



US00D845348S

(12) **United States Design Patent** (10) **Patent No.:** **US D845,348 S**  
**Tsutsui et al.** (45) **Date of Patent:** **\*\* Apr. 9, 2019**

(54) **TRIM AND TILT DEVICE FOR MARINE VESSEL PROPELLING MACHINE**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **SHOWA CORPORATION**, Saitama (JP)

CA 2864492 A1 \* 9/2015 ..... F04B 5/02  
CA 2868889 A1 \* 9/2015 ..... B63H 5/00  
(Continued)

(72) Inventors: **Hayato Tsutsui**, Shizuoka (JP); **Shinya Horie**, Shizuoka (JP)

OTHER PUBLICATIONS

(73) Assignee: **SHOWA CORPORATION**, Saitama (JP)

Outboard Power Tilt and Trim, posted on showa1.com, no psoted date given, no production date given, [online], [site visited Aug. 3, 2018], Available from Internet, URL: [https://www.showa1.com/en/product/boat/power\\_tilt\\_trim.html](https://www.showa1.com/en/product/boat/power_tilt_trim.html) (Year: 2018).\*

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

*Primary Examiner* — Garth Rademaker

(21) Appl. No.: **29/623,654**

*Assistant Examiner* — Fritzgerald L Butac

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

(74) *Attorney, Agent, or Firm* — Rankin, Hill & Clark LLP

(30) **Foreign Application Priority Data**

Apr. 28, 2017 (JP) ..... 2017-0009529

(57) **CLAIM**

(51) **LOC (11) Cl.** ..... **15-01**

The ornamental design for a trim and tilt device for a marine vessel propelling machine, as shown and described.

(52) **U.S. Cl.**

USPC ..... **D15/4**; D12/317

(58) **Field of Classification Search**

USPC ..... D8/349, 354, 356, 363, 373, 380;  
D12/168, 214, 223, 300, 305, 317;  
D15/3-5, 148, 149, 199

**DESCRIPTION**

CPC ..... B63H 20/10; F15B 11/024; F15B 15/204;  
F15B 2211/27; F15B 2211/31529  
See application file for complete search history.

FIG. 1 is a front, right side, top perspective view of a trim and tilt device for a marine vessel propelling machine showing my new design;  
FIG. 2 is a front, left side, top perspective view thereof;  
FIG. 3 is a rear, left side, top perspective view thereof;  
FIG. 4 is a rear, left side, bottom perspective view thereof;  
FIG. 5 is a front, left side, bottom perspective view thereof;  
FIG. 6 is a front elevational view thereof;  
FIG. 7 is a rear elevational view thereof;  
FIG. 8 is a left side view thereof;  
FIG. 9 is a right side view thereof;  
FIG. 10 is a top plan view thereof; and,  
FIG. 11 is a bottom plan view thereof.

