



US00D861545S

(12) **United States Design Patent** (10) **Patent No.:** **US D861,545 S**
Baker et al. (45) **Date of Patent:** **** Oct. 1, 2019**

(54) **TIE ROD END**

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Paul Dolan, Clio, MI (US)

(73) Assignee: **STEMCO PRODUCTS, INC.**,
Charlotte, NC (US)

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

(21) Appl. No.: **29/623,718**

(22) Filed: **Oct. 26, 2017**

(51) **LOC (12) Cl.** **12-16**

(52) **U.S. Cl.**
USPC **D12/160**

(58) **Field of Classification Search**
USPC D8/21, 22, 24, 25, 29, 382-400;
D12/159, 160
CPC B60G 11/22; B60G 2204/41; B60G
2204/125; B60G 2202/14; B60G
2202/142; B60G 2202/143; B60G
2206/73; B60G

(Continued)

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Qwiktie Tie Rod Assembly YouTube <https://www.youtube.com/watch?v=ZFV0pc704Fw> Jun. 27, 2017 (Year: 2017).*

Primary Examiner — Leanne Was-Englehart

(74) *Attorney, Agent, or Firm* — Perkins Coie LLP

(57) **CLAIM**

The ornamental design for a tie rod end, as shown.

DESCRIPTION

FIG. 1 is a perspective view of an embodiment of a tie rod end.

FIG. 2 is a front plan view thereof.

FIG. 3 is a back plan view thereof.

FIG. 4 is a right view thereof.

FIG. 5 is a left view thereof.

FIG. 6 is a top view thereof.

FIG. 7 is a bottom view thereof.

FIG. 8 is a perspective view of an embodiment of a tie rod end.

FIG. 9 is a front plan view thereof.

FIG. 10 is a back plan view thereof.

FIG. 11 is a right view thereof.

FIG. 12 is a left view thereof.

FIG. 13 is a top view thereof.

FIG. 14 is a bottom view thereof.

FIG. 15 is a perspective view of an embodiment of a tie rod end.

FIG. 16 is a front plan view thereof.

FIG. 17 is a back plan view thereof.

FIG. 18 is a right view thereof.

FIG. 19 is a left view thereof.

FIG. 20 is a top view thereof.

FIG. 21 is a bottom view thereof.

FIG. 22 is a perspective view of an embodiment of a tie rod end.

FIG. 23 is a front plan view thereof.

FIG. 24 is a back plan view thereof.

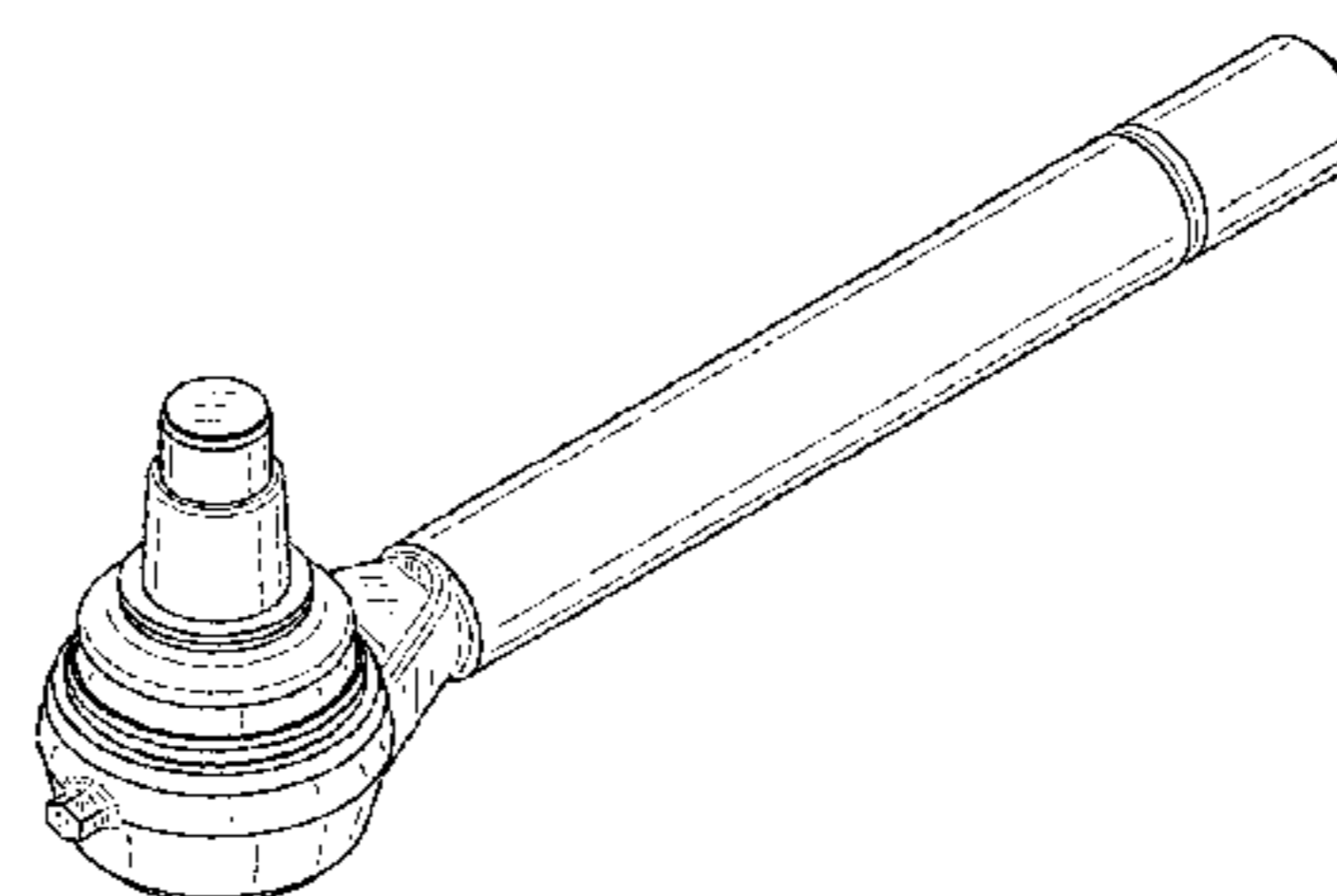
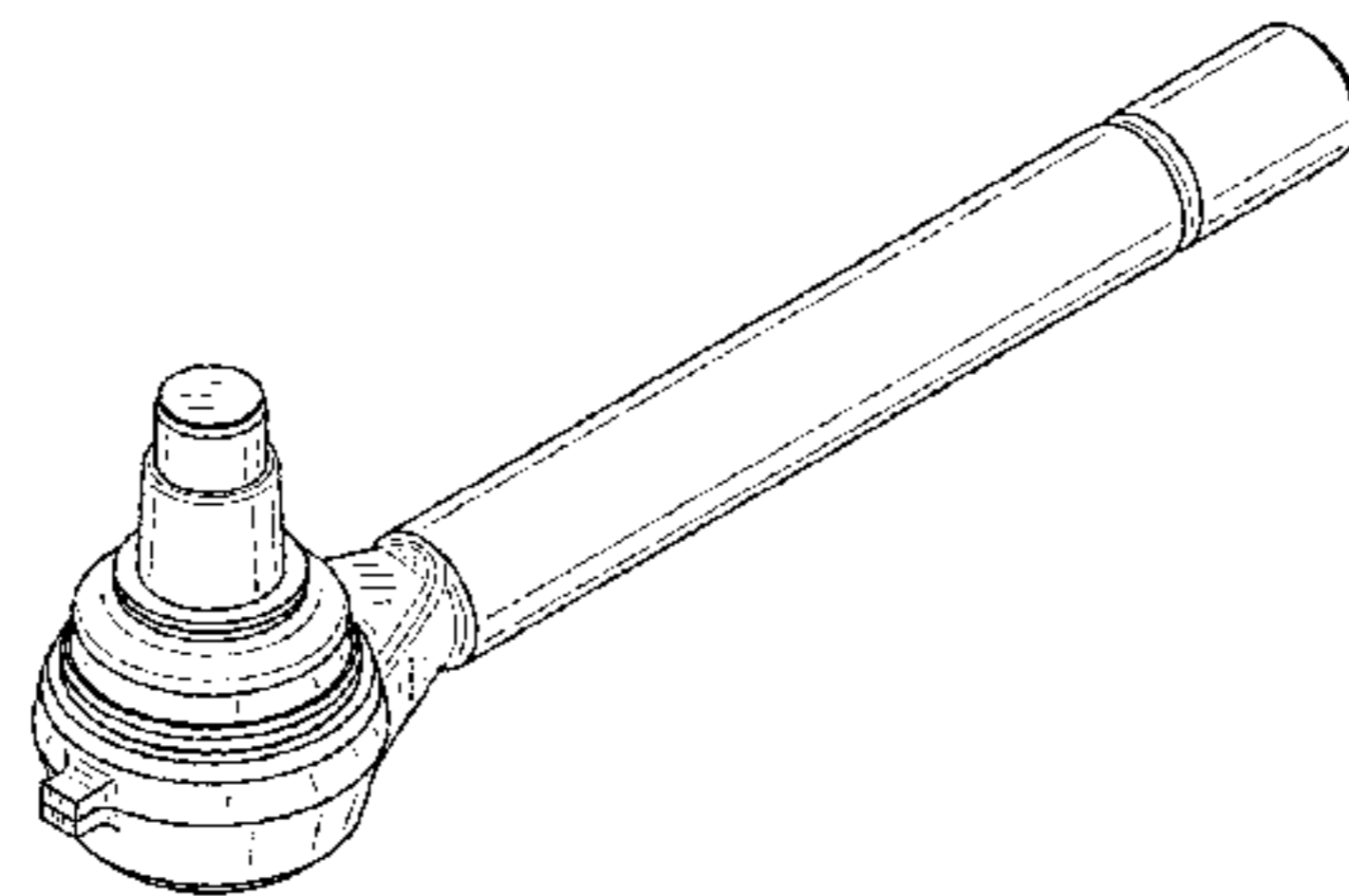
FIG. 25 is a right view thereof.

FIG. 26 is a left view thereof.

FIG. 27 is a top view thereof; and,

FIG. 28 is a bottom view thereof.

1 Claim, 20 Drawing Sheets



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(58) **Field of Classification Search**

CPC 21/0551; B62D 1/046; B62D 1/185; B62D
1/187; B62D 1/195; E21D 21/0033;
E21D 21/008; E21D 21/004; E21D
21/0006; E21D 21/0056; E21D 21/0073;
E21D 20/00; F16D 1/12; F16C 11/06;
F16C 11/0604; F16C 11/068; F16C
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See application file for complete search history.

