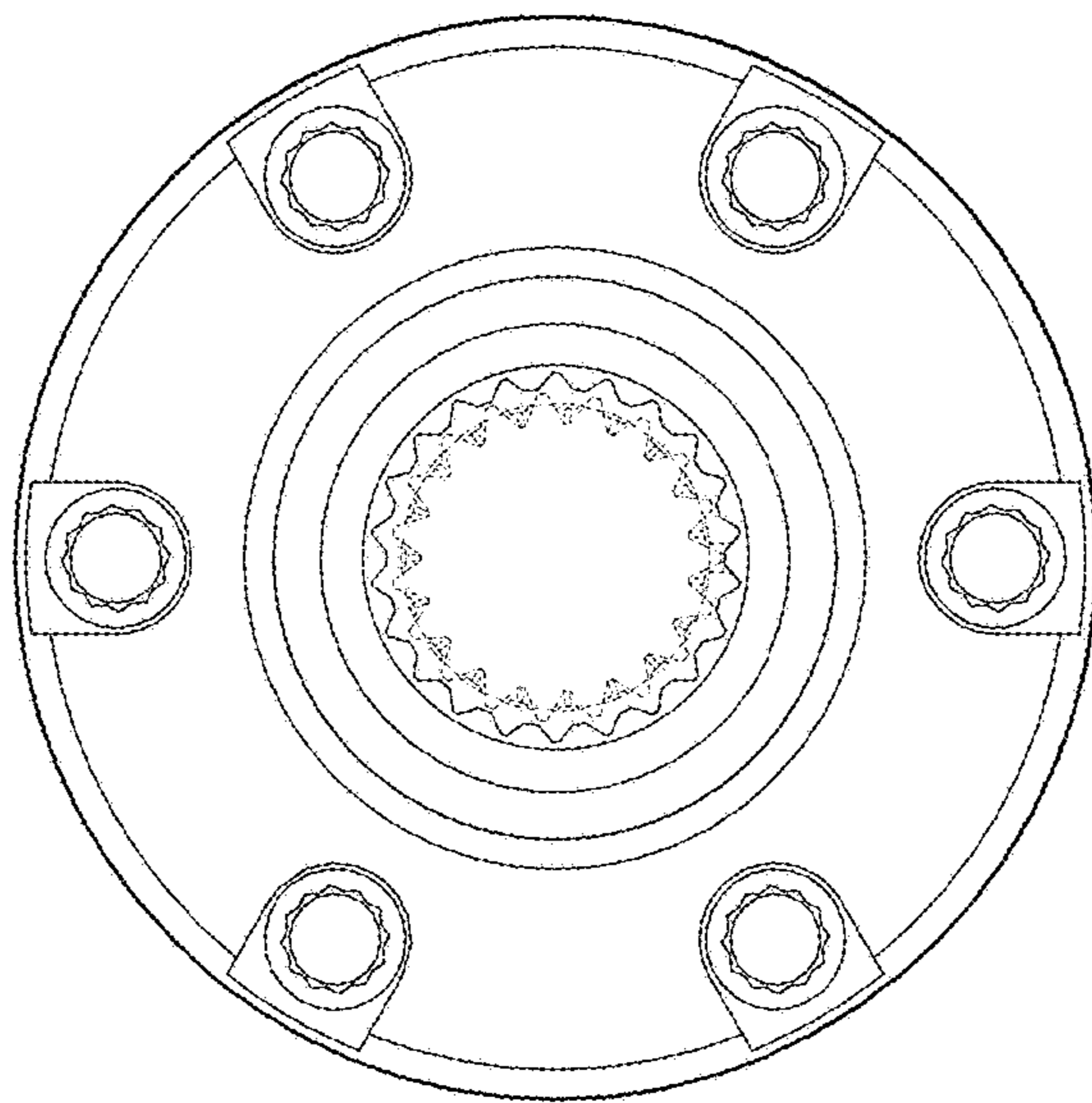


Fig. 5