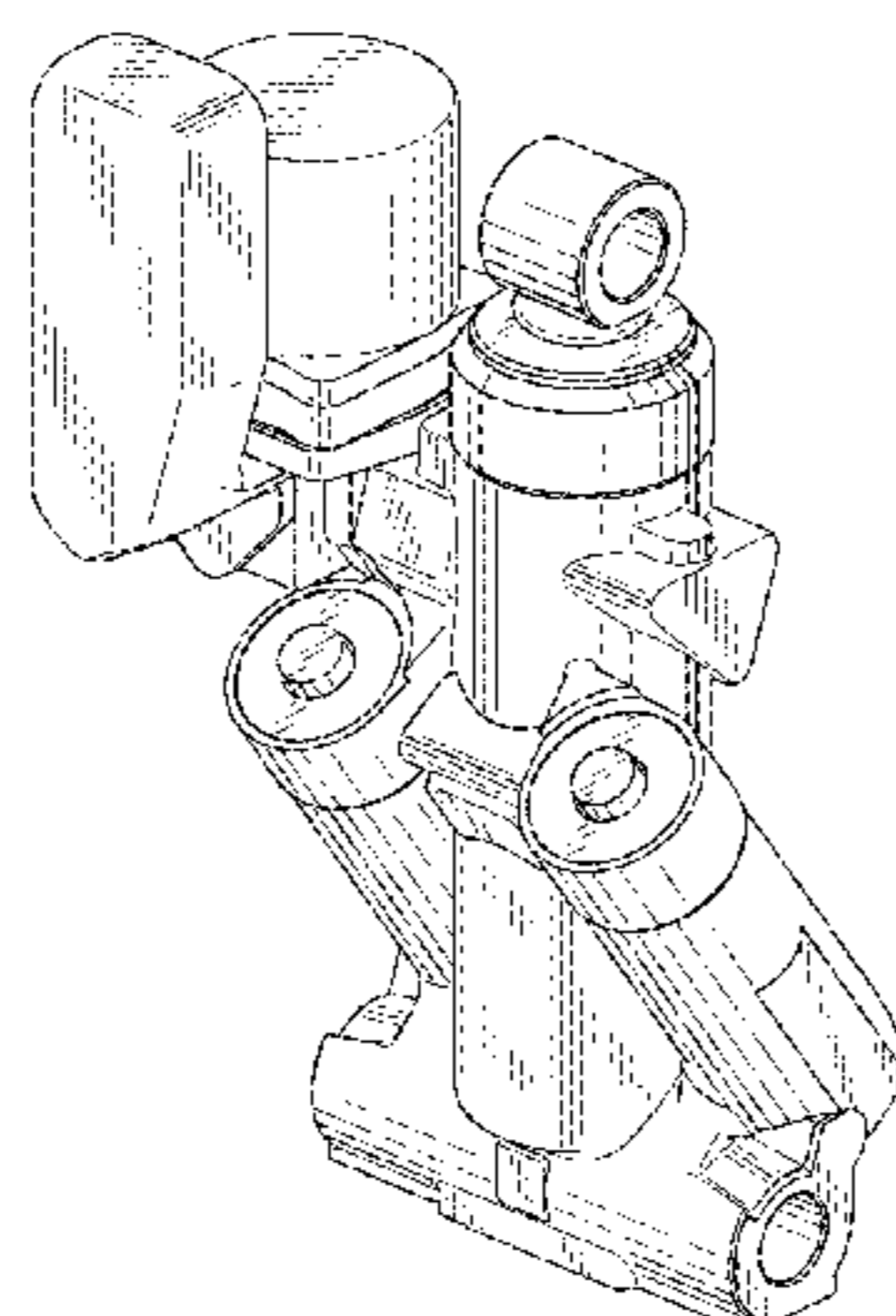
(56) **References Cited**

U.S. PATENT DOCUMENTS

5,984,741 A \* 11/1999 Nakamura ..... B63H 20/10  
440/56  
6,015,318 A \* 1/2000 Uematsu ..... B63H 20/10  
440/53  
6,039,617 A \* 3/2000 Nakamura ..... B63H 20/10  
440/53  
6,071,157 A \* 6/2000 Yoshino ..... B63H 20/10  
440/61 D

(Continued)

**1 Claim, 6 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

6,123,590 A \* 9/2000 Nakamura ..... B63H 20/10  
440/56  
9,376,192 B2 6/2016 Saito et al.  
9,849,956 B2 \* 12/2017 Tsutsui ..... B63H 20/10  
9,885,355 B2 \* 2/2018 Saito ..... F04C 11/003  
9,932,084 B2 \* 4/2018 Awasa ..... B60G 15/06  
9,932,997 B2 \* 4/2018 Tsutsui ..... B63H 20/08  
9,950,583 B2 \* 4/2018 Kaneko ..... F16F 9/3235  
2003/0157847 A1 \* 8/2003 Washizu ..... B63H 20/10  
440/61 A  
2003/0157848 A1 \* 8/2003 Saito ..... B63H 20/10  
440/61 T