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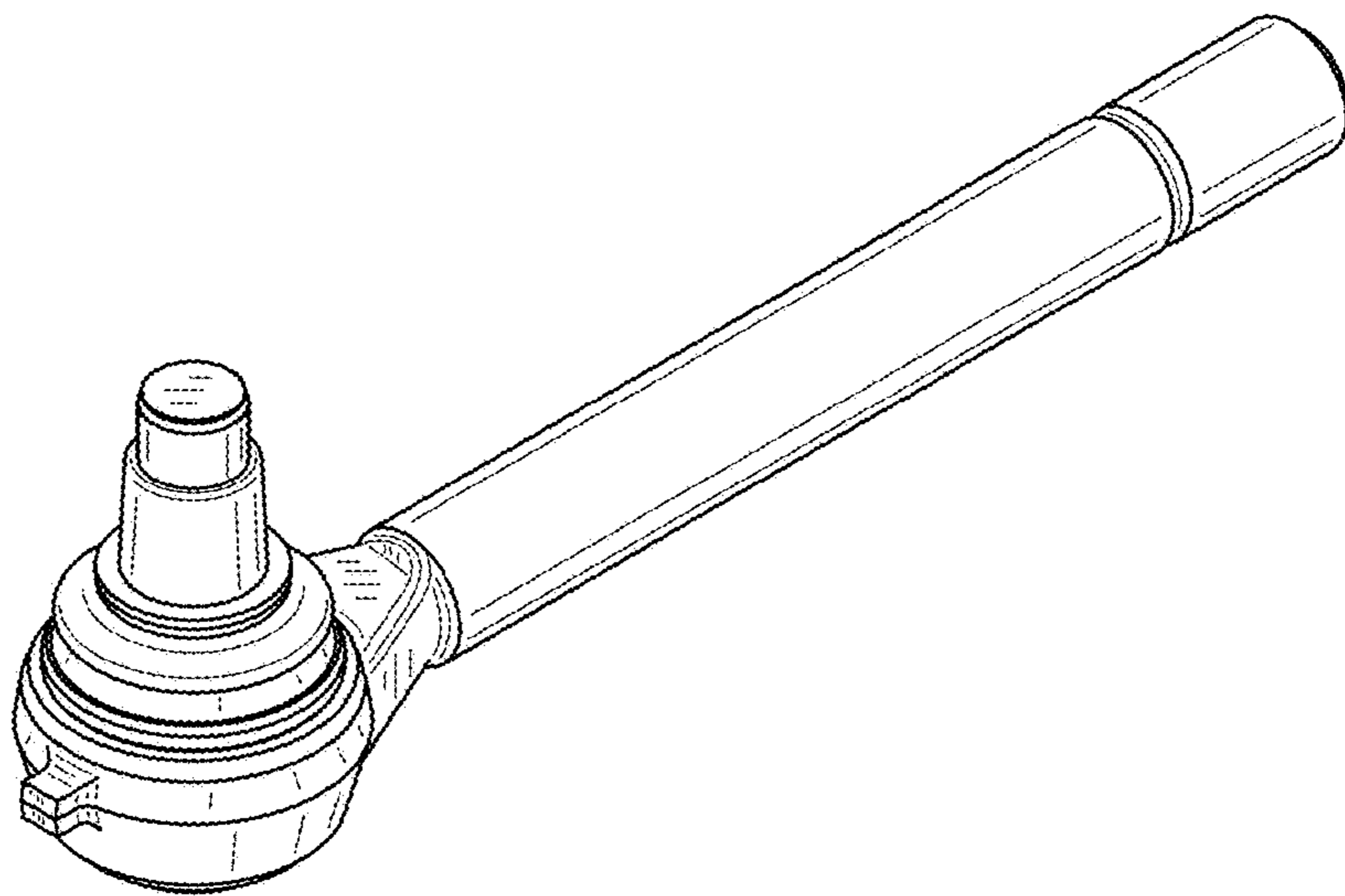