FOREIGN PATENT DOCUMENTS

JP 02099493 A \* 4/1990 ..... B63H 21/265  
JP 08198183 A \* 8/1996  
JP 11139394 A \* 5/1999 ..... B63H 20/10

\* cited by examiner

FIG. 1

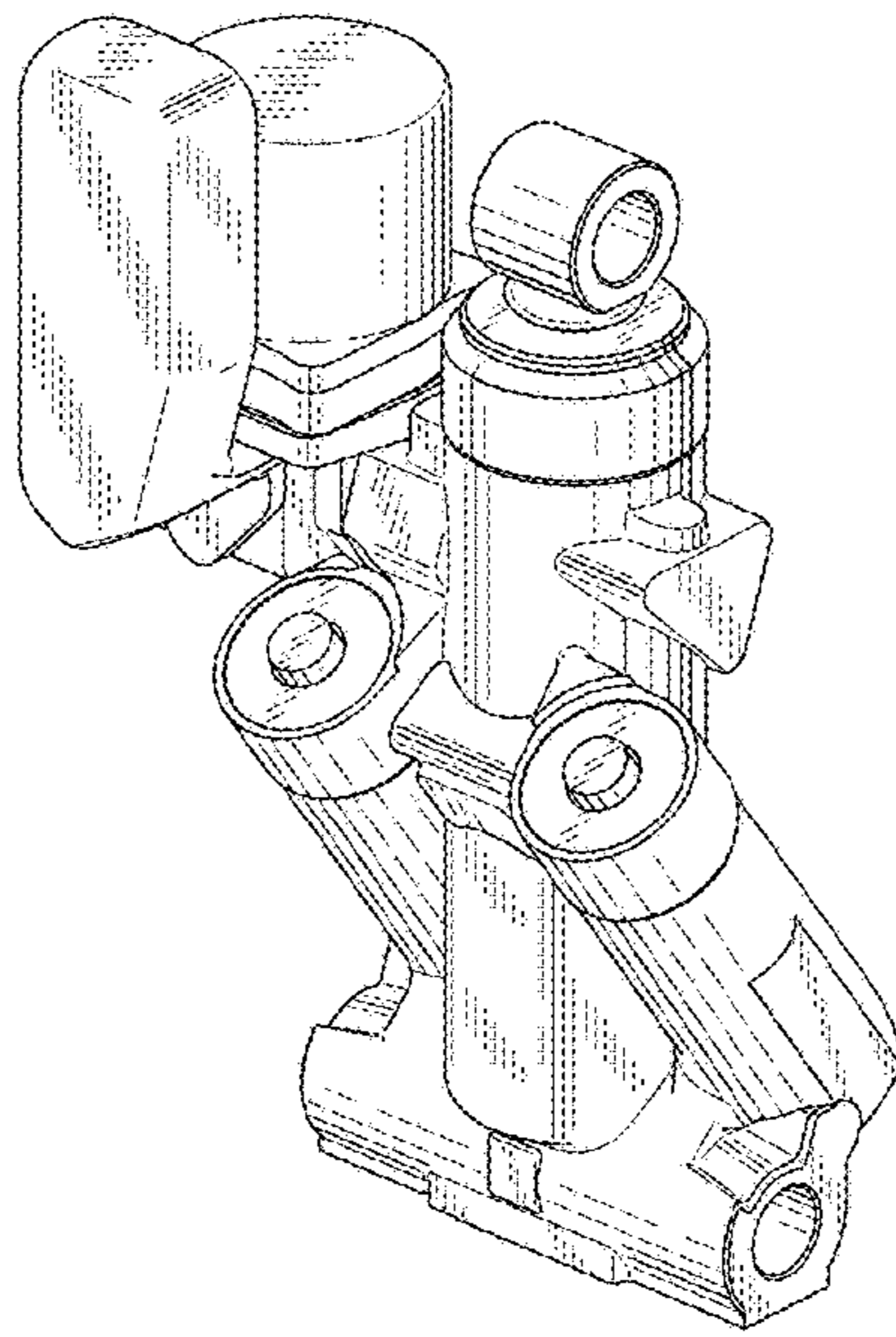


FIG. 2

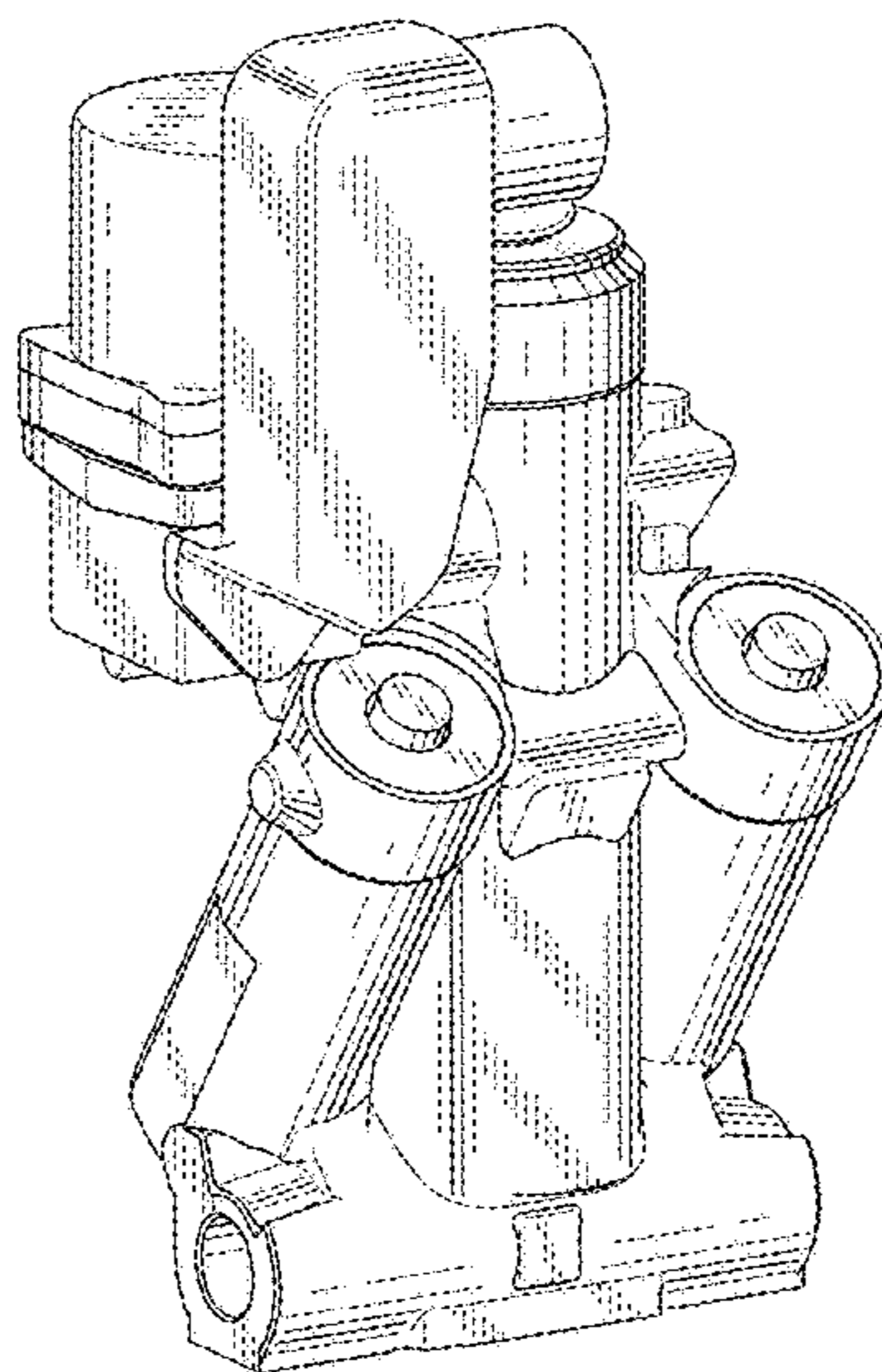


FIG. 3

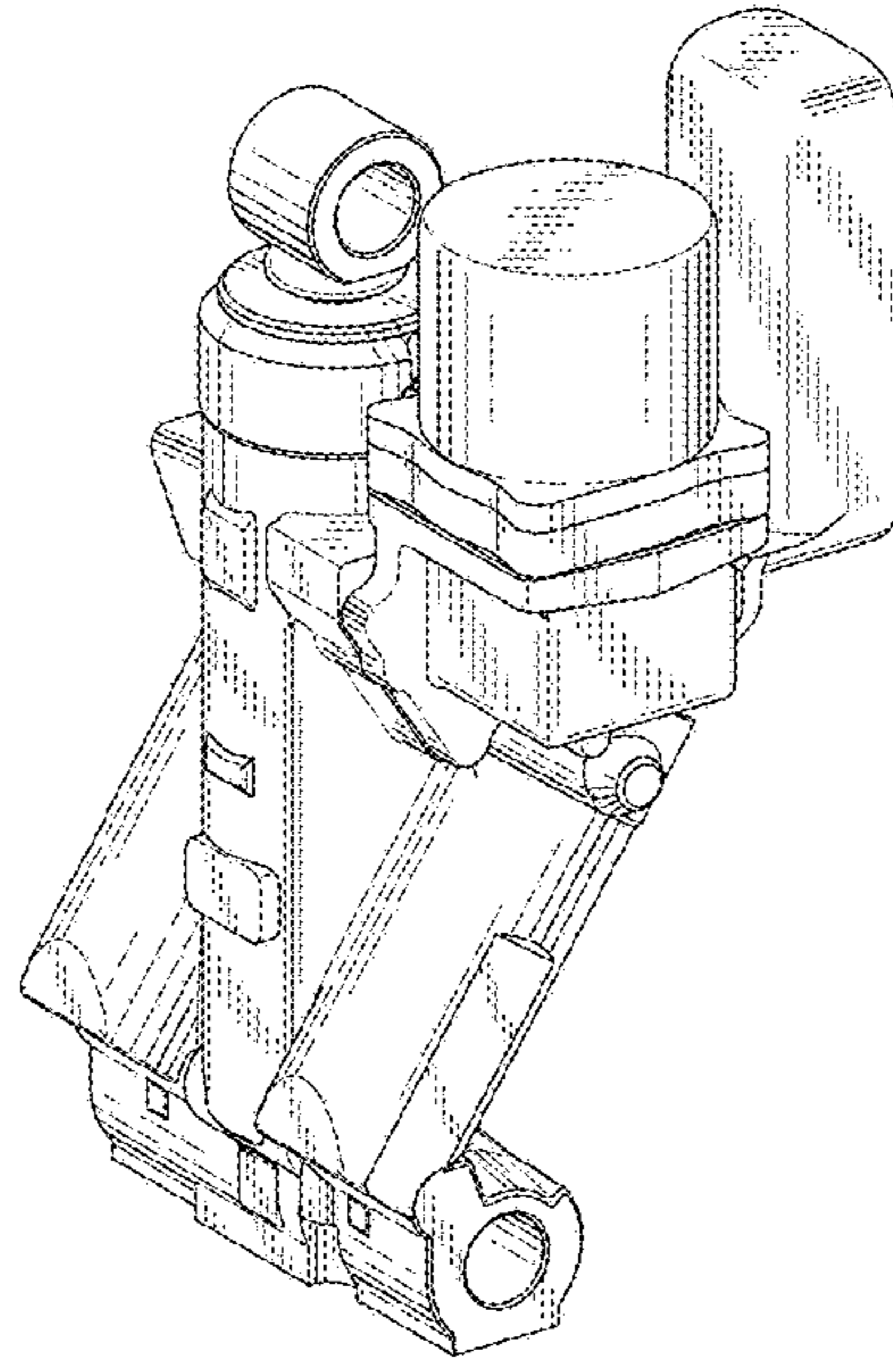


FIG. 4