FIG.1

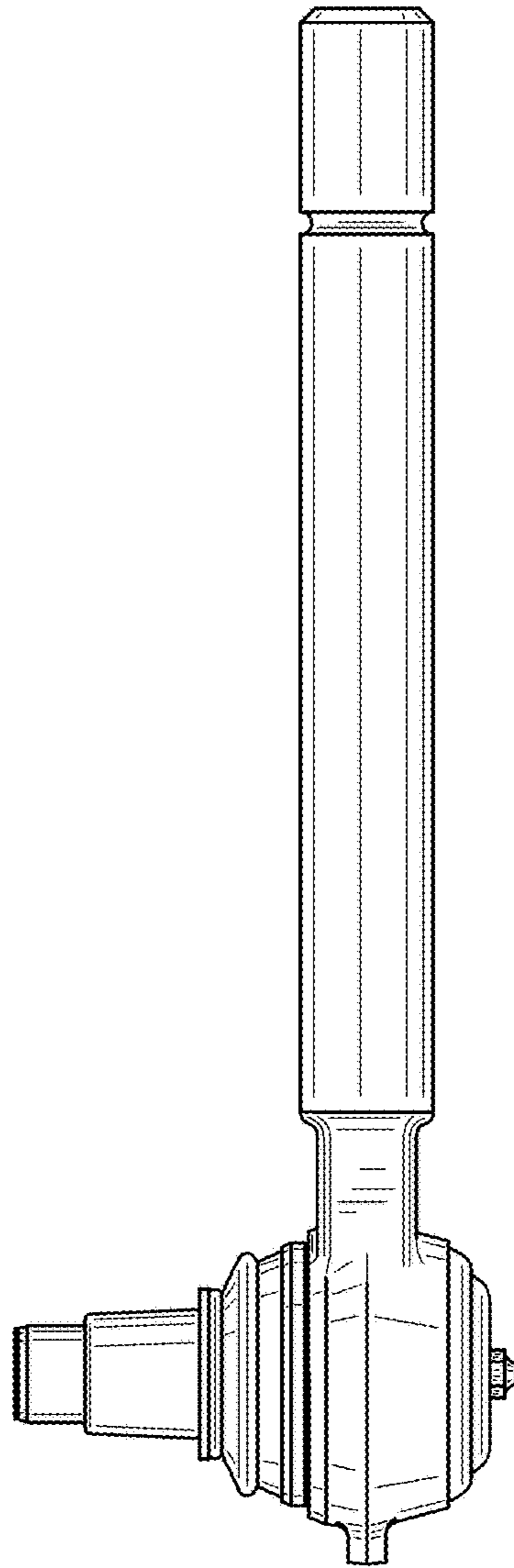


FIG.2

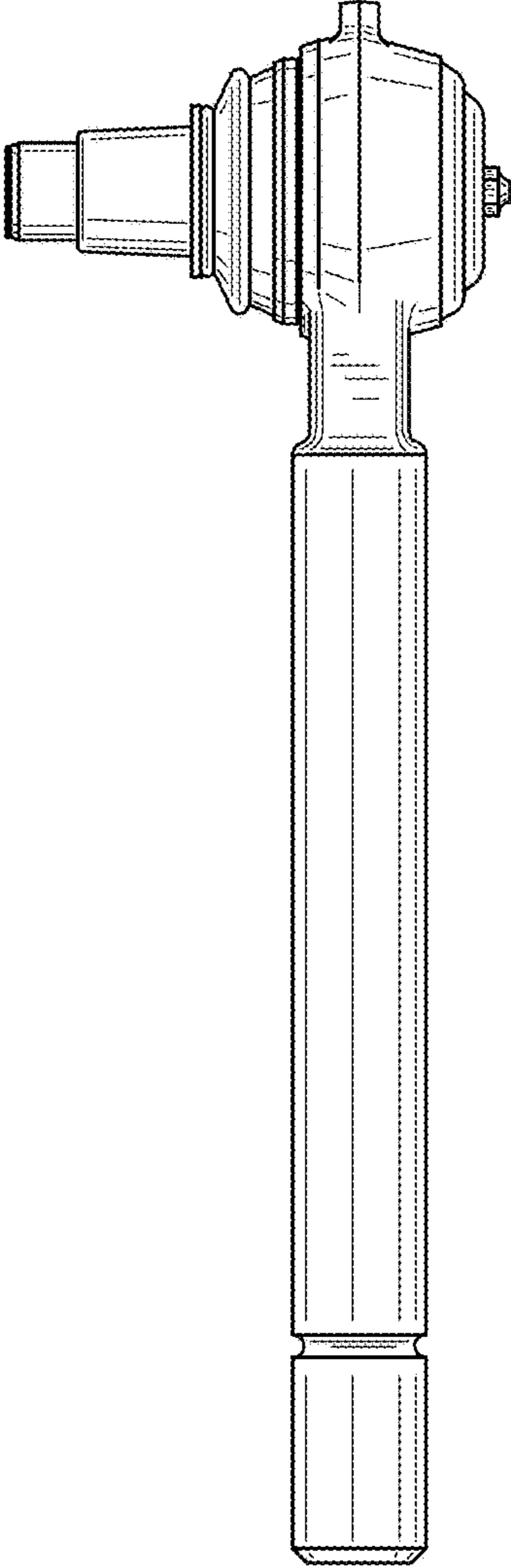


FIG.3

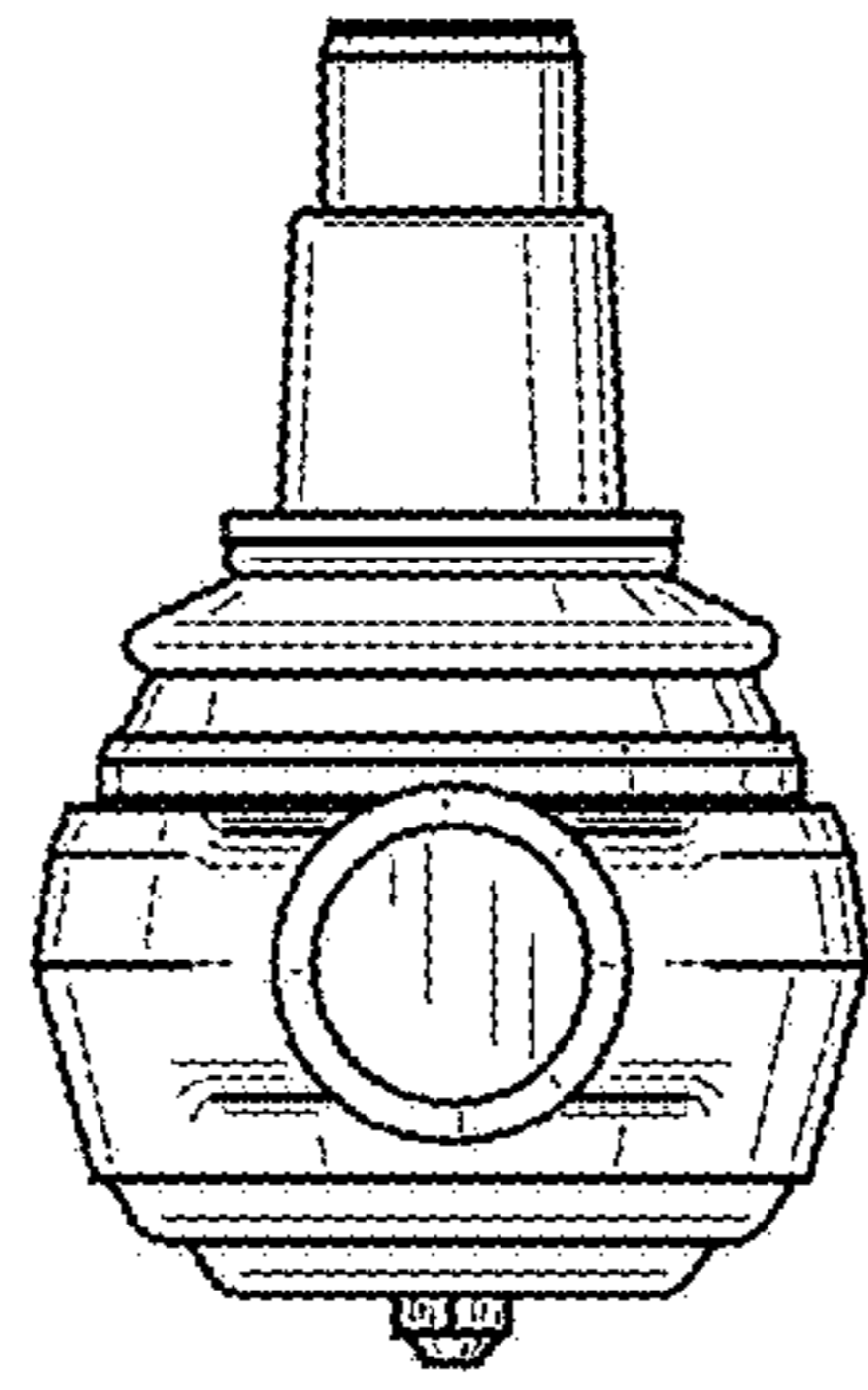


FIG. 4

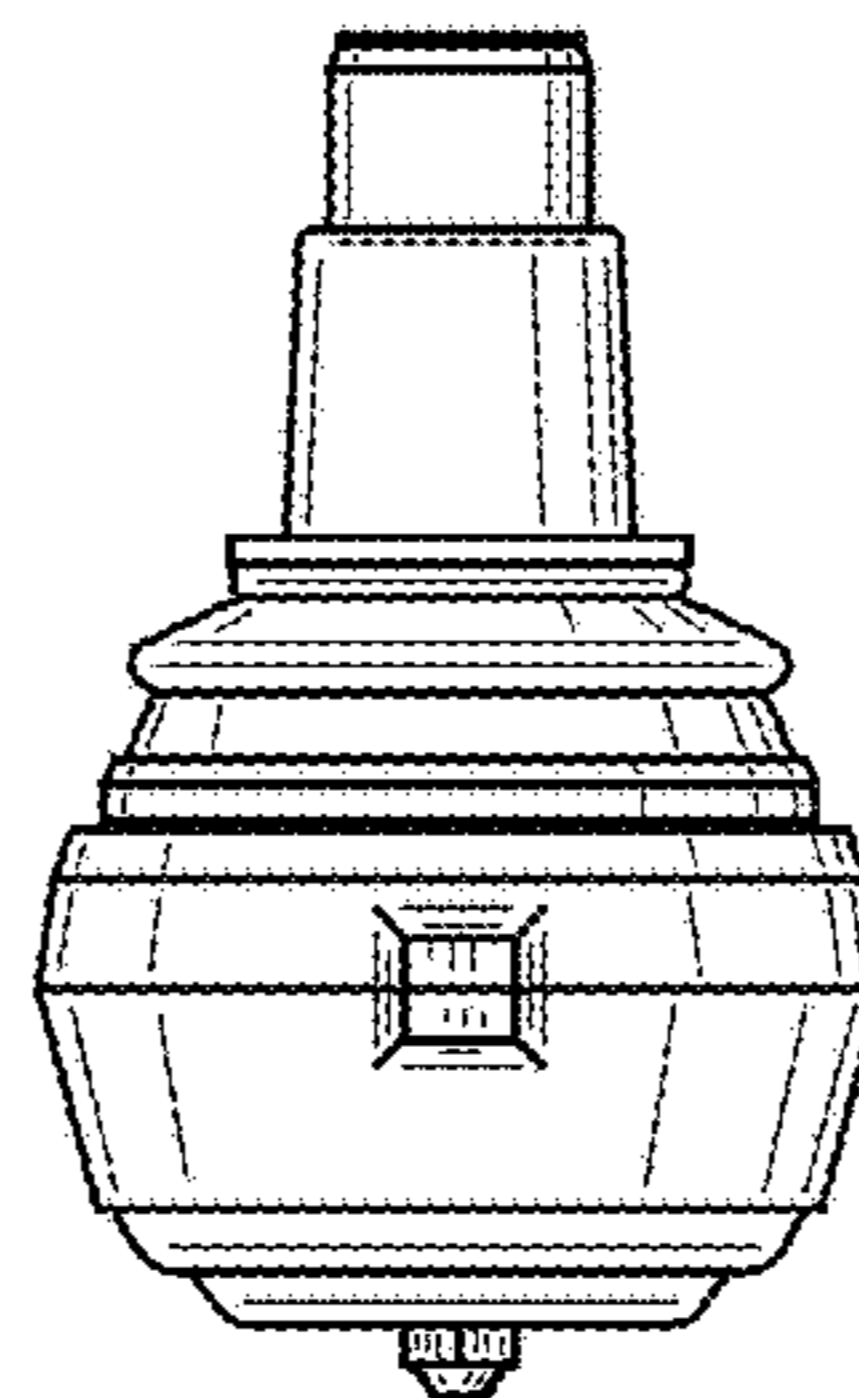


FIG. 5

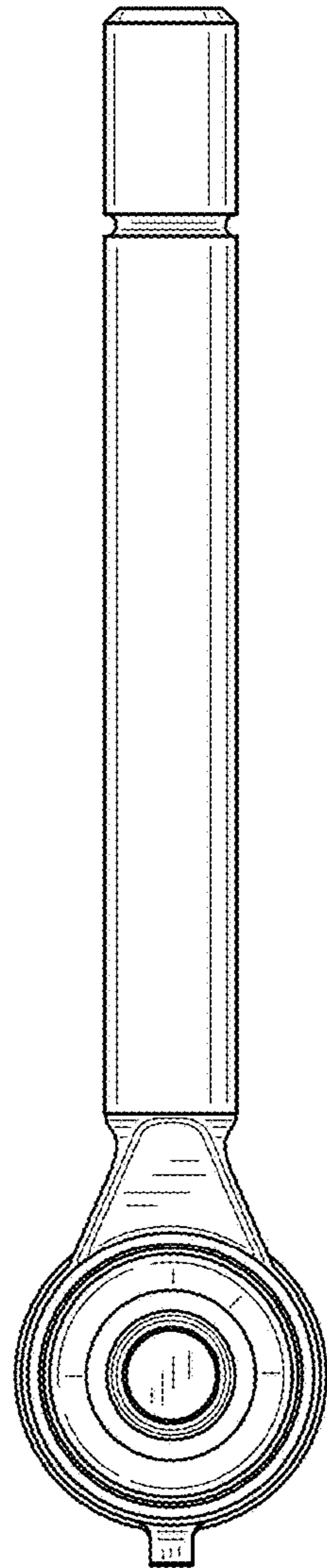


FIG. 6

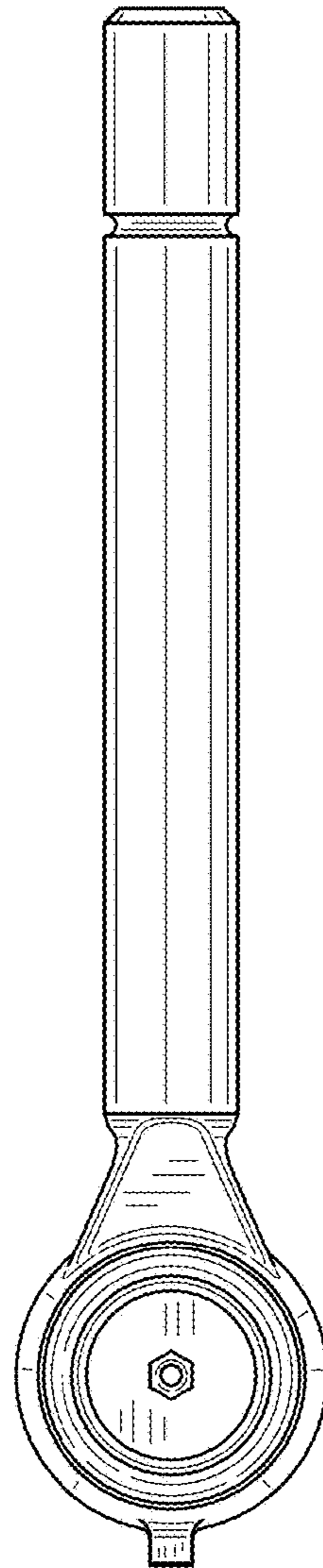


FIG. 7

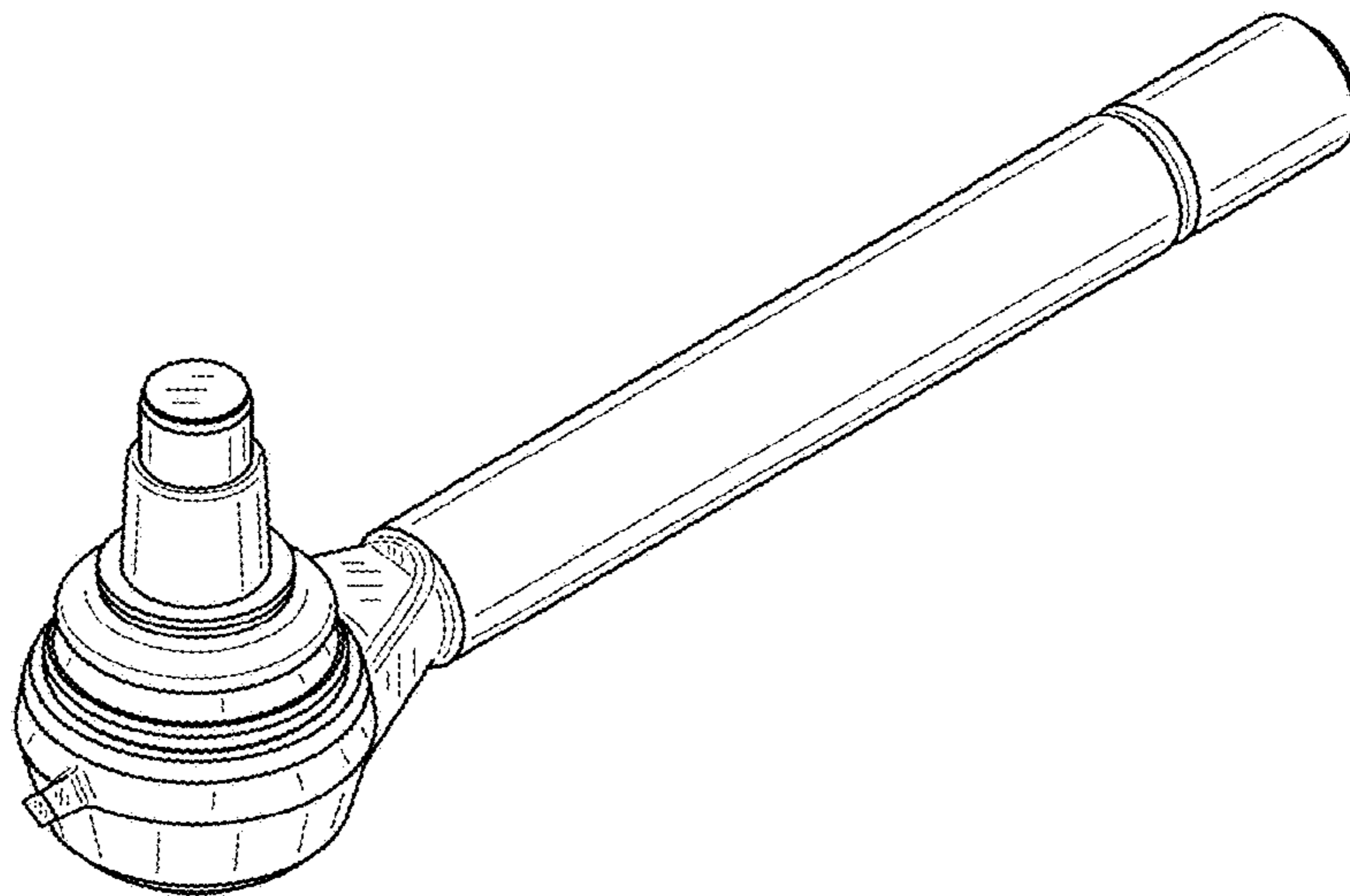


FIG. 8

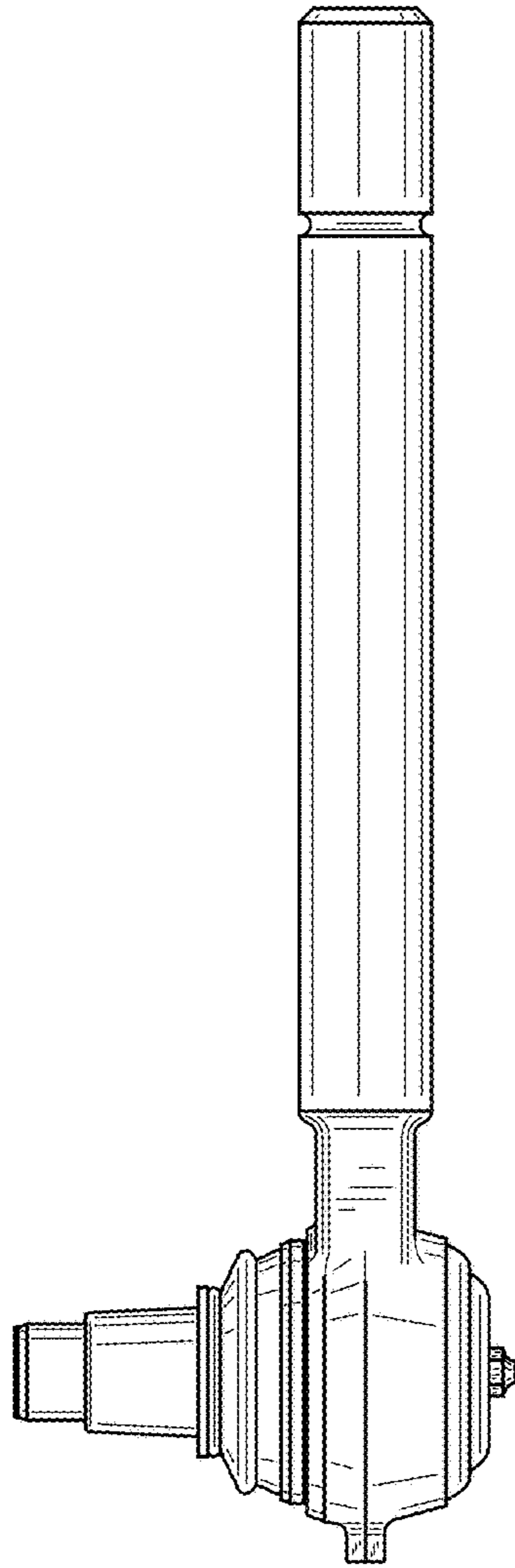


FIG.9

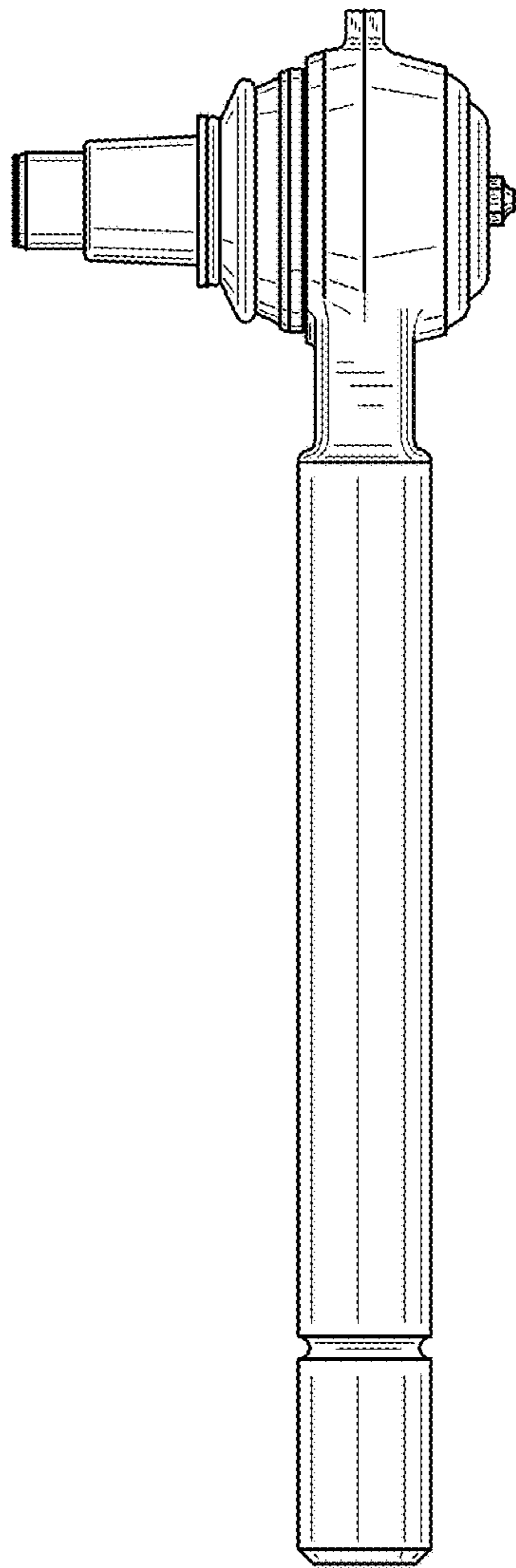


FIG.10