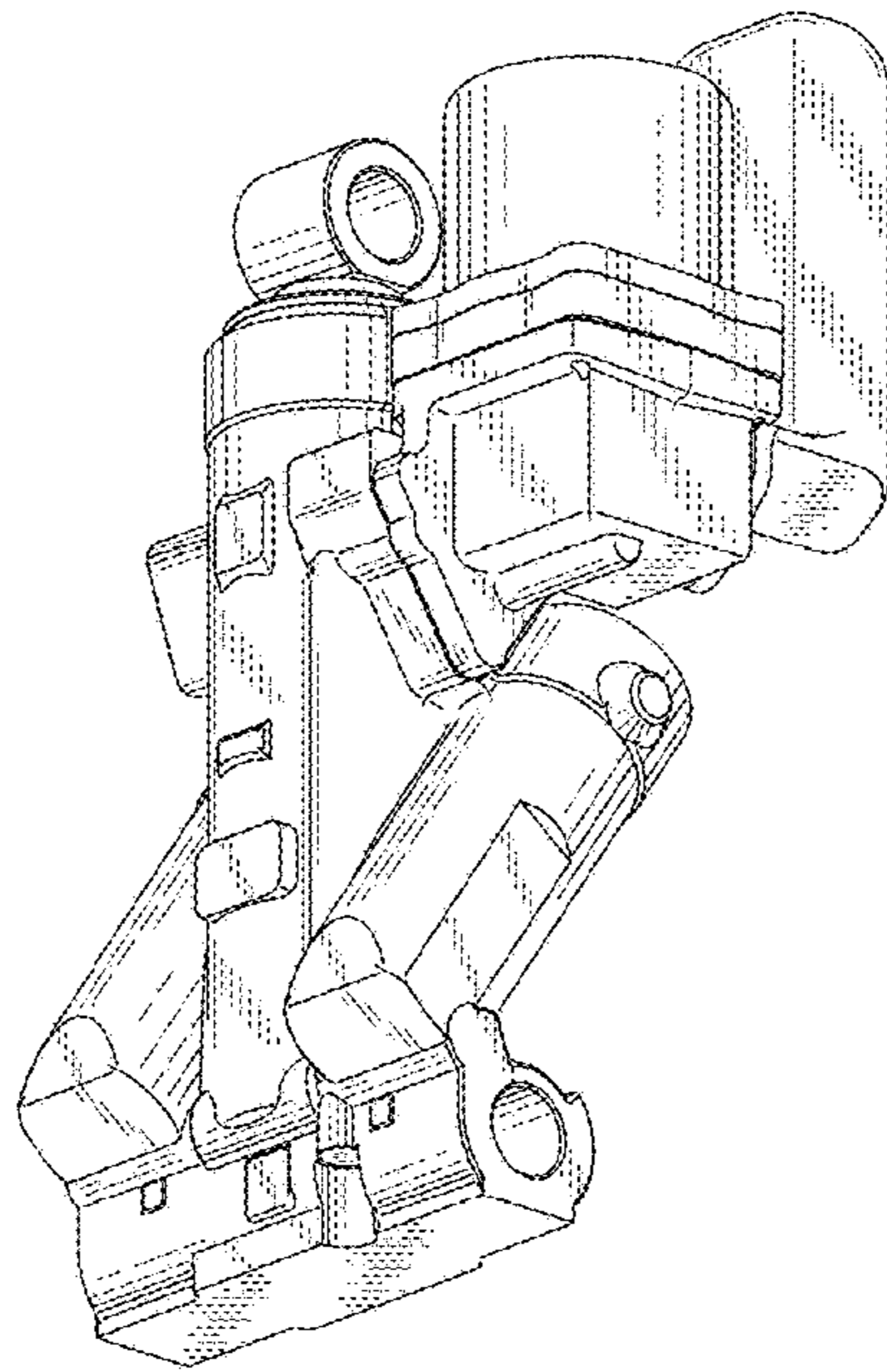


FIG. 5

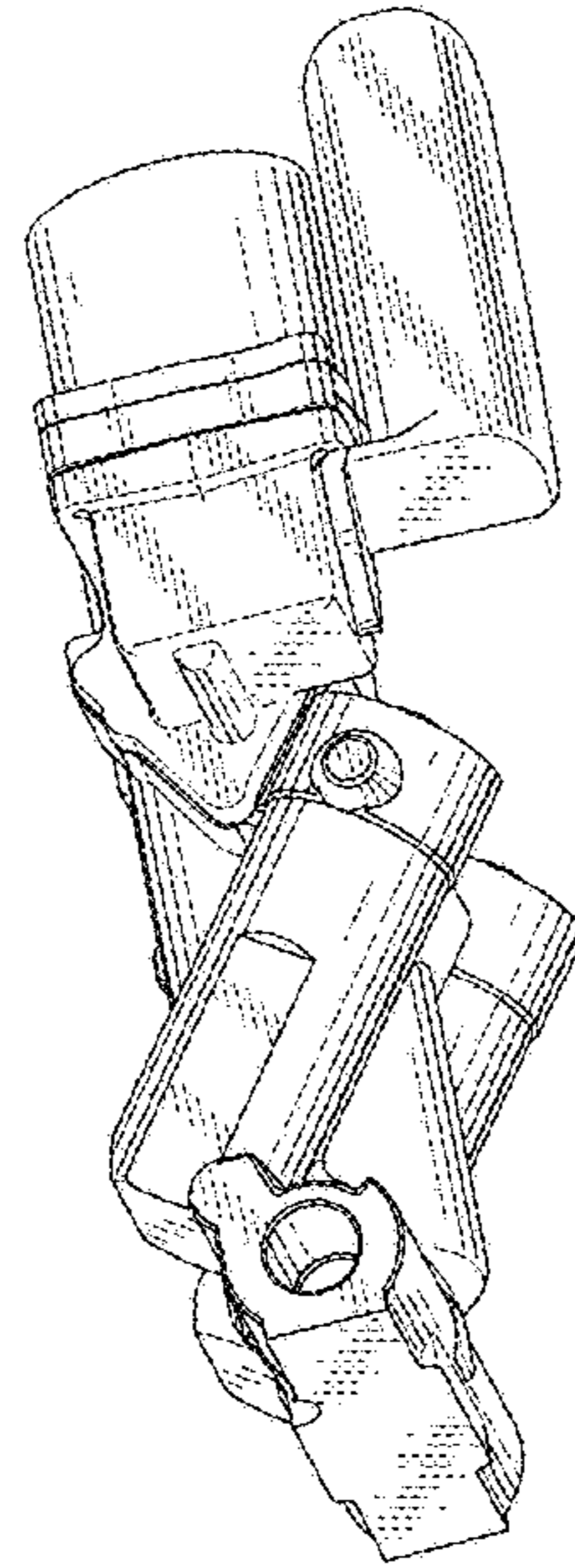


FIG. 6

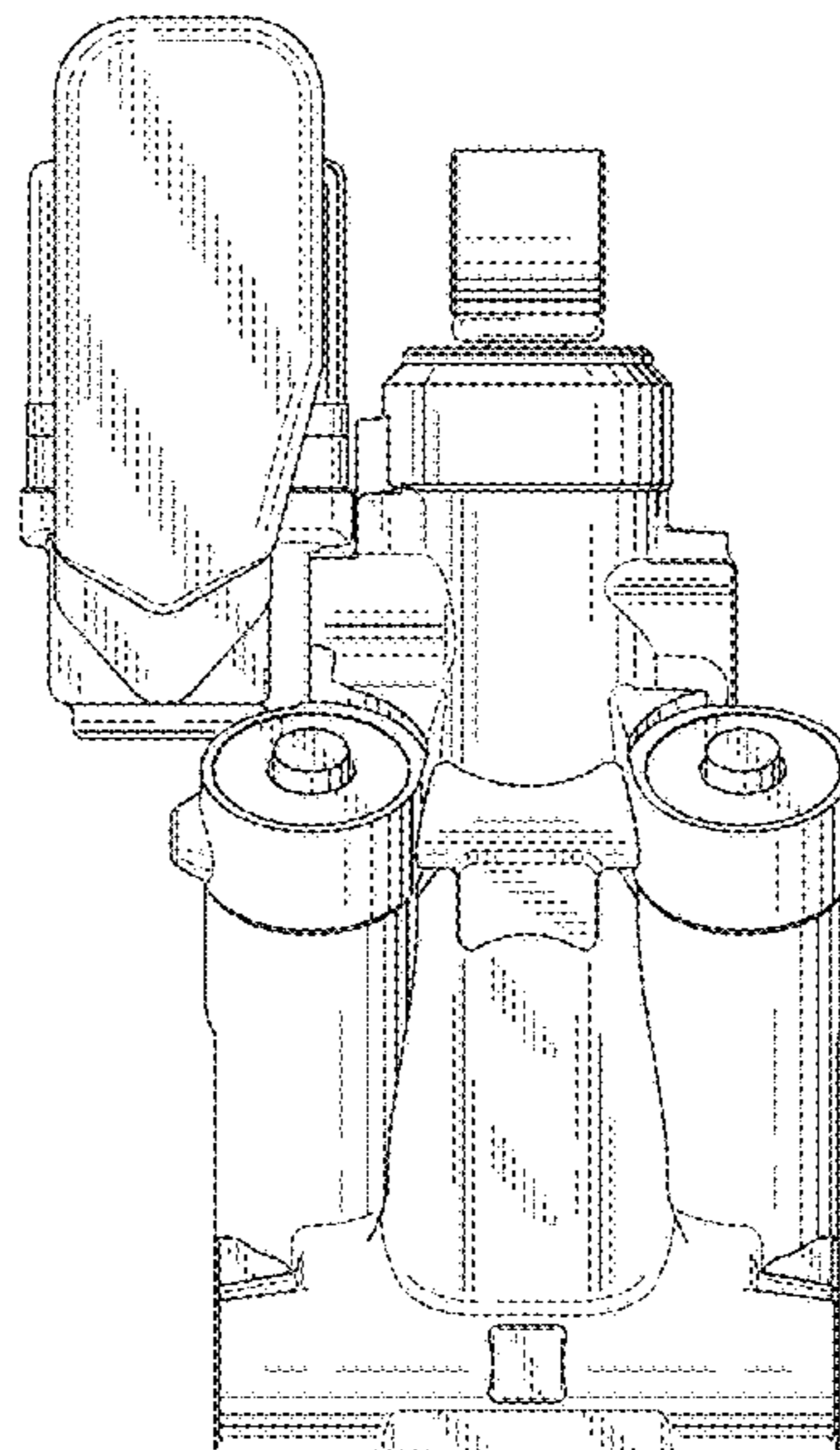


FIG. 7

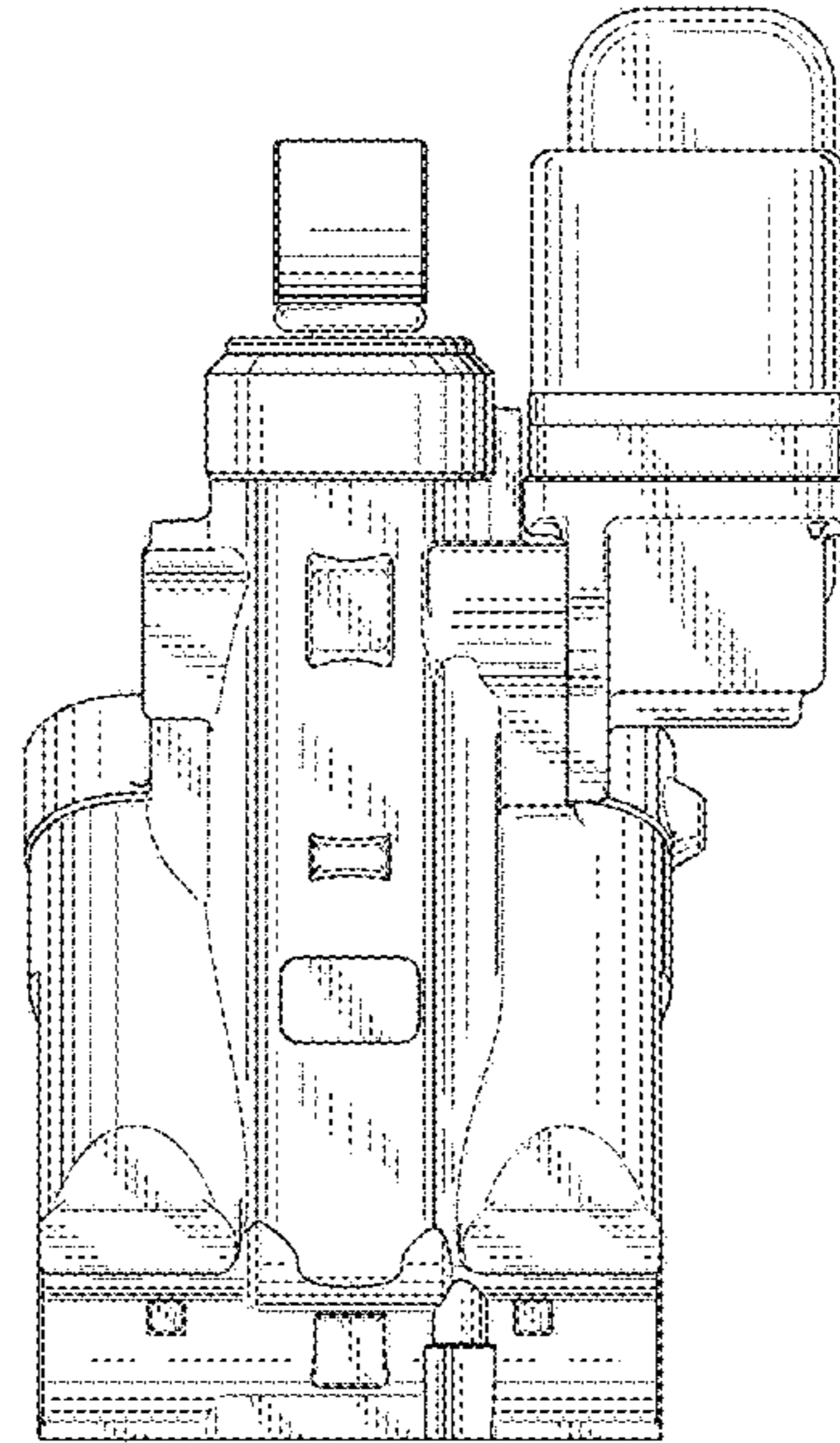


FIG. 8

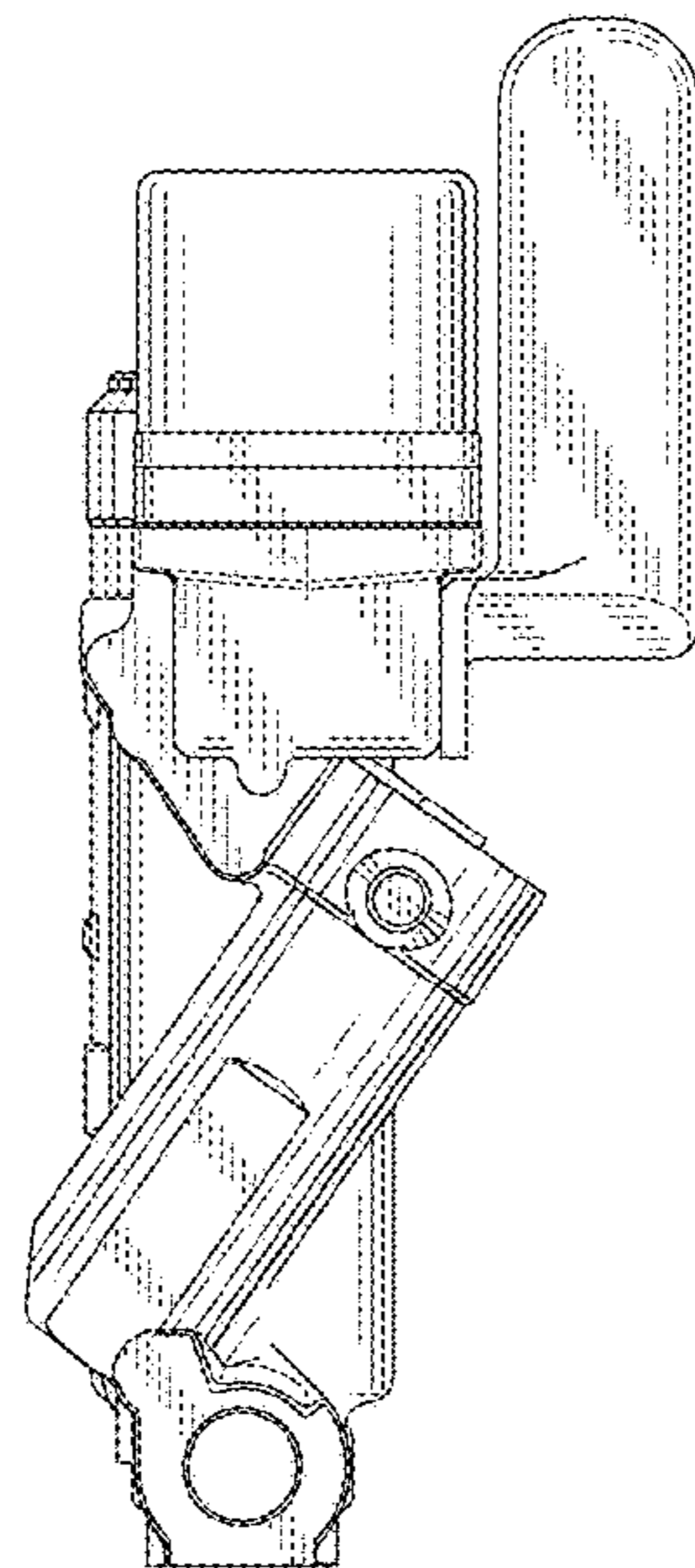