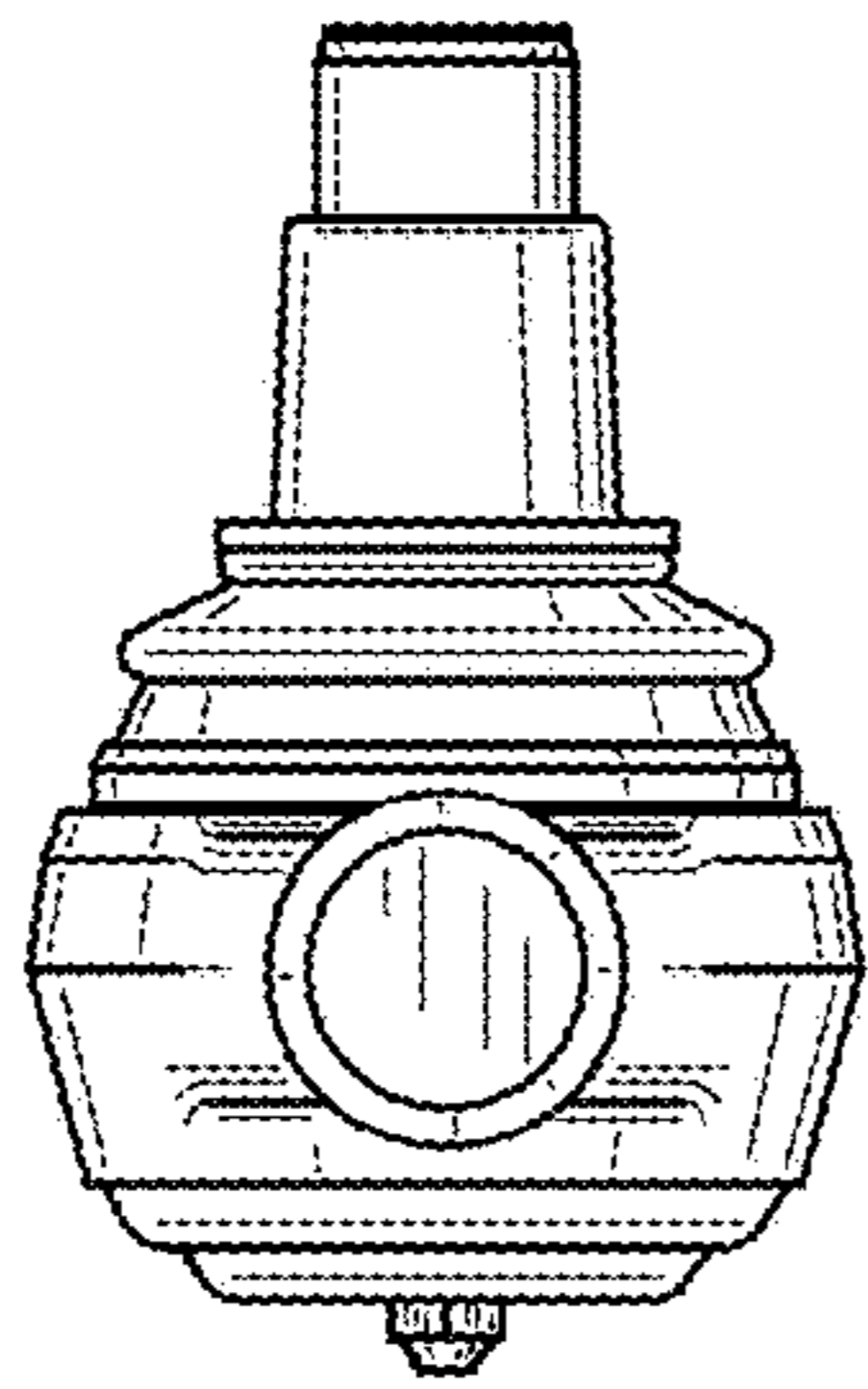


FIG. 11

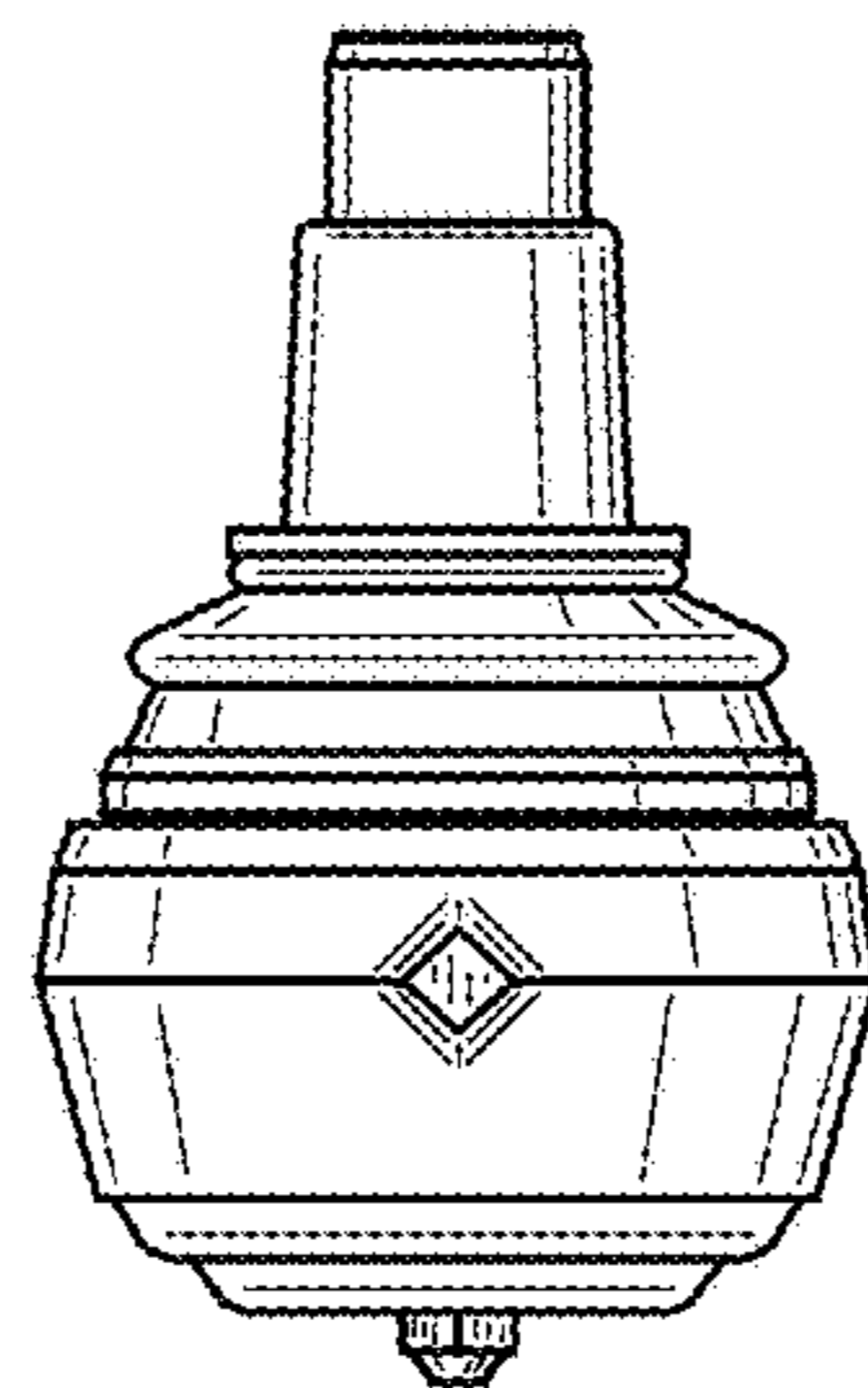


FIG. 12

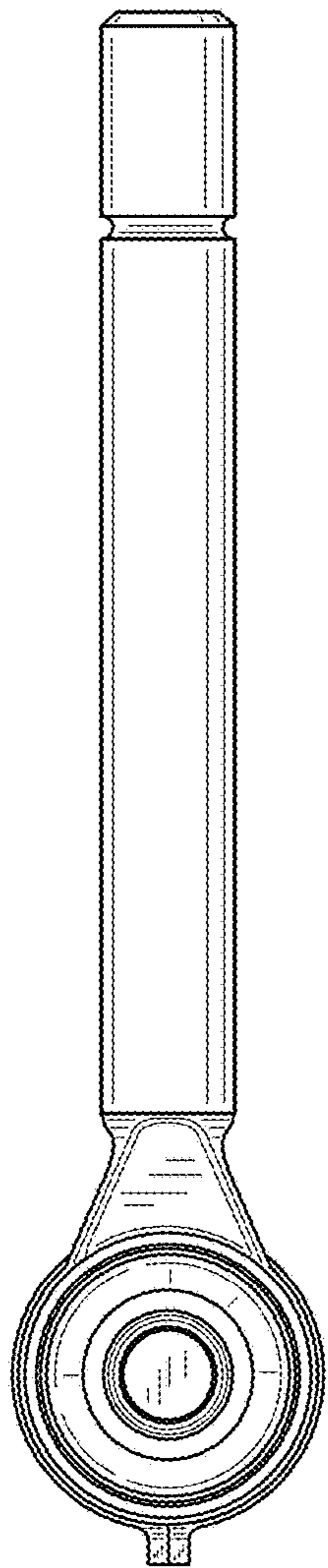


FIG.13

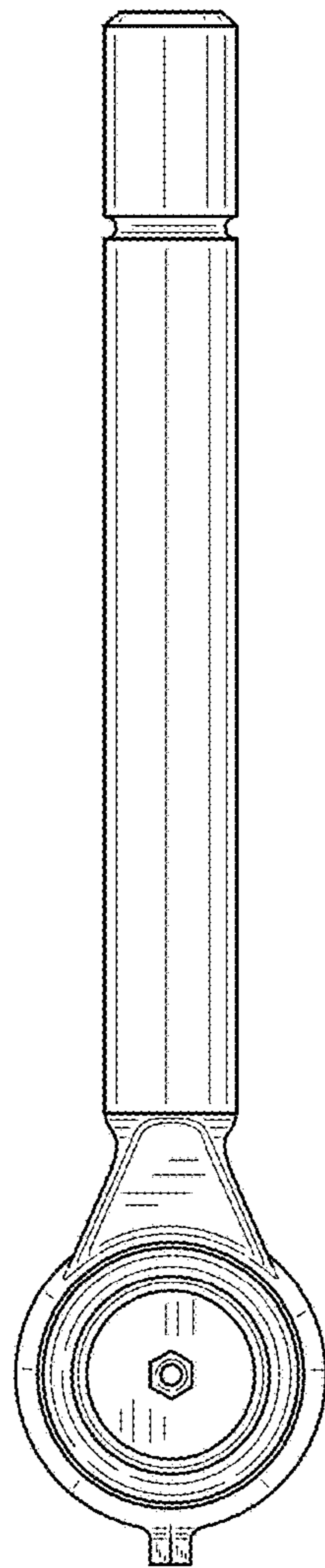


FIG.14

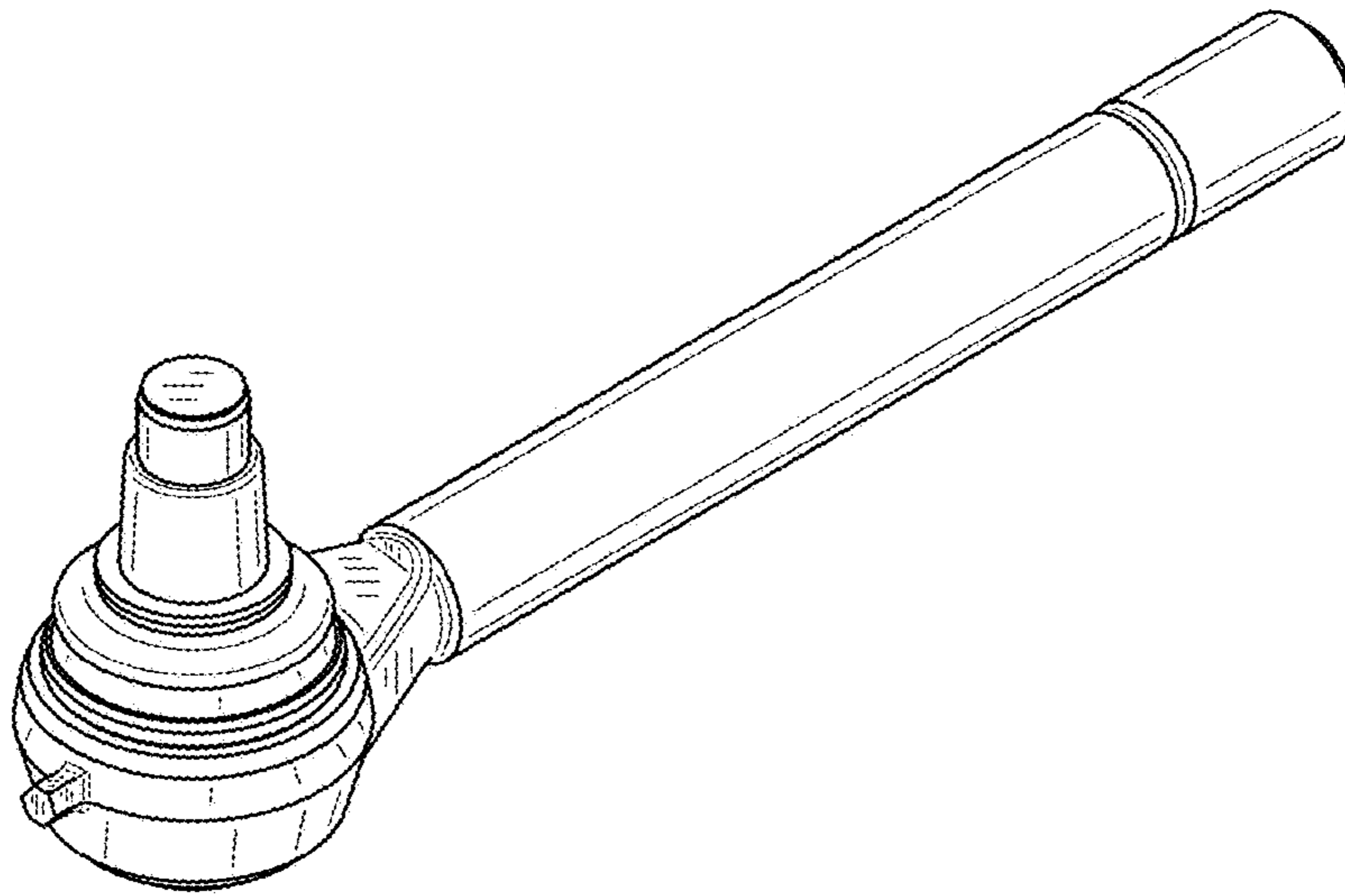


FIG. 15

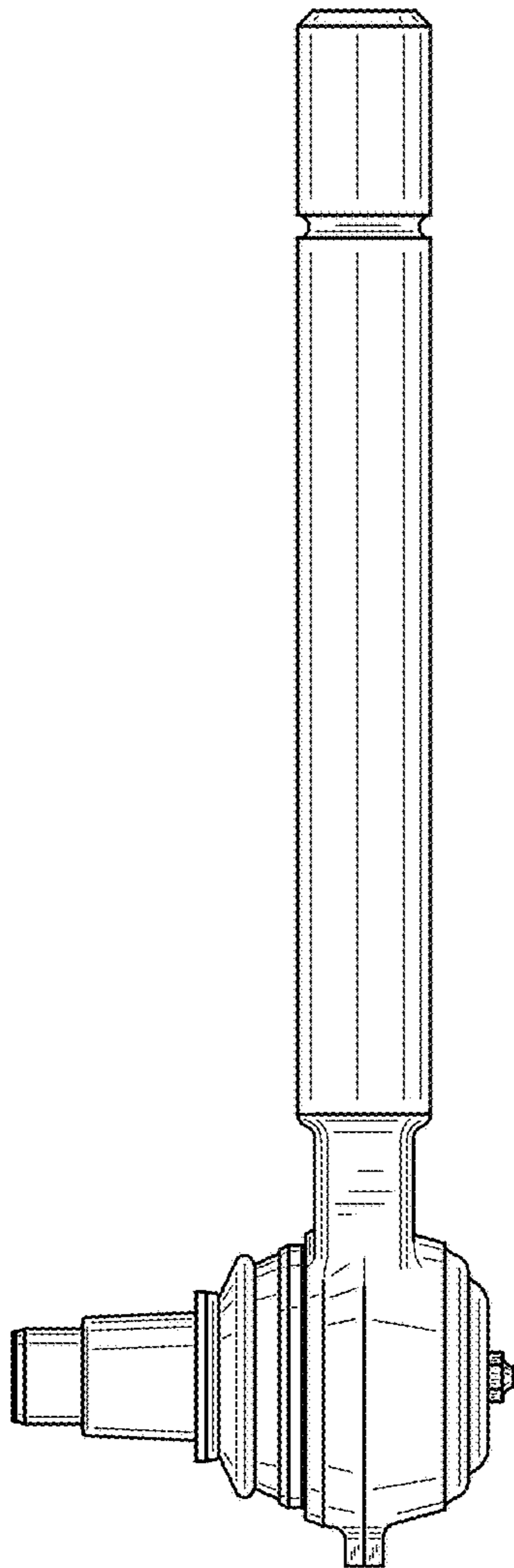


FIG.16

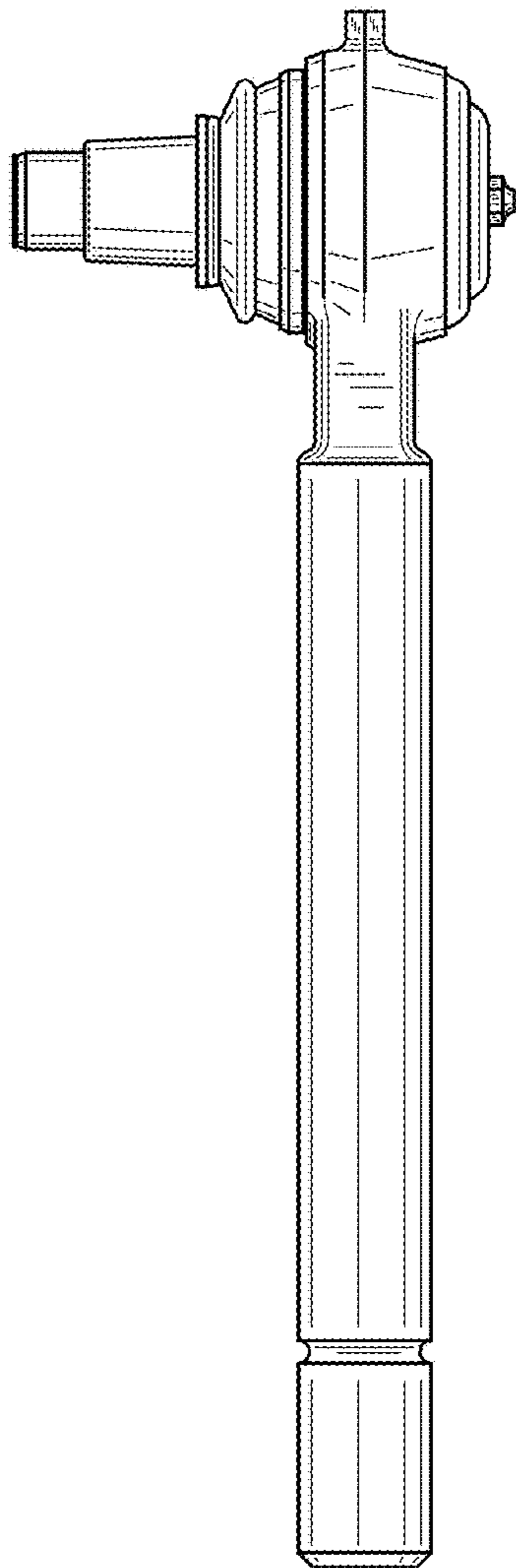


FIG.17

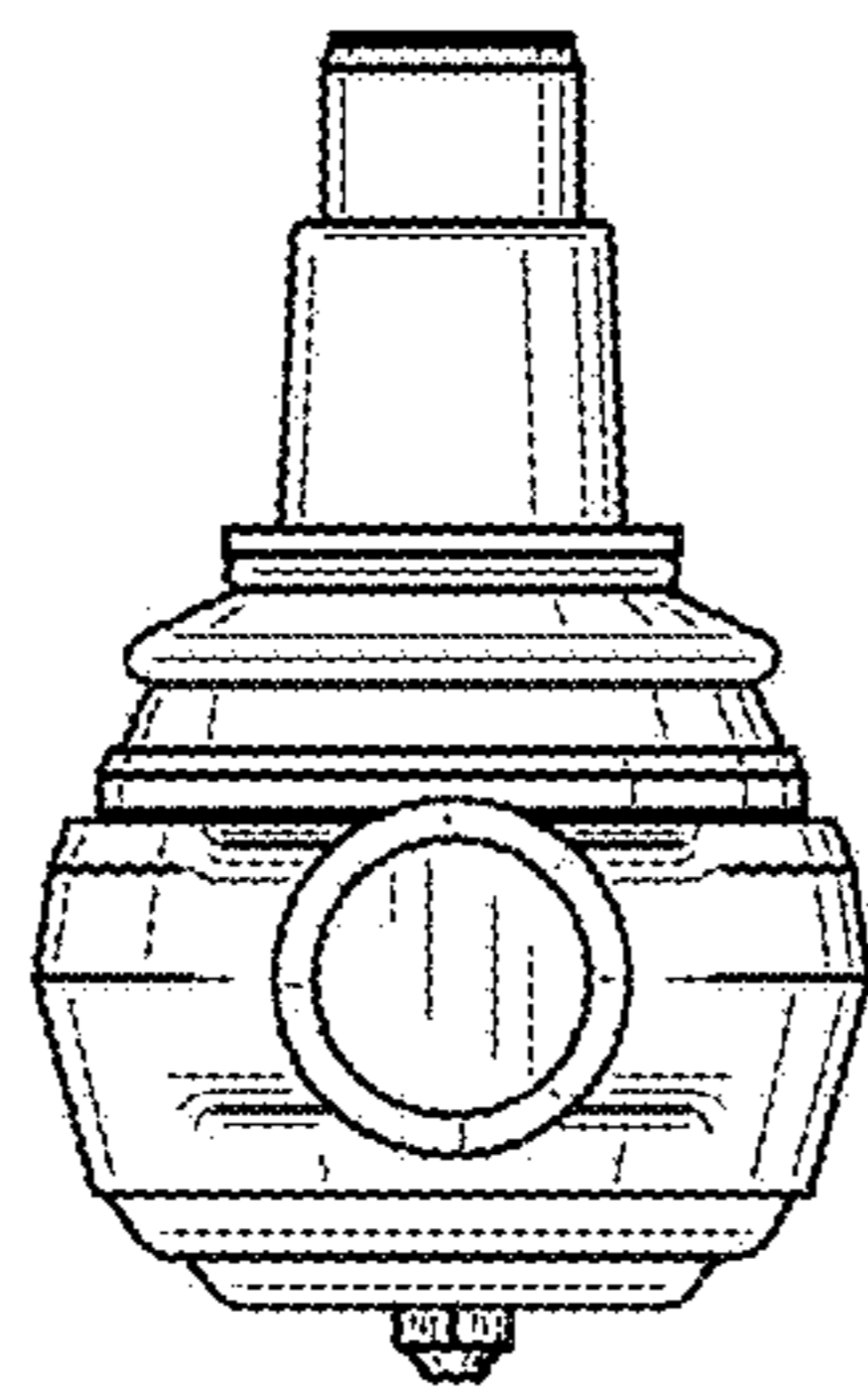


FIG.18

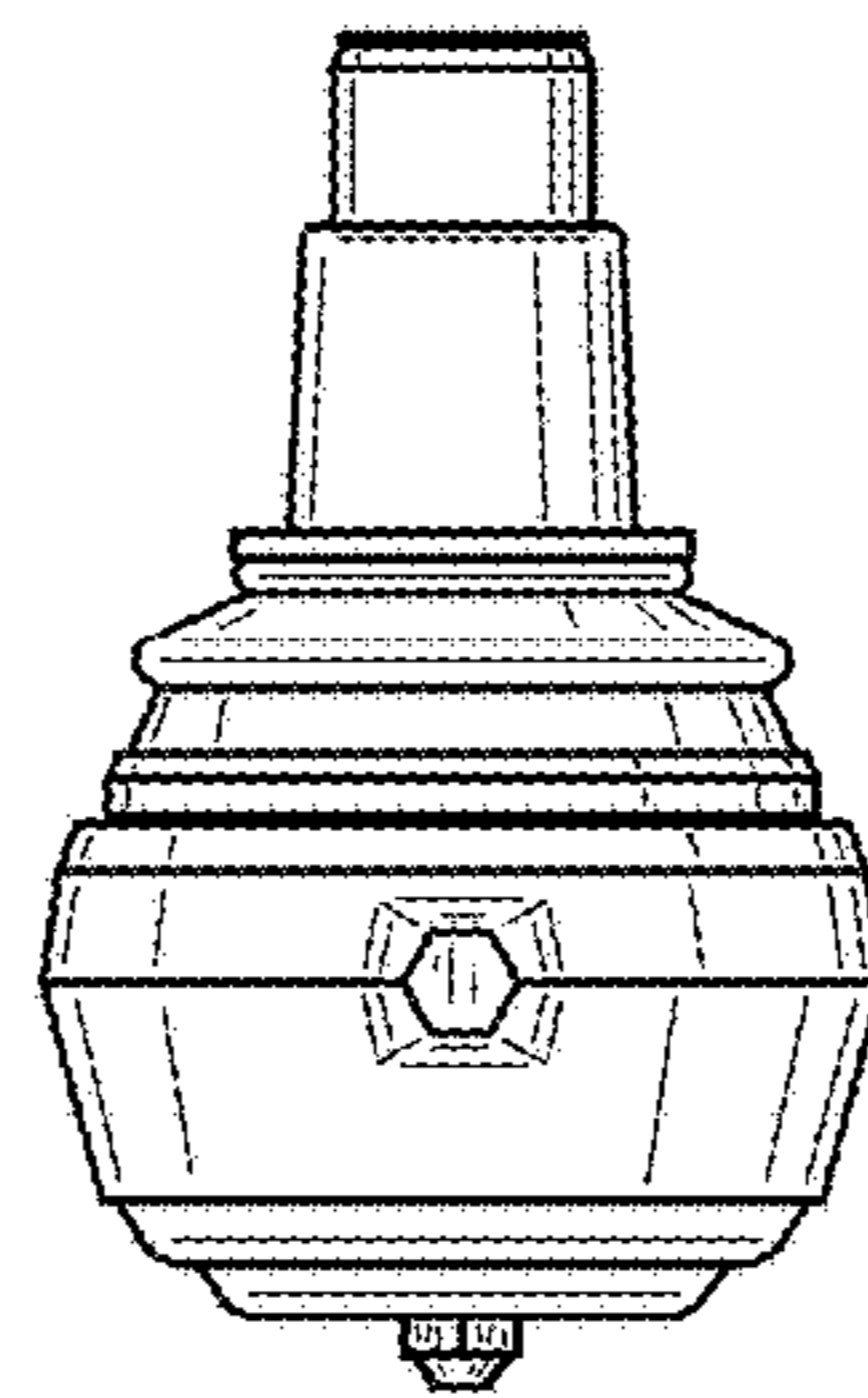


FIG.19