FIG. 9

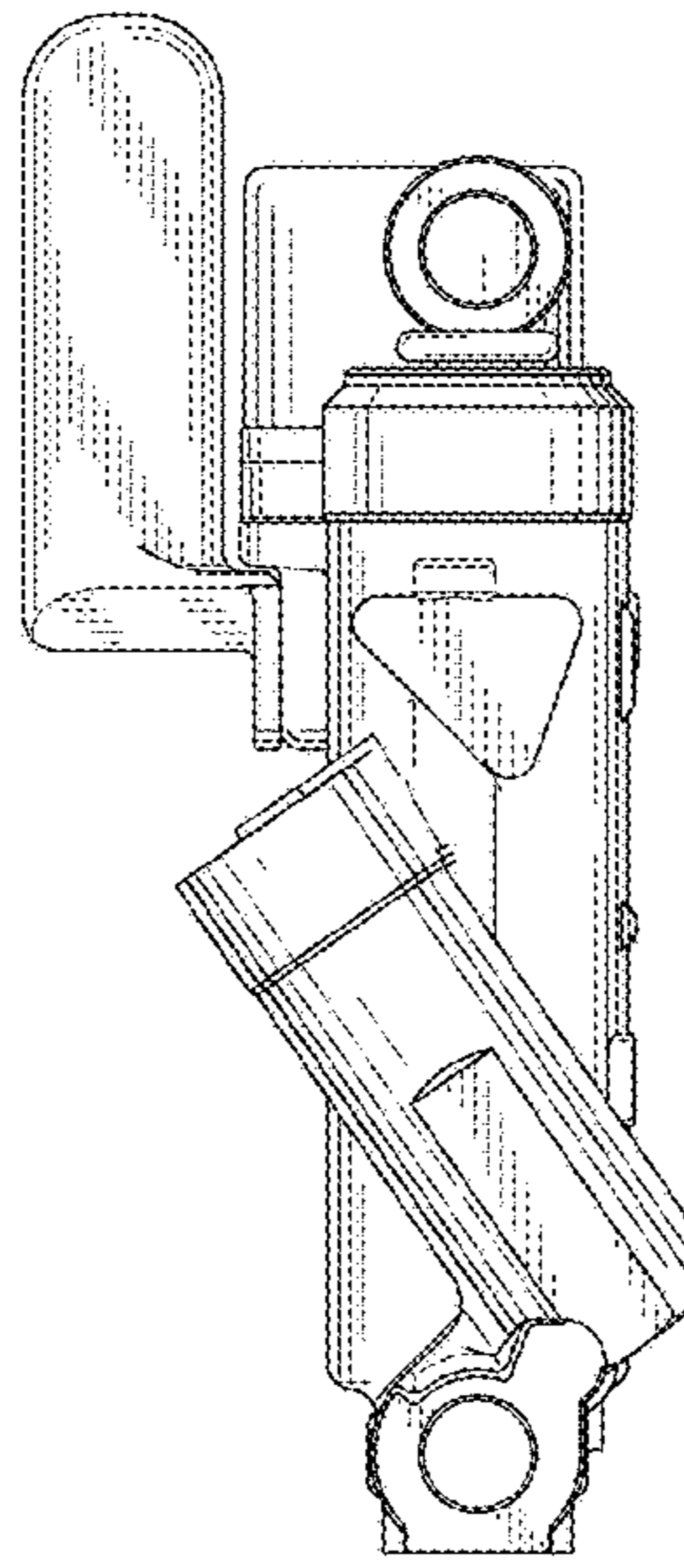


FIG. 10

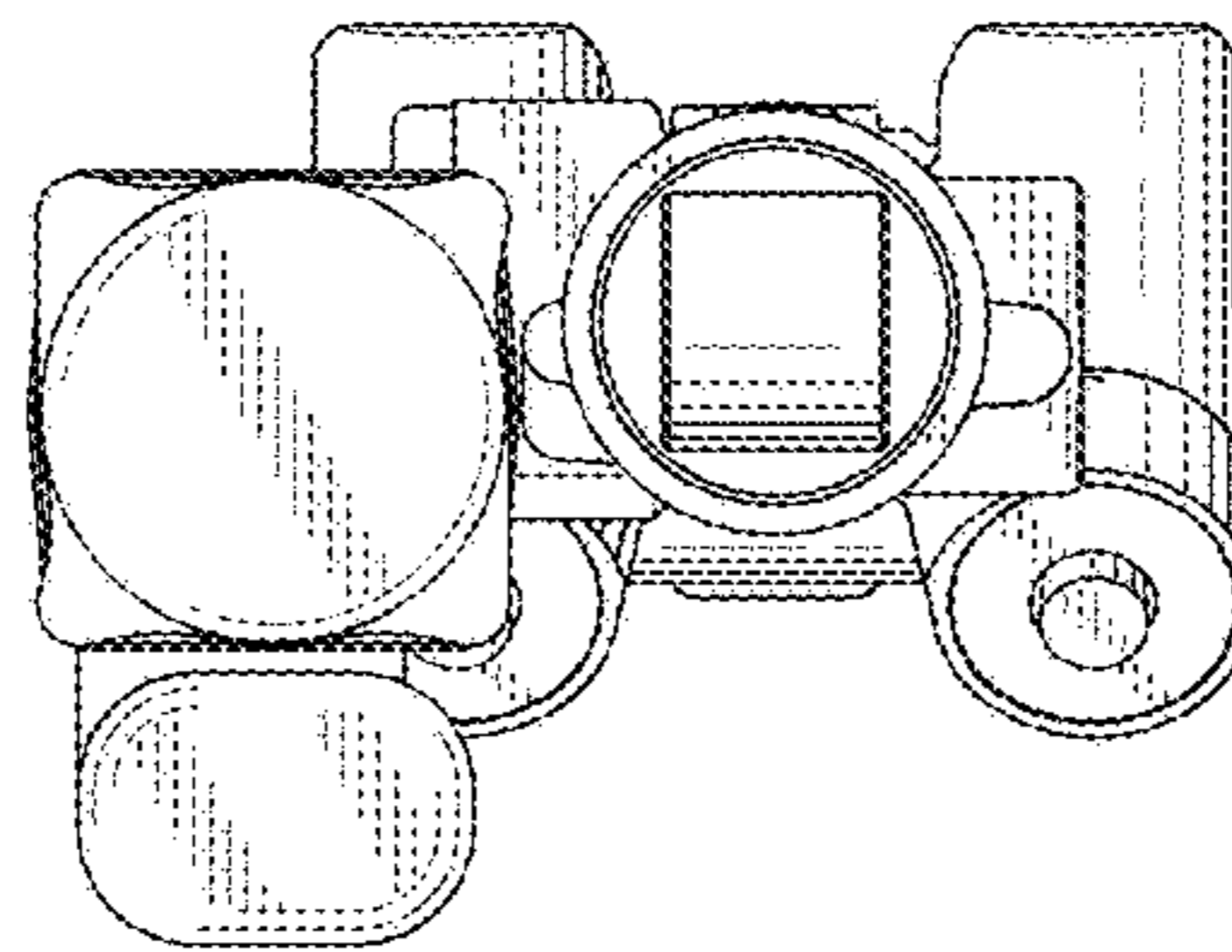


FIG. 11