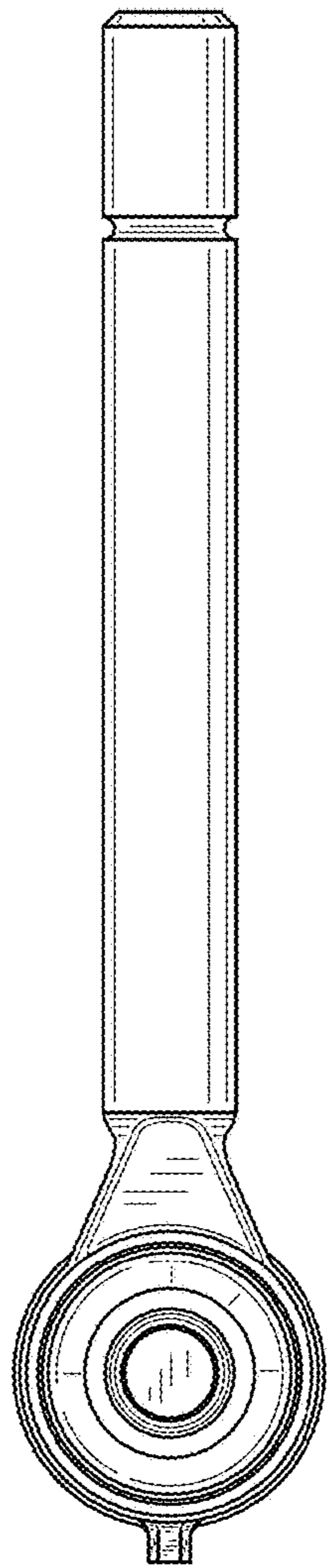


FIG. 20

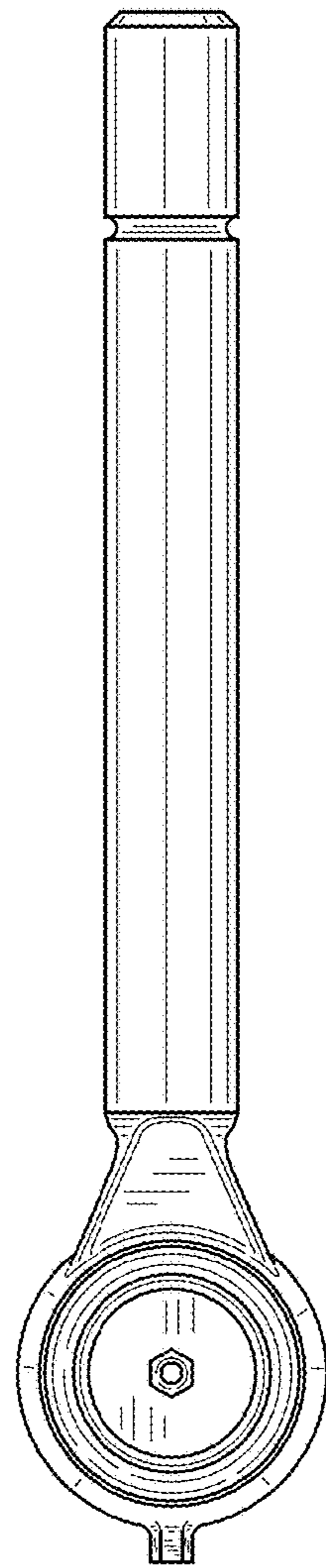


FIG. 21

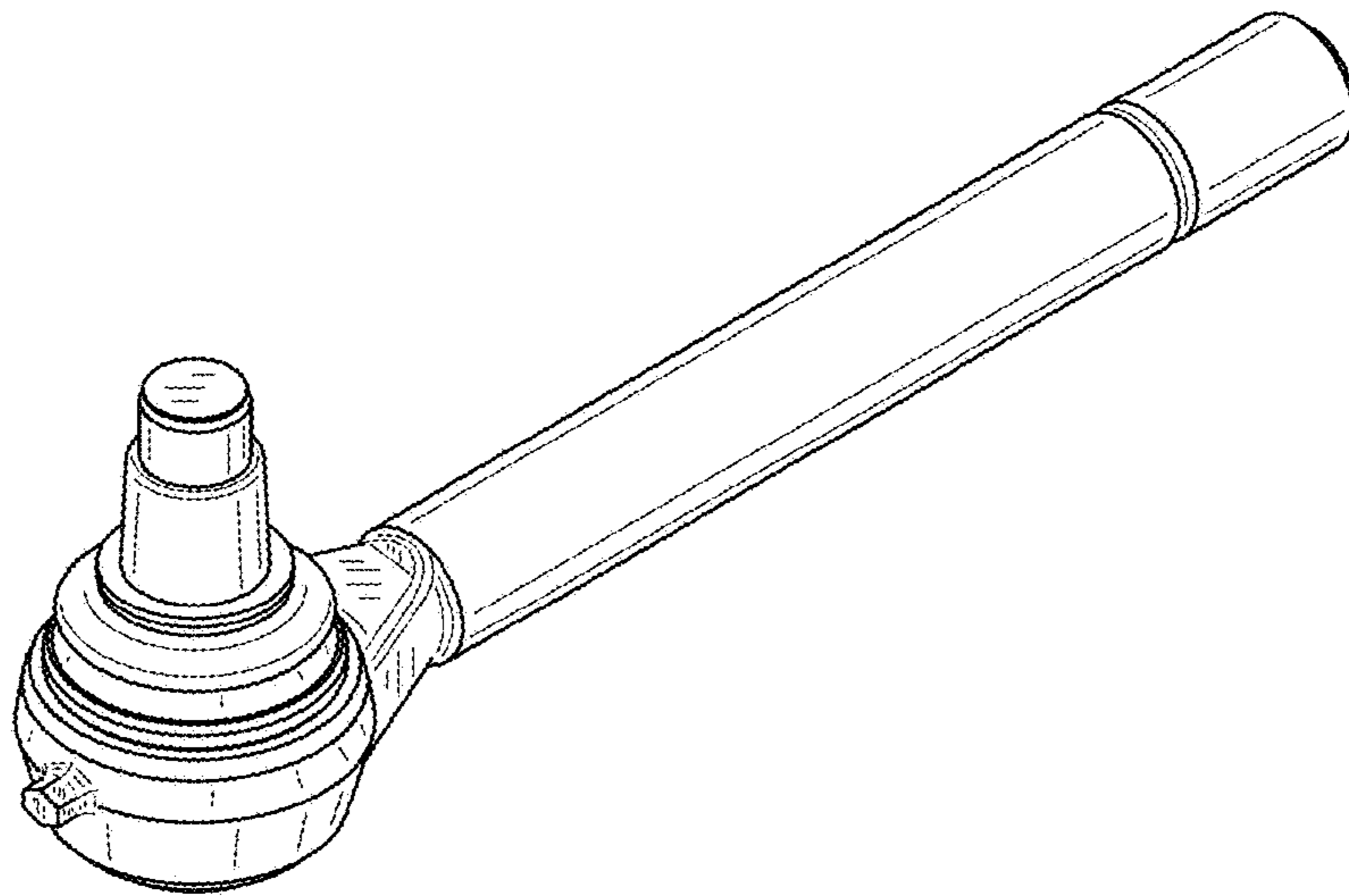


FIG.22

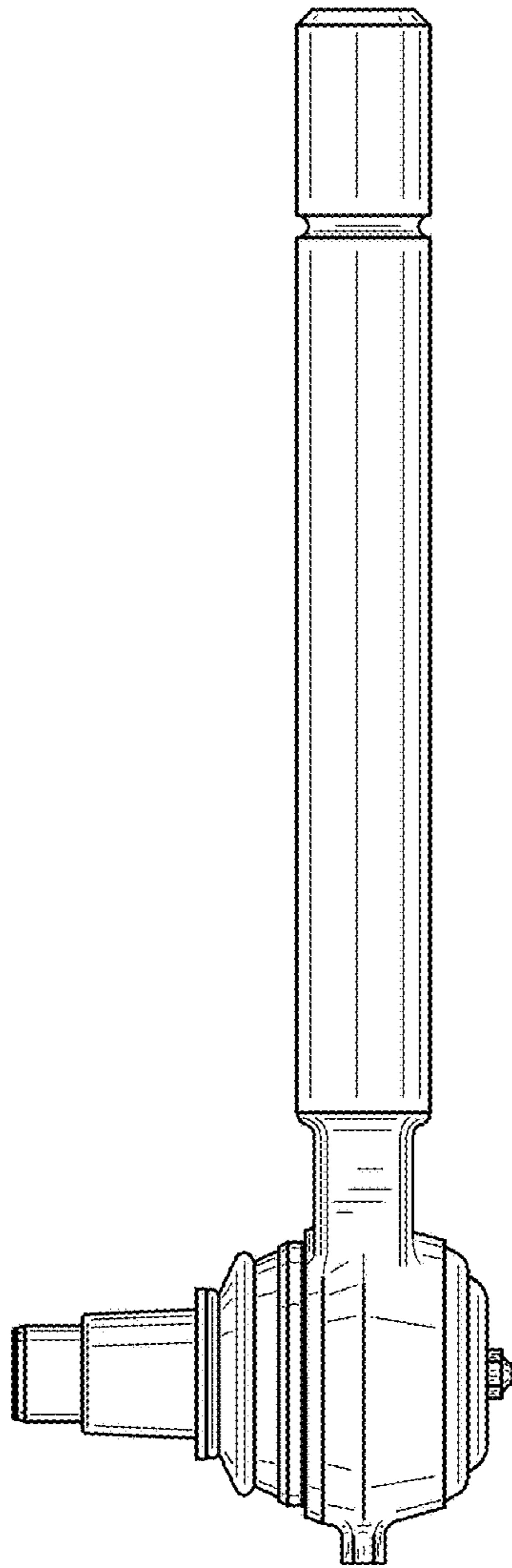


FIG. 23

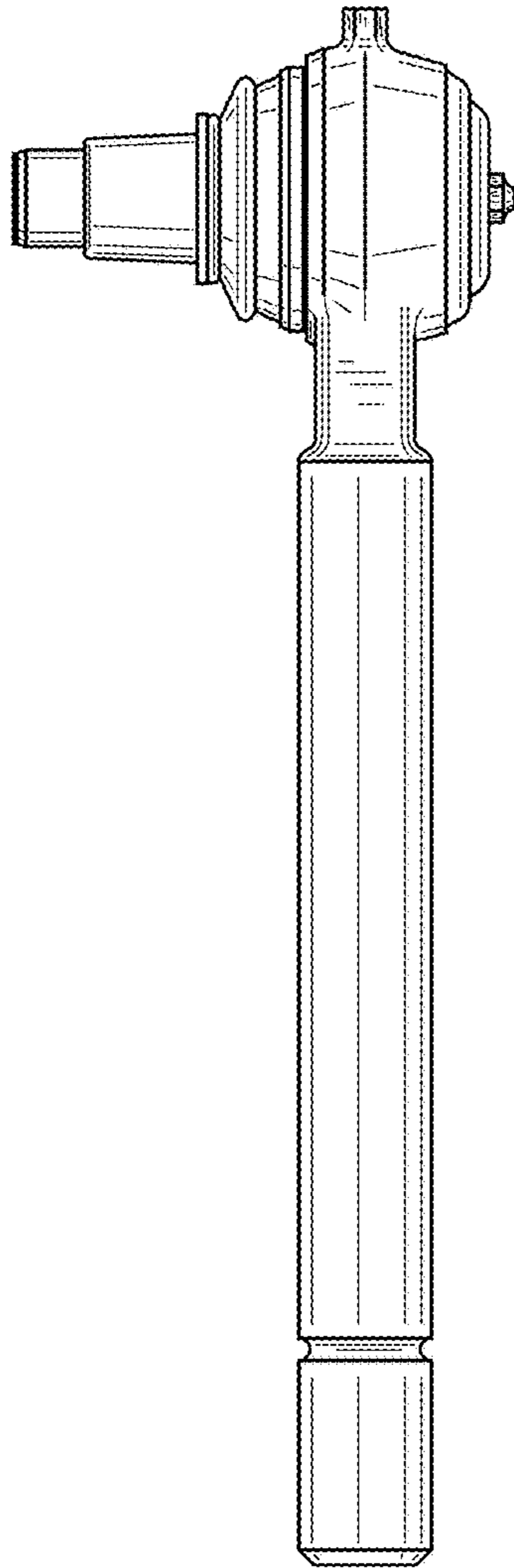


FIG. 24

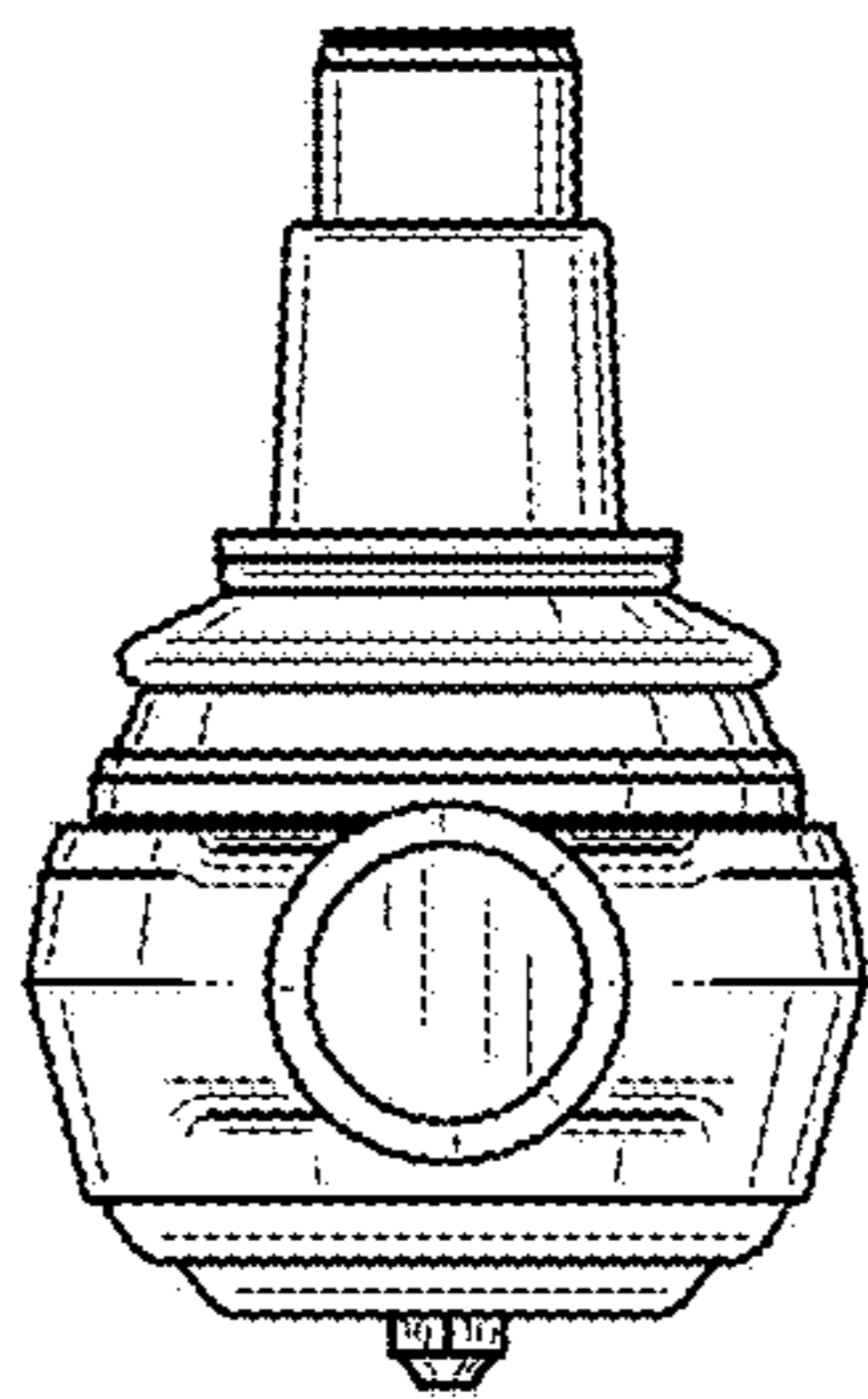


FIG. 25

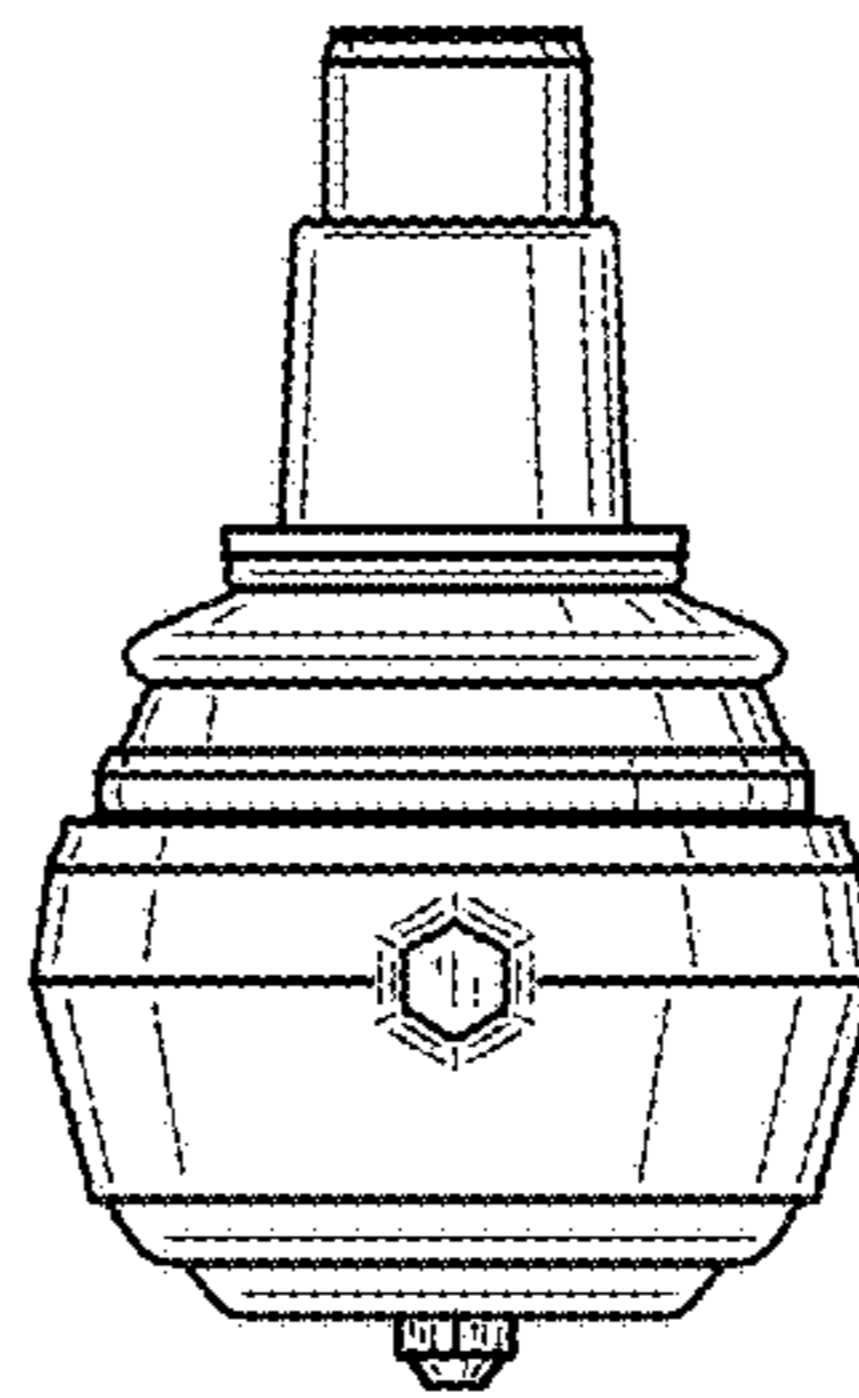


FIG. 26

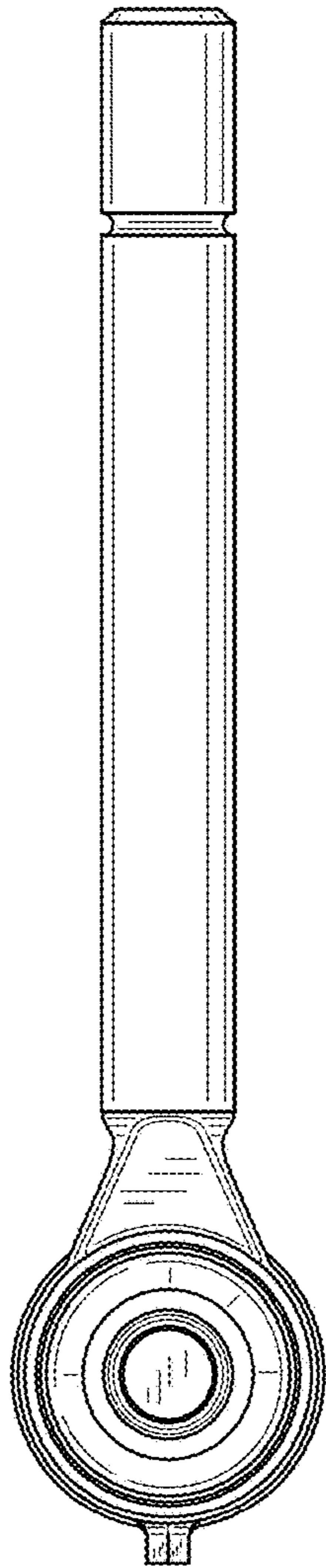


FIG. 27

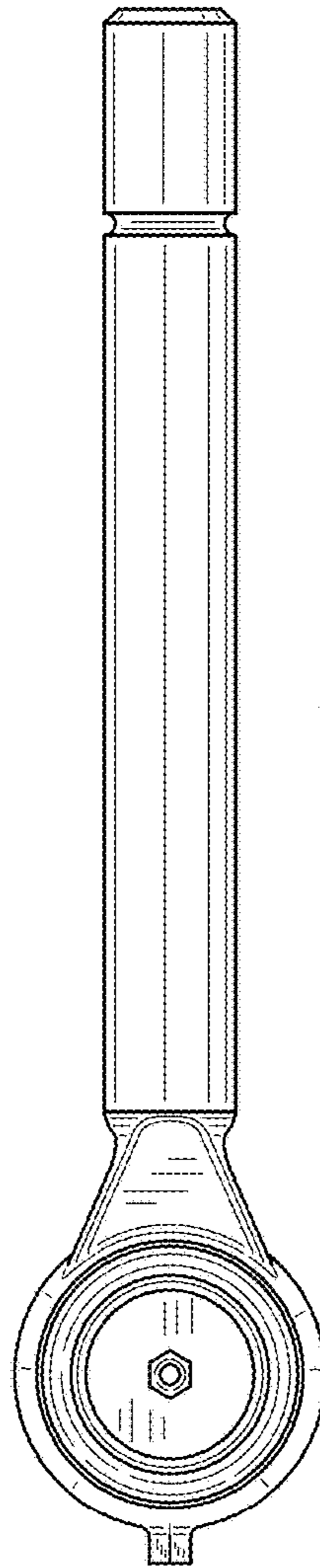


FIG. 28